



Huntington Center, Suite 2200
41 South High Street
Columbus, Ohio 43215
614-221-5100
Fax 614-221-0952
www.steptoe-johnson.com

Writer's Contact Information
317-946-9882
skipp.kropp@steptoe-johnson.com

November 14, 2024

Todd Shrewsbury
WV Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

**Re: Exceptional Events Demonstration for an Exceedance of the
2024 Annual PM_{2.5} NAAQS at Martinsburg, West Virginia
on June 29, 2023, Due to Smoke from Canadian Wildfires**

Dear Mr. Shrewsbury:

The Midwest Ozone Group¹ (“MOG”) is pleased to provide comments in support of this exceptional events demonstration and the use of the data involved in support of other demonstrations related to these events.

While the Clean Air Act (the “Act”) requires states to meet certain air quality standards, the Act also recognizes that exceptional events, including wildfires and

¹ The membership of the Midwest Ozone Group includes: Ameren, American Electric Power, American Forest & Paper Association, American Iron and Steel Institute, American Wood Council, Appalachian Region Independent Power Producers Association, Associated Electric Cooperative, Berkshire Hathaway Energy, Big Rivers Electric Corp., Buckeye Power, Inc., Citizens Energy Group, City Water, Light & Power (Springfield IL), Cleveland – Cliffs Inc., Council of Industrial Boiler Owners, Duke Energy Corp., East Kentucky Power Cooperative, ExxonMobil, FirstEnergy Corp., Indiana Energy Association, Indiana-Kentucky Electric Corporation, Indiana Municipal Power Agency, Indiana Utility Group, Hoosier Energy REC, inc., LGE/ KU, Marathon Petroleum Company, National Lime Association, North American Stainless, Nucor Corporation, Ohio Utility Group, Ohio Valley Electric Corporation, Olympus Power, Steel Manufacturers Association, and Wabash Valley Power Alliance.

prescribed burns, may sometimes prevent that from happening. Exceptional events can cause air quality monitoring data to exceed permissible concentrations of a pollutant, also called an exceedance. When that happens, the Act directs the Administrator of the United States Environmental Protection Agency (USEPA) to exclude that data from further consideration if the state demonstrates to USEPA's satisfaction that the event caused the exceedance.

On October 15, 2024, the WV DEP Division of Air Quality (“DAQ”) issued a public notice regarding the availability for comment of a proposed “Exceptional Events Demonstration for an Exceedance of the 2024 Annual PM_{2.5} NAAQS at Martinsburg, West Virginia on June 29, 2023, Due to Smoke from Canadian Wildfires.” The deadline for the submittal of comments is November 15, 2024.

The proposed exceptional events demonstration details the PM_{2.5} episode occurring in the Martinsburg, West Virginia, area on June 29, 2023, and on the days just prior to and just past June 29, 2023. The proposed demonstration specifically addresses PM_{2.5} impacts measured on June 29, 2023, at the PM_{2.5} federal reference monitor at Martinsburg, West Virginia (“Martinsburg Monitor”).

The following comments are offered on behalf of MOG in support of this exceptional events demonstration and the demonstrations of other states seeking to recognize the same events.²

MOG is an affiliation of companies and associations that draws upon its collective resources to seek solutions to the development of legally and technically sound air quality programs that may impact on their facilities, their employees, their communities, their contractors, and the consumers of their products. MOG's primary efforts are to work with policy makers in evaluating air quality policies by encouraging the use of sound science. MOG has been actively engaged in a variety of issues and initiatives related to the development and implementation of air quality policy, including the development of transport rules (including exceptional events demonstrations, implementation of NAAQS standards, nonattainment designations, petitions under Sections 126, 176A and 184(c) of the Clean Air Act (“CAA”), NAAQS implementation guidance, the development of Good Neighbor State Implementation Plans (“SIPs”), the development of greenhouse gas and Mercury and Air Toxics Standards Rules and related regional haze issues. MOG Members and Participants own and operate numerous stationary sources that are affected by air quality requirements including the PM_{2.5} NAAQS.

² These comments were prepared with the technical assistance of Alpine Geophysics, LLC.

DAQ submitted the initial notification for this demonstration to the Environmental Protection Agency (EPA) Region 3 via email on July 31, 2024, and, in its response, EPA Region 3 determined both that the Martinsburg Monitor PM_{2.5} data for June 29, 2023, may affect the EPA's initial area designations for the 2024 primary annual PM_{2.5} NAAQS and that the exceedance could be considered for exclusion under the Exceptional Events Rule.

