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Overview of 2016 Updates to ASTM D7036, A Quality Management Standard for Emission Testing

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Presentation Will Cover Four Areas

- 1. An Introduction to ASTM D7036
- 2. Regulatory Requirements for ASTM D7036
- 3. Evolution of ASTM D7036
- 4. Maintaining Relevancy of the ASTM D7036

ASTM D7036 is a Process-based Management System for Emission Testing

An Overview of ASTM D7036

Purpose	Enables Air Emission Testing Bodies (AETBs) to deliver data of defined and documented quality
Applicability	For use by firms making emission testing measurements. Required by USEPA for AETBs performing Part 75 tests.
History	First published in 2004. Modeled after ISO 17025.
Current Version	2016, reflects changes in ISO 17025 and operational experience.
Accreditations	16 Accredited AETBs, (5 by STAC, 11 by STAC-A2LA)
Benefits	Ability to perform Part 75 work. Excellent platform for AETBs involved in other ISO 17025-based standards. Consistent, predictable delivery of services. A management standard without scope limitations.
Criticisms	Adoption expense, accreditation expense, "won't change data quality," just a "paper exercise." Does EPA really value the standard and conformance?

Five Elements Define ASTM D7036 Conformance

- 1. The AETB must have a Quality Manual (QM) that addresses requirements of ASTM D7036
- 2. The AETB must operate with prescribed functions:
 - Technical Manager
 - Quality Manager
 - Qualified Individual
- 3. Test Plans are required for all projects
- 4. The AETB must conduct annual internal audits
- 5. Management must affirm that each test program conforms to ASTM D7036

EPA Promulgates Minimum Competency Rule to Address Emission Testing Data Quality Concerns

Preamble to Final Rule for Minimum Competency Requirements for Air Emission Testing:

- "EPA believes the evidence is strong that unqualified, under-trained and inexperienced testers are routinely deployed on testing projects."
- "There are many reasons why voluntary compliance has not worked, including disagreement among stack test companies on a minimum competency standard, and the sources' often used practice of hiring the lowest bidder."

Effective March 27, 2012, all Part 75 test programs must be performed by air emission testing bodies that conform to ASTM D7036-04.

Conformance can be demonstrated by "self-declaration" or third-party accreditation.

ASTM D7036 Continues to Improve

Version	Highlights
D7036-04	• Original version, modeled after ISO 17025:2000, General Requirements for the Competence of Testing and Calibration Laboratories
D7036-11	Reauthorization of the 2004 version without changes
D7036-12	 Reformatted to align with ISO 17025:2005, which was reconfirmed in 2010 and therefore remains current. Sections added as placeholders with "reserved" designations No material changes to content of D7036.
D7036-16	 Text was added to populate reserved sections and complete alignment with ISO 17025:2005. Attempted improvement to allow requalification of qualified individuals by continuing education instead of exam re-take, but failed. Revisions were incorporated to reflect the 12 years of operational experience with the standard.

D7036-16 Updates that Populate Reserved Sections of D7036-12

- Review of Requests, Tenders, and Contracts (5.4)
- Service to the Customer (5.7)
- Complaints (5.8)
- Improvement (5.10)
- Preventive Action (5.12)
- Management Reviews (5.15)
- Technical Requirements, General (6.1)
- Sampling (6.7)
- Assuring Quality of Test Results (6.9)

D7036-16 Updates that Reflect Operational Experience

- Many typographical corrections and textual clarifications
- Test Method Definition (3.2.20)
- Clarification of Qualified Individual (6.2.3)
- Flexibility added to Test Plan Content (6.4.3)
- Elimination of non-mandatory Appendix providing a Quality Manual outline

Continual Improvement Drives the Standard but not the Regulations Requiring It (1 of 2)

- The Minimum Competency Rule cites ASTM D7036-04, which is outdated.
- Operating within the framework of ASTM requires regular review and revision of standards.
- ASTM Standards that are not reviewed regularly are "retired."
- Regulations need to address advancements in the ASTM Standard.

Continual Improvement Drives the Standard but not the Regulations Requiring It (2 of 2)

- Updating Part 75 regulations to address advances in ASTM D7036 and accreditation is needed.
 - Incorporate a reference to the 2016 version.
 - Modify language to recognize that there is now a viable third party accreditation process and apply accreditation requirements to "for-hire" emission testing firms.
- If ASTM D7036 provides value for Part 75 test programs, EPA should extend conformance to Part 60 test programs.

Thank you

Questions?

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