

**ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION**

**Air Quality Exceptional and Natural Events Policy
PM10 Best Available Control Measures List**

May 31, 2001

Responsiveness Summary

On April 27, 2001, the Air Quality Division (AQD) released for public review and comment its draft Best Available Control Measures (BACM) List for Arizona's Department of Environmental Quality's (ADEQ's) Exceptional and Natural Events Policy (NEP). Comments were received from eight parties; the comments and AQD's responses follow:

1. Comment:

Several people raised a concern that the BACMs as identified on ADEQ's draft list would automatically become a part of Pima County's Natural Events Action Plan (NEAP) and be required in the Pima County area.

Response:

The ADEQ BACM list was developed to comply with the NEP. An air pollution control agency is not expected to mandate application of all of the programs on ADEQ's BACM list within its area, but rather refer to the list as it considers potential technologically and economically feasible measures for those source categories that have contributed to exceedances of the national ambient air quality standards (NAAQS) associated with natural events.

2. Comment:

Two commenters suggested that ADEQ extend the completion date of the final list.

Response:

Both EPA's "Areas Affected by PM10 Natural Events" Policy and ADEQ's "Air Quality Exceptional and Natural Events Policy" infer that BACM changes as technology improvements occur. This means that, as necessary, the list may be revised and subjected to additional public review. As such, ADEQ does not feel an extension is warranted at this time.

3. Comment:

One commenter stated that current state law exempts normal farming activities from state and local air quality regulations. As a result, in areas where the standards have been exceeded and agriculture is proven to be a significant source, the agricultural community should be able to work with regulators in developing voluntary measures that are economical and effective for

that area.

Response:

ADEQ concurs. ADEQ's draft BACM list was developed based on existing BACM for all types of source categories, with the intention that, as air pollution control agencies identified the significant source categories for their particular areas, the agencies will work with the sources to develop appropriate control measures within existing legal and regulatory constraints.

4. Comment:

One commenter stated that "regardless of measures included on ADEQ's BACM list, BACM must be identified on a case-by-case basis."

Response:

ADEQ agrees that each area that wishes to utilize ADEQ's Natural Events Policy will need to determine the appropriate BACM for that area.

5. Comment:

BACM under a NEAP are not required to be the same as BACM in a serious nonattainment area. ADEQ should not limit the listed control measures to those found in nonattainment areas.

Response:

ADEQ agrees that BACM in a NEAP may not be the same as BACM in a SIP. In its response to comments received on the Natural Events and Exceptional Events Policy Statement of August 31, 1998, for NEAPs, ADEQ considered BACM for PM10 to be "techniques that achieve the maximum degree of emissions reduction from a source, as determined on a case-by-case basis considering technological and economic feasibility." As different BACM are identified and proven to be "technologically and economically feasible," ADEQ will consider them as its list is updated. The commenter is reminded that any local area's BACM may include such measures as identified on the state list, measures that have been modified from those on the state list, or measures that are not on the state list. The determining factor is that the air pollution control agency can demonstrate that the measures meet the BACM requirements for the area.

6. Comment:

One commenter suggested that the word "origin" be deleted from the BACM list.

Response:

The "origin" column is intended to provide a reference for additional information about a particular measure to those who may be unfamiliar with the measures on the list.

7. Comment:

One commenter recommended the inclusion of a 40% opacity limit for fugitive dust sources as BACM on the list.

Response:

On December 18, 2000, EPA proposed disapproval of the State's current rule, R18-2-702, which contains a 40% opacity limit (see 65 FR 79038). Part of EPA's proposal is based on the fact that "a 20% opacity standard has been determined to be reasonably available across the country." ADEQ plans to begin a stakeholder process in the upcoming months to address the proposed disapproval by adequately revising R18-2-702. Because BACM is technically more stringent than RACM (reasonably available control measures), if a 40% opacity limit does not meet RACM, it cannot meet BACM.

8. Comment:

One commenter suggests expanding the state list to include Title V permit fugitive dust control measures for copper mining facilities.

Response:

ADEQ has evaluated the Title V permit fugitive dust control measures for copper mining facilities and revised the final BACM list section for industrial sources to include suggested measures for certain mining activities.

9. Comment:

There were two comments related to BACM #14, "Use of PM-10 Efficient Sweepers." One commenter relayed an experience where such sweepers, while efficient at cleaning the streets, were found to be discharging high levels of PM10 into the air while moving. A second commenter clarified that ADOT's commitment in the SIP was to review the results of MAG's PM10 Efficient Street Sweeping Test and make a determination regarding the economical and technological feasibility and safety of using such equipment on state roadways. If the equipment met the criteria, ADOT would then implement the use of the sweepers.

Response:

This control measure is revised to reflect recent action by the South Coast Air Quality Management District, which has finalized a rule requiring all public and private entities with 15 or more fleet vehicles to include alternative fueled street sweepers by July 2002 (see Rule 1186.1). As technology improves and lower-emitting PM10 sweepers are certified, ADEQ will relook at the measure.

