

Date:

Dave White, Chief
USDA Natural Resources Conservation Service
14th and Independence Ave., SW.
Room: 5105A-S
Washington, DC 20250

Dear Chief White:

We, the Agricultural Air Quality Task Force (AAQTF), would like to highlight several opportunities for USDA and this Task Force, specifically, to work with EPA to provide synergistic achievements of certain environmental efforts in this country. The purpose of this letter is to address those opportunities in the *Exceptional Events Rule (EER)* (72 Federal Register 13560), the *High Wind Events Guidance* (Draft released May 2, 2011), and the anticipated *Wildland and Prescribed Fire Guidance* (forthcoming).

Since 1977, multiple EPA guidance documents and regulations have either implied or documented the need for a “flagging system” for ambient air quality monitoring data affected by an exceptional event. The Safe Accountable Flexible Efficient-Transportation Equity Act: A Legacy for Users (SAFE-TEA-LU) of 2005 forced a promulgation date of March 2006 for EPA to propose a rule for flagging such exceptional data. The EPA published the final rule on March 22, 2007 (72 Federal Register 13560). Subsequent to publication of the final EER, the EPA indicated that guidance would be issued on means for handling data affected by high wind events, fires, and fire-induced smoke. On May 2, 2011, the first draft guidance document on high wind events was released in limited form for comment.

While the comment period has ended (June 30, 2011), the AAQTF through its Air Quality Standards Committee, has reviewed comments submitted by a number of states, local governments, and organizations and has identified several areas of concern based on those comments:

1. Demonstrating the Exceptionality of an Event

EER language committed to a follow-up rule that would establish parameters for making an exceptional event demonstration. To date, there is inadequate guidance for states to follow to prepare such a demonstration. Additionally, there are no prescriptive administrative or legal appeals procedures detailed in the rule by which states can challenge a decision rendered by EPA.

CONCERN #1: Without clear instructions, states can spend large amounts of resources to create an Exceptional Event demonstration. It has been estimated by state and regional air pollution regulatory agencies that preparation of an Exceptional

Event request requires over 2,500 man-hours in a 6-month period, costing upwards of \$100,000. Once submitted to an EPA Regional Office, there is no publicly available guidance regarding how each Regional Office will review the information a state or regional agency has included in their demonstration. In spite of the requirements of 40 CFR 56 (Regional Consistency), practices vary significantly from one EPA Regional Office to another. For example, differences in State Implementation Plans, Redesignations, etc. between various regions and the differences in documentation required by individual EPA Regional Offices to process such requests vary drastically.

While the draft high winds guidance document attempts to provide more direction for agencies requesting an exceptional events ruling by providing a checklist of items in Appendix B, the requirements are extremely burdensome of already-strained resources, and the requirement that all items in Appendix B be included in the application goes against the spirit of the EER that allows for a “weight of evidence” approach to demonstrating the occurrence of exceptional events.

CONCERN #2: Recent advances in continuous monitoring preclude required speciation of samples collected during high wind events. As drafted, the guidance document requires that samples be chemically speciated to elucidate the origin of collected particles. In the wake of increasingly tight budgets, many agencies have moved away from filter-based monitors to continuous monitors such as Tapered Element Oscillating Microbalances (TEOMs) to reduce operating costs. TEOM samples cannot be speciated and, therefore, cannot be used to meet the requirements specified in the guidance document.

CONCERN #3: As written, the EER creates favorable conditions for an inflation of the design values of the Particulate Matter or the Ozone National Ambient Air Quality Standards (NAAQS) in states with exceptional events. Design values are statistics that describe the status of air quality in a given area relative to the NAAQS and are used to classify nonattainment areas, assess progress towards meeting a NAAQS, and develop control strategies. When data are “flagged” as resulting from an exceptional event, these data continue to be included in calculation of design values until a decision is made by EPA to concur or disagree that an exceedance was caused by the exceptional event. Based on the track record of outstanding exceptional events requests, EPA may take several years to consider an exceptional event request. The combined lack of prescriptive qualities for states to include in an exceptional events demonstration with a lack of an appeals process will lead to increases in the design values for PM and Ozone NAAQS, potentially leading to greater numbers of non-attainment areas that are designated as such because of events beyond the control of state or regional air pollution regulatory agencies.

