# REVISION TO

# PITTSBURGH-BEAVER VALLEY AREA OZONE MAINTENANCE PLAN AND REQUEST FOR REDESIGNATION AS ATTAINMENT FOR OZONE



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## Revision To State Implementation Plan Pittsburgh-Beaver Valley Area Ozone Maintenance Plan

Ground-level ozone concentrations above the federal health-based standard are a serious human health threat and can also cause damage to crops, forests and wildlife. Since October 2001, the Pittsburgh-Beaver Valley area (Allegheny, Armstrong, Beaver, Butler, Fayette, Washington and Westmoreland counties) has been determined by the U.S. Environmental Protection Agency (EPA's) to be in attainment with the one-hour ozone National Ambient Air Quality Standard (NAAQS) (66 Fed. Reg. 53094.) As part of that determination, a 10-year maintenance plan is in place to ensure the area continues to attain the one-hour ozone standard. The Sierra Club and Group Against Smog and Pollution, Inc. challenged EPA's action in the U.S. Court of Appeals for the Third Circuit. A settlement agreement was reached and Pennsylvania will submit an amendment to the contingency measures portion of the maintenance plan to the EPA for approval as a revision to the State Implementation Plan ("SIP").

This SIP revision identifies additional measures the Commonwealth would take in the event of exceedances of the one-hour ozone NAAQS, in accordance with the procedures of the Pennsylvania Air Pollution Control Act and other relevant state statutes, to ensure that the Pittsburgh area maintains the one-hour ozone NAAQS. Those additional measures include incorporating transportation control measures into the SIP if such measures offer a quantifiable ozone reduction benefit; increasing rule effectiveness of Stage II controls at gasoline stations to control VOC emissions; the convening of a stakeholder group to recommend additional measures; and proposing additional control measures to attain and maintain the ozone NAAQS in the area.

The Contingency Measure portion of the maintenance plan is provided in its entirety below. Section E-1 is the existing approved language. Sections E-2 and E-3 (shown in bold) are the additions to the SIP.

A public comment period was held on the proposed SIP revision between February 22 and March 28, 2003. A public hearing was held on March 26, 2003 at the offices of the Department of Environmental Protection's Southwest Regional Office in Pittsburgh. No oral testimony was received from the public. The comment period closed on March 28, 2003 and no written testimony was received.

## E. CONTINGENCY MEASURES

1. The Commonwealth of Pennsylvania will track the attainment status of the ozone NAAQS in the Pittsburgh-Beaver Valley Area by reviewing air quality and emissions data during the maintenance period. The Commonwealth will develop periodic emission inventories (every 3 years) beginning in 2002, and will evaluate these periodic inventories to see if they exceed the baseline (1999) maintenance inventory by more than 10 percent. If a 10 percent exceedance occurs, the Commonwealth will evaluate whether any further emission control measures should be implemented.

Contingency measures would also be considered if an ozone NAAQS exceedance occurs. If an exceedance occurs, the Commonwealth will evaluate whether additional emission control measures should be implemented. The Commonwealth of Pennsylvania contingency plan will be triggered in the event of a monitored violation of the ozone standard. A violation means recording four exceedances of the ozone NAAQS within a consecutive 3-year period at a specific monitoring site. If a violation occurs, the Commonwealth will adopt additional emission reductions, as expeditiously as practicable, in accordance with the Pennsylvania Air Pollution Control Act to return the area to attainment with the health-based one-hour standard. The Commonwealth will also continue to operate the air monitoring network in accordance with 40 CFR 58, with no reductions in the number of sites from those in the existing network unless preapproved by EPA.

Contingency plan measures include the four VOC model rules currently being considered as additional measures for the Philadelphia Ozone Nonattainment Area. The VOC model rules have the potential to reduce emissions from consumer products, portable fuel containers, AIM coatings and solvent cleaning operations.

