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Submitted via email at: Hengesbachs1@Michigan.gov

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Michigan Department of Environment,

Great Lakes, and Energy

Air Quality Division, SIP Development Unit

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Dear Ms. Hengesbach:

Please accept these comments submitted by the Great Lakes Environmental Law Center on behalf of the undersigned individuals and organizations regarding the draft Exceptional Event Demonstration regarding ambient monitoring ozone data collected during June 24 and 25, 2022 at the East-7 Mile ambient monitoring station in Wayne County. Thank you for the opportunity to provide these comments.

Sincerely,

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1. Introduction

Despite a large body of scientific evidence demonstrating that long-term and short-term exposure to ozone pollution is linked to respiratory health effects, at every step since the U.S. Environmental Protection Agency (EPA) lowered the ozone National Ambient Air Quality Standard in 2015 both the EPA and the Michigan Department of Environment, Great Lakes, and Energy (EGLE) have sought to delay and evade utilizing their regulatory responsibility to lower ozone pollution in the Detroit area. In some cases, this has directly benefited industry while compromising the health and well-being of the public.

Now, EGLE seeks to exclude ozone data collected on June 24 and 25, 2022 at the East 7 Mile monitor in Detroit, Michigan on the basis that ozone concentrations on these days was influenced by wildfire smoke from Northern Canada. If approved, this proposal (hereinafter referred to as the “Ozone Exceptional Event Demonstration”) will potentially justify the EPA in approving EGLE’s request to redesignate the Detroit ozone nonattainment area as an attainment area and thus absolve EGLE from taking additional measures to control ozone pollution in the Detroit area.

As noted below, the Great Lakes Environmental Law Center (GLELC) believes EGLE’s evidentiary support for its Ozone Exceptional Event Demonstration to be severely lacking and inadequate under any circumstances. However, given the context of regulatory delay and evasion over the past 7 years and the fact that asthma disparities in Detroit have worsened over that span, this decision represents an important environmental justice touchstone. As such, we strongly urge EGLE to withdraw its proposal and focus its efforts on adopting further measures to lower ozone pollution in the Detroit area to provide its residents with the protection they so urgently deserve.

1. Recent History of the Ozone National Ambient Air Quality Standard and Ozone Nonattainment In Southeast Michigan

On October 1, 2015, the EPA lowered the ozone National Ambient Air Quality Standard (NAAQS) from 75 parts per billion to 70 parts per billion.[[1]](#footnote-0) Upon lowering the ozone NAAQS, the EPA was required by the Clean Air Act to designate ozone nonattainment areas no later than two years after the creation of the new standard – October 1, 2017.[[2]](#footnote-1) The EPA failed to meet this deadline for ozone nonattainment designations and was sued by a coalition of states and non-government organizations to enforce the Clean Air Act’s deadline.[[3]](#footnote-2) Finally, EPA designated the Detroit ozone nonattainment area – which included seven counties in Southeast Michigan – as a marginal nonattainment area for the ozone NAAQS on August 3, 2018.[[4]](#footnote-3)

The 10 month delay in finalizing the Detroit area nonattainment designation unjustly prioritized industry over people, including in Michigan. In early 2018, DTE filed a permit application for a permit to install that would authorize it to construct a 1,150 megawatt gas-fired power plant within what was to become the Detroit ozone nonattainment area.[[5]](#footnote-4) However, locating a major source of air pollution in a nonattainment area would trigger the nonattainment new source review – a stringent permitting process required by the Clean Air Act that would require DTE to offset its increase in ozone precursor emissions with decreases elsewhere in the nonattainment area and to achieve the lowest achievable emissions rate at its new gas plant.[[6]](#footnote-5) While both EGLE and DTE knew that its gas plant would be located in an area that was failing to attain the ozone NAAQS, DTE nonetheless made its goals to EGLE clear very early in the permit application process by noting that having their new gas plant subjected to nonattainment new source review for ozone “would be a game changer” and suggesting that receiving their permit before any nonattainment designation was finalized was a “necessary milestone.”[[7]](#footnote-6)

DTE got their wish due to a great deal of help from both the EPA and EGLE: the designation of Detroit ozone nonattainment area was significantly delayed 10 months by the EPA and EGLE made sure to meet DTE’s timeline by issuing the permit to install on July 16, 2018, a mere 18 days before the Detroit ozone nonattainment area was made effective on August 3, 2018.[[8]](#footnote-7) This acquiescence to industry came at the expense of the public who were forced to live with dangerous levels of ozone pollution for an extended period of time.

