

EPA's Alternative Test Method Approval Procedures – Stationary Source Program

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Topics

1

Background
and
Approval
Authority

2

Delegation of
Authority

3

Approval
Processes

4

Broadly
Applicable
Approvals

5

Resources

Alternative Test Method/Monitoring Approval Authority

- 40 CFR Parts 59, 60, 61, 63, and 65 all include authority for EPA Administrator to approve alternatives to test methods or monitoring procedures required under these parts
 - Test Methods: § 60.8(b), 61.18(h), 63.7(f), 59.104, 59.208, 65.158(a)(2)
 - Monitoring: § 60.13(l), 61.14(g), 63.8(f)
- Alternative methods must be “.....adequate for... determination of compliance....”

Why?

- A way to integrate innovative measurement techniques into the existing air rules for compliance purposes.
- Provide flexibility to use methods not incorporated into a given New Source Performance Standard (NSPS) or National Emission Standard for Hazardous Air Pollutant Standard (NESHAP).
- Provide an alternative to methods which may be biased due to interferences from a given source matrix.

Alternative Method Approval Authority Delegation

Who can approve alternatives?

- Administrator authority to approve major changes to test methods is delegated to OAQPS (MTG Group Leader)
- Administrator authority to approve major changes to monitoring is delegated to EPA Regional Offices
- Administrator authority to approve minor changes to test methods/monitoring is delegated to EPA Regional Offices
- Most states delegated authority for approval of minor changes (and sometimes intermediate)

§ 63.2 - Test Method vs. Monitoring

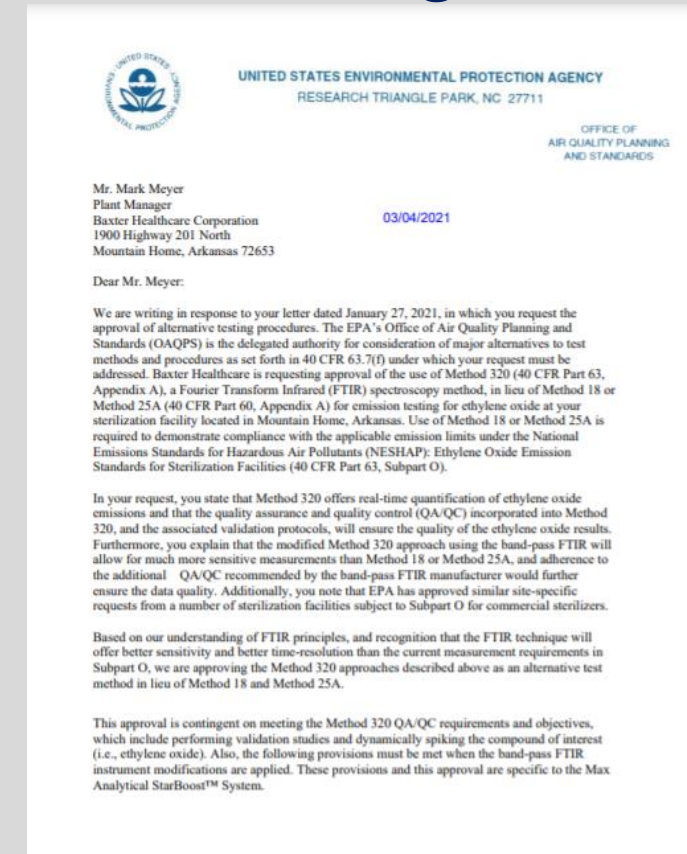
- A test method as a “validated procedure for sampling, preparing, and analyzing for an air pollutant specified in a relevant standard as the performance test procedure.”
- Monitoring is comprehensive term that may include, but is not limited to Continuous Emission Monitoring Systems (CEMS), Opacity monitoring systems, CPMS or automatic continuing monitoring that is used for demonstrating compliance with an applicable regulation
- In actuality, the test procedure used to determine compliance could be a test method or a monitoring procedure

