

program shall gather test data on individual vehicles, as well as quality control data on test equipment.

(a) *Test data.* The goal of gathering test data is to unambiguously link specific test results to a specific vehicle, I/M program registrant, test site, and inspector, and to determine whether or not the correct testing parameters were observed for the specific vehicle in question. In turn, these data can be used to distinguish complying and non-complying vehicles as a result of analyzing the data collected and comparing it to the registration database, to screen inspection stations and inspectors for investigation as to possible irregularities, and to help establish the overall effectiveness of the program. At a minimum, the program shall collect the following with respect to each test conducted:

- (1) Test record number;
- (2) Inspection station and inspector numbers;
- (3) Test system number;
- (4) Date of the test;
- (5) Emission test start time and the time final emission scores are determined;
- (6) Vehicle Identification Number;
- (7) License plate number;
- (8) Test certificate number;
- (9) Gross Vehicle Weight Rating (GVWR);
- (10) Vehicle model year, make, and type;
- (11) Number of cylinders or engine displacement;
- (12) Transmission type;
- (13) Odometer reading;
- (14) Category of test performed (i.e., initial test, first retest, or subsequent retest);
- (15) Fuel type of the vehicle (i.e., gas, diesel, or other fuel);
- (16) Type of vehicle preconditioning performed (if any);
- (17) Emission test sequence(s) used;
- (18) Hydrocarbon emission scores and standards for each applicable test mode;
- (19) Carbon monoxide emission scores and standards for each applicable test mode;
- (20) Carbon dioxide emission scores (CO+CO₂) and standards for each applicable test mode;

(21) Nitrogen oxides emission scores and standards for each applicable test mode;

(22) Results (Pass/Fail/Not Applicable) of the applicable visual inspections for the catalytic converter, air system, gas cap, evaporative system, positive crankcase ventilation (PCV) valve, fuel inlet restrictor, and any other visual inspection for which emission reduction credit is claimed;

(23) Results of the evaporative system pressure test expressed as a pass or fail;

(24) Results of the evaporative system purge test expressed as a pass or fail along with the total purge flow in liters achieved during the test; and

(25) Results of the on-board diagnostic check expressed as a pass or fail along with the diagnostic trouble codes revealed.

(b) *Quality control data.* At a minimum, the program shall gather and report the results of the quality control checks required under § 51.359 of this subpart, identifying each check by station number, system number, date, and start time. The data report shall also contain the concentration values of the calibration gases used to perform the gas characterization portion of the quality control checks.

[57 FR 52987, Nov. 5, 1992, as amended at 61 FR 40945, Aug. 6, 1996]

§ 51.366 Data analysis and reporting.

Data analysis and reporting are required to allow for monitoring and evaluation of the program by program management and EPA, and shall provide information regarding the types of program activities performed and their final outcomes, including summary statistics and effectiveness evaluations of the enforcement mechanism, the quality assurance system, the quality control program, and the testing element. Initial submission of the following annual reports shall commence within 18 months of initial implementation of the program as required by § 51.373 of this subpart. The biennial report shall commence within 30 months of initial implementation of the program as required by § 51.373 of this subpart.

(a) *Test data report.* The program shall submit to EPA by July of each

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year a report providing basic statistics on the testing program for January through December of the previous year, including:

(1) The number of vehicles tested by model year and vehicle type;

(2) By model year and vehicle type, the number and percentage of vehicles:

(i) Failing the emissions test initially;

(ii) Failing each emission control component check initially;

(iii) Failing the evaporative system functional and integrity checks initially;

(iv) Failing the first retest for tailpipe emissions;

(v) Passing the first retest for tailpipe emissions;

(vi) Initially failed vehicles passing the second or subsequent retest for tailpipe emissions;

(vii) Initially failed vehicles passing each emission control component check on the first or subsequent retest by component;

(viii) Initially failed vehicles passing the evaporative system functional and integrity checks on the first or subsequent retest by component;

(ix) Initially failed vehicles receiving a waiver;

(x) Vehicles with no known final outcome (regardless of reason);