Once the Detroit ozone nonattainment area was finalized on August 3, 2018, it triggered a requirement for EGLE to lower ozone pollution in the Detroit ozone nonattainment area to levels below the NAAQS within 3 years – by August 3, 2021. In the spring of 2022, EGLE requested that EPA redesignate the Detroit area to attainment regarding the ozone NAAQS on the basis of ozone air quality data collected at monitors throughout Southeast Michigan in the years 2019, 2020, and 2021.[[9]](#footnote-8) The proposed attainment designation was opposed by over a dozen environmental groups partially on the basis that the margin for maintaining attainment with the ozone NAAQS was razor thin at many monitors in Southeast Michigan. One such monitor was the East 7 Mile monitor. In their comments, the environmental groups noted that even if 2022’s fourth-highest daily maximum 8-hour ozone average was a rather low 70 parts per billion, the area would once again be in nonattainment with the ozone NAAQS.[[10]](#footnote-9) That exact scenario came to pass: in 2022 the East 7 Mile monitor’s fourth-highest daily maximum 8-hour ozone average was 71 parts per billion, which once again meant that the ozone design value for the years 2020-2022 was above the NAAQS.[[11]](#footnote-10)

Throughout the process of implementing the 2015 ozone NAAQS, both the EPA and EGLE have used every opportunity to delay and avoid taking further action to control ozone pollution in the Detroit nonattainment area often without legal justification. Now, at a familiar crossroads, EGLE is once again choosing to pursue the path towards delay and avoidance rather than towards more robust action to protect the public health.

1. Significance of EGLE’s Ozone Exceptional Event Demonstration Regarding Environmental Justice

The delays, inaction, and regulatory avoidance described above is particularly troubling in light of the fact that ozone pollution and the respiratory effects they cause disproportionately impact Black communities. Higher ozone levels have long been associated with increases in asthma medication use and the number of asthma hospitalizations.[[12]](#footnote-11) Ozone is particularly dangerous for those who already suffer from respiratory illnesses because, for instance, it can worsen asthma, emphysema, and chronic bronchitis. Sensitive populations such as children and the elderly are also especially susceptible to the negative health effects of ozone and are far more likely to be hospitalized for asthma.

Asthma and asthma hospitalizations are particularly prevalent in Detroit’s predominantly Black population. Zip code 48215 – which is located not far from the East 7 Mile ozone monitor on Detroit’s Eastside - has been found to have an asthma hospitalization rate of 26.8 per 10,000 people, which is the highest rate in Michigan and over 4 times the State average.[[13]](#footnote-12) While Detroiters have long suffered from a disproportionate asthma burden compared to the rest of Michigan, even more concerning is the fact that this disproportionate burden has worsened since the ozone NAAQS was lowered in 2015. Disparities in asthma rates for adults in Detroit has worsened in recent years. In 2016, the asthma rate for Detroit adults was 15.5% compared to Michigan’s 11%.[[14]](#footnote-13) In 2021, the asthma rate in Detroit adults jumped to 16.2% while Michigan’s rate stayed nearly the same at 11.1%.[[15]](#footnote-14) Disparities in asthma hospitalization rates in Detroit compared to the rest of Michigan have also worsened in recent years. In a 2008 study, the Michigan Department of Community Health found that asthma hospitalization rates in Detroit were three times higher than the rates in Michigan as a whole.[[16]](#footnote-15) In 2021, the Michigan Department of Health and Human Services found that the rate of asthma hospitalizations was at least four times higher than the rates for Michigan as a whole.[[17]](#footnote-16)

