STATE OF MICHIGAN

GENESEE COUNTY CIRCUIT COURT

SAINT FRANCIS PRAYER CENTER.
FLINT RISING,
THE ENVIRONMENTAL TRANSFORMATION MOVEMENT OF FLINT, MICHIGAN UNITED,
and C.A.U.T.I.O.N, Michigan not-for-profit community organizations headquartered and having membership in Genesee Cty, Michigan.

Appellants,

v

MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY (EGLE), of the Executive Branch of the State of Michigan, and
LIESL EICHLER CLARK in her official official capacity as Director of EGLE.

Appellees

AJAX MATERIALS CORPORATION, a Michigan corporation,

Intervening Appellee.

Case No 22-116891-AA
Hon. David J. Newblatt

BRIEF FOR APPELLANTS
ORAL ARGUMENT REQUESTED

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ORAL ARGUMENT REQUESTED

THIS APPEAL INVOLVES A RULING THAT A STATE GOVERNMENTAL ACTION IS INVALID

TABLE OF CONTENTS

TABLE OF AUTHORITIES

CONSTITUTIONS **PAGES**

STATUTES

CASES

ADMINISTRATIVE DECISIONS

REGULATIONS

AGENCY GUIDANCE DOCUMENTS

APPENDIX

MICHIGAN COURT RULE 7.215(C) ATTACHMENTS

City of River Rouge v EES Coke Battery Co, No 314789, 2014 WL 6952368 (Mich Ct App Dec 9, 2014).

Environmental Protection Agency, Complainant v DH Mayou Roofing and Supply Company, Respondent, 1973 WL 5504.

In the Matter of: Volatile Organic Material Emissions From Stationary Sources; Ract III, Illinois Pollution Control Board, 1984 WL 46096.

In the Matter of the Appeal of: World Asphalt Company, Employer, 2000 WL 36722398, California Occupational Safety and Health Appeals Board (2000).

Sierra Club v Dep't of Env't, Great Lakes, & Energy, No 350083, 2021 WL 69788 (Mich Ct App Jan 7, 2021) ("*DTE St Clair*").

STATEMENT OF QUESTIONS PRESENTED

1. Was EGLE's decision to issue Ajax a permit without evaluating emissions from the asphalt plant's six 30,000 gallon asphalt cement storage tanks arbitrary and capricious and contrary to law?

   Appellant answers: yes.

2. Was EGLE's decision to grant Ajax a permit without basing its emissions projections on the Ajax plant's maximum impact and operational design capacity of at least 600 tons of asphalt per hour and 14,400 tons per day arbitrary and capricious and contrary to law?

   Appellant answers: yes.

3. Was EGLE's determination that air quality data for nitrogen dioxide, sulfur dioxide, and particulate matter from Lansing and Grand Rapids was representative of the air quality background pollutant concentrations around the Genesee Township-based Ajax asphalt plant arbitrary and capricious and contrary to law?

   Appellant answers: yes.

STATEMENT OF JURISDICTION

The Court has jurisdiction under Part 55 of the Natural Resources and Environmental Protection Act ("NREPA"), Air Pollution Control, and venue is proper under Section 631 of the Revised Judicature Act ("RJA"). Part 55 allows EGLE to issue permits to install ("PTI") to new industrial sources of air pollution. Under Part 55, any person may appeal a PTI. MCL 324.5505(8). Appellants challenge EGLE's decision to issue a PTI to Ajax Materials Corporation allowing it to construct a polluting hot-mix asphalt plant in Genesee Township. Section 631 directs parties to file appeals from state agency decisions in "the circuit court of the county of which the appellant is a resident." MCL 600.631. Genesee Circuit Court is the proper venue because appellants are organizations headquartered in Genesee County. This appeal is also timely. The statute of limitations to appeal a PTI is 90 days. *S Dearborn Envt Improvement Ass'n Inc v DEQ*, 502 Mich 349 (2018). On December 28, 2020, Ajax submitted an application to EGLE for a "permit to install" a hot-mix asphalt plant just outside the border of northeast Flint in the Genesee Township Industrial Park. The Air Quality Division of EGLE approved Ajax's application for a permit to install its asphalt plant on November 15, 2021. This appeal was timely filed 88 days later on February 11, 2022.

INTRODUCTION

This action is brought on behalf of Saint Francis Prayer Center, Environmental Transformation Movement of Flint, Flint Rising, C.A.U.T.I.O.N., and Michigan United. These community groups appeal the Michigan Department of Environment Great Lakes and Energy's ("EGLE") decision to issue a Permit to Install to intervenor-appellee Ajax Materials Corporation ("Ajax") authorizing construction of a hot-mix asphalt plant in Genesee Township. The challenged permit does not comply with the rigorous standards of the Federal Clean Air Act ("CAA") and Michigan's air quality rules. To the contrary, EGLE rubberstamped this permit with incomplete emissions projections that fail to reflect how the Ajax plant will operate and did not consider local air quality conditions using representative air quality monitors.

EGLE's approval of Ajax's hot-mix asphalt plant will have serious consequences for the adjacent Flint and Genesee Township community—a community that already faces high levels of pollution and consequent health problems. As noted in comments submitted by the United States Department of Housing and Urban Development ("HUD"), which expressed serious concern about the permit, the asphalt plant will be located within 1,600 feet of two federally subsidized housing developments, River Park and Ridgecrest Homes. Permit File, Item 406 at 3-4 (comments of US HUD). The housing developments around the plant are nearly 100% African American. *Id*. HUD data shows that 597 children and numerous disabled and elderly people reside in these homes. *Id*. Further, the families in these developments are all low income. *Id*. In addition to the housing developments, there are also numerous multigenerational residents surrounding the industrial park and Dort Highway.[1] *See e.g.*, Hearing File, Item 33.

[1] Notably, Ajax purchased the home of a Flint resident located 100 feet from the proposed plant prior to seeking a permit to install. *See* District File, Item 25 at 1.

