NACAA ENFORCEMENT COMMITTEE

Source Tests – State Review Levels, Data Coding and Timeliness – Responses to Survey Michael Pjetraj, P.E. North Carolina DAQ



1. As reported to EPA, what does one "test" represent?

a. Single pollutant at single emission source/location and testing condition	10
b. Single test method with multiple pollutants, single testing condition	1
c. Multiple methods, multiple pollutants, single source and testing condition.	1
d. Multiple methods, multiple pollutants, multiple sources, multiple conditions included in a single testing program.	8
e. Other (describe)	1

- Other:
- Single pollutant and multiple sources.
- The graph/table provided does not describe the query inputs – unable to determine starting point. However, we currently submit to AFS (EPA) a finite number of stack test related information, such as: facility information (name address, city, unique identifier, class) test date, compliance determination, air program, pollutant (without a stack or emission point association) and AFS data submittal date in a fixed file format. Therefore, we submit a "test" per pollutant per emission point even though AFS does not associate it with a stack or an emission point.

2. If your program reviewed an emissions test report with total PM, VE, and sulfur dioxide emissions testing from two emissions sources, you would report to EPA that:

а.	1 test was reviewed (entire testing program/1 report)	7
b.	2 tests were reviewed (1 test at each source)	1
c. trair	3 tests were reviewed (1 test for each sampling /method/pollutant)	3
d. each	6 tests were reviewed (1 test for each pollutant/method at emission source)	7
e.	Other (describe)	3

- Other:
- None, we do not report emission test report review dates to AFS. However, we currently track in-house on a per pollutant per emission point so 6.
- 4 tests (PM and SO2 at 2 sources) We don't report Opacity to AFS.
- We do not report VE as a stack test

3. If your program reviewed an emissions test report for EPA Method 18 for BTEX compounds (benzene, toluene, ethylbenzene, xylene) at 5 emissions sources, you would report to EPA that:

a. 1 test was reviewed (entire testing program/1 report)	6
 b. 4 tests were reviewed (1 test for each pollutant) 	1
c. 5 tests were reviewed (1 test at each source and/or 1 test for each sampling train)	6
d. 20 tests were reviewed (1 test for each pollutant and each location/emission source)	2
e. Other (describe)	3

- Other
- None, we do not report emission test report review dates to AFS. However, we currently track in-house on a per pollutant per emission point so 20.
- If there were separate limits for each BTEX compound it would be entered in AFS as separate tests. If there was a combined limit (total BTEX) it would be entered as one test.
- Unknown

- 4. Are pre-test protocols reviewed by your agency?
- 20 yes- a few indicated they could not get to all of them

• 5. If yes, are protocols submitted for preapproval included in the # of tests reported to EPA?

• 20 No

- 6. If protocols are included as tests, are they counted the same way as completed tests?
- 20 N/A

7. How detailed a review is performed by your agency staff?

a. Cursory review (accept the test results as reported by the facility).	2
b. Moderate (Confirm a few basic requirements of the methods and applicable regulations but general consider the reported emissions values as valid and testing conditions representative.)	2
c. Detailed with respect to the performance of the test methods including at least some recalculation/verification of the reported emissions results.	5
d. Detailed with respect to test performance and detailed with respect to regulatory requirements and confirmation of representative operating conditions and process/control operating parameters	17

8. Does the level of detail of review vary based on the purpose of testing?

a. All tests are reviewed at the same detail level.	10
b. Level of detail of the review varies based on facility compliance history and relative complexity of the test methods and compliance requirements.	8
c. Level of review varies based on the quality of the test report and the test consultant's history with the agency.	4
d. Other (Please describe)	3

- Other
- Cursory review for CEM RATAs and detailed reviews for compliance demonstration purposes, enforcement related testing, initial testing, federal testing (i.e. MACT, NESHAP, etc.) tests representing more than one location (i.e. like-kind by size and manufacturer where the success/ failure of one represents multiple like-kind by size and manufacturer) and emission factor development.
- Level of detail of the review varies based on facility compliance history, relative complexity of the test methods and compliance requirements, proximity to limit, size of facility, frequency of testing, etc.
- Testing and/or reports with problems do take longer to review, however.
- The level of review depends upon whether the review has been contracted out by a 3rd party, compliance history, and the test consultant's history with the agency.

