

American Fuel & Petrochemical Manufacturers

1667 K Street, NW Suite 700 Washington, DC 20006

202.457.0480 office 202.457.0486 fax afpm.org

March 27, 2018

Lula H. Melton Office of Air Quality Planning and Standards Air Quality Assessment Division (E143-02) U.S. Environmental Protection Agency Research Triangle Park, NC 27711

Attention: Docket ID No. EPA-HQ-OAR-2016; FRL-9972-22-OAR

Submitted to the Federal eRulemaking Portal (<u>www.regulations.gov</u>)

Re: AFPM Comments on EPA's Proposed Rule, "Revisions to Testing Regulations for Air Emission Sources" (83 FR 3636, January 26, 2018)

Dear Mrs. Melton:

The American Fuel & Petrochemical Manufacturers ("AFPM") appreciates the opportunity to submit comments on the U.S. Environmental Protection Agency's ("EPA" or the "Agency") Proposed Rule entitled, "Revisions to Testing Regulations for Air Emission Sources" ("Proposed Rule" or the "Proposal"). EPA published this Proposal in the *Federal Register* on January 26, 2018, to improve the quality of data for source testing of emissions without imposing new substantive requirements on source owners and operators. The Proposal includes corrections to testing provisions, updates to outdated procedures, and approved alternative procedures.¹

AFPM is a national trade association comprising virtually all U.S. refining and petrochemical manufacturing capacity. AFPM members supply consumers with a variety of products and services used daily in their homes and businesses. These products include gasoline, diesel fuel, and home heating oil, jet fuel, lubricants, and the chemicals that serve as "building blocks" in making diverse products, such as plastics, clothing, medicine, and computers. AFPM members are subject to a number of these test methods being clarified or corrected in this Proposal.

I. BACKGROUND

EPA catalogs errors and corrections, as well as necessary revisions to test methods, performance specifications ("PS"), quality assurance/quality control ("QA/QC") procedures, and associated regulations in 40 CFR Parts 51, 60, and 63 and periodically updates and revises these

¹ See Docket ID No. EPA-HQ-OAR-2016-0510; FRL-9972-22-OAR, 83 Fed. Reg. 3636 (January 26, 2018).



provisions. The most recent updates and revisions were promulgated on August 30, 2016.² This Proposed Rule, if adopted, would make corrections and revisions to source test methods, PS, QA/QC procedures, and testing regulations. The corrections and revisions consist primarily of typographical errors, updates to testing procedures, and the addition of alternative equipment and methods the Agency has deemed acceptable to use. As such, many of the proposed amendments are noncontroversial and we support many of the revisions as meeting EPA's goal of improving data quality. However, AFPM has concerns surrounding the broad application of several of these revisions and would like to take this opportunity to comment on several proposed amendments, including those related to probe and filter temperature tolerances.

II. COMMENTS ON PROPOSED AMENDMENTS

Comments on Amendments Related to Probe and Filter Temperature Tolerances (E, F, G, H and M, N, and O)

EPA is proposing changes in the temperature tolerance for the probe and filter exhaust temperatures for Methods 5, 5b, and 5i. The Agency is proposing similar temperature tolerance specifications for measurement of particulate emissions for sources under 40 CFR 60, Subparts D, Da, Db and Dc. The proposed change in tolerance from ± 14 degrees C to ± 5 degrees C would incrementally increase the precision of the particulate emission measurements in many cases.

As an initial matter, we question the Agency's rationale for increased precision in such a broadly-applicable manner. While we do not dispute that tighter temperature tolerances would result in an increase in precision, the Agency did not say why the additional precision is now necessary. There is no discussion of how testing under the current tolerances has been insufficient and/or provided inferior data, nor any discussion regarding the availability of any new technology enabling this greater precision. Additionally, EPA has not quantified in the Proposal the degree of precision improvement this method revision would create. Without a relative indication of the level of improvement, it is not possible to ascertain how the costs associated with this revision can be weighed against the associated benefits. Without further documentation, this revision appears to be "precision for precision sake" and does not appropriately account for the negative impact such a change would have across industries.

AFPM acknowledges that such improvement in precision could be important in some applications. Aspects of that rule require measurement of emissions of "filterable" particulate matter to correlate with or audit Particulate Matter ("PM")-Continuous Emission Monitoring System ("CEMS") or Predictive Emissions Monitoring Systems ("PEMS") or monitoring of the particulate emissions as a surrogate for the metals emissions. The probe and filter temperatures are variables that may significantly influence the test results for comparison with the monitoring

² See Docket ID No. EPA-HQ-OAR-2014-0292; FRL-9950-57-OAR, 81 Fed. Reg. 59799 (August 30, 2016).



system. An improvement in measurement precision could certainly benefit the data quality in limited situations such as the Mercury and Air Toxics Standards ("MATS") rule.