The Ajax plant will degrade air quality and public health in this community by emitting air contaminants like volatile organic compounds ("VOCs") and nitrogen oxides ("NOx")—which, together, contribute to the formation of ground level ozone (smog). Permit File, Item 527 at 61. The plant will also emit particulate matter (dust), noxious pollutants like sulfur dioxide ("SO2"), and hazardous air pollutants ("HAPs"). *See id* at 59-81. These pollutants can cause offensive odors, exacerbation of asthma and emphysema, and acute health effects such as sinus irritation and asphyxiation. *See generally*, *Criteria Air Pollutants*, Environmental Protection Agency, *available* here (last accessed Nov. 1, 2022).

Because the plant was located next to Michigan residents that bear a disproportionate burden from industrial pollution, the United States Environmental Protection Agency ("EPA") also raised concerns about the siting of this plant and requested that EGLE work with local authorities to find alternative siting locations.[2] *See* District File, Item 355. If the plant could not be located elsewhere, EPA recommended that EGLE undertake additional review to determine the full scope of the Ajax plant's impact to air quality, and deny the permit if the more rigorous review shows that the plant cannot comply with Michigan's air quality rules and the federal CAA. *See id* at 3. Finally, the agency recommended, as a last resort, that EGLE adopt strict permit conditions to ensure that this plant will not severely worsen already poor health in the surrounding community. *See id* at 5-11.

Over the concerns of EPA, HUD, and hundreds of public comments, including extensive comments submitted by Appellants, EGLE issued the flawed permit at issue in this appeal. EGLE's action to approve the Ajax permit is not authorized by law for three reasons. First, EGLE

[2] EGLE anticipated that EPA would raise serious concerns with the permit for this plant. *See* EGLE Executive File, Item 012 (June 12 email from Director Liesl Clark to Deputy Director Aaron Keatley, "[AQD] said EPA won't like the ajax permit.").

issued this permit without a full description of the asphalt plant's emissions. This is because Ajax did not submit any information to EGLE that details the nature of the air contaminants the plant's six 30,000 gallon liquid asphalt cement storage tanks will emit. Second, EGLE has not analyzed the maximum emissions from the Ajax plant as required under the agency's rules. The agency's maximum emissions projections do not reflect the Ajax plant's true design capacity because EGLE failed to consider the asphalt plant's 600 ton per hour and 14,400 ton per day processing capacity. Finally, the air quality monitoring EGLE used to assess the impacts of the Ajax plant was not representative of Genesee Township and Flint's air quality and resulted in permit conditions that are not responsive to local conditions. In all, these errors led EGLE to issue a legally deficient permit that should be vacated and remanded to the agency by this Court.

PARTIES

Appellant Saint Francis Prayer Center ("SFPC") is a Flint, Michigan based nonprofit in its 40th year of serving residents of the nearby public housing community, River Park, as well as other residents in Flint. The St. Francis Prayer Center exists to serve all people, especially the poorest in the community, and to advance support, direct service, and social justice on behalf of and with the community. For more than 25 years SFPC has been involved in environmental justice efforts in Flint.

Appellant Environmental Transformation Movement of Flint ("ETM Flint") is a Flint based grassroots environmental justice non-profit committed to a future where Flint is a healthy, vibrant, supportive environment for people and nature to thrive, reflecting the resiliency of its people and enabling all residents to live their highest potential. ETM Flint grows diverse environmental justice leaders and just relationships to ensure a healthy and secure future created by and for Flint residents. ETM Flint catalyzes informed, democratic planning and equitable investment in Flint to bring green jobs and environmental solutions to lift people out of poverty and to create a healthier planet for generations to come.

Appellant Flint Rising, a project of Tides Advocacy, is an advocacy based environmental justice coalition of members, community organizations and allies that came together in the aftermath of one of the largest public health disasters in the history of this country – the Flint Water Crisis. Flint Rising believes that directly impacted people have the leadership necessary to maintain a long-haul fight for justice, reparations, and create the future that Flint families need and deserve.

Appellant Michigan United also known as the "Michigan Organizing Project," is a statewide nonprofit that engages in political and social organizing in communities across the state. Michigan United provides support to numerous coalitions and community organizations that share its mission for a more equitable and sustainable world that reflects values of economic and racial justice. Michigan United works with communities across Michigan, and in Flint, seeking to advance workers' rights, human rights, housing justice, environmental justice, and criminal justice reform at the local, state, and federal level.

Appellant C.A.U.T.I.O.N. Citizens Advocating United Together in Organizing for New Direction, is an nonprofit organization that works to advance policies that improve the social, political, and economic conditions that impact the lives of Flint community residents. C.A.U.T.I.O.N is a voice in the community for the community.

Appellee Michigan Department of the Environment Great Lakes and Energy is the executive agency with the authority to permit new sources of air pollution under Part 55 of NREPA and the CAA, and **Appellee Director Liesl Eichler Clark** is the Director of the Michigan Department of Environment Great Lakes and Energy and is named in this suit in her official capacity.

SUMMARY OF ARGUMENT

EGLE committed three legal errors that require remand of the Ajax permit for further evaluation by the agency. First, the record in this case conclusively establishes that Ajax has not provided EGLE with a complete description of the plant's potential to emit regulated air contaminants. EGLE failed to review the emissions impact of the plant's six 30,000 gallon asphalt cement storage tanks before it issued the Ajax permit. Second, the record shows EGLE issued this permit with an emissions analysis that does not reflect the intended operation of the Ajax plant. EGLE's analysis of the maximum emissions impact of this plant is arbitrary because it does not reflect the plant's maximum processing rate of 600 tons per hour and 14,400 tons per day. Finally, EGLE established background air quality in the surrounding community by relying on data that was collected from air monitors that are 50 and 100 miles away from the proposed plant. The agency failed to adequately demonstrate that these monitors provided air pollution data that was representative of the air quality in the impacted community. This rendered the agency's CAA compliance review legally defective because it did not analyze this plant's impact on the relevant area's compliance with federal air standards.

