January 10, 2019

Mr. Ben Gibson  
Air Quality Policy Division  
Office of Air Quality Planning and Standards  
U.S. Environmental Protection Agency  
109 T.W. Alexander Drive, C539-04  
Research Triangle Park, NC. 27711

Dear Mr. Gibson,

The Western State Air Resources (WESTAR) Council appreciates the opportunity to comment on the October 2018 draft guidance titled *Prescribed Fire on Wildland: Addendum to the Guidance on the Preparation of Exceptional Events Demonstrations for Wildfire Events that May influence Ozone Concentrations* (guidance). The Exceptional Events Rule, and its associated guidance documents, are critically important to western state air quality agencies. EPA notes in the guidance that, although it was written to address ozone impacts, EPA intends the guidance to also apply to particulate matter impacts, the likely dominant pollutant of concern from prescribed fires on wildlands in the west. As such, we reviewed the draft guidance with that in mind. However, WESTAR believes that EPA should indicate throughout the guidance which aspects are applicable to particulate matter and, for those instances that are not applicable to particulate matter, provide suggestions regarding how air agencies should alter their exceptional events demonstrations for a particulate matter exceedance.

Unlike recent Exceptional Events (EE) guidance on stratospheric ozone intrusions and high wind-caused dust events, for which the focus is on the technical aspects of weight-of-evidence demonstration to link the exceptional event to the monitored pollutant impact, this guidance focuses on the administrative documentation necessary to demonstrate the connection between a prescribed fire and the impact. The guidance refers to the previous ozone and wildfire guidance for the technical elements of prescribed fire ozone impact demonstrations. Please refer to the attached January 29, 2016 comments to EPA on the proposed Exceptional Events Rule, in particular those on the *Draft Guidance on the Preparation of Exceptional Events Demonstrations for Wildfire Events that May Influence Ozone Concentrations* (Wildfire Guidance, Attachment 2), for additional WESTAR perspectives on ozone from fires.
This guidance addresses newly introduced provisions to the Exceptional Events Rule. Significantly, the Exceptional Events Rule now allows for federal and state land managers to prepare Exceptional Event demonstrations, with state concurrence.\(^1\) In our comments on the proposed Exceptional Events Rule revisions, WESTAR advocated for the preeminence of air quality agencies when it comes to submitting exceptional events demonstrations after EPA proposed that the same authority be granted to land management agencies. We appreciate that EPA agreed with us and that the final rule grants ultimate authority for decisions regarding exceptional events demonstration submission to air quality agencies.

Because the potentially expanded role of federal and state land managers in the submission of exceptional events is pending, we cannot comment definitively about the processes and administrative requirements outlined in the guidance. Absent experience with that pending role, we offer the following comments and recommendations based on our review of the guidance. WESTAR has prepared comments on the following aspects of the guidance:

- Concerns about the tiered approach and the use of the Q/D metric;
- Interstate impacts and differences in smoke management policies across state boundaries;
- Applicability to prescribed fire on private lands; and
- Regulatory significance and timing of EE demonstration submission.

In addition, WESTAR is asking for clarification about several aspects of the draft guidance, including: the certification process for Smoke Management Programs (SMP); the extent of evidence required to support that high concentrations in the historical record were influenced by exceptional events that EPA has not evaluated; the authority of EPA to question a state’s decision to allow a prescribed fire to proceed; EPA’s reference to a “hybrid” approach for situations when an exceedance is attributable to impacts from both a prescribed fire and a separate wildfire; and the possibility of other documents satisfying the requirement for a multi-year Resource Management Plan.

We understand that EPA will engage in a federal inter-agency review process after it receives state comments. In the interest of collaboration, we ask that EPA provide states the opportunity to review any changes to the guidance that may arise out of that process before finalizing the guidance.

