

**Concise Explanatory Statement
and
Responsiveness Summary for the
Adoption of
the Vancouver Carbon Monoxide
Maintenance Plan**

**by the
Southwest Clean Air Agency**

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Prepared by

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Concise Explanatory Statement and Responsiveness Summary

1. Introduction

Vancouver, WA has been in compliance with the 8-hour carbon monoxide (CO) National Ambient Air Quality Standard (NAAQS) every year since 1992. In 1990, as a result of the passage of the Federal Clean Air Act Amendments (FCAAA) and the establishment of new national standards for CO, the Portland/Vancouver Air Quality Maintenance Area (AQMA) was deemed to be out of compliance or in 'nonattainment' with this standard. In 1995, the Portland/Vancouver AQMA was split into two separate airsheds for managing CO ambient standards. In 1996, the U.S. Environmental Protection Agency (EPA) formally redesignated the Vancouver area from a CO nonattainment area to a CO maintenance area, once the EPA determined the area met the standard, approved a plan to maintain the standard for a 10-year period, and found that Vancouver had met the other requirements for redesignation. The Clean Air Act requires that an area redesignated from nonattainment to maintenance submit a plan for maintaining the NAAQS for a second 10-year period.

Therefore, the Vancouver CO Maintenance Plan is submitted by the Southwest Clean Air Agency (SWCAA) for inclusion into the Washington State Implementation Plan (SIP) and will serve as the second 10-year CO maintenance plan for the Vancouver AQMA. This document demonstrates that the Vancouver area will be in compliance with the NAAQS for CO through 2016 and meets other EPA requirements.

The current NAAQS for CO is 9 ppm (or 10 mg/m³) for an 8-hour average and 35 ppm (or 40 mg/m³) for a 1-hour average, not to be exceeded more than once per year. The current 8-hour CO design value for the Vancouver CO area is 4.8 ppm based on 2004-2005 data, well below the standard. Also, the Vancouver CO area has shown a generally declining trend in the ambient 8-hour CO concentrations over the past several years.

This design value of 4.8 ppm qualifies Vancouver to use the Limited Maintenance Plan (LMP) approach in preparing this CO maintenance plan. EPA detailed the limited maintenance plan approach in a memorandum entitled, "Limited Maintenance Plan Option for Nonclassifiable CO Nonattainment Areas" from Joseph Paisie, Group Leader, Integrated Policy and Strategies Group, Office of Air Quality Planning and Standards (OAQPS), dated October 6, 1995." (LMP Guidance).

According to the LMP guidance, EPA will consider the maintenance demonstration satisfied if the monitoring data show the design value is at or below, 7.65 parts per million (ppm), or 85 percent of the level of the 8-hour CO NAAQS. The design value must be based on eight consecutive quarters of data.

One of the requirements for an area to be eligible to use the Limited Maintenance Plan option is that there be no changes to the previous 10-years' plan control measures. The control measure set forth in the 1996 plan was the Washington State I/M program. While some changes in testing technology and in which model year vehicles are required to be tested have occurred, the

program assures that emission control equipment is being maintained. Mobile sources represent over 60% of CO winter emissions, based on 2002 emission calculations. The Southwest Washington Regional Transportation Council's (RTC) Metropolitan Transportation Plan (MTP)¹ predicts decreasing CO emission estimates. This decrease is, in part, due to federal automobile emission standards and fleet turnover. Other efforts identified in the MTP to improve traffic flow have contributed and continue to contribute to the reductions in pollutants from cars and trucks. Since vehicle use is growing two to three times faster than Washington's population growth², and since mobile sources are the largest contributor to CO emissions, maintaining the vehicle I/M program is important to maintaining current air quality and achieving predicted CO emissions reductions.

As mentioned above, EPA will consider the maintenance demonstration satisfied if the monitoring data show the design value is at or below, 7.65 parts per million (ppm), or 85 percent of the level of the 8-hour CO NAAQS. In addition, when EPA approves a limited maintenance plan, the motor vehicle emission budget (MVEB) is considered not constraining for the length of the maintenance period. Since the area is in compliance with the standard, no new control strategies or new regulations will be necessary. The Vancouver area meets the CO standard with existing control measures.