(xi) Passing the on-board diagnostic check and failing the I/M emission test;

(xii) Failing the on-board diagnostic check and passing the I/M emission test;

(xiii) Passing both the on-board diagnostic check and I/M emission test;

(xiv) Failing both the on-board diagnostic check and I/M emission test;

(xv) Passing the on-board diagnostic check and failing the I/M evaporative test;

(xvi) Failing the on-board diagnostic check and passing the I/M evaporative test;

(xvii) Passing both the on-board diagnostic check and I/M evaporative test;

(xviii) Failing both the on-board diagnostic check and I/M evaporative test;

(xix) MIL is commanded on and no codes are stored;

(xx) MIL is not commanded on and codes are stored;

(xxi) MIL is commanded on and codes are stored;

(xxii) MIL is not commanded on and codes are not stored;

(xxiii) Readiness status indicates that the evaluation is not complete for any module supported by on-board diagnostic systems;

(3) The initial test volume by model year and test station;

(4) The initial test failure rate by model year and test station; and

(5) The average increase or decrease in tailpipe emission levels for HC, CO, and NO_x (if applicable) after repairs by model year and vehicle type for vehicles receiving a mass emissions test.

(b) *Quality assurance report.* The program shall submit to EPA by July of each year a report providing basic statistics on the quality assurance program for January through December of the previous year, including:

(1) The number of inspection stations and lanes:

(i) Operating throughout the year; and

(ii) Operating for only part of the year;

(2) The number of inspection stations and lanes operating throughout the year:

(i) Receiving overt performance audits in the year;

(ii) Not receiving overt performance audits in the year;

(iii) Receiving covert performance audits in the year;

(iv) Not receiving covert performance audits in the year; and

(v) That have been shut down as a result of overt performance audits;

(3) The number of covert audits:

(i) Conducted with the vehicle set to fail the emission test;

(ii) Conducted with the vehicle set to fail the component check;

(iii) Conducted with the vehicle set to fail the evaporative system checks;

(iv) Conducted with the vehicle set to fail any combination of two or more of the above checks;

(v) Resulting in a false pass for emissions;

(vi) Resulting in a false pass for component checks;

(vii) Resulting in a false pass for the evaporative system check; and

(viii) Resulting in a false pass for any combination of two or more of the above checks;

(4) The number of inspectors and stations:

(i) That were suspended, fired, or otherwise prohibited from testing as a result of covert audits;

(ii) That were suspended, fired, or otherwise prohibited from testing for other causes; and

(iii) That received fines;

(5) The number of inspectors licensed or certified to conduct testing;

(6) The number of hearings:

(i) Held to consider adverse actions against inspectors and stations; and

(ii) Resulting in adverse actions against inspectors and stations;

(7) The total amount collected in fines from inspectors and stations by type of violation;

(8) The total number of covert vehicles available for undercover audits over the year; and

(9) The number of covert auditors available for undercover audits.

(c) *Quality control report.* The program shall submit to EPA by July of each year a report providing basic statistics on the quality control program for January through December of the previous year, including:

(1) The number of emission testing sites and lanes in use in the program;

(2) The number of equipment audits by station and lane;

(3) The number and percentage of stations that have failed equipment audits; and

(4) Number and percentage of stations and lanes shut down as a result of equipment audits.

(d) *Enforcement report.* (1) All varieties of enforcement programs shall, at a minimum, submit to EPA by July of each year a report providing basic statistics on the enforcement program for January through December of the previous year, including:

(i) An estimate of the number of vehicles subject to the inspection program, including the results of an analysis of the registration data base;

(ii) The percentage of motorist compliance based upon a comparison of the number of valid final tests with the number of subject vehicles;

(iii) The total number of compliance documents issued to inspection stations;

(iv) The number of missing compliance documents;

(v) The number of time extensions and other exemptions granted to motorists; and

(vi) The number of compliance surveys conducted, number of vehicles surveyed in each, and the compliance rates found.