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\(^1\) As modified in 2016, 50.14(a)(1)(ii)(A)(2)
With this guidance document, the EPA has continued to use the tiered approach to evaluate exceptional events demonstrations, presumably to maintain consistency with previously released guidance documents. Please refer to the attached January 29, 2016 comments to EPA on the proposed Exceptional Events Rule, in particular those on the Draft Guidance on the Preparation of Exceptional Events Demonstrations for Wildfire Events that May Influence Ozone Concentrations (Wildfire Guidance, Attachment 2), for additional WESTAR perspectives on the tiered approach. In general, WESTAR supports the tiered approach as an attempt to communicate the level of analyses necessary to show a clear causal relationship between a prescribed fire and ozone concentrations at a monitoring site. However, on page 6 of the guidance, “[t]he EPA acknowledges that since prescribed fires tend to be small scale and well-defined, they are unlikely to be severe enough for Tier 1 or Tier 2 analyses.” WESTAR disagrees with this statement based on EPA’s definition/explanation of the type of exceedance that would trigger a Tier 1 analysis. Page 7 of the guidance (and page 12 of the Wildfire Guidance) summarizes a Tier 1 event as “appropriate for fires located in close proximity to a monitor in an area or during a time of year with typically low O₃ concentrations,” [emphasis added]. Many prescribed fires are conducted in late fall or early winter, a time of year when photochemically produced ozone is at a minimum for most western states. WESTAR believes that prescribed fires that cause an exceedance of the ozone NAAQS should be treated in the same manner as a wildfire exceedance, and that the same criteria for a Tier 1 clear causal relationship analysis should apply regardless of whether the fire was prescribed or wild. As such, WESTAR believes that an ozone NAAQS exceedance that is caused by a prescribed fire and occurs during a time of year with typically low ozone concentrations should qualify as a Tier 1 event.

In addition, the tiered approach has not yet been introduced for particulate matter exceedances related to prescribed fire (or wildfire). While some of the required analyses under the tiered approach translate well to particulate matter demonstrations (e.g. comparison with historical concentrations), others do not (e.g. photochemical modeling). We reiterate that, where appropriate, EPA should identify which analyses are relevant for particulate matter demonstrations and, for those that are not, recommend alternatives for use in particulate matter demonstrations.

The EPA has also continued to use the relationship between fire emissions and distance of fire(s) to affected monitoring site location(s) (Q/D) to distinguish between events requiring a Tier 2 analysis versus those requiring a more rigorous Tier 3 analysis. As stated in WESTAR’s comments to the Wildfire Guidance, we find the threshold value of Q/D greater than 100 to be somewhat arbitrary, and we note again that it is not supported by the literature cited by EPA in the Wildfire Guidance. We also point out that EPA Region IX has already accepted and concurred with a Tier 2 level wildfire-ozone demonstration with a calculated Q/D less than 100.
Further, the guidance suggests that “[s]ince prescribed fire events are controlled, typically small, and contained so they are not expected to reach the same magnitudes as a wildfire, a prescribed fire event is unlikely to have a Q/D greater than or equal to 100 tons per day/kilometer. However, air agencies may still benefit from conducting a Q/D analysis to support the clear causal relationship criterion.” As noted in the draft guidance, the Q/D for a prescribed fire will be lower compared to a wildfire, but the difference in consumption also needs to be noted. To obtain 100 tons per day per kilometer, or even come close to that value, would be unquestionably unheard-of for a prescribed fire, especially considering that this value is based on studies from the Wallow Fire and the Flint Hill fires, which were record-setting wildfires. Prescribed fires are often conducted using emission reduction techniques, and only a small area may have consumed within the approved acreage, which does not at all match what would be consumed from a wildfire of the exact same size. As a result, we believe that any kind of Q/D calculation being used to “Tier” or even support a clear causal relationship is not appropriate.

Prescribed fire activity can cause exceedances of the National Ambient Air Quality Standards (NAAQS) outside of the state or country of origin. EPA stated in the guidance webinar (November 27, 2018) that a state is not responsible for either the reasonably controllable or the reasonably preventable criteria if the fire originated outside of their jurisdiction. WESTAR agrees with this interpretation and believes that EPA should state this clearly in the guidance. For example, the guidance should state that, when a prescribed fire causes an exceedance in an adjacent state, monitoring data and metadata combined with particle trajectories should suffice to satisfy the clear causal relationship criterion.

The guidance briefly addresses prescribed fires on private lands and that these events can be included in an exceedance request and demonstration provided that the state’s land/resource management plan and Smoke Management Program both address prescribed burns on private lands, and that the private land owner has been or is following a state or federal land/resource management plan.² WESTAR believes that these requirements place an undue burden on state air agencies to revise existing Smoke Management Programs, and that EPA is requiring land/resource program components that are outside air agencies’ jurisdiction and control. In addition, requiring private land owners to have their own management plan that addresses prescribed fires is unrealistic. Adjacent states may also have limited oversight for prescribed burns on private lands, which would complicate demonstrating an exceedance on private lands in an adjacent state. WESTAR believes that the guidance should include reduced demonstration requirements for prescribed fires causing exceedances on private lands and adjacent state lands. These requirements should include only causation and back trajectories.