9. What is the average time in work hours/days does a typical review of a single pollutant at the single emissions point require including compliance evaluation, review summary documentation and other agency requirements?

a.	Less than 8 hours	9
b.	1 workday	5
с.	2-3 work days	5
d.	4-5 work days	0
e.	5+ workdays	1

- Comments:
- Less than 8 hours includes recalculation of raw data, permit review, operating condition review and report write-up (assumes all information contained in original submittal).
- Workday Well done reports take less time. Sloppy, problematic reports can take quite a bit longer. Multiple methods on the same stack, take less time per method since often stack data, flow data is shared.
- This can vary depending on the purpose of test and determining compliance. But for a single pollutant at a single emission source this is typically done in less than 8-hours for our experienced staff. I have one engineer with over 30 years experience and the other 2 engineers have less than 2 years experience. The less experienced staff members can complete a review anywhere from less than 8 hours to 2-3 work days.

• 10. Do reviews performed by your agency include? Check all that apply.

a.	recalculating results from raw data? For 1, 2, or 3 runs?	19
b.	confirming all required calibration data is included in the report?	20
с.	confirming all required QA/QC procedures are followed and met?	19
d. cas	confirming that process operations are representative of maximum/worst e/maximum normal conditions.	19
e.	Verifying that control device parameters are normal?	17
f. rep	Verifying that all required process and control parameters are being monitored and orted?	18
g.	Confirm that the required and/or appropriate test methods are performed?	20
h.	Review of the analytical data?	19
i.	Reviewing chain of custody?	15
j. req	Confirming that all required audit samples were analyzed and met the minimum uirements?	17
k.	Other (Please describe)?	2

- Other
- Varies on a case-by-case basis as to what the reviewer feels is needed to be verified.
- We also confirm compliance with permit, regulatory standard, efficiency, and/or purpose of test
- Reviewing that testing is conducted in time to meet testing due date(s) in rules/regulations or the permit.
- All of these steps occur at times but as stated in #7 above the level of detail that is reviewed depends on the knowledge level of the staff person assigned to the review.

11. The EPA information tracks the number of days for a test to be reviewed. For your program the time of review starting date is triggered by what event/action?

a.	a. Test program start date.	
b.	Test program end date (last day of sampling)	6
с.	All sample analyses completed.	0
d.	Test Report completed by testing consultant and submitted to	0
facil	ity	
e.	Facility submits complete test report to Agency for review.	11
f.	Agency review staff receives test report.	4
g.	"Test performed" action is entered into AFS.	0

- Comments:
- The label "time of review", based on our AFS submittal, is a misrepresentation of an actual emission test report review. Based on the two dates we submit to AFS, test date and data submitted date, they are drawing conclusions that do not exist, i.e. the emission test report has been reviewed at the time of data submittal to AFS.
- Each test can have a separate end date. If 2 stacks are tested as part of a single test program, one each day for two days, the end date for the first stack's test is day 1, the end date for the second stack's test is day 2.
- AFS vs Internal marks are different

12. For your program, the time of review completion date is triggered by what event/action?

 Agency review staff evaluates test validity and compliance status. 		2
b. to a	Agency review staff complete written documentation of review opropriate personnel within your agency.	9
c. and	Agency takes necessary action based on the results of the test review.	2
d. base	Agency notifies the facility regarding the results/conclusions ed on test review.	5
e.	Review completion action code reported to EPA.	3
f.	Other (describe)	1

- Other
- Agency staff complete review and enter results into database

- 13. Does the review time include a provision (clock stop) to account for additional information requests?
- most no a couple yes, one building a new system with a clock, one stated agency does not have a finite clock, one stated they use the 99 pending code

WHAT TYPES OF REPORTS ARE REVIEWED?

