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Reyna Knight
Ohio Environmental Protection Agency, DAPC
Lazarus Government Center
P.O. Box 1049
Columbus, Ohio 43216-1049
DAPC-Comments@epa.ohio.gov

Re: June 2023 Canadian Wildfire Smoke PM_{2.5} Exceptional
Events Demonstration for the Toledo, OH MSA

Dear Ms. Knight,

On behalf of the Midwest Ozone Group¹, we note that 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 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 September 13, 2024, Ohio EPA issued notice of the “Availability of Draft for Comment - June 2023 Canadian Wildfire Smoke PM_{2.5} Exceptional Events Demonstration for the Toledo, OH MSA.” The deadline for the submittal of comments is October 15, 2024.

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.

for the Toledo, OH MSA.” The deadline for the submittal of comments is October 15, 2024. The draft exceptional events demonstration details the PM_{2.5} episodes occurring in the Toledo, OH MSA on June 8, 2023, and June 29, 2023, that were driven by smoke from wildfires in Canada traveling to and impacting the Eastside Pump St (39-095-1003), Erie (39-095-0024), and RAPS (39-095-0026) monitoring sites in Lucas County, Ohio. The following comments are offered on behalf of the Midwest Ozone Group (“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.

While Ohio EPA requests that USEPA exclude the ambient PM_{2.5} concentrations measured at the Eastside Pump St (39-095-1003) monitoring site on June 8, 2023 and June 29, 2023 from regulatory determinations, including calculations of annual PM_{2.5} design values, due to the influence of Canadian wildfire smoke on the monitored concentrations during those days, it is also requesting exclusion of the 24-hour average PM_{2.5} concentrations measured at the Erie monitoring site and the RAPS monitoring site, both of which currently attain the 2024 revised annual PM_{2.5} NAAQS.

If the Eastside Pump St monitoring site on these dates are included, the valid 2021-2023 annual PM_{2.5} design value is 9.4 µg/m³, above the 2024 revised annual PM_{2.5} NAAQS value of 9.0 µg/m³. However, if these two 24-hour average PM_{2.5} concentrations were excluded, the Eastside Pump St monitoring site in the Toledo, OH MSA would have a valid 2021-2023 annual PM_{2.5} design value of 9.0 µg/m³, which represents attainment of the 2024 revised annual PM_{2.5} NAAQS. Excluding the observed PM_{2.5} data from the two identified dates has regulatory significance because it reduces the 2021-2023 annual PM_{2.5} design value for the Toledo, OH MSA to a value that is at or below the 2024 revised annual

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

PM_{2.5} NAAQS value of 9.0 µg/m³ and will preclude the Toledo, OH MSA from being designated a nonattainment area for the 2024 revised annual PM_{2.5} NAAQS.

The Erie monitoring site currently has a 2021-2023 annual PM_{2.5} design value of 8.3 µg/m³, although this design value is considered invalid due to a data capture rate of less than 50% during the first quarter of calendar year 2022. The RAPS monitoring site currently has a valid 2021-2023 annual PM_{2.5} design value of 8.1 µg/m³, which attains the 2024 revised annual PM_{2.5} NAAQS. As such, there is currently no regulatory significance for the PM_{2.5} data from June 8, 2023 and June 29, 2023 at the Erie and RAPS monitoring sites affected by wildfire smoke-driven PM_{2.5} episodes in the Toledo, OH MSA on those dates. However, given the potential for these data to hold regulatory significance in the future, Ohio EPA is also requesting the exclusion of these data from regulatory determinations, including calculations of annual PM_{2.5} design values, for the Erie and RAPS monitoring sites.

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. *Id.* 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.

Based on USEPA guidance, the appropriate evidentiary tier in the instant case is Tier 1. This is because the event that triggered the need for an exceptional event designation is a wildfire event that has shown unambiguous PM_{2.5} impacts well above historical 24-hour concentrations. As such, less evidence of the causal relationship is required.

MOG fully supports the Ohio EPA request that the USEPA Administrator exclude that the ambient PM_{2.5} concentrations measured at three monitors in Lucas County, Ohio on June 8, 2023, and June 29, 2023, from calculation of annual PM_{2.5} design values and from other regulatory determinations. As set forth in its demonstration, Ohio EPA has shown that the influence of Canadian wildfire smoke was indeed the cause of the excessively high PM_{2.5} concentrations at all three monitors on June 8, 2023, and June 29, 2023.

As noted in the demonstration, the highest 24-hour average PM_{2.5} concentration recorded at each of these three monitors in the years 2019 through 2023 occurred on June 29, 2023. Equally significant is that the PM_{2.5} concentration recorded on June 8, 2023, were the second highest for the Eastside Pump monitor and third highest for the Erie and RAP monitors.

