

SANTA BARBARA COUNTY
AIR POLLUTION CONTROL DISTRICT
POLICIES AND PROCEDURES

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Topic:	<u>Source Test Observation and Enforcement</u>		
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This policy and procedures document provides guidance to APCD personnel in the observation of source tests and enforcement actions pertaining to source tests. Source tests are conducted for the purpose of demonstrating compliance with APCD rules, state regulations, permit conditions, special agreements, or gathering emissions data. Source tests are conducted during the Source Compliance Demonstration Period (SCDP) to determine compliance with the Authority to Construct (ATC) emissions and process limits. Source tests are generally conducted on an annual basis following Permit to Operate (PTO) issuance. Source tests may also be conducted at any time APCD requires that compliance be demonstrated or emissions be quantified.

APCD reviews source test plans, observes source tests, and reviews source test results to ensure that the results are representative, accurate, and precise. APCD must have confidence in the quality of the test results to determine compliance, evaluate emission controls, and assess attainment strategies. The major activities associated with source test review and observation consist of estimating costs and securing funding, source test plan review, preparation for source test observation, source test observation, observation trip report, test report review, and compliance/enforcement assessment. Each of these activities are presented below.

COST ESTIMATE AND SOURCE OF FUNDING

The source test observer is a staff member or contractor budgeted on a cost reimbursable or fee basis. Funds must be available for source test work prior to initiating source test plan review. The observer must determine if sufficient funding is available or procure funding for the intended project before expending any effort. The Supervisor of the source test program (along with the Engineer) should be aware of new permits and expected test dates of existing permits so that sufficient time is available to secure funding without delaying the source test plan (STP) review process.

In general, compliance source tests for permits processed on a cost reimbursement basis, toxics source tests, and CEMS activities will be funded on a cost reimbursable basis. Projects that are reimbursable normally maintain deposits and many activities other than source testing are being charged to the deposit. For reimbursable projects, the Supervisor should be made aware of the schedule of the testing activity, and

the estimated number of hours the observer will expend for STP review, observation and test report review. The Engineer and/or Supervisor should determine if the existing deposit is sufficient.

For fee based permit projects, source test observation costs are recovered based on a fee consistent with APCD Rule 210, Schedule C. The observer must write a letter to the source requesting payment of the fee. The fee to be assessed is determined by the number of tests and the type of equipment tested. Review of STPs or any other related work must not proceed until the fee is received by the APCD accounting department. If a source test must be repeated due to problems with compliance, it may be necessary for the observer to request an additional fee from the source. When determining if the test fee must be reassessed prior to a retest, source test staff should review APCD expenses incurred to date and the estimated expenses expected for the retest relative to the amount of the original fee.

SOURCE TEST PLAN REVIEW

A source test plan (STP) is required to be submitted and approved for all source testing programs. If a STP is not approved, the results may not be accepted as valid by APCD. The STP is generally required to be submitted at least 30 days prior to test date. Certain permits may have different requirements and the observer must be familiar with the requirements of the particular permit.

If the permit is very specific in the required time of submittal and the STP is not submitted on time, several types of action may need to be taken. If the STP must be submitted by a certain number of days prior to the SCDP, the SCDP may be required to be postponed. If the STP must be submitted a certain number of days prior to the test date, the test date may be required to be postponed. If the STP must be submitted on a specific date and is not received by that date, the case should be referred to the appropriate enforcement Supervisor.

If the permit is not specific about STP submittal, the observer should determine if the submittal date allows sufficient time for review based upon current workload, complexity of the testing, familiarity with the source, urgency in obtaining emissions data, and other factors as appropriate. If the observer determines that the STP cannot be reviewed and approved prior to the test date, the observer should inform the Supervisor of the source test program. If directed by the Supervisor, the observer should notify the source operator that the test will need to be rescheduled to a later date.

The STP must be reviewed for consistency with the permit (including load requirements), APCD's Source Test Procedures Manual (STPM), APCD's policy and established source test methods. With prior APCD approval, a previously approved STP may be accepted by APCD in lieu of an operator submitting a new plan, if there are no major changes to the test program. In all cases, the STP must be approved in writing prior to test initiation (even if there are no changes to the prior approved STP). APCD comments to the source operator concerning the STP should be constructive, and any requests for supplemental information should be clearly stated. APCD comments and approval should only be included in the same letter if the comments are minor (i.e., conditional approvals).

Many permits require written notification of the test date be submitted to APCD at least ten days prior to test initiation. If the test date was included in the original STP, this requirement has been met. If the test date is changed or not included in the original STP, the observer must make sure that the notification requirements are met. If a test date is changed after receipt of the written notification, the source need not resubmit a written notification letter, if deemed appropriate by source test staff via telephone.

PREPARATION FOR SOURCE TEST OBSERVATION

The source test observer must verify that the STP is correctly implemented. The observer must be familiar with the source permit, APCD policy, applicable rules, the APCD's STPM, the STP, the test methods to be used, and any other communications that are relevant to the test program. The observer should bring the STP, STPM, copy of the source permit, and appropriate observation forms to the test site. The observer should contact the APCD inspector assigned to the source to be tested to allow the inspector the opportunity to be at the site during testing.