LEGAL FRAMEWORK

This appeal of EGLE's decision to authorize Ajax's asphalt plant, a new source of pollutant emissions is governed by interrelated state and federal requirements. The purpose of the federal CAA is "to protect and enhance the quality of the Nation's air resources so as to promote the public health and welfare and the productive capacity of its population." 42 USC 7401(b)(1). EPA sets National Ambient Air Quality Standards ("NAAQS") limiting the concentration of six "criteria pollutants" in the ambient air. 42 USC 7409. For example, the NAAQS for ground level ozone is 0.07 parts per million (ppm). *See Review of the Ozone National Ambient Air Quality Standards*, 85 Fed Reg 87256, US EPA (2020). In addition, EPA is required to set National Emissions Standards for Hazardous Air Pollutants ("NESHAPs"). 42 USC 7412. Certain Asphalt plants must also comply with particular requirements to ensure that they are not emitting hazardous air pollutants in quantities that would harm human health. 40 CFR Pt 63, Subpart AAAAAAA.

States like Michigan are responsible for meeting NAAQS and NESHAPS by regulating emissions from new and existing sources of pollution within their jurisdictions, including asphalt plants, through "State Implementation Plans" or "SIPs." 42 USC 7410. SIPs refer to the code of regulations promulgated by a state to control air pollution and comply with the CAA. EGLE administers Michigan's SIP. MCL 324.5501 *et seq* (authorizing legislation); Mich Admin Code R 336.1201 *et seq* (EGLE's air rules). These interrelated statutes and implementing regulations set the framework for resolving this appeal.

II. FEDERAL CLEAN AIR ACT REQUIREMENTS

A. NAAQS and NESHAPs

To fulfill the CAA's purpose, Congress instructs the EPA to set federal standards for regulated air pollutants. 42 USC 7602(g), 7409, 7412; *see Sierra Club v Dep't of Env't, Great Lakes, & Energy*, No 350083, 2021 WL 69788, at *5 (Mich Ct App Jan 7, 2021) ("*DTE St Clair*"). EPA must create National Ambient Air Quality Standards for air pollutants that cause or contribute to air pollution reasonably anticipated to endanger public health. 42 USC 7409(b). A NAAQS is the maximum ambient concentration of an air pollutant that if exceeded would endanger public health and welfare. 42 USC 7409(b)(1).[3] Polluting emissions come from stationary sources, such as industrial facilities, and mobile sources, like cars. *Id*; *see also* 42 USC 7602(z) (defining stationary source). EPA has identified six pollutants that meet its regulatory "criteria" for an air pollutant that harms public health and welfare thus requiring NAAQS. These "criteria pollutants" are carbon monoxide, lead, particulate matter ("PM10", "PM2.5"),[4] nitrogen dioxide ("NO2"), sulfur dioxide ("SO2") and ozone. *See* 40 CFR Pt 50. Ozone, commonly referred to as "smog," is formed when NO2 mixes with VOCs in the ambient air. *DTE St Clair*, 21 WL 69788 at 5. For this reason, control of VOC emissions is necessary for a state to comply with the ozone NAAQS. *Id*.

EPA may designate areas as in "attainment" or "nonattainment" depending on whether air quality monitoring shows that the ambient concentration of pollution is below or above the

[3] EPA regulations state that "[a]mbient air means that portion of the atmosphere, external to buildings, to which the general public has access." 40 CFR. § PT 50.1

[4] "Particulate matter" means any finely divided solid or liquid material, other than uncombined water, as measured by the reference methods specified under each applicable subpart, or an equivalent or alternative method. 40 CFR § 60.2. PM10 denotes particles of 10 microns or larger, while PM2.5 denotes very fine particle of less than 2.5 microns.

NAAQS threshold. To ensure that States are on track to achieve or maintain NAAQS attainment status, the Clean Air Act requires every state to adopt and submit to EPA for review "a plan that provides for the implementation, maintenance, and enforcement of [NAAQS] in each air quality control region within each State." 42 USC 7410(a) (cleaned up), 7410(k) (minimum applicable criteria for SIPS and process for federal approval); *see also DTE St Clair,* 21 WL 69788 at 16 (discussing the Michigan SIP's unique requirements). SIPs can contain more stringent requirements than the CAA, but a SIP may not be less stringent. *Id*; 42 USC 7410(a)(2). SIPs must "assure" that nonattainment areas are brought into attainment through emissions reduction, and that attainment areas maintain their status through strict control of sources of new emissions and accurate measurement of their impacts to the ambient air and public health. 42 USC 7410(a)(2)(C).

Similar to the NAAQS program, Congress has also instructed EPA to set National Emissions Standards for Hazardous Air Pollutants. 42 USC 7412(b). Hazardous Air Pollutants, or HAPs, are those pollutants that are known or suspected to cause cancer, reproductive or birth defects, or adverse environmental effects. *See NESHAPs Compliance Monitoring*, Environmental Protection Agency, *available here* (last accessed Oct. 24, 2022). Congress established an initial list of HAPs in statute and provides the EPA with the authority to revise the list periodically. 42 USC 7410(b)(1)-(2). As with NAAQS States may create their own air toxics standards and processes so long as the state is meeting minimum NESHAPs requirements. 42 USC 7412(l).

B. New Sources of Emissions

In order to assure that new stationary sources within an air quality control region do not interfere with attainment and maintenance of NAAQS and NESHAPs, the CAA requires that SIPs include "a program to provide for the . . . regulation of the modification and construction of any

stationary source within the areas covered by the plan as necessary to assure that national ambient air quality standards are achieved." 42 USC 7410(a)(2)(C); *see also* 42 USC 7412(l) (providing for the adoption of state programs controlling emissions of HAPs). The term "stationary source" means "any source of air pollution" that is not a mobile source. 42 USC 7602(z); 42 USC 7411(1)(3); *see also Air Pollution Control Dist of Jefferson Cnty, Ky v US EPA,* 739 F2d 1071, 1075 (6th Cir 1984) (describing the responsibilities of the States and US EPA). The requirement to ensure that "any stationary source" does not interfere with the attainment and maintenance of air quality standards applies to all sources of pollution, both major and minor. *See also DTE St Clair,* 21 WL 69788 at 5. EPA regulations require that SIPs include "a means by which the State or local agency responsible for final decision making on an application for approval to construct or modify will prevent such construction or modification if [] it will interfere with the attainment or maintenance of a national standard," such as NAAQS or NESHAPs. 40 CFR 51.160 (a)(2). The Michigan SIP and its permit process for new stationary sources is codified at Mich Admin Code R 336.1201-1299.