To verify continued attainment with the standard, SWCAA will track countywide, mobile emissions through the Washington Department of Ecology emission inventory triennially. If mobile emissions decrease as predicted, this will show that Vancouver is in compliance with the CO standard. Our contingency plan, should mobile emissions increase over 2005 levels, would include a tiered level of escalating response. First, SWCAA would determine if the increase is because of a change in emission calculation methodology. Then, if it appears that a true increase has occurred, SWCAA would evaluate options such as conducting a winter CO mobile emission inventory, some form of 'hot spot' analysis using a model such as the Washington State Intersection Screening Tool (WASIST) or some other method, or temporarily conducting CO monitoring. Should an exceedance be measured at the temporary monitoring site, a community advisory group could be formed to evaluate and choose emission reduction measures. Reinstatement of the oxygenated fuel rule could be considered. In the case of a violation of the standard, SWCAA could ask industrial sources to apply Lowest Achievable Emission Rate technology to their proposed projects. However, this option is unlikely to be recommended since industrial sources contribute only a small amount to the overall CO emission total. Due to the low measured CO values in Vancouver over the past ten years, SWCAA does not anticipate any future CO exceedances or violations of the 8-hour standard.

¹ Metropolitan Transportation Plan for Clark County, Southwest Washington Regional Transportation Council, December 2005

² Washington Department of Ecology, Focus on Motor Vehicle Emission Check Program, September 2004, Publication 96-1013-AIR (Rev 9/04)

2. Differences Between the Proposed Attainment Plan and the Final Maintenance Plan

There are no significant differences between the draft attainment plan for the Vancouver Carbon Monoxide Maintenance Plan which was made available for public comment on January 25, 2007 and the draft brought to hearing at Vancouver, Washington on March 1, 2007. Copies of the final plan are available from the Southwest Clean Air Agency, 11815 NE 99th Street SW, Suite 1294, Vancouver, WA 98682-2454, telephone: 360-574-3058; or on the agency's web site at SWCAA.org.

One small nonsubstantive change was made to Section 4.3 under the heading Other Anticipated Changes on page 10. The reference to gasoline vapor recovery system rules is not relevant to CO. Vapor recover rules are relevant to ozone levels and affect VOC emissions, but not CO levels. This information was deleted from the text and is shown below.

- Vapor recovery systems rules will be modified once the Washington fleet contains sufficient on-board canister systems that capture refueling emissions

3. Responsiveness Summary - Summary of Public Comment and Agency Response

The Southwest Clean Air Agency received two email comments and one mailed comment to date during the public comment period. There were no public comments presented at the Board of Directors meeting or SIP hearing. The Board approved the Vancouver CO plan during the March 1, 2007 meeting. The Ecology SIP hearing was held immediately after the Board meeting. The letters are included as part of Appendix A.

- A. Ms. Margo Sanders, Vancouver, Citizen, email message sent January 27, 2007, received Monday January 29, 2007

Comment: Ms. Sanders commented that a neighbor burns wood and possibly plastics in their fireplace in her neighborhood. SWCAA sent information to the neighbor about legal fuel burning. Her comment about the CO Plan includes a statement that quotes a state website that claims older and improperly maintained stoves are responsible for a large percentage of pollution during an inversion. She recommends that all wood burning stoves be updated, cleaned and maintained to new standards. She also comments that she does not believe that HOV lanes would be effective to reduce smog levels. She recommends eliminating the growth allowance for industrial sources and beginning analysis of area source emissions. She also suggested that SWCAA work with other agencies to replant open areas with plants to quiet noise and capture carbon dioxide while giving off oxygen. She also recommended the best plants and patterns to accomplish this.

Response: SWCAA responded on March 1, 2007 and thanked Ms. Sanders for her comments. SWCAA informed Ms. Sanders that Carbon Monoxide (CO) levels have been consistently below the national standard for over ten years. SWCAA also related that there is very little risk that CO levels will increase and the Agency is not expecting CO to be a problem for the foreseeable future. SWCAA invited Ms. Sanders to view the plan herself on the Agency website.

SWCAA's response described the declining CO emission trends that are largely a result of federal emission and fuel standards. SWCAA also referenced the SW Regional Transportation Council's (RTC) Plan for Clark County that concludes that the CO emission estimates for cars and trucks will continue to decrease through the next ten years. SWCAA informed Ms. Sanders that car and truck emissions have historically been the largest contributor to winter CO emissions. SWCAA's plan commits to checking car and truck emissions every three years to assure that emissions from these sources are continuing to decrease as expected. Unless the Agency sees that emissions from these sources are going up, and they are not expected to, the contingency

plan will not be needed. SWCAA summarized how the plan directs that the Agency consider conducting further review of the way car and truck emissions are calculated, consider doing 'hot spot' analysis at various intersections, consider conducting temporary ambient air monitoring and, if a problem is identified, a technical committee could be formed to identify any actions and evaluate their effectiveness. Ms. Sanders was informed that SWCAA would be working with the RTC, should all this become necessary. SWCAA's response to Ms. Sanders explained that the contingency plan does not specifically mention reinstating HOV lanes, although this could be considered with other emission reduction/transportation control options. Recently, however, Vancouver removed the HOV lanes on Interstate 5.