Minor/Intermediate/Major Alternative Test Method

Minor Change	Intermediate Change	Major Change
<ul style="list-style-type: none"> • Site-specific • No national significance • No effect on stringency of standard • Made to accommodate site-specific constraints • Example: minor sampling changes within an existing test method • Delegation: State/Region 	<ul style="list-style-type: none"> • Modification involves proven technology • Site-specific but could have national significance • Potential effect on stringency of standard, but demonstrated that will not • Example: changes within a prescribed analytical approach • Delegation: Region/OAQPS 	<ul style="list-style-type: none"> • Modification is an entirely new method and/or involves unproven technology • May be site-specific, but will usually set a national precedent • Potentially broadly applicable • Example: Replacement of a method used for a compliance test • Delegation: Region/OAQPS

Approval Process for Major or Intermediate Change to Test Method

- Written request to OAQPS from an affected source or their agent
 - Name/Facility Location/Testing Requirements
 - Propose alternative with detailed procedure
 - Justification and Supporting Information
 - Appropriate cc:s
- EPA will acknowledge request
 - Review request, justification, and supporting information
 - Request additional info, if needed
- Issue approval/disapproval as official letter



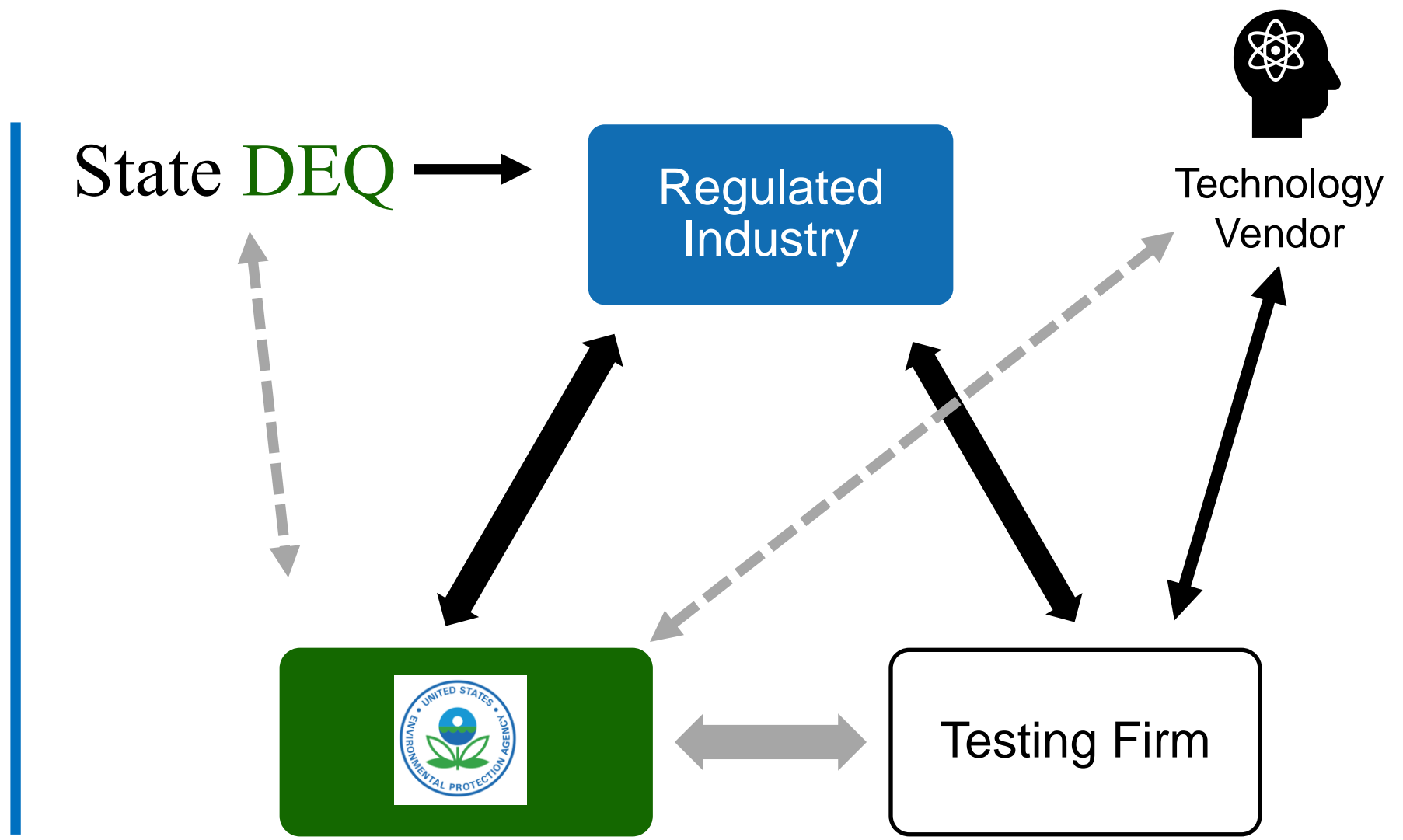
Criteria for Approval of Major/ Intermediate Changes to Test Methods