III. THE MICHIGAN SIP

Part 55 of NREPA permits EGLE to promulgate rules for the purpose of complying with the Clean Air Act. MCL 324.5503; *see also DTE St Clair*, 21 WL 69788 at 5. Pursuant to this statute, EGLE promulgated Rule 201, establishing a process by which anyone seeking to construct a new stationary source of pollution must obtain a "permit to install" before initiating construction and operation. Mich Admin Code, R 336.1201. EGLE must assure that new proposed sources, like Ajax's new plant, comply with the requirements of the Clean Air Act and Michigan's SIP.

A. Requirements for Complete Descriptions of a New Source's Potential to Emit Air Contaminants in Michigan's Permit to Install Program

A cornerstone of the permitting process for all sources under the CAA and Michigan's SIP is assuring that a proposed source will not interfere with the State's compliance with federally promulgated NAAQS and NESHAPs before it initiates operation. *See* 40 CFR 51.160(1)(a). EGLE's assessment of new sources requires that applicants for permits to install submit a "complete description" of their proposed industrial process and a description of the plant's potential to emit "all air contaminants."[5] Mich Admin Code R 336.1203(1)(a)-(c); *see also* Permit File, Item 1, at 4 (PTI application requiring a complete description of emissions producing processes and equipment). EGLE must deny a permit if "[s]ufficient information has not been submitted by the applicant to enable the department to make reasonable judgments" about the plant's predicted emissions and compliance with state and federal air quality rules. Mich Admin Code R 336.1207(1)(d).

Pursuant to EPA regulations, Michigan's SIP requires each permit applicant to estimate, in tons per year, the amount of each regulated air contaminant that the proposed source has the "potential to emit" under its physical and operational design. 40 CFR 51.165(a)(1)(iii); Mich Admin Code R 336.1116(n). A source's "potential to emit" is predictive and state agencies like EGLE are required to take prospective action to ensure that the equipment being placed into operation by applicants for PTIs will comply with the CAA. *See* Mich Admin Code R 336.1203(1)(c) (requiring prospective descriptions of the plant's proposed emissions); *see also* Mich Admin Code R 336.1207(1)(d).

[5] This term is used synonymously with "air pollutant" and refers to regulated criteria pollutants and hazardous air pollutants. MCL 324.5501.

Given the predictive nature of determining a new source's potential to emit air contaminants, such calculations are inherently uncertain. To account for this uncertainty and make certain that permit applicants will not underestimate their potential to emit, EPA regulations and EGLE's rules require EGLE's compliance evaluation to assume the source will cause the "maximum impact" of pollution emissions. The models must also reflect the sources design capacity. *See* 40 CFR Pt 51, App W 8.2.2(d) ("For stationary source applications . . . the source should be modeled using the design capacity (100 percent load)"), 8.3.2(e); *see also* Mich Admin Code R 336.1902 (adopting App W); *See also, State ex rel Ohio AG v Shelly Holding Co,* 191 Ohio App 3d 421, 427 (2010) (discussing the CAA's legal requirements to assess a new source's maximum processing capacity). Accordingly, EGLE guidance instructs permit applicants to assume their new source will operate at 100 percent of its design capacity, that it will run 24 hours a day and 365 days a year, that it will use the materials emitting the highest amount of air contaminants, and that air pollution control equipment is either not installed or turned off. Michigan Department of Environmental Quality, Potential to Emit Workbook, at 1-1 (Sept 2015). All applicants for a permit to install must provide potential to emit estimates for each discrete emissions unit—sub-sources of emissions within the plant, such as a smoke stack—that is a part of the new source. Mich Admin Code R 336.1203(1)(a)-(c).

B. Compliance with Federal Standards and Representative Ambient Pollutant Concentration Data

If an applicant's plant has a potential to emit that exceeds certain regulatory thresholds, then the source must show that it will not interfere with Michigan's NAAQS through "compliance demonstrations." *See AQD-022: Dispersion Modeling Guidance for Federally Regulated Pollutants,* EGLE (Feb 2015) *available* here ("AQD-022"). In addition, Michigan's HAP rules – which refer to HAPs at "toxic air contaminants" or TACs – may require the adoption of control

equipment if the plant has the potential to emit TACs in dangerous quantities. *See* Mich Admin Code R 336.1224(2)(b) (exempting from the control technology requirements those sources that emit less than 0.1 pound per hour or less for a carcinogen or 1.0 pound per hour or less for any other toxic air contaminant). Moreover, if a source is capable of emitting above more stringent "major source" thresholds, EGLE may allow the source to restrict its pollution through permit limits on the sources emissions in order to avoid the more stringent standards. Mich Admin Code R 336.1205 (enumerating specific requirements for restricting a proposed new sources' potential to emit air contaminants). Accurately determining a source's potential to emit criteria pollutants and hazardous air pollutants is essential because it determines whether or not a permit applicant must perform a NAAQS compliance demonstration, adopt emissions control technology, and whether more stringent requirements apply. Additionally, if a PTI applicant submits inaccurate or incomplete information on its potential to emit to EGLE, the public is left in the dark during the comment process about the plant's impacts and the safety of the air they breathe.