14. What types of tests are reviewed? Check all that apply.

a. Testing performed due to federal and state regulatory requirements to demonstrate compliance with applicable standards.	20
 Tests submitted in support of permit applications and/or emissions factors and emissions inventories 	18
c. CEM reports -	19 - plus one "other group in agency"
d. Pre-test protocols	18 – but "not considered test"

WHAT TYPES OF REPORTS ARE REVIEWED?

15. Are emissions testing performed in conjunction with CEMS reviewed by your agency? If yes please note which type of reports are reviewed. Check all that apply.

a.	No	0
b.	Yes, initial certification	16
d. Dow	Excess Emission Reports (Including Monitoring Intime)	12
с.	RATA	19
e.	Malfunction Abatement Plans	6
f.	Part 75 CEMS Audit	12
g.	Other	2

16. How many staff (full time equivalents) are dedicated to emission test report review? If 2 half time positions, report as 1 FTE)

a.	1	6
b.	2	4
с.	3	2
d.	4	2
e.	5+	5

17. Does the test review staff perform other duties with respect to testing such as (check all that apply):

a.	Pre-test protocol review	19
b.	Stack test observations	19
с.	Facility inspections	12
d.	Permit review with respect to testing requirements	18
e.	Required EPA reporting	13
f.	Other (please describe)	6

- Other:
- The reviewing staff enter the reports into NY database which is then loaded into EPA system via a monthly batch upload process.
- State conducted stack tests and CEMS Audits
- CEMS QA Audits and Stack Testing
- Review draft permits, develop policies and procedures
- All of our compliance staff are asked to complete many tasks, one of which is emission test report review. Aside from the other items mentioned on this question, the test review staff also review/complete annual emission inventories, review Title V Reports, Review certifications, etc

18. How many other staff is involved with work duties that pertain to emissions testing other than test review and evaluation (for example: regional staff to perform test observations or other staff that communicates with the facilities). The emissions tests duties would be only part-time responsibilities

a.	0-1	11
b.	2-5	5
с.	6-10	1
d.	10+	3

- Comments
- 10+ (31 regional compliance inspectors)
- We have 7 staff (besides the test observer, report reviewer) who are involved with permitting and compliance. These people may have some occasional involvement with emissions testing – especially with respect to the testing fulfilling permit requirements. Overall, testing would take up a very small amount of their time – maybe 1% or less.

19. How many staff members would be involved in the review/observation/communication/EPA reporting/enforcement for a typical testing program.

a.	1	4
b.	2-4	14
с.	5-7	1
d.	8+	1

20. What type of staff is involved in all aspects of an emissions test? Please check all that apply.

a.	Permitting (test requirement)	11
b. com	Regional Inspectors and pliance staff	13
с.	Enforcement personnel	12
d.	IT staff for EPA reporting	7
e.	Other (please describe)	6

- Comments:
- – Items (a) & (c) are also normally regional staff duties.
- a.) ADEM-Air Division engineering staff do permitting, compliance, and enforcement for each assigned facility. These personnel work in conjunction with the ADEM-Air Division Emission Measurement Section personnel to ensure that all aspects of emission testing and reporting for a facility are performed correctly and thoroughly evaluated.
- Our regional compliance inspectors have many roles including stack testing, CEM/COM, inspections, enforcement, complaints and permitting
- x Mecklenburg County Air Quality ("MCAQ") staff are assigned facilities and are responsible for permitting, inspecting, and enforcement at their assigned facilities. The staff member assigned to the facility that is conducting stack testing accompanies the stack test observer during the testing.
- x (All testing is handled through our Compliance and Enforcement Section)