The observer must use a District vehicle for transportation to the test site. The observer should be familiar with the safety requirements of the facility at which the testing is conducted. The observer must arrive equipped with the proper safety equipment. Normally this equipment includes a hard hat, safety glasses, safety shoes, and hearing protection (refer to the District's Safety policy and procedures. If a considerable amount of time has passed between approval of the STP and the test date, the observer should contact the source several days prior to the test to verify that the test will commence as planned.

OBSERVATION

The observer must determine if each part of the test program is consistent with the STP. If a procedure or piece of equipment is significantly different than that contained in the STP, the observer should inform the source operator or the test contractor. Of particular concern is the level of equipment operation during the test relative to the permitted maximum. Since tests are usually intended to be conducted at the maximum load allowed by permit, the observer must verify that the equipment is operating at the proper load. This operating requirement must be defined in the STP. If questions arise concerning consistency with the STP that cannot be addressed by the observer, the observer should contact the Supervisor of the source test program for guidance. The source operator or the test contractor should immediately respond to bring the test program into compliance with the STP. All test data or samples collected in a manner not consistent with the STP will be invalidated by the observer. The test contractor may propose an alternate procedure than that contained in the STP. The observer will determine that the alternate procedure is acceptable before allowing the test contractor to deviate from the STP. If the observer cannot make such a determination, they shall verify the acceptability of the alternate procedure with the Supervisor of source test program before allowing the operator to continue.

The observer should witness as much of the test program as possible. At a minimum, a complete test run of each type of test should be observed for each emissions source tested. The test contractor may be allowed to initiate testing prior to the arrival of the observer. However, the observer may invalidate test data and samples collected prior to their arrival, if evidence suggests that the data or samples were not obtained consistent with the STP. The test contractor may be allowed to continue testing after the observer has left, if the observer is confident that the testing will be conducted consistent with the STP. If there is any indication that testing may be problematic, the observer should not allow tests to continue after their departure.

The observer must complete the instrument method or wet test method observation forms as appropriate for each test run. The observation forms must be as complete and detailed as possible to allow the test report reviewer to compare the final test results to the preliminary results and raw data. Test data or samples may be invalidated by the observer at the test site or upon review of the test report. See Section 4.16 of the STPM. Invalidation at the test site may be due to improper source operating conditions, loss or contamination of samples, improper sampling procedures or equipment, or improper sample

recovery procedures. Invalidation upon test report review is normally due to improper sample analysis procedures or equipment, and loss or contamination of samples or data.

The approved STP is the primary guideline to determine the validity of the test program. All deviations from the STP or the referenced test method must be approved by the observer or the Supervisor of the source test program prior to implementation. The STP may not be entirely consistent with the STPM due to peculiarities of the source permit or the source itself. In this case, the STP takes precedence.

TRIP REPORT

For tests that were problematic or anticipated to indicate noncompliance, the observer should complete an observation trip report on the work day following the observation. The trip report should be in the form of a memo to the project file with a copy going to the Supervisor of the source test program and other appropriate District staff. The trip report should contain an overview of the test program including preliminary results, estimated compliance status and any problems experienced. The completed observation forms should be filed in the appropriate source test section folder. The trip report should reference appropriate observation forms (as applicable). Such a report is required for a test program which included any deviation from the STP or possible compliance problems. If the test was not problematic, notification to the Supervisor of the source test program of test status will suffice.

REPORT REVIEW

The person reviewing the test report should be the same person who observed the test program. In the case somebody other than the observer reviews the report, they should get the test observation notes from the observer.

The reviewer should determine the date of test report submittal and verify that the date of submittal complies with the source permit. Generally, the test report must be submitted within 45 days of test program completion.

Test results are normally not invalidated due to errors in data reduction, calculations or interpretation of data. Valid results can usually be determined from the raw data contained in the test report. If report raw data allows the reviewer to correct portions of the test report, such corrections should be entered into the report. Any significant corrections must be noted in the correspondence, from APCD to the source, on test report status (i.e., report acceptance letter or request for additional information/corrections). Test results may be invalidated if the test program was not observed by APCD. This decision should be made by the Supervisor of the source test program.

The reviewer must be familiar with the STP and the source permit. The reviewer should verify that the test program has satisfied the requirements of the permit. The reviewer should check the raw data, data reduction procedures, data transformation, and calculations for at least one test run of each test type. For instrument testing this will include checking that the strip charts were read correctly, the calibration drift is acceptable, the pollutant values are correctly calculated and averaged, and the mass emission values are correctly calculated.

The reviewer should write a test report review letter to the source operator with copies to the project file, Supervisor of the source test program and other District staff (as appropriate). The letter should include the

compliance status of each emissions source tested, and final APCD approved test results if they differ from those presented in the report.

