

April 2, 2007

**SUMMARY OF COMMENTS AND STAFF RESPONSES
FOR PROPOSED REVISION TO OAC 252:100-1-3, DEFINITIONS**

**COMMENTS RECEIVED PRIOR TO AND AT THE
JULY 19, 2006, AIR QUALITY ADVISORY COUNCIL MEETING**

Written Comments

EPA Region 6 – Letter dated July 13, 2006, received by FAX on July 13, 2006, signed by Thomas H. Diggs, Chief, Air Planning Section and David Neleigh, Chief, Air Permits Section.

1. **COMMENT:** We [EPA] provided comments on the amended definition for VOCs (Subchapter 1) in a letter dated July 13, 2005. As we indicated in that letter, we support the ODEQ revision to exempt tert-butyl acetate (tBAC) from VOC emissions limitations [Subchapters 1, 9, 37 and 39], but we cannot support the exemption of tBAC from emissions reporting and recordkeeping requirements. EPA made clear in its revisions to 40 CFR Part 51- Requirements for Preparation, Adoption and Submittal of Implementation Plans that tBAC was not being exempted for the purposes of recordkeeping and reporting (' 51.100(s)(5)) and our Federal Register of November 29, 2004 (69 FR 69298) provides details of why exemption from reporting and recordkeeping could not be allowed. We will work with you in drafting revised language to require reporting and recordkeeping for tBAC; however, we will not be able to approve a revision to the plan that exempts tBAC from reporting and recordkeeping requirements.

RESPONSE: DEQ appreciates EPA's concerns, but this particular rule change only exempts TBAC as a VOC. DEQ is working with EPA on this issue and, if necessary, will address EPA's concerns in future rule making.

Mike Peters (Ryan, Whaley & Coldiron), attachment to email dated July 17, 2006

2. **COMMENT:** The proposed changes to the definitions in OAC 252:100-1-3 of the OAPCR seek to specifically include both "Condensable particulate matter" and "Filterable particulate matter" in the determination of "Particulate matter" and "Particulate matter emissions." If promulgated as currently proposed, how will compliance with the existing permit particulate matter ("PM") emissions limitations (some of which are based solely on filterable PM (sometimes referenced as the "front half") be determined?

RESPONSE: PM has always had these two distinct components, filterable and condensable PM. Filterable PM refers to the fraction of PM emissions in a sampling train that is a solid or a liquid at sampling conditions. Condensable PM, on the other hand, is the fraction of PM that is vapor at sampling conditions, but which will condense into both liquid and solid PM

once cooled. Both these fractions are emitted to the atmosphere as PM emissions and it is standard for DEQ to require testing for both to show compliance with state PM emission regulations. However, staff agrees that the way the proposed terms “condensable PM” and “filterable PM” were added to the definition of “PM emissions” implied a requirement to test for both in all cases. This was not the intent of the rule change and the proposed change to the definition for “PM emissions” has been modified accordingly.

As previously stated, DEQ requires “back half” testing to show compliance with state PM emission regulations (Subchapter 19). Conversely, DEQ has always followed EPA guidelines concerning testing to show compliance with any federal regulation (NSPS) DEQ administers.

3. **COMMENT:** If such rules are adopted, how will the DEQ allow/authorize industry to review existing permit PM emission limitations and revise the currently permitted emission limitations as necessary to account for potential PM emissions increases associated with the inclusion of condensable PM (sometimes referenced as the “back half”) which were not previously required, identified or included in previous permit determinations?

RESPONSE: DEQ has modified the original proposal. See response two (2) above. DEQ will continue to require “back half” testing to show compliance with state PM emission regulations (Subchapter 19). Most existing permit PM emissions limitations are based upon filterable and condensable PM.

4. **COMMENT:** If such rules are adopted and assuming the DEQ allows/authorizes industry the opportunity to revise existing PM emission limitations to incorporate condensable PM, will affected industry be authorized to continue current operations at currently permitted PM emission rates until such time as the permit emission limitations are revised?

RESPONSE: See response two (2) above. Most existing permit PM emissions limitations are based upon filterable and condensable PM.

5. **COMMENT:** For those facilities which are currently subject to an NSPS standard which includes a PM emission limitation which has been adopted and /or otherwise incorporated in the currently applicable permit, will compliance with such limitation be based on the currently proposed PM definitions (i.e., filterable and condensable PM) or will compliance be based on filterable PM only as previously determined by EPA?

