

**Commonwealth of Pennsylvania
Department of Environmental Protection**



Final

State Implementation Plan Revision

**Visual Inspection Quality Assurance Protocol Revision in the Vehicle Safety
Inspection Program for 42 Counties**

March 2009

Bureau of Air Quality
Pennsylvania Department of Environmental Protection
P.O. Box 8468
Harrisburg, PA 17105-8468
717-787-9495

www.depweb.state.pa.us

John Hanger
Secretary

Edward G. Rendell
Governor

Blank page for copying purposes

Background

A. Pennsylvania's Vehicle Safety Inspection Program State Implementation Plan

On December 1, 2003, the Secretary of the Pennsylvania Department of Environmental Protection (Department) submitted to the United States Environmental Protection Agency (EPA) a revision to the State Implementation Plan (SIP) for the Commonwealth of Pennsylvania's (Commonwealth's or Pennsylvania's) enhanced vehicle emission inspection and maintenance (I/M) program and vehicle safety inspection program. The December 1, 2003, SIP revision included a requirement for a visual inspection of pollution control equipment in the vehicle safety inspection program in the 42 Pennsylvania counties in which an I/M program is not required. The SIP submittal included safety inspection regulations, codified at *67 Pa. Code* Chapter 175, and information about how the Commonwealth will meet federal I/M program requirements contained in 40 CFR §§ 51.350-51.371.

On October 6, 2005, EPA approved the SIP revision (70 FR 58313). The approved SIP revisions are codified in 52 CFR §2020 (relating to identification of plan).

B. Effectiveness of the Anti-Tampering Pilot Program

Pennsylvania safety inspection regulations require, in *67 Pa. Code* §175.80(d) (relating to inspection procedure), that in the 42 counties in which there is not an emission inspection program (non-I/M counties), vehicles must be visually checked to ensure that the following emission control components are not the wrong type for the certified vehicle configuration and have not been removed or disconnected:

- Catalytic converter
- Exhaust gas recirculation (EGR) valve
- Positive crankcase ventilation (PCV) valve
- Fuel inlet restrictor
- Air pump
- Evaporative control system components

The visual inspection is also referred to as the anti-tampering program (ATP). The current quality assurance program for the safety inspections, as it relates to administrative audits of approximately 5,200 safety inspection garages in the 42 non-I/M counties, has experienced significant operational inefficiencies because of the frequent need to return to the inspection stations to achieve full compliance with the following terms of the December 1, 2003 SIP that reads:

“As part of the audit of the 42 Non-I/M County Program, a vehicle on the station's premises which has a safety inspection sticker indicating that it has passed a safety inspection administered by the station within the immediately preceding two business days shall be re-inspected by station personnel in the presence of the personnel performing the audit to determine whether the vehicle properly passed the anti-tampering

program/visual inspection (ATP) portion of the safety inspection. In the event it is determined that a vehicle improperly passed the ATP portion, in addition to any other sanction available by law, if the station remains in operation, it shall be revisited unannounced at least once within the three months following the initial audit and again within the next three-month period to ascertain compliance with ATP inspection requirements. If there is no vehicle available for re-inspection at the time of the audit, the station shall be revisited unannounced within 30 days. The Commonwealth also will implement a records audit that includes the calculation of failure rates for ATP inspection components for each inspection station. The Commonwealth shall compare these failure rates to rates in areas conducting both ATP and I/M inspections and, as necessary, will respond to significant differences in failure rates with adjustments to the audit process and/or training, as appropriate.”

In fiscal year (FY) 2005/2006, 4,662 administrative audits were conducted with 2,014 (44%) having a vehicle to re-inspect in conformance with the criteria outlined above. Because of the absence of a recently inspected vehicle (namely, a vehicle inspected within the preceding two business days) on the premises of the station being audited, it was necessary to re-visit 2,648 (56%) of the stations to attempt to verify compliance with the ATP inspection protocol. During the 2,648 re-visits conducted in FY 2005/2006, there were vehicles available for re-inspection at only 450 (17%) stations.

In FY 2006/2007, there were 5,043 administrative audits conducted with 2,937 (58%) having vehicles present to re-inspect to verify compliance. For all re-inspections performed in FY 2005/2006 and FY 2006/2007, there were no measurable ATP inspection failures detected.