In addition to a source's potential to emit air contaminants, EGLE must also consider levels of air pollution in the area where the source is to be located. Permit applicants often must gather air quality monitoring data to establish the baseline of air pollution in the area before a plant even applies for a permit. *See, Sierra Club v EPA,* 705 F3d 458, 468 (DC Cir 2013). The EPA stipulates that this data can be gathered from a site-specific monitoring network established by the permit applicant or by utilizing data gathered from existing, off-site air quality monitors. Mich Admin Code R 336.1902(1)(b)(viii) (adopting 40 CFR Pt 51, Appendix W, Federal Guideline on Air Quality Models); *see also id*. 2.1(b) ("Suitability of Models"); *see also* New Source Review Manual, EPA, C.18, *available* here (last accessed November 2, 2022). According to EPA, it is "generally preferrable" to use monitoring data collected from the area where the permitted source

is to be located. *Id*. Despite this, data from off-site air quality monitors may be utilized when on site monitoring is not feasible and only if such data is "representative" of air quality in the area where the proposed source is located. *See* 40 CFR Pt 51, App W 8.3 (discussing the need for representative model inputs throughout). If EGLE's analysis of a plant's impact on air quality lacks representative data, then there is no way to know if a plant will interfere with the area's compliance with federal and state air quality standards.[6] Applicants for permits to install new sources of air pollution cannot adequately demonstrate compliance with NAAQS or federal air toxics standards without an accurate description of the new source's potential to emit air contaminants and representative background air quality data that enable EGLE to make "reasonable" prospective judgments about the new proposed sources CAA compliance. Mich Admin Code R 336.1207(1)(d).

C. Best Available Control Technology

Complete information describing a new source's potential to emit air pollutants is also essential to assessing its compliance with Michigan's rules requiring the adoption of the best available emissions control technology. Under Michigan's air quality rules, "[a] person who is responsible for any new source of volatile organic compound emissions" must set its emissions rates at "the maximum allowable emissions rates achievable by the application of the best available control technology" or "BACT." Mich Admin Code R 336.1702(a). Rule 702's BACT requirement applies to all sources of VOCs proposed to be installed within the State of Michigan. *Information For an Administratively Complete Permit to Install*, EGLE, (Oct 2009) at 5, available here (last visited Oct 6, 2022). In essence, this requires sources of VOC emissions to use the best

[6] As an illustration, data from a national park with no smog should not be used to assess the impacts of a new plant in an area that is already heavily burdened with smog pollution because the model would not reflect the plant's true impacts to local air quality.

control technology at their plant because that is the only way to comply with the emissions limit set in the permit. *Id*. In addition, all new sources of toxic air contaminants must also lower their emissions to the lowest possible rate based on the application of BACT. *See* Mich Admin Code R 336.1224. The BACT requirement for HAPs is subject to certain exemptions. Applicants qualify for the exemption depending on the predicted air quality impact of their plant. *See e.g., id* at (b)(i) (exemption from BACT requirements for facilities that emit less than 0.1 pounds of carcinogens per day). For this reason, the applicant must submit complete descriptions of a proposed new source's potential to emit HAPs and VOCs.

BACT analysis has five steps (1) identify all emissions control technology, (2) eliminate infeasible alternatives in light of environmental and economic considerations, (3) rank the remaining technologies by effectiveness, (4) evaluate the most effective controls and document results, and (5) select the best control technology. *Instructions for Conducting a BACT Analysis*, EGLE, available here (last visited Sep. 29, 2022). Just as with the suite of CAA requirements, to make an accurate BACT assessment the applicant must have accurate data estimating the plant's air contaminant emissions. Without accurate and complete potential to emit estimates it is impossible to accurately assess the effectiveness of any given control technology the applicant identifies. This underscores why accurate, complete, and prospective assessment of a new source's proposed emissions are the foundation of CAA compliance.

Ensuring that all residents of Michigan breathe safe, clean, and healthy air depends on EGLE's rigorous adherence to air quality rules and accurate assessment the air quality impact of new sources of pollution emissions such as the Ajax hot-mix asphalt plant.

STATEMENT OF FACTS

On November 15, 2021, the Michigan Department of Environment Great Lakes and Energy issued an air pollution permit to Ajax Materials Corporation to construct an asphalt plant in the heart of a low-income, multigenerational African American community in Genesee Township and Flint's northeast side. *See* Hearing File, Item 234 at 5-6 (Appellants' comments); Permit File, Item 406 (comments of US HUD). Appellants timely filed this appeal 88 days later on February 11, 2022. The statement of facts provides an overview of the location of the plant, the existing air quality and environmental justice concerns in Flint and Genesee Township, the proposed plant and its operations, and the permitting process.

I. FLINT AND GENESEE TOWNSHIP'S ENVIRONMENTAL JUSTICE INDICATORS

Ajax plans to construct its plant just outside the northeast border of Flint in the Genesee Township Industrial Park. District File, Item 29. This area is heavily concentrated with industry and EPA Environmental Justice Indicators reflect that the local population has a higher rate of exposure to numerous harmful air contaminants. Hearing File, Item 13 at 9.

Flint is known for the environmental injustices that have faced African American, low-income residents because they have borne disproportionate exposure to pollution. EPA has developed a screening tool to help state and federal agencies, and the public, better understand disproportionate exposure to environmental hazards in a community. The EPA's "EJSCREEN" tool produces "environmental justice indexes" that are based on environmental and demographic factors, such as health information, socioeconomic information, and concentration of industry around population hubs. The index will be higher if a community is both overexposed to pollution and populated with minorities or low income residents. For example, the ozone environmental justice index (EJ Index) for the area surrounding the Ajax plant is in the 96th percentile for the

State of Michigan. Hearing File, Item 234 at 7. The area is in the 94th percentile for exposure to air toxics. *Id*. This means that this community is roughly 95% more likely to have both a high concentration of minority households with exposure to ozone and toxics than other areas of Michigan. Exposure to ozone over an 8 hour period is associated with increases in asthma and exacerbation of other respiratory conditions and the community surrounding the Ajax plant is uniquely sensitive to these effects. *See* Hearing File, Item 248 at 4.