2. Implementing Control Measures

The implementation of the High Winds Event Guidance requires states to implement escalating emission control measures to gain exclusion of monitoring data. The EER

definition of “not reasonably controllable or preventable” goes beyond the emission control measures required under Section 110 and Part D (for nonattainment areas) of the Clean Air Act.

CONCERN #1: As drafted, the High Winds Events Guidance does not provide enough certainty to states implementing control measures that such adopted measures will be deemed “reasonable” by EPA. In the final guidance document, the AAQTF recommends that EPA provide a mechanism such as a High Wind Action Plan that would allow States and EPA to collaboratively identify, in advance of an exceedance potentially caused by an exceptional event, selected control measures that are “reasonable.” In particular, the AAQTF encourages EPA to leverage the expertise and research captured in the USDA Natural Resources Conservation Service (NRCS) National Conservation Practice Standards (NCPS) when identifying control measures that are reasonable and appropriate for agricultural lands.

3. Demonstrating Causality of Exceedances

The demonstrations required of states to show “clear causal” relationships between a high wind event and a measured exceedance of the NAAQS requires states to show not only that there was an impact from an event on a monitored value but that the impact was significant enough to have caused the exceedances. To do this, states would have to calculate the incremental impact caused by an event at a monitoring site over the relevant averaging time.

CONCERN #1: The level of analysis required to demonstrate the incremental impact of an exceptional event is excessive and overly burdensome. Among the requirements of an exceptional event request specified in the guidance document, states and/or regional air pollution regulatory agencies must provide a comprehensive controls analysis that includes back trajectories indicating specific sources of pollutants along with detailed descriptions of controls and their effective implementation. Such an analysis requires monetary resources, human resources, and expertise to perform these complex analyses that are well beyond that normally available to these state and local agencies. The analysis also requires source-specific emissions inventories and meteorological data associated with measured concentrations that are often unavailable, particularly in rural areas. **The draft guidance includes requirements that appear to surpass those of the EER as well as the recent requirements of EPA when approving exceptional event requests.**

Furthermore, the specified requirements are still a “moving target.” EPA acknowledged in the preamble to the EER that there are no precise and universally applicable techniques for calculating incremental impacts. Such ambiguity further compounds the burden of proof on state and local agencies, exacerbating the resource requirements needed.

CONCERN #2: The draft guidance recommends a default high wind speed threshold that is inappropriate for many agricultural regions. The draft guidance suggests that

events inducing wind speeds above 25 mph should be considered as “high wind” events based on data collected from arid, desert environments. The guidance allows agencies to demonstrate that wind speeds below this threshold induced an exceptional event, but below this threshold, the burden of proof on the agency is increased. In many agricultural areas, studies have shown that wind speeds lower than 25 mph can entrain substantial amounts of soil material. For example, the San Joaquin Valley Air Pollution Control District has scientifically documented a wind entrainment threshold of 17.9 mph for soils with high clay contents and has included this data in prior exceptional event requests that have been approved by EPA. Rather than ascribing a single, nation-wide threshold wind speed for characterizing an event “exceptional,” scientifically documented, region-specific thresholds should be considered on a case-by-case basis.

CONCERN #3: The methods of analysis required to demonstrate the impact of an exceptional event are counter to other efficiencies being implemented by state and local regulatory agencies. The guidance is not well-tailored for rural, filter-based monitors that measure exceedances since the guidance implies that hourly data is required to conduct the specified analysis. Such hourly data is not usually collected by rural monitors that are likely to be affected by high wind events but are not near population centers. This shortcoming is further compounded when “every sixth day” monitoring is employed. Furthermore, as discussed above, samples collected by TEOM samplers, which are being used by many agencies to reduce the cost of maintaining monitoring networks, cannot be speciated and, therefore, cannot be used to meet the requirements specified in the guidance document.