When amending the Clean Air Act in 2005, Congress intended to provide regulatory relief for NAAQS nonattainment resulting from exceptional events negatively affecting air quality that were outside of a state's control. That concern led to enactment of provisions specifically establishing the process by which USEPA could exclude air quality monitoring data directly related to an exceptional event. *See* 42 U.S.C. § 7619. Subsequently, USEPA promulgated the exceptional events rule. 40 C.F.R. § 50.14. Under the exceptional events rule, USEPA excludes “any data of concentration of a pollutant above the NAAQS (exceedances) if the air quality was influenced by exceptional events.” *Bahr v. Regan*, 6 F.4th 1059, 1066 (9th Cir. 2021) (cleaned up).

A state requesting data exclusion under the exceptional events rule must demonstrate “to the Administrator's satisfaction that such event caused a specific air pollution concentration at a particular air quality monitoring location.” 40 C.F.R. § 50.14(a)(1)(ii). That demonstration must include certain regulatory required information:

- (A) A narrative conceptual model that described the event(s) causing the exceedance or violation and a discussion of how emissions from the event(s) led to the exceedance or violation at the affected monitor(s);
- (B) A demonstration that the event affected air quality in such a way that there exists a clear causal relationship between the specific event and the monitored exceedance or violation;
- (C) Analyses comparing the claimed event-influenced concentration(s) to concentrations at the same monitoring site at other times to support the requirement at paragraph (c)(3)(iv)(B) of this section. The Administrator shall not require a State to prove a specific percentile point in the distribution of data;

- (D) A demonstration that the event was both not reasonably controllable and not reasonably preventable; and
- (E) A demonstration that the event was a human activity that is unlikely to recur at a particular location or was a natural event.

40 C.F.R. § 50.14(c)(3)(iv).

A state must also comply with pre-request requirements, which include notifying USEPA of the intent to request exclusion, flagging data to be excluded, engaging in public comments, and implementing mitigation measures. See 40 C.F.R. § 50.14(c)(2)(i); 40 C.F.R. § 50.14(c)(3)(v); 40 C.F.R. § 51.930. In short, there are three core statutory elements: (1) a clear causal relationship; (2) a showing that the event was not controllable, and (3) a showing that the event was human activity unlikely to recur a particular location or was a natural event.

Depending on the circumstances of a particular exceptional event, a particular tier of evidence is required to provide a compelling case to USEPA to exclude data under the Exceptional Events Rule. In instances where a state provides sufficient evidence to showcase that a given event is indeed an irregularity, USEPA will make a concurring determination and issue an exclusion of that specific event from the dataset. 40 C.F.R. 50.14(c)(2)(ii).

Wildland fires make up 44% of primary PM_{2.5} emissions. See 89 Fed. Reg. 16214. As such, these events can cause exceedances that impact design values in a particular area.

USEPA has recognized that these particular events are exceptional and that states may request to exclude them from the dataset, given that a sufficient evidentiary standard is met. *Id.*; see generally, 81 Fed. Reg. 68216. There are several tiers of evidentiary showings related to PM_{2.5} demonstrations. These three tiers create a ladder of increasing evidentiary burdens on the states to convince USEPA that an event merits exclusion.

- Tier 1 clear causal analyses are intended for wildland fire events that cause unambiguous PM_{2.5} impacts well above historical 24-hour concentrations, thus requiring less evidence to establish a clear causal relationship.
- Tier 2 clear causal analyses are likely appropriate when the impacts of the wildland fire on PM_{2.5} concentrations are less