(2) Registration denial based enforcement programs shall provide the following additional information:

(i) A report of the program's efforts and actions to prevent motorists from falsely registering vehicles out of the program area or falsely changing fuel type or weight class on the vehicle registration, and the results of special studies to investigate the frequency of such activity; and

(ii) The number of registration file audits, number of registrations reviewed, and compliance rates found in such audits.

(3) Computer-matching based enforcement programs shall provide the following additional information:

(i) The number and percentage of subject vehicles that were tested by the initial deadline, and by other milestones in the cycle;

(ii) A report on the program's efforts to detect and enforce against motorists falsely changing vehicle classifications to circumvent program requirements, and the frequency of this type of activity; and

(iii) The number of enforcement system audits, and the error rate found during those audits.

(4) Sticker-based enforcement systems shall provide the following additional information:

(i) A report on the program's efforts to prevent, detect, and enforce against sticker theft and counterfeiting, and the frequency of this type of activity;

(ii) A report on the program's efforts to detect and enforce against motorists falsely changing vehicle classifications to circumvent program requirements, and the frequency of this type of activity; and

(iii) The number of parking lot sticker audits conducted, the number of vehicles surveyed in each, and the non-compliance rate found during those audits.

(e) *Additional reporting requirements.* In addition to the annual reports in paragraphs (a) through (d) of this section, programs shall submit to EPA by July of every other year, biennial reports addressing:

(1) Any changes made in program design, funding, personnel levels, procedures, regulations, and legal authority, with detailed discussion and evaluation of the impact on the program of all such changes; and

(2) Any weaknesses or problems identified in the program within the two-year reporting period, what steps have already been taken to correct those problems, the results of those steps, and any future efforts planned.

(f) *SIP requirements.* The SIP shall describe the types of data to be collected.

[57 FR 52987, Nov. 5, 1992, as amended at 61 FR 40945, Aug. 6, 1996]

§ 51.367 Inspector training and licensing or certification.

All inspectors shall receive formal training and be licensed or certified to perform inspections.

(a) *Training.* (1) Inspector training shall impart knowledge of the following:

(i) The air pollution problem, its causes and effects;

(ii) The purpose, function, and goal of the inspection program;

(iii) Inspection regulations and procedures;

(iv) Technical details of the test procedures and the rationale for their design;

(v) Emission control device function, configuration, and inspection;

(vi) Test equipment operation, calibration, and maintenance;

(vii) Quality control procedures and their purpose;

(viii) Public relations; and

(ix) Safety and health issues related to the inspection process.

(2) If inspector training is not administered by the program, the responsible State agency shall monitor and evaluate the training program delivery.

(3) In order to complete the training requirement, a trainee shall pass (i.e., a minimum of 80% of correct responses or lower if an occupational analysis justifies it) a written test covering all aspects of the training. In addition, a hands-on test shall be administered in which the trainee demonstrates without assistance the ability to conduct a proper inspection, to properly utilize equipment and to follow other procedures. Inability to properly conduct all test procedures shall constitute failure of the test. The program shall take appropriate steps to insure the security and integrity of the testing process.

(b) *Licensing and certification.* (1) All inspectors shall be either licensed by the program (in the case of test-and-repair systems that do not use contracts with stations) or certified by an organization other than the employer (in test-only programs and test-and-repair programs that require station owners to enter into contracts with the State) in order to perform official inspections.

(2) Completion of inspector training and passing required tests shall be a condition of licensing or certification.

(3) Inspector licenses and certificates shall be valid for no more than 2 years, at which point refresher training and testing shall be required prior to renewal. Alternative approaches based on more comprehensive skill examination and determination of inspector competency may be used.

(4) Licenses or certificates shall not be considered a legal right but rather a privilege bestowed by the program conditional upon adherence to program requirements.

(c) *SIP requirements.* The SIP shall include a description of the training program, the written and hands-on tests, and the licensing or certification process.

§ 51.368 Public information and consumer protection.

(a) *Public awareness.* The SIP shall include a plan for informing the public on an ongoing basis throughout the life of the I/M program of the air quality problem, the requirements of Federal and State law, the role of motor vehicles in the air quality problem, the need for and benefits of an inspection program, how to maintain a vehicle in