This letter imparts concerns but also offers potential resolutions to these concerns.

Congress created the Soil Conservation Service in 1935 which became the Natural Resources Conservation Service. As of 2010, NRCS had 12,000 employees in 2,900 offices, with an office in almost every county in the US. Whether developed in a laboratory or on the land, NRCS science and technology helps landowners make the right decisions for every natural resource and to meet environmental regulations. NRCS achieves this success through partnerships, working closely with individual farmers and ranchers, landowners, local conservation districts, government agencies, Tribes, and many other people and groups that care about the quality of America’s natural resources. Implementation at the “field” level takes place with the development of National Conservation Practice Standards (NCPS). There are over 140 research-backed standards in place.

Seventy percent (70%) of the land in the United States is privately owned, making stewardship by private landowners extremely important. NRCS works with landowners through conservation planning and assistance designed to benefit the soil, water, air, plants, and animals that result in productive lands and healthy ecosystems for a sustainable, nutritious, abundant food supply.

EPA’s partnering with USDA and NRCS, eliminates duplication of science-based standards development. With regards to the EER and more specifically high wind events and prescribed fires, NRCS has NCPS already used at the farm and privately-owned land levels for controls.

State air regulatory programs familiar with these practices have utilize NCPS for best achievable control measures (BACM) and reasonably achievable control measures (RACM) in their existing air quality regulatory programs. Other states are not familiar with these science-based NCPS, but here is where the partnership can begin.

All of the 140+ National Conservation Practice Standards are written to prevent deterioration of a natural resource and provide specific best management practices (BMPs) for farmers and private land owners. Each practice is developed using science-based research and many include results from in-field demonstration projects.

RECOMMENDATION #1: The NCPS should be listed and named in future EPA regulations where those regulations have the potential to impact agriculture, especially for the benefit of state regulatory agencies not familiar with NCPS. USDA-NRCS staff is available to direct the attention of EPA and state air regulatory employees to the most effective, scientifically vetted practice for the environmental issue at hand. An example of this is the partnership between USDA and EPA in the group working to develop EPA’s Agricultural Air Quality Conservation Measures Reference Guide.

RECOMMENDATION #2: Farmers and private land owners utilizing the appropriate and designated NCPS should be considered as meeting BACM and RACM by State air regulatory agencies for emission controls relative to the EER and PM and Ozone NAAQS SIPs. Accepting that these practices are BACM and RACM, but for the “overwhelming concentrations of pollutants” from an exceptional event, the implementation of NCPS should be considered sufficient controls placed upon farmers and private land owners.

RECOMMENDATION #3: Should EPA make a science-based determination that additional emission reductions are needed by the agricultural community, EPA should communicate that opinion to USDA-NRCS and allow NRCS to develop the next level of science-based controls which provides for continuity in best practices implemented at the farm and private land owner levels.

RECOMMENDATION #4: The High Wind Guidance document should maintain the spirit of the EER is accepting a “weight of evidence” approach to demonstrating that an exceedance was caused by an exceptional event rather than requiring analyses that are impractical or excessively burdensome. Among the requirements mandated in the draft guidance that should be made optional are chemical speciation of samples and detailed, source-specific emissions estimates for all sources upwind of the monitor deemed to affect measured concentrations.

RECOMMENDATION #5: Considering the number and depth of comments provided to EPA on the High Wind Events Guidance, USDA and the AAQTF offer to utilize science-based controls to assist in the development of the Wildland and Prescribed Burning Guidance. Involvement in the development of such guidance versus simply making comments on a proposed draft of the guidance leverages the expertise of the two agencies and will hopefully result in a more efficiently produced and effective effort.

We hope these concerns and recommendations will be relayed to EPA, and we look forward to assisting EPA with additional science-based practices that create the most benefit for the conservation of our natural resources that also result in productive lands and healthy ecosystems for a sustainable, nutritious, abundant food supply.

Sincerely,

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