The Columbian article that Ms. Sander's comments appear to reference contains information related to the ozone maintenance plan, not the CO maintenance plan. Area sources mentioned in the January 27th article, such as surface coating or curtailing painting on hot summer days is related to summer ozone precursor reductions, not winter CO. SWCAA's response included information on how residential wood combustion is the biggest contributor from area sources in the wintertime. Our response included how the Agency asks people to voluntarily refrain from wood burning, especially from uncertified woodstoves (unless it is their only source of heat) during winter stagnation periods. SWCAA's response described the Agency woodstove rebate program in which \$10,000 per year is allotted to encourage citizens to replace their old uncertified woodstoves with new cleaner burning Washington certified woodstoves. SWCAA also informed Ms. Sanders that all new woodstove purchases must be Washington certified stoves and that Washington standards are more stringent than the federal standards. Also, no current program exists to require that old or improperly maintained woodstoves meet current standards. Requiring replacement or updating of old stoves would be a significant financial burden for some residents.

The Columbian article mentions a growth allowance for industrial sources. Ms. Sanders recommends eliminating the growth allowance for industrial smokestacks. SWCAA informed Ms. Sanders that industrial sources only contributed about 1% of the winter carbon monoxide in 2002. The CO plan as proposed does not contain a growth allowance for industrial sources. SWCAA asserts that if CO levels become so high that the national air quality standard is ever threatened again in Vancouver, emission reductions from industrial sources would not provide the needed

reductions. Ms. Sanders recommends that SWCAA begin analysis of area emissions. SWCAA's plan directs that analysis of area sources is not necessary as long as CO emissions from mobile sources, the largest contributor, continue to decrease. SWCAA asserts that an analysis of area sources is not warranted at this time, since the Vancouver area is well below the national CO ambient air quality standard.

SWCAA informed Ms. Sanders that the Agency does not have authority over the use of various plants to capture CO₂ and trap metals. SWCAA forwarded Ms. Sander's comments on the benefits of plantings along freeways to the Washington Department of Transportation. Washington DOT is the agency who makes the decisions regarding plantings along freeways.

SWCAA's complete response to Ms. Sanders is in Appendix A.

- B. Randi Holland, Vancouver, Citizen, email message sent Monday, January 29, 2009, 3709 Clark Avenue, Vancouver, WA 98661

Comment: Randi Holland comments that although she and her husband are not informed about how air should be cleaned up or smog reduced to slow the rate of global warming, they want to see community clean air standards raised.

Response: SWCAA thanks the Hollands for their comments and appreciates their interest in maintaining clean air. SWCAA responded to the Holland's comments on March 1st by stating that the Vancouver area is in compliance with all federal and state air quality standards. SWCAA's mission is to preserve and enhance air quality in SW Washington.

- C. B. Fry, letter received January 29, 2007, Citizen, no return address

Comment: B. Fry's comments were largely illegible. From what could be read, B. Fry comments that that pollution credits seem to allow businesses to pollute even more. He also commented on government ethics.

Response: Since B. Fry's comments were largely illegible, SWCAA could not comment. From what could be read, there were no comments directly related to the CO Maintenance Plan.

4. Summary of Public Comment Notifications

The Southwest Clean Air Agency provided public notification by various methods. The public comment period officially opened on January 25, 2007, when a paid advertisement appeared in The Columbian. The same paid advertisement appeared again on February 11, 2007. A news release announcing that the Vancouver Carbon Monoxide Maintenance plan was being revised and would be available for public review and comment was also issued on January 25, 2007. This release was sent to newspapers in the area: The Columbian, The Reflector, and the Camas-Washougal Post-Record. A posting to the Agency website on January 25th also included information on the public comment period and provided links so that the plan could be reviewed online. Copies of the Plan were provided for public access at the Vancouver Community Library, Ecology's Lacey Headquarters and at SWCAA offices in Vancouver. Three comments were received from local citizens. Copies of these notifications and the public comments are included in the Appendixes. In addition, a story appeared in The Columbian on Friday, January 26, 2007 called "Anti-Smog Plan Circulated for Public Input". There were no public comments at the March 1, 2007 Board of Directors meeting or the Department of Ecology SIP hearing held immediately after the board meeting.

Appendixes

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Appendix A. Public Comments

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Appendix B. Public Notices

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Appendix C. Newspaper Articles

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