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Submitted via email: brad.frost@illinois.gov

Brad Frost  
Office of Community Relations  
Illinois Environmental Protection Agency  
1021 North Grand Avenue, East  
Post Office Box 19506  
Springfield, IL 62794-9506

Re: Wildfire Exceptional Events Demonstration for  
Ground-Level Ozone in the Chicago 2008 Ozone  
Nonattainment Area

Dear Mr. Frost:

These comments are offered on behalf of the Midwest Ozone Group in response to the public notice of the Illinois Environmental Protection Agency (Illinois EPA) December 21, 2020 draft "Wildfire Exceptional Events Demonstration for Ground-Level Ozone in the Chicago 2008 Ozone Nonattainment Area." The exceptional events demonstration addresses two days of ambient ozone monitoring data at the Northbrook Water Plant monitoring site within the Chicago-Naperville IL-IN-WI nonattainment area ("Chicago NAA").

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.<sup>1</sup> 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 assessment of exceptional events, the development of transport rules, NAAQS standards, nonattainment designations, petitions under Sections 126, 176A and 184(c) of the Clean Air Act ("Act"), NAAQS implementation guidance, the development of Good Neighbor state implementation plans (SIPs) and related regional haze and climate change issues. MOG

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<sup>1</sup> The members of and participants in the Midwest Ozone Group include: American Electric Power, American Forest & Paper Association, American Wood Council, Ameren, Alcoa, Appalachian Region Independent Power Producers Association (ARIPPA), ArcelorMittal, Associated Electric Cooperative, Big Rivers Electric Corp., Citizens Energy Group, Cleveland Cliffs, Council of Industrial Boiler Owners (CIBO), Duke Energy, East Kentucky Power Cooperative, ExxonMobil, FirstEnergy, Indiana Energy Association, Indiana Utility Group, LGE / KU, Marathon Petroleum, National Lime Association, Ohio Utility Group, Olympus Power, and City Water, Light and Power (Springfield IL).

Members and Participants own and operate numerous stationary sources that are affected by the air quality ozone design values for Illinois including the implication of those results to upwind states under the Good Neighbor Provisions of the Clean Air Act. MOG seeks the development of technically and legally sound air pollution rules and actions that may impact their facilities, their employees, their contractors, and the consumers of their products.

This is not the first time MOG has addressed the need to recognize exceptional events and their impact on Illinois. On January 31, 2018, MOG offered comments to EPA's response to certain state designation recommendations for the 2015 ozone NAAQS. 83 Fed. Reg. 651 (January 5, 2018). In those comments MOG had analyzed all the monitors in Illinois and the other states that were impacted by May and June 2016 Exceptional Events. MOG noted that data from monitors related to exceptional events initially had not been excluded from the designation analyses. This resulted in higher design values which would cause unnecessarily stringent, inaccurate nonattainment designations but also higher future year predictions of ozone concentrations. The importance of managing Exceptional Events has and continues to be an issue of importance to MOG as a key element of managing NAAQS nonattainment implementation at the local level as well as managing the obligation of upwind states under the Good Neighbor Provisions of the Act.

The Illinois EPA demonstration appropriately and thoroughly addresses Section 319 of the Act and the related Exceptional Events Rule at 40 CFR 50.14. The Exceptional Events Rule promulgated in pursuant to Section 319 of the Act provides, "criteria and procedures for the Governor of a state to petition the Administrator to exclude air quality monitoring data that is directly due to exceptional events from use in determinations by the Administrator with respect to exceedances or violations of the national ambient air quality standards [(NAAQS)]." The Illinois demonstration addresses the impact of plumes from Arizona wildfires adversely affected ozone data at the Northbrook Water Plant ozone monitor in Northbrook, Cook County, Illinois. Wildfires occurred across Arizona throughout June 2020. The Illinois monitor was affected by smoke transported from Arizona wildfires from June 18-19, 2020. The demonstration appropriately urges that the data for those dates should be excluded from regulatory determinations.

The Illinois EPA exceptional events demonstration quotes and methodically tracks EPA's regulation. Illinois provides 14 scientifically and technically based findings and evidence demonstrating the adverse air quality impact of the exceptional events on the Northbrook Water Plant ozone monitor. This draft demonstration serves as an example to other states as they assess their regulatory obligation to address the impact of the Arizona Wildfires and other similar exceptional events on the performance of their ozone monitors. MOG supports the submittal of this demonstration to EPA.

Illinois EPA notes the ". . . exclusion of the June 18 and 19, 2020 data may have regulatory significance to other EPA actions to include future clean data determinations, redesignations, violations of the 2008 ozone standard, triggers of contingency measures under the 2008 ozone NAAQS, or violations of the 2015 ozone NAAQS." Draft Designation at p. 4.

MOG applauds Illinois EPA in its assessment of the significant role Exceptional Events play in implementation of the Act.

Illinois EPA observes that the EPA-developed Tier 2 analysis to identify clear causal relationship is problematic relative to wildfire impacts and the comparison of the fire emissions to the fire's distance to the monitor (Q/d analysis). It is suggested that EPA's criterion of a  $Q/d \geq 100$  tons/km is not determinative as evidenced by past EPA decisions dismissing its analysis. Illinois EPA comments that, "It should be noted that in none of the eastern U.S. exceptional events demonstrations approved by EPA in the past few years and reviewed for comparison to this analysis has the demonstration come close to meeting the Q/d threshold of 100 tons/km." MOG observes the Illinois EPA demonstration inclusive of several analytical steps is a thorough assessment of the impact by the Exceptional Event on the nonattainment monitor. As there is growing evidence that the impacts of wildfire can be long in range, additional assessment by EPA is appropriate concerning the validity of Tier 2 thresholds, which are of questionable technical merit when considered in the context of this demonstration. MOG appreciates that, as a result of the inappropriate scope of EPA's Q/d analysis criterion, Illinois EPA augmented the demonstration with Tier 3 analyses. Included in the Illinois EPA analyses are assessments of meteorological conditions, upstream and measured ozone concentrations, satellite images, NOAA Hazard Mapping and AQI data, CALIPSO retrievals, regional upwind measurements of unusually high ozone concentrations, HYSPLIT model forward and backward trajectory analyses, satellite images of transport, and PM<sub>2.5</sub>/CO/NO<sub>x</sub> measurements impacted by wildfire smoke plume, PM<sub>2.5</sub> speciated data, and similar day analysis.

MOG appreciates the opportunity to review the Illinois Exceptional Events demonstration and urges that the affected data be excluded from the determination of design values for the subject air quality monitors.

Very truly yours,

*Kathy G. Beckett*

Kathy G. Beckett  
Counsel for the Midwest Ozone Group