It is also significant that in the case of all three monitors, the demonstration provides two data plots, trajectories and calculations of exceedances of the 98th percentile. This information clearly qualifies these to be Tier 1 events that require less evidence to establish the required “clear causal relationship.”³

The demonstration goes on to address such remaining factors as a narrative conceptual model describing the event as not reasonably controllable and not caused by

³ “PM_{2.5} Wildland Fire Exceptional Events Tiering Document”, EPA-457/R-24-001, April 2024.

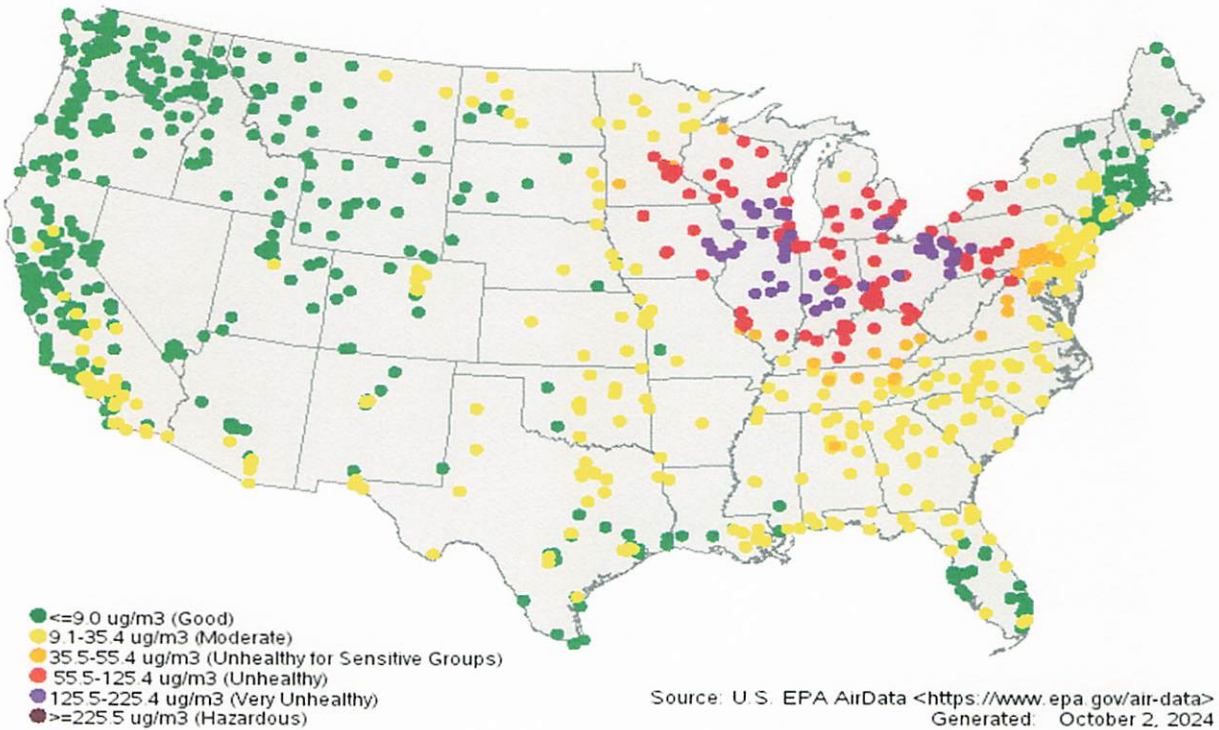
human activity. The demonstration also satisfies requirements related to notification of the public of the events and participation of the public in the submission of this request.

Finally, it is significant that the demonstration not only seeks to exclude affected data from being considered at the Eastside Pump St monitor (which would lower the annual PM_{2.5} design value from 9.4 ug/m³ to a value that would bring that monitor into attainment), the demonstration also properly seeks to exclude affected data related to the Erie and RAPS monitors (even though they are currently in attainment). MOG supports approval of this demonstration for all three monitors, not only because of the immediate regulatory issues related to the Eastside Pump St monitor, but also because of the potential for the affected data at the other two monitors taking on regulatory significances as annual PM_{2.5} concentrations are calculated for future years.

The monitors and episode days that are carefully addressed in the Ohio EPA demonstration are far from the only ones that have influenced air quality during those time frames. Most PM_{2.5} monitors within Ohio also observed 24-hour average PM_{2.5} concentrations at significantly elevated levels on the two requested exclusion dates, as well as on days around these dates. Additional days around the selected ones, even if not currently 'regulatorily significant,' may in the future be relevant and significant not only to Ohio 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 PM_{2.5} air quality index plot of June 28, 2023, one of the episode days in the Ohio demonstration, that illustrates that multiple monitors in the region are likely to have Tier 1 threshold exceedances of current or future regulatory significance.

PM2.5 AQI Values by site on 06/28/2023



MOG urges USEPA to accept other demonstrations that may utilize Ohio's 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 Ohio EPA exceptional events demonstration for all three monitors. 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,

David M Flannery
Legal Counsel
Midwest Ozone Group