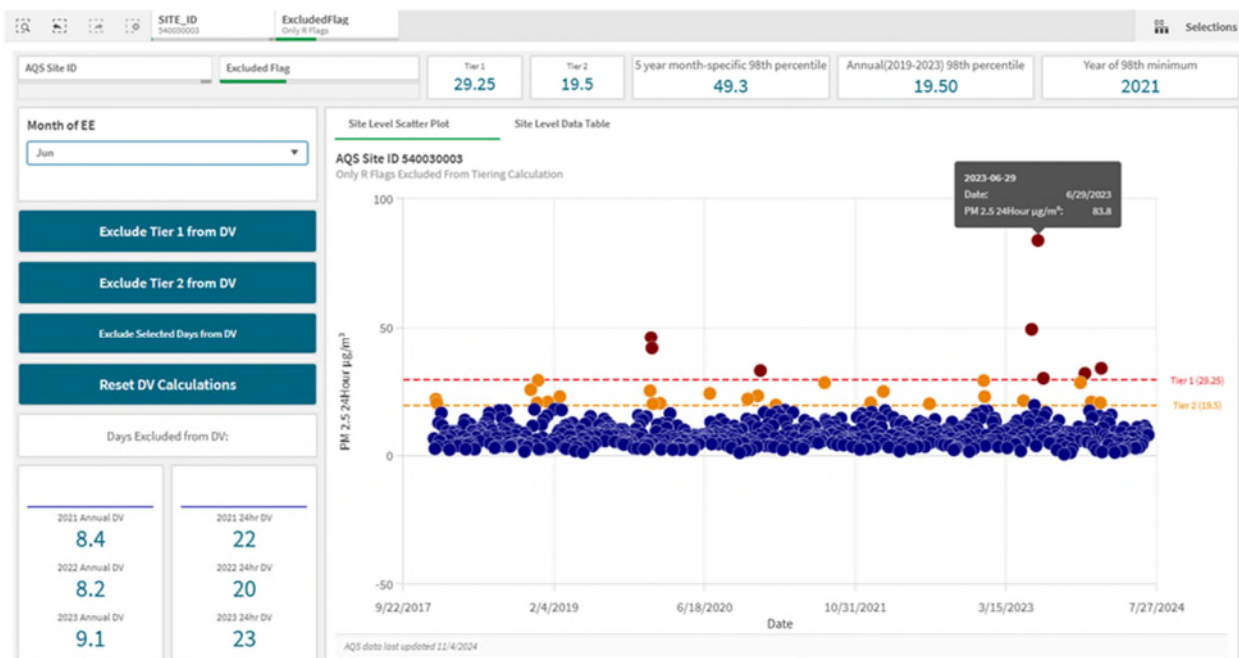
distinguishable from historical 24-hour concentrations, and require more evidence, than Tier 1 analyses.

- Tier 3 clear causal analyses should be used for events in which the relationship between the wildland fire and PM_{2.5} 24-hour concentrations are more complicated than a Tier 2 analysis, when 24-hour PM_{2.5} concentrations are near or within the range of historical concentrations, and thus require more evidence to establish the clear causal relationship than Tier 2 or Tier 1.

U.S. Environmental Protection Agency, *PM_{2.5} Wildland Fire Exceptional Events Tiering Document* (April 2024) at 5. It is important to note that overall process for exceptional event demonstrations for wildfire ozone and wildland fire PM_{2.5} are the same. See *id.* at 6.

MOG agrees that the proposed DAQ demonstration shows that the level of PM_{2.5} concentration measured in West Virginia during this event was highly unusual because the measured PM_{2.5} concentration for the Martinsburg Monitor exceedance on June 29, 2023, was more than 1.5 times the most recent 5-year month specific 98th percentile for 24-hour PM_{2.5} data, as identified in the Environmental Protection Agency's Tiering Tool.³ MOG notes that the tiering graph provided by the DAQ in its demonstration, and presented below, shows the June 29, 2023 measured concentration of 83.8 µg/m³ is 4.3 times the highest 98th percentile of data, which far exceeds the 1.5 times or more threshold to be considered at Tier 1 event.

³ U.S. Environmental Protection Agency. "Tiering Tool – for Exceptional Events Analysis". Air Quality Analysis. U.S. Environmental Protection Agency, March 26, 2024, <https://www.epa.gov/air-quality-analysis/tiering-tool-exceptional-events-analysis>



In addition, and of particular note in this instance regarding the causal relationship between the wildfire event and the Martinsburg Monitor $PM_{2.5}$ levels measured on June 29, 2023, is the reference to the Chemical Speciation Network (CSN) of air monitors, which is a network of monitors that supplements the $PM_{2.5}$ air monitors and assists regulators with identifying the composition of $PM_{2.5}$ air pollution.⁴ The proposed demonstration summarizes data from nine regional CSN monitors that provided composition data during the most smoke-impacted days of the 2023 Canadian Wildfires, including two CSN monitors in Lawrenceville, PA, as well as the Martinsburg Monitor. Measured organic carbon at these regional CSN monitors ranged from 70% to 88% of the speciated high $PM_{2.5}$ concentrations on June 29, 2023, which is considerably higher than normal $PM_{2.5}$ organic carbon speciation during non-smoke days, which ranged from 30% to 60% on June 28, 2022, and is further evidence that the high $PM_{2.5}$ concentrations measured on June 29, 2023, originated from the 2023 Canadian wildfires.