- Produce results adequate for the Administrator's determination of compliance
 - Any approved alternative test method will produce results adequate for the Administrator's determination of compliance (*see 40 CFR Parts 60 and 63, Sections 60.2 and 63.2*)
 - The change in the testing method or procedure will not affect the stringency of the applicable regulation.

Criteria for Approval of Major/ Intermediate Changes to Test Methods

- Acceptance of an alternative test method shall be based on substantive technical support information
 - Detailed and documented test procedures
 - Direct comparisons (e.g., Method 301) with existing reference or compliance test methods
 - Precision and bias determinations (e.g., duplicate test trains and multiple test runs under a range of test conditions)
 - Chemical, engineering, and economical evaluations are also a consideration

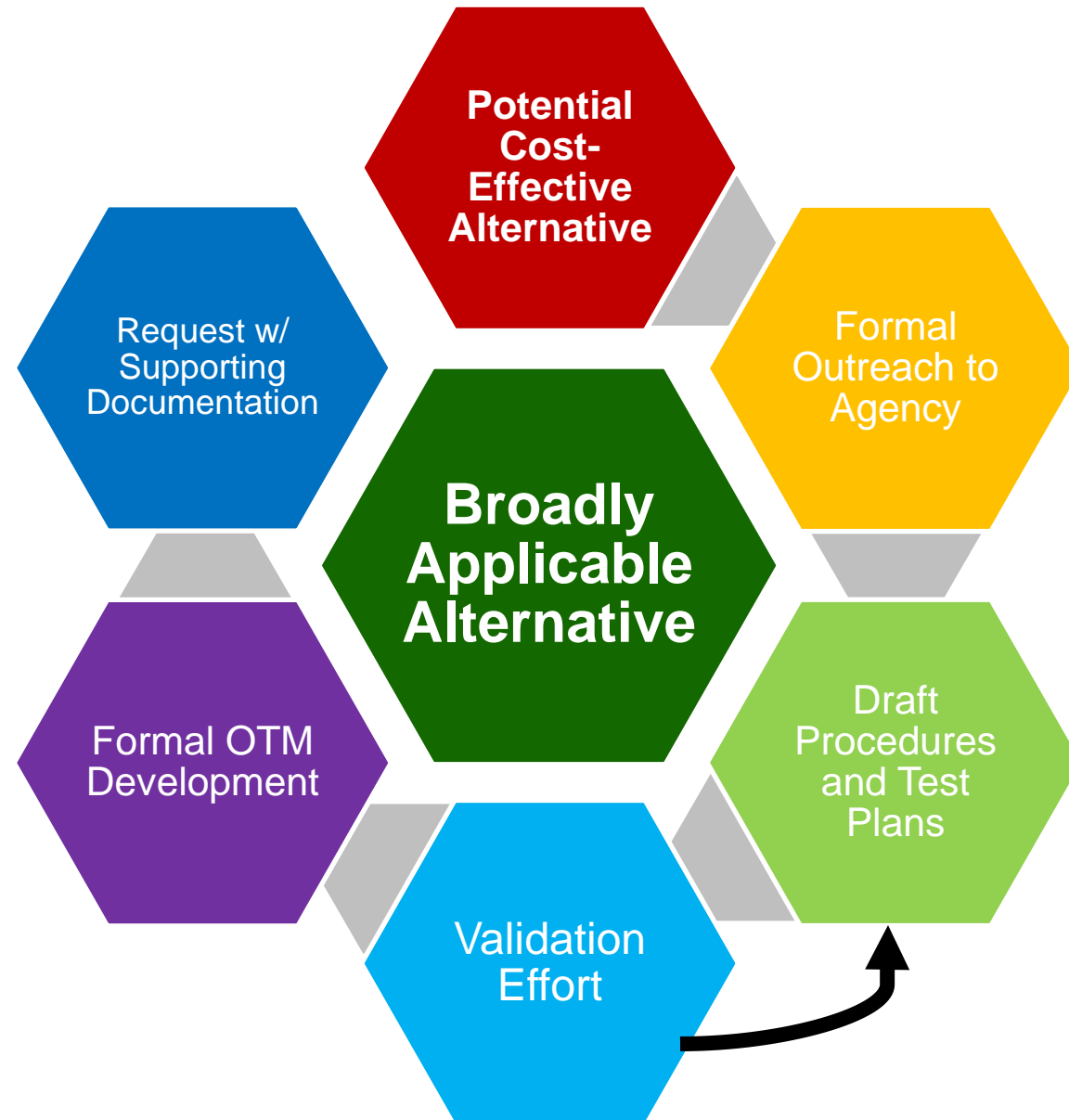
Case Study 1
Commercial Sterilizers
and Emerging
Technology