Given the location of the East 7 Mile monitor in an environmental justice community that is experiencing a severe and worsening asthma burden disparity, this Ozone Exceptional Event demonstration, if approved, may function to perpetuate environmental injustice. It is unquestionable that the Ozone Exceptional Event Demonstration, if approved, will have a disproportionate impact on Black Detroiters. If approved, it could potentially pave the way for EPA to approve EGLE’s request made earlier this year to redesignate the Detroit area to attainment for the ozone NAAQS. This would absolve EGLE from taking additional steps to curb ozone pollution in the Detroit area. If it is not approved, the Detroit ozone nonattainment area will likely be reclassified from a marginal nonattainment area to a moderate nonattainment area, which will trigger requirements for major sources of ozone precursor emissions to adopt reasonably available control technology, for the implementation of a vehicle inspection and maintenance program, and for EGLE to revise its State Implementation Plan to reduce ozone precursor emissions by at least 15% over 6 years.[[18]](#footnote-17) Notably, EPA was already legally obligated to do so by February 2022, yet EPA has delayed as well, paralleling EGLE’s efforts to avoid protecting the health of vulnerable residents.[[19]](#footnote-18)

Given the serious environmental justice implications involved in this Ozone Exceptional Event Demonstration, we believe it is imperative that EGLE clearly demonstrate that the wildfire smoke traveling to the Detroit area and impacting the East 7 Mile monitor on June 24 and 25, 2022 caused the ozone design value to be above the NAAQS. For the reasons stated below, we don’t believe EGLE has met that burden here.

1. Regulatory Background Regarding Exceptional Event Demonstrations

While the EPA is allowed to exclude air quality monitoring data that have been influenced by “exceptional events” from regulatory determinations, including determinations regarding whether an area has attained the NAAQS, the Clean Air Act emphasizes “that protection of public health is the highest priority.”[[20]](#footnote-19) In order to ensure public health is prioritized, the Clean Air Act requires that:

A clear causal relationship must exist between the measured exceedances of a national ambient air quality standard and the exceptional event to demonstrate that the exceptional event caused a specific air pollution concentration at a particular air quality monitoring location.[[21]](#footnote-20)

The Clean Air Act and EPA’s regulations makes clear that EGLE must establish a “clear causal relationship” between the exceptional event and the “exceedance” of the NAAQS caused by “a specific air pollution concentration at a particular air quality monitoring location.”[[22]](#footnote-21)

1. Comments

The draft Ozone Exceptional Event Demonstration provides information that attempts to demonstrate that wildfire smoke from Northern Canada was capable of reaching the Detroit area on June 24and 25, 2022. However, it largely relies on a variety of mismatched pieces of circumstantial evidence in an attempt to establish the clear causal relationship between the measured exceedances of the ozone NAAQS at the East 7 Mile monitor while also failing to analyze other key pieces of information or analyzing other potential causes for ozone concentrations at the East 7 Mile monitor on the dates in question.

1. The Maximum Daily 8-Hour Averages on June 24 and 25, 2022 Were Not Abnormal For The East 7 Mile Monitor

One piece of evidentiary support EGLE relies upon to establish a causal relationship between the ozone concentrations at the East 7 Mile monitor and the proposed exceptional event is by arguing that the ozone maximum daily 8-hour averages (MDA8) at the East 7 Mile monitor on June 24 and 25, 2022 “rank just below the 99th percentile and are among the four highest concentrations in 2022.”[[23]](#footnote-22) Of course, this would be true for any ozone data that EGLE would desire to exclude. Attainment with the ozone NAAQS is determined by utilizing a design value that is the three-year running average of the fourth-highest MDA8 at a given monitor. In simple terms, EGLE only relies on data from the handful of days with the worst ozone pollution to determine whether or not an area is attaining the ozone NAAQS. By their very nature, most if not all of the MDA8 ozone concentrations that EGLE may want to exclude from their design value will be among the worst at that given monitor in any given year.