COMPLIANCE STATUS/ENFORCEMENT

1. General

A. Compliance Determination

Source tests generally include three separate test runs, with each of the three test runs forty to sixty minutes in length. Compliance with permit limits or APCD rules and regulations are determined by comparing the applicable emission limit with the average of the three source test runs, with this average rounded to the same number of significant figures as the emission limit. Thus, if one test run exceeds the emission limit, but the average of the three runs indicates compliance, then the source is deemed to be in compliance with the permit limit. If the first test run indicates noncompliance, the source is not allowed to change operations to induce the average of the three runs to indicate compliance. Since a mid-test change in operations is not consistent with the STP, any such change not pre-approved by the APCD observer invalidates any subsequent tests. Details on determination of noncompliance on-site is provided in a separate section below.

B. Compliance Status After Discovery of a Failed Test

When a source fails a source test, a Notice of Violation (NOV) shall be issued as detailed in the following sections. If the test is part of SCDP to verify emission limits in a new permit or it is the initial test to verify emission limits for a reevaluated permit, APCD may not pursue enforcement action. However, if any testing shows a source does not comply with a APCD prohibitory rule, a NOV will be issued. For sources in SCDP, refer to District policies and procedures for guidance (both from the Engineering Division and the Compliance Division). A failed source test must be followed up by a repeat test to verify compliance. Until a retest of the affected equipment verifies compliance, each day of operation subsequent to the day of discovery may be a separate violation unless the source operator takes action which APCD accepts as reasonably bringing the source back into compliance. If the owner/operator believes that they are or will be in violation, they may seek breakdown and/or variance protection from enforcement action consistent with APCD Regulation V. The day of discovery is defined as: (1) the test day for noncompliant determinations made on-site; or, (2) for a violation discovered after receipt of the test report, the day that the operator was informed of the violation by APCD. Note, variances may not be obtained for ATC permits or for activities during the SCDP.

If the source is able to provide evidence that the cause of the violation has been remedied, or that the violation was an aberration, APCD may find no further enforcement action is necessary for the interim period between the test date and a successful repeat source test. For example, assume a source which includes a baghouse fails a particulate matter (PM) test. Upon report review, the source realizes that the baghouse pressure drop was smaller than normal due to tears in several bags in the baghouse. Replacement of the bags resulted in an increase in the pressure drop to appropriate values. In such a case it is logical to assume that compliance has been reestablished (the retest will confirm this). Another example of acceptable operation post-discovery of a violation is process curtailment such that extrapolated emissions would likely be less than the permitted

limit. In such a case, APCD must approve any proposed extrapolation methods. In any event, a repeat source test is always required to verify compliance.

The repeat source test should be completed as expeditiously as possible. APCD source test staff will be prepared to provide support for test observation with advance notification. If a source does not cooperate with the request to expeditiously retest, APCD may order a retest in accordance with APCD Rule 210.D.1.b, and Sections 42303 and 41511 of the California Health and Safety Code. Specifically, Rule 210.D.1.b states that APCD may require a source test if it has reasonable cause to believe emissions from a source violate any rules and/or permit conditions.

C. Source Test/CEMS Data Precedence

For sources with continuous emission monitoring systems (CEMS), the annual source test will generally occur in conjunction with the CEMS certification audit. Due to the acceptable accuracy deviation allowed for CEMS, it is possible that the source test will indicate noncompliance while the CEMS indicates compliance (or vice versa). In such a circumstance, the source test data takes precedence over CEMS for determining compliance. If the CEMS reports a violation while the source test indicates compliance, the source should be granted latitude when determining compliance only for the time that the source test is occurring.

2. On-Site Compliance Assessment

The preliminary test results obtained by the observer at the test site may indicate that the emissions source is not in compliance with APCD rules, state regulations, permit conditions, or special agreements. If the preliminary test results indicate a large deviation from compliance, the test program should be continued until enough data is collected to demonstrate non-compliance. The observer or the Supervisor of the source test program should determine the amount of data needed to demonstrate non-compliance. At a minimum, a single run must be completed. For example, if the test indicates that NO_x exceeds permitted limits, at least one of the three, forty minute runs must be completed.

If a relatively small adjustment or repair will bring the source into compliance within a few hours, the source operator should be advised to do so and repeat the test program. If a small adjustment or repair will not bring the source into compliance (based on the repeat test), the source operator should be advised that each subsequent day of operation may be considered a separate violation.

In all cases, if a test clearly shows the source is out of compliance, the source test observer shall notify the source that a NOV will be issued for the non-compliance situation. In addition, the observer shall provide the operator guidance on what their next steps should be. If the observer has any uncertainty about the compliance status of the source, they should contact the Supervisor of the source test program for direction.

3. Compliance Determination During Source Test Review

If upon review of the source test report a violation is discovered (reference Report Review Section above), the reviewer should discuss it with the Supervisor of the source test program. After verification that a violation occurred, the reviewer should initiate NOV action. As detailed above, unless the source can provide evidence that the violation has been remedied to APCD's satisfaction, each subsequent day of operation is subject to enforcement action.

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