may be found at http://www.epa.gov/ttn/amtic/criteria.html. The EPA hereby announces the designation of one new reference method for measuring pollutant concentrations of PM\(_{10}\), one new reference method for measuring pollutant concentrations of PM\(_{10-2.5}\), one for measuring ozone (O\(_3\)), and three new equivalent methods for measuring pollutant concentrations of PM\(_{2.5}\) in the ambient air. These designations are made under the provisions of 40 CFR part 53, as amended on October 26, 2015 (80 FR 65291–65468).

The new reference method for O\(_3\) is an automated method that utilizes a measurement principle based on non-dispersive ultraviolet absorption photometry. The newly designated reference method for O\(_3\) is identified as follows:

RFOA–0216–230, “Teledyne Advanced Pollution Instrumentation, Model 265E or T265 Chemiluminescence Ozone Analyzer,” operated on any full scale range between 0–100 ppb and 0–1000 ppb, with any range mode (Single, Dual, or AutoRange), at any ambient temperature in the range of 5 °C to 40 °C, and with a TFE filter or a Kynar® DFU in the sample air inlet, operated with a sample flow rate of 500 ± 50 cm\(^3\)/min (sea level), with the dilution factor set to 1, with Temp/Press compensation ON, and in accordance with the appropriate associated instrument manual, and with or without any of the following options: Internal or external sample pump, Sample/Cal valve option, Rack mount with or without slides, analog input option, 4–20 mA isolated current loop output. Note 2 applies to the following Teledyne Advanced Pollution Instrumentation Models 265E and T265.

The application for a reference method determination for this candidate method was received by the Office of Research and Development on February 2, 2016. The analyzer is commercially available from the applicant, Teledyne Advanced Pollution Instrumentation, Inc., 9480 Carroll Park Drive, San Diego, CA 92121–2251.

The new reference method for PM\(_{10}\) is a manual monitoring method based on a particular PM\(_{10}\) sampler and is identified as follows:

RFPS–0216–231, “Met One Instruments, Inc. E–FRM–PM\(_{10}\) and E–FRM–PM\(_{2.5}\) Sampler Pair” for the determination of coarse particulate matter as PM\(_{10-2.5}\), consisting of a pair of Met One Instruments, Inc. E–FRM samplers, with one being the E–FRM PM\(_{10}\) sampler (RFPS–0315–221) and the other being the E–FRM PM\(_{2.5}\) sampler (RFPS–0216–231). The units are to be collocated to within 1–4 meters of one another and sample concurrently. Both units are operated in accordance with the associated E–FRM instruction manual. This designation applies to PM\(_{10-2.5}\) measurements only.

One newly designated equivalent method for PM\(_{2.5}\) is a manual monitoring method based on a particular PM\(_{2.5}\) sampler and is identified as follows:


The application for reference method determination for the PM\(_{10}\) method was received by the Office of Research and Development on February 4, 2016, the PM\(_{10-2.5}\) method application was received on March 21, 2016, and the equivalent PM\(_{2.5}\) method was received on March 28, 2016. These monitors are commercially available from the applicant, Met One Instruments, Inc., 1600 Washington Blvd., Grants Pass, OR 97526.

Two newly designated equivalent methods for PM\(_{2.5}\) are manual monitoring method based on particular PM\(_{2.5}\) samplers and are identified as follows:

EQPS–0316–233, “URG–MASS100 Single PM\(_{2.5}\) Sampler,” operated with software (firmware) version 4B or 5.0.1, configured for “Single 2.5” operation with a URG–2000–30EGN Cyclone particle size separator, and operated for a continuous 24-hour sample period at a flow rate of 16.67 liters/minute, and in accordance with the URG–MASS100 Operator’s Manual and with the requirements and sample collection filters specified in 40 CFR part 50, appendix L.
EQPS–0316–234. “URG–MASS300 Sequential PM$_{2.5}$ Sampler,” operated with software (firmware) version 4B or 5.0.1, configured for “Multi 2.5” operation with a URG–2000–30EGN Cyclone particle size separator, and operated for a continuous 24-hour sample period at a flow rate of 16.67 liters/minute, and in accordance with the URG–MASS300 Operator’s Manual and with the requirements and sample collection filters specified in 40 CFR part 50, appendix L.

These applications for equivalent method determinations for the PM$_{2.5}$ methods were received by the Office of Research and Development on March 21, 2016. These monitors are commercially available from the applicant, URG Corporation, 116 S. Merritt Mill Rd., Chapel Hill, NC 27516.

Representative test monitors have been tested in accordance with the applicable test procedures specified in 40 CFR part 53, as amended on October 26, 2015. After reviewing the results of those tests and other information submitted by the applicant, EPA has determined, in accordance with part 53, that these methods should be designated as a reference or equivalent methods. As designated reference and equivalent methods, these methods are acceptable for use by states and other air monitoring agencies under the requirements of 40 CFR part 58, Ambient Air Quality Surveillance. For such purposes, the methods must be used in strict accordance with the operation or instruction manual associated with the method and subject to any specifications and limitations (e.g., configuration or operational settings) specified in the designated method description (see the identification of the method above).


Consistent or repeated noncompliance with any of these conditions should be reported to: Director, Exposure Methods and Measurement Division (MD–E205–01), National Exposure Research Laboratory, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711.

Designation of these reference and equivalent methods are intended to assist the States in establishing and operating their air quality surveillance systems under 40 CFR part 58. Questions concerning the commercial availability or technical aspects of the method should be directed to the applicant.

Dated: April 19, 2016.

Jennifer Orme-Zavaleta,
Director, National Exposure Research Laboratory.

[FR Doc. 2016–10006 Filed 4–27–16; 8:45 am]