Therefore, the question is not whether the MDA8 ozone concentration on June 24 and 25, 2022 were high compared to all other ozone data. Instead, the question is whether the MDA8 was so high as to be unprecedented in such a manner that would indicate something outside of normal, local conditions may have influenced the data. That is simply not the case here. Looking to 2022 data, the 71 parts per billion MDA8 measured at the East 7 Mile monitor was not outside of the norm. An equivalent MDA8 was measured on July 4, 2022 and a higher MDA8 of 75 parts per billion was measured on June 30, 2022.[[24]](#footnote-23) Looking to historical data, the 71 parts per billion MDA8 was also not outside of the norm. In each year going back at least a decade, the East 7 Mile monitor has detected a MDA8 of at least 71 parts per billion and oftentimes has detected a MDA8 that is significantly higher.[[25]](#footnote-24)

EGLE also suggests that an increase in the MDA8 of 30 parts per billion from June 23 to June 24, 2022 is exceptional. However, EGLE also provides that this increase is far from unprecedented as it has happened at least five other times in the past five years.[[26]](#footnote-25) During none of the previous five years has EGLE sought to exclude ozone data from the East 7 Mile monitor because it was impacted by wildfire smoke.

In short, absent further explanation, nothing about the ozone MDA8 measured on June 24 or 25, 2022 or the increase in the ozone MDA8 from June 23rd to the 24th suggests that ozone concentrations at the East 7 Mile monitor were impacted by wildfire smoke.

1. EGLE’s Use of Monitoring Data for PM10 and Brown Carbon to Support Its Assertion that Wildfire Smoke Was Present On June 24and 25, 2022 Is Not Adequately Supported

EGLE also utilizes air monitoring data for PM10 and brown carbon to serve as a ground truth of sorts for its model which it claims demonstrates wildfire smoke was present in the Detroit area on the days in question. EGLE claims that both PM10 and brown carbon are indicators of wildfire smoke and therefore spikes in PM10 and brown carbon pollution at monitors in the Detroit area can be evidence that wildfire smoke was present on or around June 24 and 25, 2022. However, EGLE’s use of this data to support its assertion is rife with problems.

First, EGLE overstates the spike in PM10 pollution. EGLE relied on particulate matter pollution collected by the Dearborn monitor to make the assertion that there were “much higher PM10 maximum values which can be an indication of woodsmoke in the area.”[[27]](#footnote-26) However, it’s important to note that the spike in PM10 pollution illustrated in Figure 32 was a short-term spike in the maximum 1-hour average of PM10 concentrations measured June 24. The 24-hour average PM10 concentrations remained low throughout June 24 and 25. Further, both 1-hour and 24-hour average PM2.5 concentrations remained low at the Dearborn monitor throughout June 24 and 25. Additionally, even the short-term spike in PM10 does not appear to be outside of the norm even for the rest of June 2022. According to Figure 32 there were several times during that month alone when maximum 1-hour PM10 concentrations exceeded those detected on June 24 and 25. A detailed review of the PM10 data at the Dearborn monitor confirms that the spike in 1-hour PM10 concentration on June 23 was not exceptional. While the maximum 1-hour PM10 concentration on June 24, 2022 was 64 micrograms per cubic meter of air, it was well above that on dozens of other occasions during June 2022.[[28]](#footnote-27) Nothing about the particulate matter data collected at the Dearborn monitor during the month of June suggests that air quality in Detroit was being significantly impacted by wildfire smoke during June 24 or 25, 2022. Absent further explanation, this data does not establish any causal connection between the ozone concentrations measured on June 24 and 25, 2022 at the East 7 Mile monitor and wildfire smoke.

EGLE’s reliance on the brown carbon data presented in Figure 33 suffers from a similar pitfalls. EGLE claims that brown carbon concentrations in Dearborn peaked on June 23rd and that this, in combination with a spike in 1-hour PM10 concentrations in Dearborn, shows that wildfire smoke was in the area.[[29]](#footnote-28) However, 1-hour PM10 concentrations at the Dearborn monitor peaked on *June 24th,* not on June 23rd. In fact, on June 23rd the maximum 1-hour PM10 concentration at the Dearborn monitor was a modest 25 micrograms per cubic meter of air. If both PM10 and brown carbon are indicators of wildfire smoke as EGLE claims, then both PM10 and brown carbon concentrations in Dearborn should have spiked at the same time. Instead, brown carbon concentrations spiked on June 23rd while the maximum 1-hour PM10 concentration remained low. Conversely, on June 24th brown carbon concentrations dropped while the maximum 1-hour PM10 concentration spiked.