Broadly Applicable Alternative Test Method Approvals

- All alternative monitoring approvals and most alternative method approvals are site-specific
- In 2007, EPA clarified process to issue test method approvals that are broadly applicable
- Federal Register Notice lays out authority and procedures for approval (72 FR 4257, 1/30/2007)
- Over 140 Broad Approval Decisions
- Only OAQPS can issue broad approvals




Case Study 2 –
Other Test Method
Development and
Broadly Applicable
Alternatives



Resources

- Definitions of major/intermediate/minor changes to test methods and monitoring § 63.90(a)
- Delegation of approval authority to states § 63.91(g)
- Delegation of approval authority to Regions Directive 7-121
<http://intranet.epa.gov/ohr/rmpolicy/ads/delegat.htm> (EPA Internal site)
- Guideline for alternative test method requests on EMC website:
<https://www.epa.gov/sites/production/files/2020-08/documents/gd-022.pdf>
- Broad approvals for test method changes on EMC website:
<https://www.epa.gov/emc/broadly-applicable-approved-alternative-test-methods>
- Federal Register Notice on alternative test method process and broad approvals on EMC website: <https://www.epa.gov/emc/emc-recent-additions>

Air Emission Measurement Center (EMC)

CONTACT US SHARE   

The EPA hub for stationary source air emissions test methods and procedures.



February 2021: [GD 54 - EPA Source Test Observation and Report Review Checklists](#)

January 2021: [Other Test Method 45 \(OTM-45\) Measurement of Selected Per- and Polyfluorinated Alkyl Substances from Stationary Sources](#)

October 2020: [Revisions to Test Methods and Performance Specifications for Air Emission Sources; Final Rule - FR Notice 10/7/2020.](#)

NOTICE: It has come to our attention that one of the two providers of audit samples has ceased manufacturing samples for the stationary source audit program. The general provisions to 40 CFR Parts 60 and 63 (see §60.8(g)(1) and §63.7(c)(2)(iii)(A)) require that the owner or operator obtain audit samples if the audit samples are “commercially available” and have defined “commercially available” as two or more independent accredited audit sample providers (AASP) to have blind audit samples available for purchase. Since there are no longer two providers, the requirement to obtain these audit samples is no longer in effect until such time as another independent AASP has audit samples available for purchase.

When there are two or more AASP with audit samples available for purchase, we will update this webpage with the name or names of the providers and audit sample(s) available for purchase. At that time, this information must be listed on the EMC website for 60 days before audits are required again.

The Air Emission Measurement Center (EMC) provides information on test methods for measuring pollutants from smokestacks and other industrial sources. This website compiles the test methods available for emission measurement. [Contact EMC staff for technical assistance](#) in the use and application of the methods.

Test Methods

- [Promulgated Test Methods](#)
- [Proposed Test Methods](#)
- [Approved Alternative Methods](#)
- [Conditional Test Methods](#)
- [Other Test Methods](#)

Monitoring

- [Promulgated and Proposed Performance Specifications](#)
- [Quality Assurance Procedures](#)
- [Compliance Assurance Monitoring](#)
- [Continuous Emission Monitoring](#)
- [Metals and Mercury Emissions Monitoring](#)

Technical Support

- [Technical Support for Quality Assurance, Audit Program, etc.](#)
- [EMC Methods Support Directory](#)

www.epa.gov/emc

Questions ?

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