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Current Status of EPA Verification Program for EPA Protocol Gases

Robert Wright¹, Thien Bui², Lyn Gameson³, Frank Guenther³, Travis Johnson⁴, Mustafa Mustafa⁵, Michael Papp¹, Solomon Ricks¹, John Schakenbach⁴, Lorenzo Sena², and Avraham Teitz⁵

- ¹ US Environmental Protection Agency, Research Triangle Park, NC
- ² US Environmental Protection Agency, Kansas City, KS
- ³ National Institute of Standards and Technology, Gaithersburg, MD
- ⁴ US Environmental Protection Agency, Washington, DC
- ⁵ US Environmental Protection Agency, Edison, NJ

Accurate compressed gas calibration standards are needed to calibrate continuous emission monitors (CEMs) and ambient air quality monitors that are being used for regulatory purposes. US Environmental Protection Agency (EPA) established its traceability protocol to ensure that commercially-prepared standards are traceable to the National Institute of Standards and Technology (NIST). The protocol is an analytical procedure that specialty gas producers use to assay the standards with NIST reference standards and to estimate the uncertainty of the certified concentrations. EPA does not have direct oversight of the production of the standards. In 2010, EPA established a Protocol Gas Verification Program (PGVP) to determine that accuracy of a representative sample of the standards and to disseminate the results of the verifications to end users of the standards. The verifications are performed by laboratories at NIST and EPA Regions 2 and 7. This presentation summarizes the results of the verifications to date.