The air monitoring data provided by EGLE simply doesn’t align to support its assertion that spikes in PM10 and brown carbon were caused by wildfire smoke in the area. EGLE’s Ozone Exceptional Event Demonstration does nothing to explain these discrepancies in their data.

1. EGLE’s Matching Day Analysis Does Not Provide Sufficient Information To Enable Meaningful Public Input

EGLE also attempts to utilize a matching day analysis to compare weather conditions on June 24 and 25, 2022 to other days with similar weather conditions in order to compare ozone concentrations on similar meteorological days. EGLE posits that if there is a noticeable difference between ozone concentrations between the event date and meteorologically similar days, it can indicate that there is a clear causal relationship between wildfire smoke and elevated ozone concentrations.[[30]](#footnote-29) EGLE has not provided sufficient information to enable the public to provide meaningful input regarding its matching day analysis.

EGLE’s matching day analysis relies on four days that it has picked as being sufficiently similar to June 24 and 25, 2022 to allow for a comparative analysis. However, EGLE has not provided the meteorological conditions for all of the potential days. Instead, it has only provided the conditions for the four days it has picked. It’s unclear how EGLE came to settle on these four days, what criteria it used, and why some days were chosen and not others. Further, EGLE states that it excluded meteorology days that it believes were influenced by exceptional events in the 2020 season as well as dates which showed significant effects of smoke transport in the days leading up to the event.[[31]](#footnote-30) EGLE did not submit any exceptional event demonstration to exclude any other ozone data from the East 7 Mile monitor in the years 2020, 2021, or 2022 so it’s impossible to know what days were excluded and what “exceptional events” could justify EGLE’s decision to omit them from its matching day analysis here. However, it’s fair to assume that EGLE has likely excluded meteorology days that had some of the highest ozone concentrations in 2019 and 2020. Unjustifiably excluding even one of these days could greatly skew EGLE’s matching day analysis.

Without more transparency, it’s impossible to provide meaningful input to EGLE regarding its matching day analysis. EGLE must provide the public with the full list of meteorology days it considered in its matching day analysis as well as the days it excluded from its matching day analysis before the public can provide meaningful comments.

1. EGLE Must Analyze the Impact of Local Pollution on Ozone Concentrations at the East 7 Mile Monitor

At no point in the Ozone Exceptional Event Demonstration does EGLE analyze any local emissions sources and their potential impact on ozone concentrations at the East 7 Mile monitor. This is a necessary part of the causal analysis for any exceptional event demonstration. EGLE must not only demonstrate that an exceptional event impacted ozone concentrations at the East 7 Mile monitor but also that the exceptional event caused the exceedance of the NAAQS.[[32]](#footnote-31) Put another way, EGLE must demonstrate that but-for the exceptional event, ozone concentrations East 7 Mile monitor would never have caused an exceedance of the NAAQS.

It is rather commonplace for states seeking to exclude ozone data through an exceptional event demonstration to include an analysis of local emission sources. For example, Maryland used a NOx/Ozone ratio to demonstrate that ozone levels were smoke influenced and were not caused by local power plants.[[33]](#footnote-32) Ohio examined NOx emissions from power plants on exceptional event days to make a similar demonstration.[[34]](#footnote-33)

EGLE has provided no analysis of local pollution sources and their expected contribution to ozone concentrations at the East 7 Mile monitor. Without such information, it is impossible to establish that but-for the exceptional event EGLE is claiming to have occurred, ozone concentrations at the East 7 Mile monitor would have never resulted in an exceedance of the NAAQS in 2022.

1. Conclusion

The Commenters appreciate the opportunity to provide comments to EGLE on this important Ozone Exceptional Event Demonstration. As discussed above, EGLE’s proposal has significant environmental justice implications. If EGLE decides to exclude the ozone data on June 24 and 25, 2022, it will have significant public health consequences for Black Detroiters already suffering from increasingly disproportionate rates of asthma and asthma hospitalizations. As such, it’s essential that EGLE clearly demonstrate its conclusion that ozone concentrations at the East 7 Mile monitor would not have caused an exceedance of the NAAQS but for the influence of wildfire smoke. For the reasons described above, we do not believe EGLE has met that burden here.