The regulation of emissions from other source types and/or for other purposes may not drive the need for such a level of precision. Yet the changes have been proposed to Methods 5, 5b, and 5i for application to any type of source. Those methods are cited by many other Part 60 Subparts and by various State and Local agency rules and permit conditions for a wide variety of source types. There are source types for which such a narrow tolerance would be difficult to achieve with the existing test equipment. Such changes may require equipment modification or test team personnel and/or physical changes to sampling infrastructure (*e.g.*, ports, monorail supports, etc.). These additional costs may outweigh the technical benefit in many cases.

Other test methods would also be affected by the changes, as they refer to the specifications and operations described in Method 5. For example, EPA Methods 29 (metals) and 23 (dioxins and furans) refer to Method 5, yet those methods include a collection of samples within the post-filter impinger train. The precision of those methods would not be affected by the proposed changes to Method 5, yet testers would have to operate within the tighter tolerance. This would increase the cost of normal operation of these test methods with no gain in precision. Also, any test run that did not meet the specification may be invalidated based on this "technicality" despite its actual scientific validity. Such an occurrence may force additional test runs to be completed at significant expense.

The testing equipment currently in use was designed to meet the existing specifications for the probe and filter temperature tolerance. In some conditions (*e.g.*, cold, strong winds, high stack gas temperature, etc.), it can be difficult to keep temperatures within the current 14-degree C tolerance. Alteration of some equipment components, or even complete replacement of components, would likely be necessary to achieve the proposed 5-degree C tolerance in all but nearly ideal weather and source conditions. This would require capital expenditures by the testing companies that would have to be covered quickly by increasing the cost of the tests. The increased cost may be warranted where the improved precision is important (*e.g.*, MATS) but not in those cases where the precision is less important.

The equipment improvements that may be necessary to meet the 5-degree C tolerance may include:

- Increased probe sheath tubing diameter to make room for added insulation around every probe heater;
- Improved insulation, possibly requiring re-design of filter heating ovens;
- Improved sealing and insulation of the openings at the inlet and outlet of filter heating ovens; and/or
- For sources with high stack temperatures, air-cooled or water-cooled probes (these would need to be used much more often than at present).



Changes to the sampling infrastructure may be needed in many cases to ensure safety of testing personnel and equipment. The added weight of revised sampling probes and filter ovens (e.g., larger-diameter probe sheaths and insulation, air-cooled or water-cooled probes, etc.) may require revisions to the facilities for support of the monorails used to support the sampling probe assembly. Source operators may need to re-design and retrofit the stack infrastructure at significant expense. The additional modifications, including any necessary downtime, is not justified in light of the incremental increase in precision for most industrial sources.

We therefore recommend that the temperature tolerance changes be limited to those Part 60 or 63 Subparts for which the improved method precision may be worth the extra cost (*e.g.* Electric Utility MATS). Such changes should not be made to Methods 5, 5b, or 5i because those methods are applied to a wide variety of sources for which the tighter tolerances would not produce meaningfully better data.

AFPM Comments on Other Proposed Amendments and Revisions

AFPM generally supports the revisions outlined in the Proposed Rule. The table below includes further comments on several specific proposed changes in the Proposal.

Proposed Update	AFPM Position and Comments
L. Method 2B of Appendix A-1 of Part 60 In Method 2B, in section 12.1, the definition of ambient carbon dioxide concentration would be revised because the global monthly mean ("(CO ₂) _a ") concentration varies over time. Also, a website link would be added to the definition.	Support This proposed change is beneficial because it would slightly increase the calculated exhaust gas volume by improving method precision and would provide a more accurate measure of the atmospheric CO_2 concentration, rather than specifying a fixed value. This would cause a slightly lower denominator in the equation, so the calculated result would be slightly higher. This would improve method precision at no extra cost.
P. Method 7 of Appendix A-4 of Part 60 In Method 7, sections 10.1.2 and 11.3 reference erroneous sections; the correct sections would be inserted.	Support with changes The proposed changes are beneficial corrections. However, the new language refers only to the alternate scanning procedure in 10.1.1.2 and does not reference the normal spectrophotometer calibration procedure in 10.1.1.1. Instead, AFPM proposes that EPA change the language (in 10.1.2 and 11.3) to reference 10.1.1 so that either calibration type may be used (that is, either 10.1.1.1 or 10.1.1.2).