#### 2. Status of Current Contingency Measures

a. In accordance with the Air Pollution Control Act 35 P.S. §§4001-4015, and other applicable Pennsylvania statutes, Pennsylvania has promulgated the following regulations as contingency measures that will provide additional air quality benefits in the Pittsburgh-Beaver Valley ozone maintenance area (Pittsburgh area). Pennsylvania has submitted these regulations to EPA as revisions to the state implementation plan (SIP). Upon EPA approval of these revisions to the SIP, such regulations shall be part of the maintenance plan for the Pittsburgh area:

Solvent Cleaning Operations, promulgated as a final rule on December 21, 2001, effective in the Pittsburgh area on December 22, 2002. (31 Pa. B. 6921)

Portable Fuel Containers, promulgated as a final rule on October 5, 2002, effective in the Pittsburgh area on January 1, 2003. (32 Pa. B. 4819)

Consumer Products, promulgated as a final rule on October 5, 2002, effective in the Pittsburgh area on January 1, 2005. (32 Pa. B. 4824)

b. In accordance with the Air Pollution Control Act 35 P.S. §§4001-4015, and other applicable Pennsylvania statutes, Pennsylvania is currently promulgating the following regulation as a contingency measure that will provide additional air quality benefits in the Pittsburgh area. If this regulation is approved as final rulemaking, Pennsylvania will submit this regulation to EPA as a SIP revision. Upon EPA approval of this revision to the SIP, such regulation shall be a part of the maintenance plan for the Pittsburgh area:

Architectural and Industrial Maintenance Coatings, scheduled for consideration as a final rule by the Environmental Quality Board (EQB) on April 15, 2003, effective in the Pittsburgh area on January 1, 2005, if adopted.

#### 3. Additional Contingency Measures

If a violation of the one- hour ozone National Ambient Air Quality Standard (NAAQS) occurs, Pennsylvania will analyze the exceedances (including the contribution from upwind states) at the violating monitoring site(s). Pennsylvania will rely on the following additional contingency measures to prevent additional violations and will develop a SIP revision:

A. If two exceedances or a violation of the one-hour ozone NAAQS occurs at the same monitor during the same year, Pennsylvania would initiate three separate actions, as follows:

(i) In accordance with the procedures of the Air Pollution Control Act, and other Pennsylvania statutory requirements, prepare a SIP revision that would be submitted to EPA in the event of a violation which would designate projects contained in the currently approved Transportation Improvement Program (TIP) that reduce VOC and NOx emissions which meet the description of transportation control measures (TCMs) under section 108(f)(1)(A) of the Clean Air Act. All TCMs in the current TIP would be included in the proposed SIP revision, except projects that are determined to offer no quantifiable VOC or NOx emission or ozone reduction benefit. This quantification determination will be made by a work group of personnel from the Pennsylvania Department of Environmental Protection (DEP), the Pennsylvania Department of Transportation (PennDOT), and the Southwestern Pennsylvania Commission (SPC).

The anticipated timeframe of this action is as follows: Following two exceedances:

Within 2 weeks of second exceedance – DEP will notify PennDOT and SPC of the second exceedance and schedule the initial work group meeting.

Within 6 weeks of second exceedance – the work group will identify all specific TCMs from the current TIP that meet the above criteria for inclusion in a SIP revision.

Following a violation:

Within 8 weeks of a violation – DEP will publish a proposal in the Pennsylvania Bulletin with a 30-day comment period on the projects identified by the work group.

Within 12 weeks of a violation – public comment period ends.

Within 16 weeks of a violation – consider public comment, prepare and propose a SIP revision to EPA.

(ii) Within 120 days of the second exceedance, DEP will convene a stakeholder group to evaluate the feasibility of implementing additional measures if a violation of the one-hour NAAQS occurs. The stakeholder group will be composed of interested state and local government agencies, that shall include, but not be limited to, PennDOT, SPC, the Port Authority of Allegheny County, business, environmental, and health representatives, citizens, and other interested parties. Additional measures to be examined would include but would not be limited to the following: Port Authority of Allegheny County bus fleet – fuel with ultra-low sulfur diesel; retrofit with NOx adsorbers, PM traps, and other air pollution control devices compatible with ultra-low sulfur diesel fuel; expand "park n' ride" lots; expand small shuttle bus routes; offer free rides within the downtown area; provide incentives to encourage transit use (tax credits and reduced fares); implement a vehicle "scrappage" program; implement traffic calming measures; expansion of transit service; controls on small internal combustion engines; and emission reductions in upwind areas. Using the exceedance analysis developed by Pennsylvania and other air quality techniques, a qualified consultant will be retained to assist the workgroup by providing objective estimates of potential emission reductions from those additional measures, so that the stakeholder group can make informed recommendations. If a violation of the one-hour ozone NAAQS occurs, the stakeholders will, based on the analysis of the causes of the violation, recommend to SPC and DEP specific additional measures to prevent and remedy future ozone violations as expeditiously as practicable.

