



April 5, 2013

NOTE

Subject: Update - Chronology of development and availability of Qualified Source Testing Individual exam questions

To: SES Members

From: SES QSTI/QSTO Committee

Source Evaluation Society members have requested a chronology of our making available the SES QSTI/QSTO written exams. The interest derives from the requirements in the ASTM D7036-04 standard practice that an air emissions testing body will provide written exams for evaluating qualified individuals for test methods not covered by exams provided elsewhere. Knowledge of the availability of SES exams and the methods covered therein will help air emissions testing bodies with planning and maintaining *qualified individual* status for their staffs.

Below is a chronology of exams SES has provided and the test methods covered by those exams; edits and additions made since the January 2013 version of this chronology are in red. The SES completed comprehensive updates and revisions to the exam questions for Methods groups 2 and 4 prior to March 2008 and to exam questions for Methods groups 1 and 3 prior to March 2010. Note that during the period from 2004 through the present, the SES QSTI/QSTO exam committee has continued to review, update, and add new exam questions for each of the methods and the methods groups on an ongoing basis.

- March 2004
 - Group 1 - Gas flow, isokinetic sampling, and particulate matter testing; EPA Methods 1, 1A, 2, 2A, 2C, 2D, 2F, 2G, 2H, 3, 3B, 4, 5, 5A, 5B, 5D, 5E, 5F, 5I, 17, 19, and 202 (pre-2010 version).
 - Group 2 - Sampling for gaseous pollutants with manual and wet chemistry test methods. EPA Methods 3, 3B, 6, 6A, 6B, 7, 7C, 7D, 8, 11, 13A, 13B, 15A, 16A, 19, 26, 26A, and 202 (pre-2010 version)
 - March 2005
 - Group 3 - Measuring gaseous pollutant concentrations with instrumental test methods and conducting CEMS RATAs; EPA Methods 3A, 6C, 7E, 10, 10B, 20 and 25A and EPA CEMS Performance Specifications 2, 3, 4, 4A, 5, 6, 7, 8, and 15.
 - June 2006 (and again in 2010)
 - Group 3 - Measuring gaseous pollutant concentrations with instrumental test methods and conducting CEMS RATAs; updated with questions to reflect revisions to methods published in May 2006 and 2008.
- NOTE:** Until 2010 the Group 3 exam description included a reference to 40 CFR part 75, the Continuous Emission Monitoring provisions for the Acid Rain Program. The current pool of questions for the Group 3 exam includes no questions specifically derived only from 40 CFR part 75 or that part's support documents; however, there are questions in both the Methods Groups 1, 1A, and 3 exams pools that overlap with and apply to the requirements of the 40 CFR part 75 requirements (e.g., Method 1 traverse point locations; Methods 3A, 6C, and 7E performance requirements; CEMS relative accuracy calculations).
- March 2007
 - Group 4 - Testing for emissions of hazardous metals; EPA Methods 12, 19, 29, 101, 101A, 102, and ASTM D6784-02.

- March 2011
 - Group 4 - Testing for emissions of hazardous metals; added questions covering Method 30B.
- March 2012
 - Groups 1 and 2 – Expanded to include questions related to the revised Methods 201A and 202 (2010).
 - Group 3 - Added questions about the U.S. EPA Traceability Protocol for Assay and Certification of Gaseous Calibration Standards (Revised May 2012), EPA 600/R-23/531, sections 2.1.1 – 2.1.3.
 - Group 5 – New methods group for conducting Part 75 CEMS RATAs; EPA Methods 1 through 4 (including but not limited to Methods 2F, 2G, 2H, 3A, and 3B), 6C and 7E; Part 75 Appendix A, Sections 3, 6, and 7; and sections 3 and 8 of the Part 75 Emissions Monitoring Policy Manual. See also related sections in 40 CFR part 60, appendix B, Performance Specification 2 and the U.S. EPA Traceability Protocol for Assay and Certification of Gaseous Calibration Standards (Revised May 2012), EPA 600/R-23/531 sections 2.1.1 – 2.1.3. (See note below regarding status of an individual relative to the QI requirements of part 75 as applied using the SES exams for Methods Groups 1, 1A, and 3 In lieu of the exam for Methods Group 5.)
- February 2013
 - Group 1A – New methods group for conducting stack gas flow measurements; EPA Methods 1, 2, 2A, 2C, 2D, 2F, 2G, 2H, 3, 3B, 4 (including references to Method 5 DGM calibration procedures), 19, 40 CFR part 60.8(f), 40 CFR part 63.7(e)(3), and the SES Exam Guideline (<http://www.sesnews.org/GuideQSTIExamSuccessv4.rtf>).

NOTE: The Clean Air Markets Division of the Office of Air Programs in the Environmental Protection Agency has determined that the individual who has passed either the SES Methods Group 1 or 1A exam and the Methods Group 3 exam has demonstrated the knowledge equivalent to that required to pass the SES Methods Group 5 exam. Further, an individual passing the Group 1 or 1A and Group 3 exams or an individual passing the Group 5 exam, demonstrating relevant field test proficiency as required in ASTM D7036-04, is considered a qualified individual (QI) for conducting and leading CEMS relative accuracy testing as required under part 75. This decision also means that an individual who applies for and is approved as an SES QSTI for Methods Group 1 or 1A and Group 3 has satisfied both the knowledge and the proficiency requirements for a QI for conducting and leading part 75 CEMS relative accuracy testing.