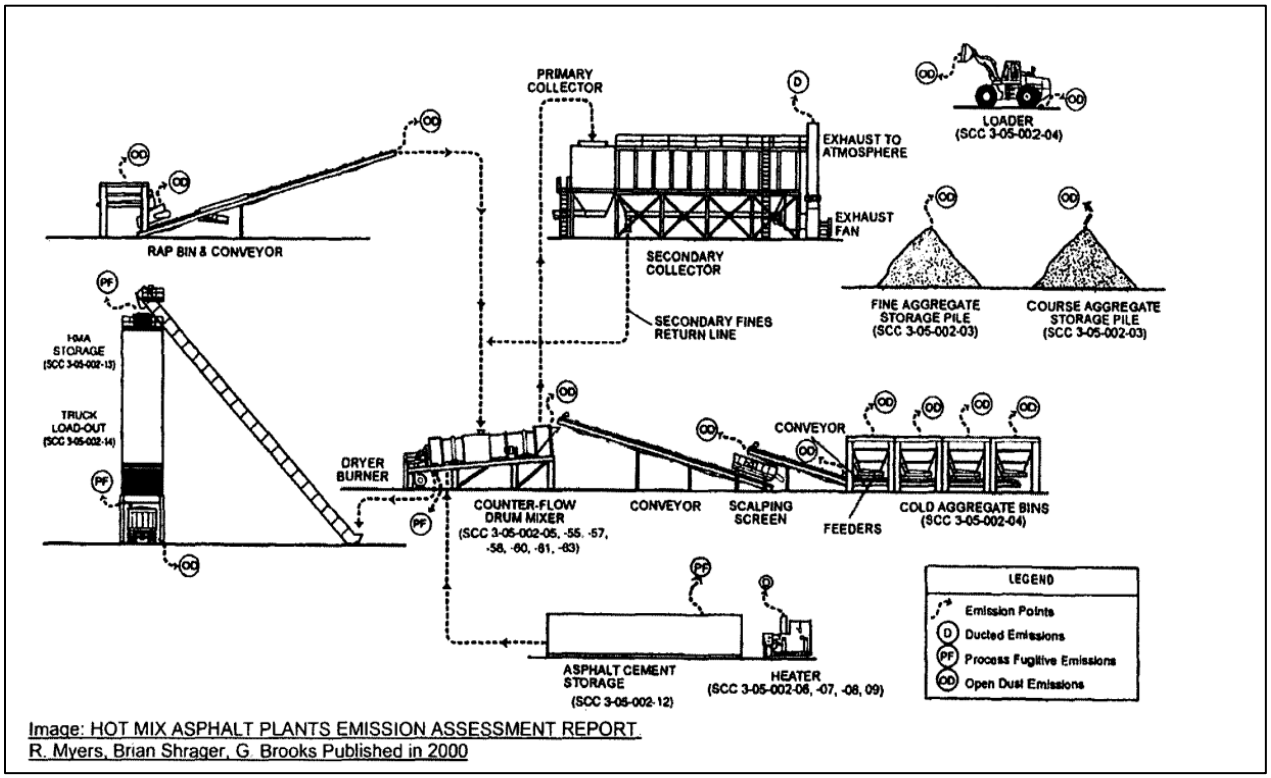
These high EJ indicators reflect the stark reality that this proposed plant is located in close proximity to residential housing and numerous community gathering centers. A total of 2,970 people live within a 1-mile radius of Ajax's proposed plant. Hearing File, Item 234 at 7-8. Two US Housing and Urban Development communities, River Park and Ridgecrest Townhomes, sit between 1,100 and 1,550 feet from the Ajax plant. Permit File, Item 376; AQDD File, Item 23. These housing developments are 100% low income African American households and home to 597 children. *Id* at 1. The rate of asthma in this area is 43 per 100,000, over three times the state average of 12.5 per 100,000. *Id* at 16. Four mobile home parks are located within a 1-mile radius of the site along with three children's parks, a public beach, a county recreation area, a community garden, five churches, and an assisted living center. Hearing File, Item 234 at 5. The population living in a 1-mile of the proposed plant is 86% minority, including 77% of the population identifying as Black or African American and 10% of the population identifying as Hispanic. Hearing File Item 234 at 8. Forty-three percent of households have incomes of less than $15,000 a year in this area. *Id*. The area's per capita income in 2018 was $14,991. *Id*; *see also generally*, Hearing File, Item 265 (EJ Summary). The concentration of African American and low income residents around the many sources of air pollution in proximity to the numerous sources of

industrial pollution in this area is the result of intentional decisions on the part of local and state officials. *See* EGLE Executive, Item 71 at 5.

Ajax's proposed asphalt plant will join numerous industrial facilities in the Genesee Township Industrial Park compounding the exposure risks faced by the local population. *See* Permit File, Item 1. The Genesee Township Industrial Park is home to several sources of air pollution in the community, including the Genesee Power Station, a wood waste fired power plant, and Universal Coating, a plastics and metal coating plant, both of which have a history of permit violations. District File, Item 31 at 2-5; District File, Item 149 (listing numerous CAA violations by facilities in the Genesee Township Industrial Park). In addition, the adjacent Dort Highway is dotted with numerous industrial facilities, including RJ Industrial Recycling, Genesee Recycling, Chuck's Recycling, Superior Materials, the Ace-Saginaw Paving Company, Buckeye Terminals, Environmental Rubber Recycling, Emterra Environmental USA, and the Lake State Railway Company. *See id*; *see also* District File, Item 29 (map of nearby sources of industrial pollution). Genesee Power Station, one of the nearby emissions sources, has been a source of substantial odors and visible emissions. *See* District File, Item 25 (complaints about a "chemical smell" and the smell of "burnt rubber" emanating from the Genesee Power Station), Item 31, at 4-5; District File, Item 25 at 1. Not only is the Genesee Power Station a significant contributor to air quality decline, it was also the subject of a federal civil rights investigation concluding that EGLE's permitting process for the plant discriminated against African Americans in the surrounding community. District File, Item 321. In approving the Ajax plant, EGLE is adding to the disproportionate environmental burdens shouldered by this low income African American community. Like all Michigan residents, this community should be able to enjoy clean air and a healthy environment with their families and neighbors.