10. Comment:

One commenter clarified that ADOT's commitment for measure #15, "Curbing, Paving, or Stabilizing Shoulders on Paved Roads," is for only those roads under jurisdiction of ADOT (state highways) and not targeted arterials. A second commenter suggested a transition period for implementation of the measure.

Response:

ADEQ thanks the commenters and revised the BACM list to indicate that organizations are responsible for implementing measures only in geographical areas of their jurisdictions. In response to the second comment, the implementation period of any measure is determined as the air pollution control agency works with stakeholders to develop the measure.

11. Comment:

One commenter suggests that measure #17, “Frequent Routine Sweeping or Cleaning of Paved Roads,” be expanded to include residential areas that are in active home construction. This could be included in a requirement that developers of residential communities develop dust control plans for their projects. The commenter further suggests that this measure would also be an effective best management practice for stormwater pollution control. A second commenter inquired about the meaning of “frequent.”

Response:

The measure, as identified on the list, requires local governments to routinely sweep streets under their jurisdiction. Measure #2, “Dust Control Plans for Construction, Demolition and Land Clearing,” requires developers to address various fugitive dust sources at construction sites, which may include such sites in residential areas. In response to the second comment, sweeping intervals may be determined using several factors, including local population, number and type of vehicles utilizing the streets, etc. To clarify the measure, it has been retitled “Routine Sweeping or Cleaning of Paved Roads.”

12. Comment:

One commenter recommended that measure #23, “Replace Crack Seal Blower Equipment with Vacuum Systems,” be deleted from the list or revised to require a crack sealing dust mitigation plan be required as an alternative. A second commenter suggested the measure be revised to reflect a transition period or apply to all new equipment.

Response:

ADEQ clarified that the measure as listed pertains to replacing such equipment as it is retired, not by a specified date. ADEQ also encourages local governments to consider the commenter’s suggestion to require crack sealing dust mitigation plans as a potential BACM for NEAPs.

13. Comment:

One commenter suggested that the definition of BACM should be developed on a geographic or “airshed” basis and ADEQ’s list be revised to reflect a list of BACM that will apply only to portions of Pima County.

Response:

ADEQ’s list is a necessary component of the state policy and is a “starting point” for any area of the state that violates the PM10 NAAQS and wishes to utilize ADEQ’s NEP. Pima County, as will other air pollution control agencies, will work with stakeholders to develop its own BACM once the affected source categories are identified.

14. Comment:

A commenter suggests that, with respect to sources whose emissions may not be quantified with any clear degree of precision, any definition of BACM must fairly consider the economic feasibility of the measure.

Response:

ADEQ agrees that economic feasibility is one criteria an air pollution control agency uses in determining BACM for a specific area.

15. Comment:

Should BACM affect sources that would not be “contributing” but for the occurrence of the natural event? Should “source” be defined as a class of sources or individually?

Response:

The technical work that is part of a NEAP includes doing an emissions inventory to quantify the sources contributing to the measured NAAQS violation and subsequent modeling to determine the contribution of specific source categories or individual sources, if applicable, to the exceedances. The technical work is then utilized to determine BACM for the appropriate source categories.

16. Comment:

One commenter emphasizes the necessity of a local public process to enable a community-wide understanding of the control obligations of BACM.

Response:

ADEQ agrees with the commenter.

17. Comment:

Any definition of BACM that affects the agricultural basin of Pinal County should respect and incorporate the prevailing BACM definition under Pinal County’s December 3, 1997, Natural Events Action Plan.

Response:

As a practical matter, any air pollution control agency developing a NEAP will want to review any previous relevant documents.

18. Comment:

One commenter suggested that measures #18 and #19 include the use of catalytic converters that meet federal standards on all existing wood stoves and any new ones.

Response:

For clarification purposes, these measures have been restated as one, “Prohibit the installation or construction of a fireplace or wood stove unless it is a fireplace with a permanently installed gas or electric log insert or fireplace or wood stove that meets EPA standards.”

19. Comment:

Implementation of measure #20, “Vegetative and Chemical Stabilization and Construction of Windbreaks on Public Property next to Open Land/Lots,” should be the responsibility of the owner of the vacant lot.

Response:

This measure applies to public lands, so the applicable agency would have the responsibility.

20. Comment:
Measure #22, “Traffic Rerouting or Rapid Clean-Up of Temporary Sources of Dust on Paved Roads,” should be included in dust control plans.

Response:

This measure is intended to provide a plan to deal with future circumstances, such as spills from trucks or residue from rains, that result in excessive fugitive dust from paved roads. The measure could apply to both public and private organizations who have responsibility for maintenance of paved roads.

21. Comment:
Measure #9, “Operate water application system while conducting earthmoving operations on disturbed surface areas ≥ 1 acre,” should apply to all grading operations.

Response:

In its research, ADEQ found the 1 acre size to be the norm. Any air pollution control agency, however, could consider applicability to a smaller area as a control measure.