

Focus on Wallula Nonattainment Area for Particulate Matter

From the Department of Ecology's Air Quality Program

Status Report: August 2004

Background information

The U.S. Environmental Protection Agency (EPA) has set an air quality standard for particulate matter 10 microns or smaller in size (PM₁₀). The standard is 150 micrograms per cubic meter of air (μ g/m³). The purpose of this standard is to protect public health. When an area in Washington does not meet an air quality standard, it is classified as "nonattainment," and the Department of Ecology (Ecology) must develop a plan to meet the standard.

Ecology began monitoring air quality in the Wallula, Washington area in February 1986. Soon after monitoring began, the Wallula area had the first of many exceedances of the PM_{10} standard. As required by the 1990 Amendments to the Clean Air Act, EPA designated Wallula as nonattainment for PM_{10} . The Amendments also required Washington State to develop an attainment plan to bring Wallula into attainment with the PM_{10} standard. Ecology submitted the plan to EPA in 1991.

In 2001, EPA determined that Wallula had failed to meet the PM₁₀ standard and reclassified the area to "serious" nonattainment. EPA's action required Ecology to develop a new attainment plan with more stringent requirements to bring Wallula into attainment with the PM₁₀ standard.

Sources of PM₁₀ in Wallula

Air monitoring data shows that more than half of the PM_{10} emissions in the Wallula area come from agricultural tilling, when soil is disturbed during plowing, weeding, seeding, and other operations. About 30 percent of emissions come from pulp and paper mill operations. All other sources of emissions are much smaller. An analysis of PM_{10} filters shows that the material on the filters is mainly dust.

Natural events

All but one exceedance of the standard since 1997 have been determined to be natural events due to windblown dust caused by high winds. This is significant because, under EPA's Natural Events Policy, natural events are not considered when determining the attainment status of an area. The one exceedance not due to a natural event was caused mainly by dust from transporting a large quantity of compost from the pulp and paper mill's composting facility to a nearby fiber farm. However, this transport does not represent normal operation of the composting facility, and the only time it occurred was in July 1997.

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Elements of Wallula's serious attainment plan

Controlling emissions

Emission control technologies

Air pollution sources in nonattainment areas are required to use Best Available Control Measures (BACM) and Best Available Control Technology (BACT) to control their emissions. Wallula's attainment plan defines BACM for the pulp and paper mill's composting operation and for the beef cattle feedlot. Additional controls on the pulp and paper mill are not necessary. BACM for agricultural tilling had already been defined in Washington's *Columbia Plateau Windblown Dust Natural Events Action Plan*. BACT for the beef cattle processing plant is defined in the plant's most recent permit.

Dust control

The attainment plan relies on a dust control plan for the pulp and paper mill's composting operation to address circumstances surrounding the 1997 exceedance of the PM_{10} standard. This dust control plan addresses normal composting operations, as well as the control of dust during any future special operations such as the transporting of compost that occurred in July 1997.

The air operating permit for the pulp and paper mill includes fugitive dust control requirements. The feedlot has adopted a fugitive dust control plan that addresses the BACM requirement for the facility.

Contingency measures

The Clean Air Act requires an attainment plan to include contingency measures, or a backup plan, for reducing emissions if an area fails to attain the PM_{10} standard by the attainment date. Since EPA found that Wallula attained the standard by December 31, 2001, contingency measures do not need to be implemented.

Since most exceedances in Wallula are due to high winds, the attainment plan includes a process to better identify source activities during an exceedance.

Transportation conformity

Transportation conformity is a program that requires all transportation plans and projects to be consistent with the state's plan for meeting air quality standards. This means that transportation activities cannot cause or contribute to violations of air quality standards, or delay attainment of the standards.

Since mobile sources do not contribute significantly to PM₁₀ emissions in Wallula, the attainment plan justifies exemption of the Wallula nonattainment area from comprehensive, regional analysis for transportation conformity. Specific transportation projects in Wallula (for example, widening of Highway 12) must still meet project-level conformity requirements.

What is happening now?

Air monitoring

Ecology continues to monitor air quality in the Wallula area. The PM_{10} monitor for Wallula has long been located east of the Boise Cascade pulp and paper mill. Monitoring at this site was terminated in October 2003 to comply with an agreement with the landowner. Ecology's analysis of monitoring data found that similar PM_{10} concentrations were being monitored at a new site at Burbank Schools. EPA concurred that the Burbank Schools site could serve as a replacement for the terminated Wallula site. Monitoring at Burbank Schools is now being used to track Wallula's attainment of the PM_{10} standard.

Preparing to submit the attainment plan to EPA

Ecology is in the final stages of completing the draft attainment plan. Ecology will then bring the attainment plan to public hearing for comments in the Wallula area, and submit it to EPA for approval.

Preparing to request redesignation of the area

For Wallula to be redesignated to attainment, EPA must certify that the area meets five requirements found in the Clean Air Act. These include EPA's approval of a state implementation plan that maintains the PM₁₀ standard for 10 years after redesignation.

Ecology has drafted a maintenance plan that addresses four of the five requirements for redesignation. Ecology is now focusing on demonstrating that Wallula will maintain the standard through 2015. Once Ecology has fully completed the plan, Ecology will take the maintenance plan to public hearing in the Wallula area and, following public comment, submit it to EPA.

Target dates (approximate)

Public hearing on the Wallula serious attainment plan: Late summer 2004

Public hearing on the Wallula maintenance plan: Fall 2004

For more information

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