In an effort to increase the number of vehicles observed and reduce cost and wasted effort, the Pennsylvania Department of Transportation (PennDOT) instituted a pilot program in which quality assurance staff checked two vehicles at those garages that had vehicles present at the time of their visit and examined vehicles that had been inspected in the preceding five business days rather than in the preceding two business days. The pilot procedure, evaluated between March 1, 2007 and June 30, 2007, was conducted as follows:

A vehicle on the station’s premise which had a safety inspection sticker indicating that it had passed a safety inspection administered by the station within the preceding five business day was re-inspected by station personnel in the presence of the PennDOT Quality Assurance Officer to determine whether the vehicle properly passed the anti-tampering portion of the safety inspection. Extending the “preceding business days” from two to five enabled PennDOT staff to see more vehicles without having to revisit stations. The alternate method piloted resulted in substantial reduced mileage and fuel costs by eliminating revisits, while increasing the number of stations PennDOT’s Quality Assurance Officers were able to visit. This method of verifying anti-tampering results will more efficiently utilize PennDOT’s Quality Assurance Staff and permit more targeted station visits if necessary.

During the 120-day pilot program, PennDOT conducted 1,956 administrative audits with 1,677 (85%) stations having a vehicle to re-inspect according to the pilot program criteria

outlined above. By continuing to use the above criteria, PennDOT staff will be able to visit every station at least once a year and see more vehicles for the purpose of auditing anti-tampering results. During this pilot program, staff drove 20,000 fewer miles than in the same time frame from the previous year. This will result in substantial fuel cost savings each year and permit more effective use of quality assurance personnel.

The analysis of the pilot program results shows that the required objective of ensuring that inspection stations are correctly conducting anti-tampering inspections will be achieved in a more efficient and cost effective manner and will strengthen the Commonwealth's I/M SIP.

C. The Program Changes

The Commonwealth proposes to revise the Quality Assurance section in the December 1, 2003 SIP revision (pp. 23-24) for the non-I/M counties as follows.

§ 51.363 Quality Assurance

There are no quality assurance changes to the 1996 I/M SIP with respect to the I/M program.

The Commonwealth's Quality Assurance program is comprised of both internal PennDOT personnel and external personnel. PennDOT's Vehicle Inspection Division oversees the 42 Non-I/M County Program. The description of the staff is contained in the 1996 I/M SIP. In addition, through the contract with the I/M Program Manager, the contractor provides oversight for the safety inspection program in the 25 I/M counties. Both PennDOT staff and the Contractor perform, at least once per year, safety audits of each safety inspection station in accordance with established protocol for the audit of stations performing vehicle safety inspections pursuant to *67 Pa. Code*, Chapter 175. As part of the audit of the 42 Non-I/M County Program, a vehicle on the station's premises which has a safety inspection sticker indicating that it has passed a safety inspection administered by the station within the immediately preceding ~~two~~ **FIVE** business days shall be re-inspected by station personnel in the presence of the personnel performing the audit to determine whether the vehicle properly passed the anti-tampering program/visual inspection (ATP) portion of the safety inspection. In the event it is determined that a vehicle improperly passed the ATP portion, in addition to any other sanction available by law, if the station remains in operation, it shall be revisited unannounced at least once within the three months following the initial audit and again within the next three-month period to ascertain compliance with ATP inspection requirements. If there is no vehicle available for re-inspection at the time of any audit, the station shall be revisited unannounced within 30 days. The Commonwealth also will implement a records audit that includes the calculation of failure rates for ATP inspection components for each inspection station. The Commonwealth shall compare these failure rates to rates in areas conducting both ATP and I/M inspections and, as necessary, will respond to significant differences in failure rates with adjustments to the audit process and/or training, as appropriate.

D. Public Participation

Requirements for a public comment process are set forth in Section 110(a)(2) of the CAA and 40 CFR Section 51.102(d). A public hearing on the proposed revisions to the quality assurance program was held on Thursday, March 19, 2009. Notice of the hearing was published in the *Pennsylvania Bulletin* at least 30 days prior to the date of the hearing. No public comment was received.