Submitted on behalf of:

Asthma and Allergy Foundation

Bill O’Brien

Darren Riley, CEO/Co-Founder Just Air

Detroit Greenways Coalition

Detroit Hispanic Development Corporation

Earthjustice

Eastside Climate Action Coalition

Eastside Community Network

Ecology Center

Keith Cooley

MI Air MI Health

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Original United Citizens of Southwest Detroit

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Sierra Club

Southwest Detroit Community Benefits Coalition

Southwest Detroit Environmental Vision

Sugar Law Center

Theresa Landrum

Vincent Martin

V. Martin Environmental Justice LLC

We the People of Detroit

We Want Green Too

West Michigan Environmental Action Council

1. 80 Fed. Reg. 65,291 (Oct. 26, 2015), available at https://www.federalregister.gov/documents/2015/10/26/2015-26594/national-ambient-air-quality-standards-for-ozone [↑](#footnote-ref-0)
2. 42 U.S.C. 7407(d)(1)(B)(i). [↑](#footnote-ref-1)
3. *American Lung Assoc., et al. v. EPA,* No. 3:17-cv-06900 (N.D. Cal.). [↑](#footnote-ref-2)
4. 83 Fed. Reg 25,776 (Jun. 4, 2018) (designating the Detroit nonattainment area effective August 3, 2018). [↑](#footnote-ref-3)
5. DTE Electric Company: Belle River Combined Cycle Power Plant, Permit to Install Application; Prevention of Significant Deterioration (Jan. 22, 2018) (attached as Exhibit 1). [↑](#footnote-ref-4)
6. *See,* 42 U.S.C. 7503. [↑](#footnote-ref-5)
7. DTE Electric Company, Pre-Application Presentation, Sept. 19, 2017 (attached as Exhibit 2). [↑](#footnote-ref-6)
8. Permit to Install 19-18 Issued to DTE Electric Company – Belle River Combined Cycle (Jul. 16, 2018), available at https://www.egle.state.mi.us/aps/downloads/permits/finpticon/2018/19-18.pdf [↑](#footnote-ref-7)
9. 87 Fed. Reg. 14,210 (Mar. 14, 2022), available at https://www.govinfo.gov/content/pkg/FR-2022-03-14/pdf/2022-05253.pdf [↑](#footnote-ref-8)
10. Comments Submitted by Sierra Club et al., Proposed Redesignation of the Detroit, MI Area to Attainment of the 2015 Ozone Standards, Docket No. EPA-R05-OAR-2020-0730 (attached as Exhibit 3). [↑](#footnote-ref-9)
11. Summary of Highest 8-Hour Concentrations for 2022 for All Sites in Michigan (Oct. 31, 2022), available at https://www.michigan.gov/egle/-/media/Project/Websites/egle/Documents/Reports/AQD/monitoring/2022-ozone-levels-8hr-highest.pdf?rev=3f8afd6959244a9a9789220a3dfd200e&hash=450EFE04414A75D35340C8F2D797CB05 [↑](#footnote-ref-10)
12. See, e.g., U.S. EPA, National Ambient Air Quality Standards for Ozone; Final Rule, 73 Fed. Reg.

16,436, 16,440 (Mar. 27, 2008); see also U.S. EPA, Integrated Science Assessment for Ozone and

Related Photochemical Oxidants, EPA 600/R-10/076F (Feb. 2013), www.epa.gov/ncea/isa/ozone.htm

(cataloguing scientific studies and discussing in depth the wide range of adverse health effects associated

with short- and long-term ozone exposure); U.S. EPA, Policy Assessment for the Review of the Ozone

National Ambient Air Quality Standards, EPA-452/R-14-006 (Aug. 2014), at 4-57. [↑](#footnote-ref-11)
13. Age-Adjusted Hospitalization Rates per 10,000 people by Zip Code for Michigan and Detroit, 2016-2019, Michigan Department of Health and Human Services, available at https://www.michigan.gov/-/media/Project/Websites/mdhhs/Folder50/Folder2/Michigan\_Asthma\_Hospitalization\_Rates\_by\_Zip\_Code\_2016-2019\_.pdf?rev=174bc40976a0406081fd6f7b218774f3 [↑](#footnote-ref-12)
14. C. Thompson, Detroit's longtime problem with asthma is getting much worse. Why that's concerning.

