

Christina Schwerdtfeger

Proposed regulation lacks sufficient detail to describe the qualifications and training requirements for observers for EPA Test Method 22. My concern is that unqualified personnel at CBPs may be asked to perform the opacity tests for EPA Test Method 22 without the appropriate training. It is critical that accurate observations are performed by the permitted facility to demonstrate compliance with their standard permit. See attached letter with technical details.

407 Old Blue Mountain Ln
Georgetown, TX 78633
May 28, 2023

Gwen Ricco, MC 205
Office of Legal Services
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, Texas 78711-3087

Subject: Non-Rule Project No. 2022-033-OTH-NR: Observers for TM 22

Ms. Ricco,

I am providing written comments to TCEQ about the proposed revisions to the rule for Standard Permits for Concrete Batch Plants (CBPs).

My name is Christina Schwerdtfeger. I am a retired environmental professional with 34 years of experience and a PhD in chemistry. During my career, I performed hundreds of audits of industrial facilities to assess their compliance with environmental regulations and determine the effectiveness of their environmental management systems. I was a certified auditor for ISO 14001 and specialized in air quality permitting, operational controls, record-keeping and training.

PURPOSE

Based on my professional experience, I believe that the proposed regulation lacks sufficient detail to describe the qualifications and training requirements for observers for EPA Test Method 22.

My concern is that unqualified personnel at CBPs may be asked to perform the opacity tests for EPA Test Method 22 without the appropriate training. It is critical that accurate observations are performed by the permitted facility to demonstrate compliance with their standard permit.

BACKGROUND

It was possible to track down the training requirements for observers for EPA Test Method 22, but it was time-consuming, convoluted and not trivial. Given the current language in the proposed regulation, it would be very difficult, if not impossible, for a typical CBP worker or site supervisor to find and interpret these requirements themselves.

The starting point is TCEQ's reference to EPA Test Method 22¹ in the draft regulation. When this document is retrieved, only a short note is found under the title with no helpful details about training requirements for observers:

¹ USEPA Test Method 22 located in Appendix A-7 of 40 CFR 60. Accessed at: <https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-60/appendix-Appendix%20A-7%20to%20Part%2060>

“Note: This method is not inclusive with respect to observer certification. Some material is incorporated by reference from Method 9.”²”

While looking further within EPA Test Method 22, a Recordkeeping Form is found in Section 17.0. The template for EPA Test Method 22 only requires identification of the Observer and their Affiliation. (In contrast, the Recordkeeping Form for EPA Test Method 9 requires: Observer, Observer Certification Date, and Observer Affiliation.)

At the end of EPA Test Method 22, two reference documents are listed which were supposed to contain additional information. Unfortunately, these documents were very old (from 1975) and only describe certification requirements to become a visible emission evaluator per EPA Test Method 9:

1. Missan, R., and A. Stein. Guidelines for Evaluation of Visible Emissions Certification, Field Procedures, Legal Aspects, and Background Material. EPA Publication No. EPA-340/1-75-007. April 1975.
2. Wohlschlegel, P., and D.E. Wagoner. Guideline for Development of a Quality Assurance Program: Volume IX—Visual Determination of Opacity Emissions from Stationary Sources. EPA Publication No. EPA-650/4-74-005i. November 1975.

At this point, no helpful information was found within EPA Test Method 22 or its reference documents to provide details about observer training and qualifications. This lack of information prompted a more detailed search of EPA’s website. An updated guidance document was found called Visible Emissions Field Manual EPA Methods 9 and 22 (EPA, 1993)³.

This document is helpful because EPA provides explicit information about observer training requirements for Test Method 22 on Page C-2 under Section 1.2:

“Since this procedure only requires the determination of whether a visible emission occurs and does not require the determination of opacity levels, observer certification according to the procedures of Method 9 are not required. **However, it is necessary that the observer is educated on the general procedures for determining the presence of visible emissions. As a minimum, the observer must be trained and knowledgeable regarding the effects on the visibility of emissions caused by background contrast, ambient lighting, observer position relative to lighting, wind, and the presence of uncombined water (condensing water vapor). This training is to be obtained from written materials found in Citations 1 and 2 in the Bibliography or from the lecture portion of the Method 9 certification course.**”

The requirements from EPA in this Field Manual are clear and reasonable. TCEQ should not expect operators of CBPs to track down, find and attempt to interpret these training requirements on their own.

² USEPA Test Method 9 located in Appendix A-4 of 40 CFR 60. Accessed at: <https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-60/appendix-Appendix%20A-4%20to%20Part%2060>

³ Visible Emissions Field Manual EPA Methods 9 and 22 (USEPA, December 1993) accessed at: <https://www3.epa.gov/ttnemc01/methods/VEFieldManual.pdf>

PROPOSED REVISIONS TO RULE

Based upon the research & analysis described above, my recommendation is for TCEQ to add two new definitions to the rule under Definitions, Section (2) to explicitly describe who is qualified to perform the observations and their required training:

- **Observer: Person who is trained to properly observe and record visible emissions in accordance with EPA Test Method 22, Visual Determination of Fugitive Emissions From Material Sources and Smoke Emissions From Flares per 40 CFR 60 Appendix A-7.**
- **Observer Training: Shall be accomplished through either: self-study of Visible Emissions Field Manual EPA Methods 9 and 22 (USEPA, December 1993) or from the lecture portion of the EPA Test Method 9 certification course. As a minimum, the observer must be trained and knowledgeable regarding the effects on the visibility of emissions caused by background contrast, ambient lighting, observer position relative to lighting, wind, and the presence of uncombined water (condensing water vapor). Training only needs to be completed once.**

I also recommend expanding the recordkeeping requirements under Section (3)(J)(ix) of the proposed rule with new language as indicated in red font:

Records shall be maintained on-site for the following including, but not limited to:

- quarterly visible emissions observations; any corrective actions required to control excess visible emissions; **and observer's name, affiliation, type of training completed (self-study or lecture portion of Method 9 certification course); and date of training.**

It would be reasonable for an Observer to complete their training only once since EPA Method 22 is a qualitative test method. Observers should not be subject to a 6-month re-certification requirement similar to EPA Method 9.

CLARIFICATION OF REFERENCE

Lastly, the reference to EPA Test Method 22 under General Requirements (5)(H) of the proposed rule should be described as "Appendix A-7 to Part 60 – Test Methods 19 Through 25E" ⁴ and not as "Appendix A". USEPA previously aggregated all of the test methods into a "Appendix A" but this is no longer the case.

⁴ USEPA Test Method 22 is located in Appendix A-7 of 40 CFR 60. Accessed at: <https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-60/appendix-Appendix%20A-7%20to%20Part%2060>

CONCLUSION

Thank you for the opportunity to provide TCEQ with comments on this important topic. The final rule can and should be improved to ensure that CBP operators have appropriately qualified observers for visible emissions.

Sincerely,

A handwritten signature in blue ink that reads "Christina Schwerdtfeger". The signature is fluid and cursive, with the first name "Christina" being more prominent than the last name "Schwerdtfeger".

Christina Schwerdtfeger, PhD
Retired Environmental Professional