MOG fully supports the DAQ request that the USEPA Administrator exclude the ambient $PM_{2.5}$ concentrations measured at the Martinsburg Monitor on June 29, 2023, from calculation of annual $PM_{2.5}$ design values and from other regulatory determinations. As set forth in its demonstration, DAQ has shown that transported smoke from the 2023 Canadian Wildfires on wildlands caused the $PM_{2.5}$ exceedances at the Martinsburg Monitor on June 29, 2023. DAQ correctly notes that exclusion of

⁴ <https://www.epa.gov/amtic/chemical-speciation-network-csn>

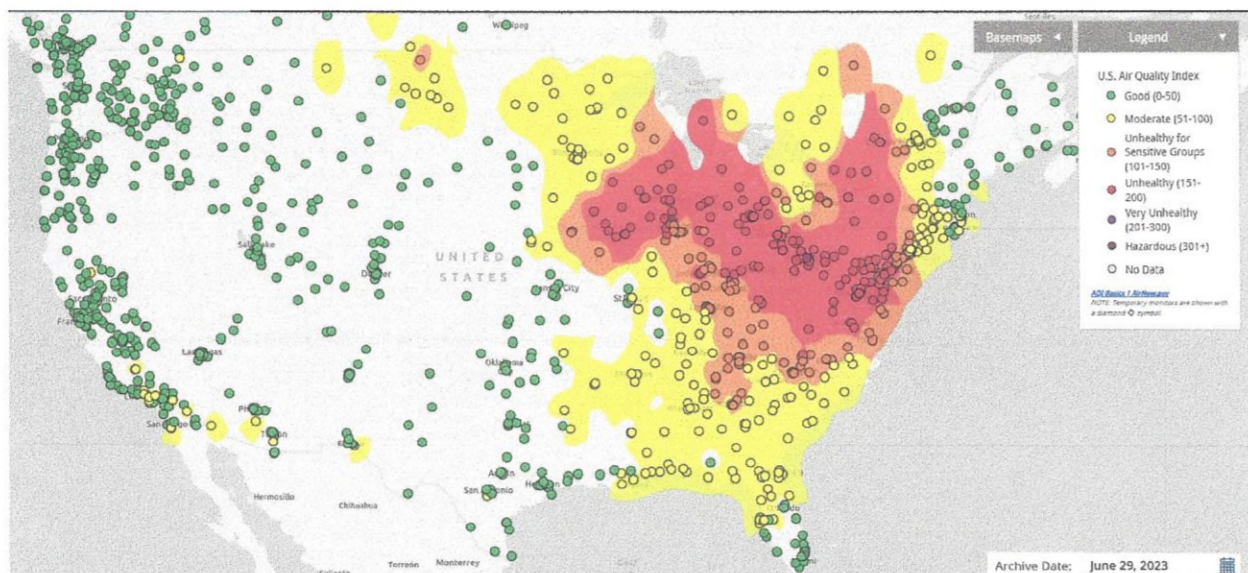
the June 29, 2023, data point will lower the 2023 design value for this monitor to 8.9 $\mu\text{g}/\text{m}^3$ allowing this monitor to be consider attainment.

The demonstration goes on the address such remaining factors as a narrative conceptual model describing the event as not reasonably controllable and not caused by human activity. The demonstration also satisfies requirements related to notification of the public of the events and participation of the public in the submission of this request.

The demonstration also identifies additional monitoring data impacted by the event that are below the $\text{PM}_{2.5}$ NAAQS are therefore not of regulatory significance. Because of the potential for these additional data becoming regulatorily significant in the future, DAQ has reserve the opportunity to amend its request to include these additional data points.

The monitors and episode days that are carefully addressed in the DAQ demonstration are far from the only ones that have influenced air quality during those time frames. Many $\text{PM}_{2.5}$ monitors in the same area also observed 24-hour average $\text{PM}_{2.5}$ concentrations at significantly elevated levels on the same exclusion dates, as well as on days around these dates. As has been noted, additional days, even if not currently ‘regulatorily significant,’ may in the future be relevant and significant not only to West Virginia but also to other states. USEPA should consider allowing this demonstration to stand for those additional monitors and days, as needed.

Air quality data and maps demonstrate that air quality during these identified episodes also had significant impact on multiple other monitors in the Midwest. Below is a $\text{PM}_{2.5}$ air quality index plot of June 29, 2023, the episode event exclusion day requested in the West Virginia demonstration, that illustrates that multiple monitors in the region are likely to have Tier 1 threshold exceedances of current or future regulatory significance.



MOG urges USEPA to accept other demonstrations that may utilize this technical work for wildfire influence on other regional monitors during the same episodes of record.

MOG appreciates this opportunity to offer comments in support of the DAQ exceptional events demonstration for an Exceedance of the 2024 Annual PM_{2.5} NAAQS at Martinsburg, West Virginia on June 29, 2023, Due to Smoke from Canadian Wildfires. MOG also appreciates the opportunity to express support for consideration of this data in the development of demonstrations by other states related to these events. Congress has made it clear that data of the nature described in this demonstration cannot and should not be used to implement a National Ambient Air Quality Standard and other matters of regulatory significance.

Very truly yours,

Edward L. Kropp

Edward L. Kropp
 Legal Counsel
 Midwest Ozone Group