

**TITLE 252. OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY  
CHAPTER 100. AIR POLLUTION CONTROL RULES**

RULE IMPACT STATEMENT

**Subchapter 3. Air Quality Standards and Increments**

**252:100-3-4. Significant deterioration increments [AMENDED]**

Before the Air Quality Advisory Council, January 19, 2011

Before the Environmental Quality Board, February 25, 2011

1. **DESCRIPTION:** The Department is proposing to modify Subchapter 3, Air Quality Standards and Increments, to add the 24-hour and annual PM<sub>2.5</sub> PSD increments to OAC 252:100-3-4. This is part of the implementation of the New Source Review (NSR) program for the PM<sub>2.5</sub> (fine particulate matter) National Ambient Air Quality Standards (NAAQS) which were promulgated on July 28, 1997, and revised on October 17, 2006. In the October 20, 2010, *Federal Register* (75 FR 64864), EPA finalized Phase 2 of the NSR implementation rule, which included the PM<sub>2.5</sub> increments for the PSD program. EPA's rule did not make any changes to the PM<sub>10</sub> annual or 24-hour increments. This modification will bring the State's PSD program up to date with respect to PM<sub>2.5</sub> increments and will enable the Department to maintain its delegated authority for the full NSR program.
2. **CLASSES OF PERSONS AFFECTED:** Classes of persons affected are the owners and operators of facilities that emit PM<sub>2.5</sub> or its precursors in quantities great enough to subject them to PSD permitting under Subchapter 8.
3. **CLASSES OF PERSONS WHO WILL BEAR COSTS:** The owners and operators of major sources of PM<sub>2.5</sub> will bear the costs of obtaining and complying with permits, and of installing, maintaining, and operating any PM<sub>2.5</sub> controls required by applying Best Available Control Technology (BACT) to ensure that the PSD increments for PM<sub>2.5</sub> are not exceeded.
4. **INFORMATION ON COST IMPACTS FROM PRIVATE/PUBLIC ENTITIES:** The Department has received no information on cost impacts from private or public entities.
5. **CLASSES OF PERSONS BENEFITTED:** The citizens of the State of Oklahoma will benefit from the reductions in the amount of PM<sub>2.5</sub> in the air they breathe. This modification incorporates PM<sub>2.5</sub> increments into the State rules for use in the PSD permitting program. PSD requirements prohibit new and modified major stationary sources from emitting pollutants in quantities that cause or contribute to violation of the PSD increments.
6. **PROBABLE ECONOMIC IMPACT ON AFFECTED CLASSES OF PERSONS:** EPA has determined that the expansion of the NSR program to cover PM<sub>2.5</sub> and its precursors is expected to increase only marginally the costs to owners and operators of PM<sub>2.5</sub> sources that become subject to the program (73 FR 28345). This would mean that the new annual and 24-hour PM<sub>2.5</sub> increments, which are part of the PSD program, would also only marginally increase costs to owners and operators of these PM<sub>2.5</sub> sources.
7. **PROBABLE ECONOMIC IMPACT ON POLITICAL SUBDIVISIONS:** The

Department anticipates no economic impact on political subdivisions.

