

**Commonwealth of Pennsylvania  
Department of Environmental Protection**



**State Implementation Plan Revision  
Enhanced Vehicle Emissions Inspection/Maintenance Program  
Implementation of “Revised Final” Cutpoints**

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Division of Air Resource Management  
Bureau of Air Quality  
Pennsylvania Department of Environmental Protection  
P.O. Box 8468  
Harrisburg, PA 17105-8468  
717-787-9495  
J. Wick Havens, Chief

**[www.dep.state.pa.us](http://www.dep.state.pa.us)**

## **Purpose and Background**

Five counties of southeastern Pennsylvania (Bucks, Chester, Delaware, Montgomery and Philadelphia) comprise the Philadelphia severe ozone nonattainment area. For areas designated as being in severe ozone nonattainment, the Federal Clean Air Act (CAA) requires tailpipe emissions testing on certain motor vehicles registered in that area. To comply with this requirement, the Commonwealth employs a tailpipe testing method known as Acceleration Simulation Mode 5015 (ASM5015) as a component of its Enhanced Vehicle Emissions Inspection/Maintenance Program.

An ASM tailpipe emissions testing program incorporates exhaust emissions standards, measured as a concentration in parts per million (ppm) for hydrocarbons and oxides of nitrogen, and percent concentration for carbon monoxide. If a vehicle subject to testing has emissions higher than the standard, the vehicle fails the emissions test. These standards, or cutpoints, vary by model year and are adjusted for vehicle weight. Older vehicles have less stringent standards (i.e., higher cutpoints) than newer vehicles. As the test weight of a vehicle increases, the test standard becomes more stringent (i.e., lower cutpoints).

EPA allows states to use an overall less stringent set of cutpoints during the start-up of a new tailpipe testing program. These “interim” cutpoints must then be replaced with “final” cutpoints to be used for the duration of the program.

On August 16, 2002, the National Vehicle and Fuel Emissions Laboratory of the U.S. Environmental Protection Agency’s (EPA) Office of Transportation and Air Quality released “revised final” cutpoints giving states the option to use either the original final or the revised final cutpoints in their tailpipe emissions programs. As opposed to using vehicle weight, the revised final cutpoints employ a method of adjusting the cutpoint by a vehicle’s engine displacement. According to EPA in their August 16, 2002 memo *Revised Final Cutpoints for ASM50150 and ASM2525*, the revised final cutpoints “will result in lower overall failure rates relative to those that would otherwise occur under the original final ASM cutpoints.” This drop in failure rates is attributed to the revised cutpoints being optimized to better target true, high emitting vehicles while reducing the potential for false failures.

By submitting this revision to the Commonwealth’s State Implementation Plan (SIP) for the Enhanced Vehicle Emissions Inspection/Maintenance Program, Pennsylvania exercises its option to implement the revised final cutpoints for the ASM 5015 tailpipe testing program in the Philadelphia area.

## **Regulatory Revisions to 67 Pa. Code, Chapter 177 (Emission Inspection Program)**

In order for Pennsylvania to implement the revised final cutpoints in its ASM program, the Commonwealth amended its emissions inspection program regulation codified in Title 67, Part I, Subpart A, Article VII, Chapter 177, Subchapter A. Specifically, the amendments appear in Section 1 of Appendix A of that subchapter, which contains the procedures, standards, equipment specifications and quality control requirements for Pennsylvania’s ASM tailpipe testing program.

On May 24, 2003, the Commonwealth published the amended regulations in the *Pennsylvania Bulletin* that incorporated EPA's revised final cutpoints. The amendments became effective immediately upon publication. These regulations are included as Attachment A.

Attachment B is a copy of the August 16, 2002 EPA memo detailing the revised final cutpoints.

On May 31, 2003, the Commonwealth published notice of a 30-day public comment period on the proposed SIP revision, including notice of a public hearing within that time period. Attachment C is a copy of the *Pennsylvania Bulletin* notice of the public comment period and public hearing.

The Commonwealth convened a public hearing on July 2, 2003 at the Department's Southeast Regional Office in Conshohocken, PA. The public comment period officially closed on July 3, 2003. No public comment was received.

An Order of the United States District Court for the Eastern District of Pennsylvania in the case of *Clean Air Council v. Mallory and Seif*, No. 01-179, requires the Commonwealth by September 1, 2003 to either fully implement the original final cutpoints or fully implement the revised cutpoints, if the revised cutpoints are fully approved by then. It is the intention of the Commonwealth to meet the court imposed compliance date.

### **List of Attachments**

Attachment A – 67 Pa. Code, Chapter 177 (Emission Inspection Program), Subchapter A, Appendix A

Attachment B – August 16, 2002 memorandum from EPA: *Revised Final Cutpoints for ASM5015 and ASM2525*

Attachment C - May 31, 2003 *Pennsylvania Bulletin* notice of the public comment period and public hearings.