RESPONSE: DEQ has always followed EPA guidelines concerning testing to show compliance with any federal regulation (NSPS) DEQ administers.

6. **COMMENT:** How will the increased levels of water born, non-process related solids which are naturally occurring be accounted for by the DEQ?

RESPONSE: DEQ will continue to follow testing procedures set forth in OAC 252:100 and applicable EPA guidelines and methods concerning testing.

7. **COMMENT:** For those facilities which previously did not report condensable PM, will the DEQ require such facilities to file amended emissions inventory documents and remit past annual operating fees based on the indicated level of condensable PM?

RESPONSE: See response two (2) above. It is believed that most existing permit PM emissions limitations take condensable PM into account. Facilities are required to submit emissions inventories each year that accurately reflect emissions levels.

8. **COMMENT:** Will the DEQ seek to differentiate between process generated condensable PM vs. non-process generated condensable PM?

RESPONSE: DEQ will continue to follow testing procedures set forth in OAC 252:100 and applicable EPA guidelines and methods concerning testing. In most cases all condensable PM is process generated.

**VERBAL COMMENTS RECEIVED
AT THE JULY 19, 2006 COUNCIL MEETING**

9. **COMMENT:** Mike Peters (Ryan, Whaley & Coldiron) reiterated his written comments above.

RESPONSE: See response two (2) above.

10. **COMMENT:** Rusty Kroll (Doener, Saunders, Daniel and Anderson) reiterated Mr. Peters' comments.

RESPONSE: See response two (2) above.

**COMMENTS RECEIVED PRIOR TO THE
OCTOBER 18, 2006, AIR QUALITY ADVISORY COUNCIL MEETING**

Mark Lawson (Spirit AeroSystems, Inc.) email dated September 20, 2006

11. **COMMENT:** The change in the particulate matter definition brings in the law of unintended consequences.

"Particulate matter emissions" means filterable and/or condensable particulate matter emitted to the ambient air as measured by applicable reference methods, or an equivalent or alternative method. (252:100-1-3. Definitions)

The particulate matter proposed definition includes condensable particulate matter. By definition condensable matter is:

"Condensable particulate matter" means material that is vapor at stack conditions, but which condenses and/or reacts upon cooling and dilution in the ambient air to form solid or liquid particulate matter immediately after discharge from the stack. Condensable particulate matter is considered PM-2.5. (252:100-1-3. Definitions)

Steam, visible as a white emission, coming out of a stack vent (i.e. from a boiler or a cooling tower) becomes condensable particulate matter since it is cooled and diluted in the ambient air and forms fine liquid particulate matter (which gives it the white appearance) after discharge from the stack and would now count in our annual air emission inventory as PM2.5.

Was water intended to be counted as condensable particulate matter?

RESPONSE: The methods used to measure condensable PM emissions exclude water because water is not a regulated air pollutant.

Rusty Kroll (Doerner, Saunders, Daniel & Anderson, L.L.P.) written comments hand delivered to the Air Quality Advisory Council on July 19, 2006 and forwarded to staff on October 10, 2006.

12. **COMMENT:** The proposed rules depart from the long-standing definition of "particulate matter" and "particulate matter emissions", which include only liquid or solid in a finely divided form. The proposed definition broadens the current definition to include materials that exist as vapor when exiting a source, but condense in certain testing equipment. This proposed expansion in the definition is not a clarification but a new substantive requirement of the regulations.

RESPONSE: Not true. The proposed rule changes do not depart from the long standing definitions of "particulate matter" or "particulate matter emissions" nor do they broaden the definitions. Before June of 2003 the definitions for these were:

"Particulate matter" means any material that exists in a finely divided form as a liquid or a solid.

"Particulate matter emissions" means are finely divided solid or liquid material as measured during a stack test of the source's emissions.

After June of 2003 the definition were changed to:

"Particulate matter" means any material that exists in a finely divided form as a liquid or a solid.

"Particulate matter emissions" means particulate matter emitted to the ambient air as measured by applicable reference methods, or an equivalent or alternative method.