Proposed Update	AFPM Position and Comments
<u>R. Method 18 of Appendix A-6 of Part 60</u> In Method 18, in section 13.1, the erroneous paragraph (c) designation would be re-designated as (b).	Oppose The proposed correction would create an error in the paragraph numbering as there was no apparent problem with the current numbering.
<u>S. Method 22 of Appendix A-7 of Part 60</u> In Method 22, sections 11.2.1 and 11.2.2 would be revised to allow digital photography to be used for a subset of the recordkeeping requirements. Section 11.2.3 would be added to allow digital photographic records. Note that ALT-109 is the associated broadly applicable alternative that allows the use of digital photographs for specific recordkeeping requirements.	Support with changes While AFPM supports the proposed changes to allow the use of digital cameras, we recommend that EPA further expand this change to include digital video as well in the event a facility uses video cameras to monitor flares.
II. Method 308 of Appendix A of Part 63 In Method 308, deionized distilled water would replace the aqueous n-propanol solution; the affected sections are 2.0, 7.2.2, 7.2.3.3, and 11.3.2. Section 7.2.2, which defines the aqueous n-propanol solution, would be removed. Section 8.1.2 would be revised to require a leak check prior to the sampling run (in addition to after the sampling run) for QA purposes; requiring a leak check prior to the sampling run would potentially save time and money. In section 9.1, methanol spike recovery check would be added as a QC measure in Table 9.1. In section 12.1, variables used in equations 308-4 and 308-5 would be added and section 12.5, which includes equations 308-4 and 308-5, would be added. In section 13.0, the title "Reserved" would be replaced with "Method Performance" and QA requirements would be added to be consistent with other methods.	Support with changes The changes include a beneficial switch from n- propanol solution to distilled deionized water. Another change is the addition of a paired train during one test run with one train to be spiked. The laboratory analysis would include analysis of the spike recovery as an additional QA procedure. The change would provide improved QA but would mean added costs for the second sampling train and for the additional laboratory analysis.



Proposed Update	AFPM Position and Comments
LL. Method 325A of Appendix A of Part 63 In Method 325A, section 8.2.1.3 would be revised to clarify that only one extra sampling site is required near known sources of volatile organic compounds ("VOCs") when the source is within 50 meters of the boundary and the source is located between two monitors. The label under Figure 8.1 would be corrected from Refinery (20% angle) to Refinery (20° angle). Section 8.2.3.2 would be revised to include facilities with a monitoring perimeter length equal to 7,315 meters (24,000 feet). Section 8.2.3.3 would be added to provide clarification and an equivalent procedure in Option 2 (linear distance between sites) for site locations that parallel section 8.2.2.2.4 in Option 1 (radial distance between sites).	Support with changes The proposed changes are beneficial clarifications and corrections. EPA should also consider changing the references in Section 8.2.1.3 to "VOCs" to "VOCs or other species required to be monitored" in the interest of making the method more universal. Otherwise, if passive sampling is required for other compounds, those requirements might necessitate amending that section of Method 325A. Also, to be consistent with the proposed amendments to 40 CFR Part 63, Subpart CC for the fenceline monitoring requirements for refineries, AFPM recommends that EPA provide an exclusion for installing additional monitors if only monitored Leak Detection and Repair ("LDAR") components meet the 50-meter criterion. It is not reasonable to require additional monitors, if only a single valve, connector, or other LDAR component is located within 50 meters of the fenceline. EPA is proposing to address this issue for refinery fenceline monitoring to exclude these additional monitors, if the LDAR component is being monitored quarterly. AFPM recommends that the same exclusion be incorporated into section 8.2.1.3
<u>MM. Method 325B of Appendix A of Part 63</u> In Method 325B, section 9.3.2 would be revised to correct an error in the number of field blank samples required for a sampling period and to provide consistency with the sample analysis required in Method 325B. In sections 9.13 and 11.3.2.5, the erroneous reference to section 10.6.3 would be corrected to 10.0. Also, in section 11.3.2.5, the erroneous reference to section 10.9.5 would be corrected to 9.13. Section 12.2.2 would be revised to correct the calculation of target compound concentrations at standard conditions. Sections 12.2.3 and 12.2.4 would be deleted because the equations for target concentrations are incorrect. Table 17-1 would be revised to add inadvertently omitted QC criteria from section 9.3.3.	Support The proposed changes are beneficial clarifications and corrections. Alternate Method Alt-122 still applies to refiners, so the more general language of Method 325B is acceptable even though it does not directly incorporate Alt- 122.



III. CONCLUSION

AFPM supports a number of the changes in this proposed rule as part of efforts to improve the data collection process and to better inform information collection as part of the rulemaking process. However, in making changes to Methods 5, 5b and 5i, AFPM recommends that the temperature tolerance changes be limited to those Part 60 or 63 Subparts for which the improved method precision may be worth the additional cost.

AFPM appreciates the opportunity to provide these suggestions to improve the Agency's test methods. Should you have further questions, please contact David Friedman at <u>dfriedman@afpm.org</u>.

Sincerely,

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David Friedman Vice President, Regulatory Affairs