8. **POTENTIAL ADVERSE EFFECT ON SMALL BUSINESS:** The Department does not anticipate any potential adverse effects on small business from this proposal. EPA has determined that the expansion of the NSR program to cover PM<sub>2.5</sub> and its precursors is expected to increase only marginally the costs to owners and operators of PM<sub>2.5</sub> sources that become subject to the program (73 FR 28345). Since the requirement that no new source or modification causes or contributes to the exceedance of a PSD increment is an integral part of the PSD program, there is no reason to expect that the modification to add the PM<sub>2.5</sub> PSD increments to Section 4 of Subchapter 3 would significantly or uniquely affect small business.
9. **LISTING OF ALL FEE CHANGES, INCLUDING A SEPARATE JUSTIFICATION FOR EACH FEE CHANGE:** No fee changes are included in the proposal.
10. **PROBABLE COSTS AND BENEFITS TO DEQ TO IMPLEMENT AND ENFORCE:** The Department expects increases in the costs of implementing and enforcing the proposed revisions to the PSD program including the PM<sub>2.5</sub> increments. The proposed changes would assure that the state rules will be consistent with federal requirements and will enable the Department to maintain its delegated authority for the full NSR program.
11. **PROBABLE COSTS AND BENEFITS TO OTHER AGENCIES TO IMPLEMENT AND ENFORCE:** None. No other agencies will be implementing or enforcing this rule.
12. **SOURCE OF REVENUE TO BE USED TO IMPLEMENT AND ENFORCE RULE:** Federal grants, fees, and state appropriations will continue to be used to implement and enforce the rule.
13. **PROJECTED NET LOSS OR GAIN IN REVENUES FOR DEQ AND/OR OTHER AGENCIES, IF IT CAN BE PROJECTED:** The proposal should have little effect on net revenues for the Department and/or other agencies.
14. **COOPERATION OF POLITICAL SUBDIVISIONS REQUIRED TO IMPLEMENT OR ENFORCE RULE:** Cooperation of political subdivisions will not be required to implement or enforce the rule.
15. **EXPLANATION OF THE MEASURES THE DEQ TOOK TO MINIMIZE COMPLIANCE COSTS:** State implementation of these federal requirements should minimize compliance costs.
16. **DETERMINATION OF WHETHER THERE ARE LESS COSTLY OR NONREGULATORY OR LESS INTRUSIVE METHODS OF ACHIEVING THE PURPOSE OF THE PROPOSED RULE:** There are no less costly or nonregulatory methods of achieving the purpose of the proposal because federal regulations prescribe implementation of the PM<sub>2.5</sub> increment in the PSD program.
17. **DETERMINATION OF THE EFFECT ON PUBLIC HEALTH, SAFETY AND ENVIRONMENT:** The proposal should result in a reduction in the amount of fine particulate matter in the air because new and modified PSD sources would be required to

demonstrate compliance with the new PM<sub>2.5</sub> PSD increments. This reduction would benefit the health of the citizens of Oklahoma. The health effects associated with exposure to PM<sub>2.5</sub> are significant. Epidemiological studies have shown a significant correlation between elevated PM<sub>2.5</sub> levels and adverse health effects.

18. **IF THE PROPOSED RULE IS DESIGNED TO REDUCE SIGNIFICANT RISKS TO THE PUBLIC HEALTH, SAFETY AND ENVIRONMENT, EXPLANATION OF THE NATURE OF THE RISK AND TO WHAT EXTENT THE PROPOSED RULE WILL REDUCE THE RISK:** Epidemiological studies have shown a significant correlation between elevated PM<sub>2.5</sub> levels and adverse health effects including premature mortality. Other important effects associated with PM<sub>2.5</sub> exposure include aggravation of respiratory and cardiovascular disease (as indicated by increased hospital admissions, emergency room visits, absences from school or work, and restricted activity days), lung disease, decreased lung function, asthma attacks, and other cardiovascular problems. Individuals particularly sensitive to PM<sub>2.5</sub> exposure include older adults, people with heart and lung disease, and children. The PM<sub>2.5</sub> PSD increments, an integral part of the PSD program, reduce PM<sub>2.5</sub> emissions and limit health effects from exposure to PM<sub>2.5</sub>. Relatively small reductions in PM<sub>2.5</sub> levels are estimated to result in worthwhile public health benefits. The increment also helps protect against major environmental effects of PM<sub>2.5</sub> such as visibility impairment, soiling, and materials damage.
19. **DETERMINATION OF ANY DETRIMENTAL EFFECT ON THE PUBLIC HEALTH, SAFETY AND ENVIRONMENT IF THE PROPOSED RULE IS NOT IMPLEMENTED:** None is anticipated. If the State does not implement the proposal as part of its PSD program, the EPA will be required to do so.
20. **PROBABLE QUANTITATIVE AND QUALITATIVE IMPACT ON BUSINESS ENTITIES (INCLUDE QUANTIFIABLE DATA WHERE POSSIBLE):** New and modified stationary sources that are major for PM<sub>2.5</sub> will be subject to the PSD permitting program. The owners and operators of these sources would be required to determine and apply appropriate controls to ensure that PM<sub>2.5</sub> emissions from these sources do not cause or contribute to a violation of the PM<sub>2.5</sub> PSD increment.

**THIS RULE IMPACT STATEMENT WAS PREPARED ON:** December 15, 2010