The Detroit News, April 5, 2022, https://www.detroitnews.com/story/news/local/detroitcity/

2022/04/05/asthma-detroit-worse-health-services-report/7059301001/. [↑](#footnote-ref-13)
15. Id. [↑](#footnote-ref-14)
16. E.A. Wasilevich, S. Lyon-Callo, et al., Bureau of Epidemiology, Michigan Department of Community

Health, Detroit – The Epicenter of Asthma Burden, Epidemiology of Asthma in Michigan, 2008,

https://www.michigan.gov/documents/mdch/14\_Ch12\_Detroit\_Epicenter\_of\_Asthma\_276687\_7.pdf [↑](#footnote-ref-15)
17. P. Kunyangna & B. Anderson, Detroit: The current status of asthma burden, 2021 update. Michigan

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https://www.michigan.gov/documents/mdhhs/Detroit-AsthmaBurden-2021\_Update\_748381\_7.pdf. [↑](#footnote-ref-16)
18. 42 U.S.C. 7511a(b). [↑](#footnote-ref-17)
19. 42 U.S.C. 7511(b)(2). EPA has been sued over its illegal failure to take action regarding the Detroit area. *Alliance of Nurses for Healthy Environments, et. Al. v. Regan,* No. 22-cv-1606 (D.D.C.) [↑](#footnote-ref-18)
20. 42 U.S.C. 7619(b)(3)(A). [↑](#footnote-ref-19)
21. Id. [↑](#footnote-ref-20)
22. Id.; 40 C.F.R. 50.14(a)(1)(ii). [↑](#footnote-ref-21)
23. Draft – Wildfire Exceptional Event Demonstration for Ground-Level Ozone in Southeast Michigan – East 7-Mile Monitor, at 14, December 2022 (hereinafter “EGLE Draft Exceptional Event Demonstration”) [↑](#footnote-ref-22)
24. Summary of the Highest 8-Hour Concentrations for 2022 for All Sites in Michigan, available at https://www.michigan.gov/egle/-/media/Project/Websites/egle/Documents/Reports/AQD/monitoring/2022-ozone-levels-8hr-highest.pdf?rev=3f8afd6959244a9a9789220a3dfd200e&hash=450EFE04414A75D35340C8F2D797CB05 [↑](#footnote-ref-23)
25. Summary of the Highest 8-Hour Ozone Concentrations for 2021-1992 for All Sites in Michigan, available at https://www.michigan.gov/egle/-/media/Project/Websites/egle/Documents/Reports/AQD/monitoring/1992-2021-ozone-levels-8hr-highest.pdf?rev=8188e78003894e67b0f01011fe0ba8ab&hash=3A5719B18751E8665C72D3C7DD2167DF [↑](#footnote-ref-24)
26. Exceptional Event Demonstration at 31. [↑](#footnote-ref-25)
27. EGLE Draft Exceptional Event Demonstration at 40. [↑](#footnote-ref-26)
28. U.S. Environmental Protection Agency, Daily Data – PM10 Monitor, Dearborn, Michigan, Site 26-163-0033, accessed at https://www.epa.gov/outdoor-air-quality-data/interactive-map-air-quality-monitors [↑](#footnote-ref-27)
29. EGLE Draft Exceptional Event Demonstration at 40. [↑](#footnote-ref-28)
30. Id. at 53. [↑](#footnote-ref-29)
31. Id. [↑](#footnote-ref-30)
32. *Supra,* note 21-22. [↑](#footnote-ref-31)
33. Maryland Department of the Environment, State of Maryland Exceptional Event Demonstration and Analysis of the May 2016 Fort McMurray, Albert Canada Wildfire and its Impact on Maryland’s Air Quality on May 25 and 26, 2016 (Oct. 2017), available at https://www.epa.gov/sites/default/files/2018-07/documents/mde\_may\_25\_26\_ee\_demo.pdf [↑](#footnote-ref-32)
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