II. AJAX'S PROPOSAL

Ajax's application for a permit to install proposes to construct a plant with a counterflow drum mixer, six 30,000 gallon liquid asphalt cement storage tanks, various silos for storing finished hot-mix asphalt, and a "yard" with open air piles of granulated mineral material, or "aggregate." Permit File, Item 26. Each of these "emissions units" contribute to the deterioration of air quality in the surrounding community. *See* Permit File, Item 526 at 95. Emissions units associated with counterflow drum mix asphalt plants are displayed in this diagram:



General process flow diagram for counter-flow drum mix asphalt plants, Draft Technical Fact Sheet, Permit File, Item 12 at 2 (parentheticals refer to emissions rates provided in EPA guidance).

For this appeal, it is important to understand how the counterflow drum mixer and the asphalt cement storage tanks function. As displayed in the figure the AC Tanks, the AC Tank Heater (Heater), and the Counter-Flow Drum Mixer (Drum) are all discrete emissions units.

A. Tanks and Heater

Hot-mix asphalt is manufactured by mixing mineral aggregate with liquid asphalt cement. *See* Permit File, Item 527 at 11; *see also* Toxics File, Item 87 at 270.[7] Asphalt cement is a petroleum-based product that is also referred to as "bitumen." *Id*. This viscous and sticky material binds the aggregates together to form asphalt. Permit File, Item 527 at 11-12. The AC Tank is used to store the liquid asphalt cement prior to mixing it with aggregates to create the final product, of hot-mix asphalt." Permit File, Item 527 at 11. Ajax plans to build six 30,000 gallon tanks to store 180,000 gallons of heated liquid asphalt cement.[8] Ajax plans to heat the AC Tanks with a gas powered heater to maintain the asphalt cement in a liquid state. *See* Permit File, Item 527 at 5-6.

As noted in the above diagram, the AC Tanks and the Heater are separate emissions units. The AC Tanks and the Heater both produce "fugitive emissions," which means pollution that is not emitted through a smokestack. Permit File, Item 12 at 2 (reflecting in the industrial process flow that the AC Tanks and the AC Heater both produce "process fugitive emissions," or "PF.") *See id* at 15. The Heater's emissions are the result of fuel combustion that release numerous pollutants into the ambient air through an exhaust system. *See* Permit File, Item 527 at 67. The AC Tanks' emissions result from the heated bitumen within the tanks. This material emits odorous and harmful pollutants into the air through vents. Permit File, Item 526 at 57 (discussing EGLE's estimates of H2S emissions from the bitumen AC Tanks).

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[7] Mazumder, M., Sriraman, V., Kim, H. H., & Lee, S.-J. (2016, June 11). Quantifying the environmental burdens of the Hot Mix Asphalt (HMA) pavements and the production of Warm Mix Asphalt (WMA). International Journal of Pavement Research and Technology. Retrieved September 28, 2022, from link.

[8] The typical HMA asphalt plant has two 18,000 gallon liquid asphalt cement storage tanks. Toxics File, Item 87 at 375.

Many asphalt manufacturers, including Ajax, make use of a "vapor condensation and recovery system" on the AC Tanks to reduce the impact of the AC Tanks' pollution emissions. To fulfill its obligations under Rule 702 Ajax also undertook an analysis of the best available control technology to control its VOC emissions from the AC Tanks. *Id*. at 125.

B. Drum Dryer and Stack

All asphalt plants combine aggregates and asphalt cement inside a "drum." *Id* at 11. The Ajax plant is a counterflow drum mix plant. *Id*. This type of plant first dries the mineral aggregate in a heating compartment. *Id*. Drying mineral aggregate is necessary to reduce moisture that accumulates on the aggregate while it is stored in piles. In a letter to EGLE the plant's manufacturer states, "[t]he production rate of the plant will change by approximately 15% based on 1% of material moisture change." EGLE Executive File, Item 204 at 5. When drying is complete, the drum feeds the dried aggregate into a second mixing compartment to combine with the asphalt cement. Permit File 527 at 11. Both compartments rotate to mix the materials and are heated through combusting gas, distillate fuel, waste oil, and sometimes recycled oil. *See id*. The process of burning fuel to power the heater, the drying of the mineral aggregate, and the mixing of aggregate and cement all cause emissions which are routed through an industrial filter and into the air through a smokestack. *Id* at 15. EPA considers the water vapor emitted during this process to be part of the overall emissions from the drum. Toxics File, Item 087 at 384.

The counter flow drum mixer is designed to process between 500 and 600 tons per hour and to operate at a maximum of 24 hours a day 365 days a year. Permit File, Item 1 at 17 ("The design capacity of the drum mixer/dryer, operating 24 hours per day and 365 days per year would result in a total annual production of 4,380,000 tons HMA . . . Ajax will agree to an enforceable operational restriction (annual production limit) to limit the emissions. . .

below the major threshold levels."); *see also* Permit File, Item 66 at 6 (applicant's initial modeling reflecting maximum one-hour processing capacity of 600 tph).

III. THE PERMIT PROCESS

The purpose of Michigan's air quality permitting process is to evaluate if Ajax's application complies with Michigan's air quality rules and to provide the public an opportunity to review proposed permit conditions and provide comment.