As can be readily seen, the change in June of 2003 merely removed redundant language from the definition of "particulate matter emissions" while leaving the definition for "particulate matter" unchanged. The proposed change adds the term, "filterable and/or condensable" to the definition of "particulate matter emissions." This does not add a new requirement because the addition is a dependent clause "as measured by applicable reference methods." These methods test for both filterable and condensable PM and thus the inclusion of the term in question is justified.

13. **COMMENT:** We believe that for many regulated entities in the State of Oklahoma, ODEQ has not previously required that condensable particulate matter be counted to determine compliance with various state particulate matter regulations. We believe that ODEQ's records will show that many entities' permits incorporated a test that captured only filterable particulate matter. Accordingly, for entities, the requirement of the proposed rules to include condensable particulate matter, may affect the ability of their facilities to achieve and maintain compliance with applicable particulate matter standards.

RESPONSE: The ODEQ has always required that condensable and filterable emissions be counted when determining compliance with state particulate matter emission rules (252:100-19).

14. **COMMENT:** Additionally, the proposed regulations will have a significant impact on air emissions fees paid by such entities. We believe that a significant number of entities in the State of Oklahoma have reported particulate matter emissions in annual air emissions inventories based upon test results or emission factors that did not include condensable particulate matter within their scope.

RESPONSE: Test methods or emission factors used to show compliance with applicable state and federal emission regulations are not linked to the responsibility of owner or operators to provide "true, accurate and complete" emission inventories. Reported actual particulate matter emission should be complete and include both condensable and filterable particulate matter emissions.

15. **COMMENT:** Oklahoma law requires that before a state regulation that is more stringent than a federal requirements can be proposed, the ODEQ must prepare a justification analysis of the economic impact compared to the environmental benefit of the rule, which must be submitted to the Governor and State Legislature, To our knowledge, this required analysis has not been performed and, if that is the case, applicable rulemaking procedures have not been followed. The Rule Impact Statement states that the proposed regulations will not have any impact on public, health, safety or the environment. It appears that no information on any benefit of the proposed rule has been developed by ODEQ.

RESPONSE: Such an analysis was not required because there are no new emission regulations being proposed in this rule making. The PM emissions limitation contained in Subchapter 19 predate any applicable federal PM emission regulations (NSPS).

**COMMENTS RECEIVED PRIOR TO THE
April 18, 2007, AIR QUALITY ADVISORY COUNCIL MEETING**

Environmental Federation of Oklahoma - Letter dated January 12, 2007, received on January 12, 2007, signed by James Barnett, President and General Counsel

16. **COMMENT (paraphrased):** It is unclear whether or not condensable particulate matter would be counted to show compliance with particulate matter emission limits set in Subchapter 19 or NSPS.

RESPONSE: See response two (2) above.

17. **COMMENT:** ... Historically, for measurement of particulates pursuant to this subchapter [OAC 252:100-19], permits written by the Division have specified the use of EPA Method 5 or other approved methods that do not measure the condensable emissions. This appears to provide context that clearly indicates the condensable fraction is not included for purposes of Subchapter 19. However, this is not consistent with recent industry experience with the Department's compliance and enforcement staff.

RESPONSE: A search of historical permits shows that determinations of condensable particulate matter to show compliance with Subchapter 19 date back to at least 1997 (10 years). In addition, The Air Quality Division has conducted an intensive search of past historical records and found documentation that shows that the Division has required back-half testing to show compliance with Subchapter 19 at least since 1974 (33 years).

EPA Region Six - Email from Shar Alan, dated March 21, 2007

18. **COMMENT:** The current 252:100-1-3 (Definitions) states "Reasonably Available Control Technology" or "RACT" means devices, systems, process modifications, or other apparatus or techniques that are reasonably available taking into account: (A) The necessity of imposing such controls in order to attain and maintain a national ambient air quality standard; (B) The social, environmental, and economic impact of such controls; and (C) Alternative means of providing for attainment and maintenance of such standard.

Although this specific portion of the Definitions is not being proposed for revision at this time, for consistency purposes we recommend that ODEQ adopt EPA's long standing definition of RACT from 44 FR 53761, September 17, 1979 "the lowest emission limitation that a particular source can meet by applying a control technique that is reasonably available considering technological and economic feasibility" in 252:100-1-3.

RESPONSE: RACT is defined in two different subchapters in Chapter 100. Both definitions are slightly different from the definition recommended in the above comment. The Division will not propose a change these definitions at this time, but will consider changing the definitions for RACT in the next round of definition changes.