² See guidance, pages 17 and 22.
In Figure 1 of the prescribed fire guidance, discussion with the EPA regional office states that “...EPA and air agency work collaboratively to determine appropriate scope of demonstration based on the regulatory significance and approvability considerations.” Many times, the regulatory significance is not known for one to three years after the event. Conversely, the data required for a prescribed fire submission becomes increasingly difficult to track down over time. If a NAAQS exceedance occurs due to a prescribed fire, EPA should work with states to determine the necessary scope in the immediate aftermath of the event so the air agency can collect all required information in a timely fashion, without consideration for regulatory significance.

In addition to the above comments, WESTAR believes that the guidance is somewhat ambiguous in places, and that EPA should clarify several aspects. Most air agencies are unfamiliar with the terminology and the documents referenced in the guidance. EPA needs to clarify both the prescribed fire terminology and the documentation required for the demonstration submittal. In addition, WESTAR would appreciate clarification on the process of certifying a state’s Smoke Management Program. The draft guidance states that “SMPs that have been incorporated into an [sic] SIP are one example of ‘certified’ SMPs.” We understand that to mean that no other steps are necessary to “certify” a state’s SMP. However, we would like clarification about whether the SMP needs to be incorporated into the state’s most recently submitted SIP, and whether the SMP must be “recertified” if a state submits a new SIP and/or if that state revises its SMP.

Part of the clear causal relationship criterion requires a comparison of the event-related exceedance with historical concentrations in the same area for the same season. If there are other “high” values in the historical record that have been influenced by exceptional events on which the EPA has not acted (due to a lack of “regulatory significance”), EPA suggests that states identify those values and include “event information to support that the fire caused the monitored exceedance or violation, such as a list of previous fire dates and locations, evidence of stratospheric intrusion, or evidence supporting other event types.” WESTAR believes that EPA should state clearly in the guidance that identifying affected data and the type of event will suffice to ensure that that data are not considered part of the “normal” historical concentration record.

In addition, the guidance repeatedly references a “multi-year land or resource management plan.” It is the impression of several western states that such a plan may exist in other forms, and that the EPA should clarify this, and also include other document types that would be acceptable alternatives.
WESTAR requests additional guidance on events where both prescribed fire and wildfire contribute to an exceedance. There are times when wildfire smoke from states far from the impacted monitor can contribute to an exceedance that is primarily caused by a prescribed fire located nearby. In this case, EPA has informally indicated that a ‘hybrid’ demonstration may be necessary. WESTAR requests clarification on what a ‘hybrid’ demonstration would look like and what requirements would need to be met.

Finally, WESTAR would like clarification concerning EPA’s authority to question a state’s decision to allow a prescribed burn to proceed. The requirements laid out in the guideline to meet the “unlikely to recur at a particular location” criteria involve reporting the natural fire return interval. EPA notes that this information is likely available in the burn plan or a multi-year land management plan. For many burns, the natural fire return interval, and other characteristics of the burn, go through a vigorous approval process, including NEPA approval, before they are brought to an air agency’s attention. It is assumed that if a burn has been approved on the burner side, the justification for that burn has been well vetted. Air agencies are responsible for determining the air quality impacts of a burn, and are not the experts on why a burn is necessary. WESTAR believes it would be inappropriate for EPA to determine the appropriateness of the burn itself and should focus on the historical frequency of prescribed fire exceedances at a location.

Because ozone from prescribed fire constitutes one of several sources of ozone, some of which state regulatory agencies have no ability to control, it is imperative that EPA, in coordination with states and other federal agencies, continues to develop and refine the science and policy tools to distinguish between sources of ozone. These sources include ozone from international anthropogenic sources, natural sources, and domestic fires.

Obtaining funding for tools that analyze emissions from both prescribed and wildland fires is a concern for exceptional events because states are dependent upon the federal government for many of the tools necessary to complete the analyses. We realize that, like states, EPA does not have control over the tools of other federal agencies, some of which are necessary for fire emissions analyses. However, we expect that EPA will work with its federal partners to ensure that these tools are maintained and further refined.

On behalf of WESTAR, I reiterate our appreciation that EPA is soliciting input from states in the development of the exceptional events related guidance. In that spirit of collaboration, I request that EPA share the draft guidance with states for review and comment after the federal inter-agency review process. Please do not hesitate to contact Sheryl Fontaine at

Alaska Arizona California Colorado Hawaii Idaho Montana Nevada New Mexico North Dakota Oregon South Dakota Utah Washington Wyoming
WESTAR, 3 Caliente Road #8, Santa Fe, NM (505) 930-5197
the Nevada Division of Environmental Protection, or Bob Levens at WESTAR, if you have any questions or need additional information about our comments.

Sincerely,

[Signature]
Nancy Vehr, President
Western States Air Resources Council

Attachment
WESTAR January 29, 2016 comment to EPA on Exceptional Events Rule and Wildfire/Ozone Guidance