TCMs that are recommended on a consensus basis that require implementation by local or regional agencies in the Pittsburgh area would be proposed to SPC for inclusion as projects in the next revision to the TIP. If the onehour ozone standard is violated Pennsylvania will propose an additional SIP revision to include those specific projects that SPC has added to the TIP on a similar timeframe as set forth in subparagraph (i). Additional emission reduction measures also recommended on a consensus basis by the stakeholders would be proposed by DEP, in the event of a violation, through the rulemaking process set forth in paragraph 2.B.(ii) to the extent that DEP has the legal authority to do so under the Air Pollution Control Act and other applicable state statutes.

(iii) Within 90 days of a second exceedance, Pennsylvania will develop a written plan, in consultation with the Allegheny County Health Department, detailing the steps necessary to increase rule effectiveness under 25 Pa. Code §129.82, from 80% to at least 90%, to control VOCs from gasoline dispensing facilities.

B. If a violation of the one-hour ozone NAAQS occurs, Pennsylvania would take the following actions:

(i) Implement the written plan to increase rule effectiveness under 25 Pa Code §129.82. Within one year of the violation, Pennsylvania will submit a status report on the plan to EPA to demonstrate increased rule effectiveness. (ii) Based on the analysis of the causes of the violation, propose and adopt additional emission reductions as expeditiously as practicable in accordance with the Clean Air Act, the Air Pollution Control Act, other Pennsylvania statutory requirements, and DEP's Policy for Approval and Distribution of Regulations (012-0820-001) that would provide additional air quality benefits in the Pittsburgh area to attain and maintain the one-hour ozone NAAQS. Additional measures to be considered for adoption in the Pittsburgh area will include, but not be limited to, small source NOx rules that would affect boilers, turbines, and internal combustion engines in the maintenance area, and measures recommended by the workgroup in accordance with paragraph 2.A.(ii) that are within DEP's legal authority.

In the event of a violation, Pennsylvania will propose and adopt additional emission reduction measures to attain and maintain the one-hour ozone NAAQS standard in accordance with the requirements of the Clean Air Act, the Air Pollution Control Act, other Pennsylvania statutory requirements, and DEP's Policy for Approval and Distribution of Regulations on the following anticipated timetable.

Within 4 weeks of violation - Submit request to begin regulatory development process.

Within 10 weeks of violation - Complete draft regulation.

Within 12 weeks of violation – Mail draft regulation to Air Quality Technical Advisory Committee (AQTAC) for review.

Within 16 weeks of violation – AQTAC review/action

Within 18 weeks of violation – Complete regulatory package for management review

Within 24 weeks of violation – Mail regulatory package to the Environmental Quality Board (EQB) for approval as proposed rulemaking.

Within 28 weeks of violation – EQB meeting/action Within 30 weeks of violation -Attorney General review/comment.

Within 32 weeks of violation - Publish in the Pennsylvania Bulletin for comment as proposed rulemaking.

Within 40 weeks of violation - Comment period on proposed rule closes.

Within 44 weeks of violation - House and Senate Standing Committees and Independent Regulatory Review Commission (IRRC) comment on proposed rule.

Within 48 weeks of violation - Department summarize comments and redraft proposed rule for final rulemaking.

Within 50 weeks of violation – Mail regulatory package AQTAC for review as final rulemaking.

Within 54 weeks of violation – AQTAC action.

Within 56 weeks of violation – Complete development of final regulatory package.

Within 60 weeks of violation – Mail regulatory package to EQB for approval as final rulemaking.

Within 64 weeks of violation – EQB meeting/action.

Within 68 weeks of violation - IRRC action on final rulemaking.

Within 70 weeks of violation - Attorney General's review/action.

Within 72 weeks of violation - Publish in the Pennsylvania Bulletin as final rulemaking.

Within 80 weeks of violation – Submit rulemaking to EPA as a SIP revision.