A. The Ajax Plant's Potential to Emit Air Contaminants

EGLE's rules required Ajax to submit potential to emit estimates for all air contaminants it proposes to emit. At the end of the permit process, Ajax produced final potential to emit estimates for the air contaminants associated with its operation. These estimates account for emissions from the aggregate piles, the drum dryer, the AC Tank Heater, and loading and unloading the hot-mix asphalt storage silos. Permit File, Item 527 at 60. Ajax plans to emit particulate matter and SO2 in quantities that exceed a regulatory threshold called the "significant emissions rate" ("SER"). *Id*. *See* AQD-022. The plant will emit 70 tons of SO2 a year and 26 tons of particulates a year. Permit File, Item 527 at 60. In addition, because ozone is a criteria pollutant, Ajax was required to fully account for the plant's VOC and NOx emissions. The company estimated that its plant has the potential to emit 33.4 tons per year of VOCs and approximately 32 tons of NOx per year, which are 84% and 79% of the SER respectively. In addition to determining if compliance demonstrations are required for the criteria pollutants Ajax proposes to emit, the company was also required to account for emissions of TACs in order to assess the effectiveness of emissions control technology for its plant. *See* Mich Admin Code RR 336.1203(1)(c), 336.1224.

As part of approving the Ajax PTI, EGLE published Ajax's final accounting of its potential to emit criteria and hazardous air pollutants in various tables. Permit File, Item 527 at 60-81. Ajax's final calculations of the plant's potential to emit regulated air contaminants assume that the plant will process an average of 12,000 tons of material a day and operate at a maximum production rate of 550 tons per hour. *See e.g.*, *id* at 61 (table displaying the impacts of the drum processing at a maximum of 550 tons per hour). Additionally, the background concentrations Ajax used to evaluate the plant's impact came from Lansing for NO2 and Grand Rapids for PM-10 and SO2. Permit File, Item 527 at 102.

B. Public Participation

A description of the public participation process provides helpful context for understanding the deficiencies in EGLE's review of Ajax's permit application. Public engagement happened in fits and starts and only after EGLE negotiated much of the permit with the applicant. *See eg*, Permit File, Item 101 (negotiation of permit conditions for aggregate piles); *see also* Permit File, Item 123-124 (letters informing interested parties regarding public comment). At the end of the public participation process, EGLE issued the permit despite significant substantive concerns raised by EPA, HUD, and the public. *See* Permit File, Item 381 (EPA Comments); Permit File, Item 406 (HUD comments).

Initially, the lead permit engineer assigned to review the application thought the permit would not be controversial and would not require significant public engagement.[9] Permit File, Item

[9]January 19 Email from Permit Engineer Ms. Ambrosia Brown to Ajax Representative Mr. Mark Boden: "As we discussed this morning, we will try our best to meet your May 1 date. Pertaining to your public comment question: Unless there is an unknown issue that would make this a controversial project, we would only require public notice if the proposed limits would result in emissions on a plant-wide basis of at least 90% of Title V thresholds. However, when that happens we usually just tweak the annual throughput limit to fix the issue."

2. The lead inspector for the plant disagreed with this determination. Permit File, Item 3. He noted the 2017 disposition of a federal civil rights investigation that found EGLE discriminated against African Americans in the permitting process for the nearby Genesee Power Station permit to install and that the Ajax permit raised similar concerns. EGLE Executive, Item 71 at 5. As noted previously, the Genesee Power Station is located adjacent to the proposed Ajax plant. This fact led EGLE to conclude this permit would be controversial and require public comment.

The comment period was open from June 24, 2021, until August 8, 2021, or 45 days. EGLE then granted the request of numerous community groups and citizens to extend the public comment until September 7, 2021. Hearing File, Item 76. Finally, EGLE extended the comment period for a third and final time to September 22, 2021, based on the overwhelming public outcry over this permit. Hearing File, Item 150. During the public comment period, EGLE received 340 comments. Permit File, Item 526 at 7. These included comments from EPA, HUD, various Flint municipal entities, state and federal legislators, local residents, and many environmental and community based organizations. *Id* at 21. EGLE only received one comment in support of the Ajax plant. *Id* at 88. In addition to public comments, EGLE also held two virtual information sessions on August 3 and September 1 and an in-person comment period on August 11, 2021. *Id* at 12.

To ensure that the community around the proposed plant had sufficient information and opportunity to comment, the Appellants repeatedly requested more in-person opportunities for public comment. EGLE's notices, sent in the mail to some interested parties, were not delivered until well into the public comment period. *See* Hearing File, Item 234 at 30-33. Many community members do not have access to internet, making it difficult to take advantage of online hearings, submit comments on EGLE's website, or review the posted material on the internet. *Id.*

Appellants suggested measures EGLE could take to increase community engagement through in-person public comment sessions with appropriate COVID-19 precautions, such as meeting outdoors while masked. Hearing File, Item 248. The purpose of this request was to ensure that community members without internet access could provide comment and felt comfortable doing so in a neutral space, such as a public park. *Id*. But EGLE ignored these suggestions and ultimately held a single in-person comment session at a Genesee Township government building. The building was inaccessible using public transportation and Genesee Township officials requested the presence of armed and uniformed officers at the in-person comment session. [10] Permit File, Item 206; Permit File, Item 287 at 3 (comments of ETM Flint).

The Appellants submitted extensive comments. The comments raised problems with EGLE's review for those pollutants causing respiratory and carcinogenic health impacts, including explaining that the agency was underestimating emissions from the AC Tanks. Hearing File, Item 234 at 47. In addition, the Appellants' comments noted deficiencies in the agency's public participation process, matters related to nuisance odors and visible emissions, as well as civil rights concerns. *Id*; *see also* Permit File, Item 205 (talking points for the Appellants' membership for public comment period). The plant's negative environmental and human health impacts, the Appellants explained, would disproportionately fall on the surrounding low-income minority community and accumulate atop of the impacts of existing air pollution and disproportionate rates of COVID-19 and asthma. Permit File, Item 217.

[10] Notably, the 2017 resolution of the Genesee Power Station civil rights complaint found that EGLE unnecessarily required the presence of armed and uniformed officers at public meetings in African American communities and did not require their presence in similarly situated white communities. *See* District File, Item 321 at 16.

Highlighting the Genesee Power Station decision, the Appellants also argued that the decision to permit the Ajax plant should be understood in the context of the State's previous violations of federal civil rights laws in environmental permitting. *Id*; *See also*, Hearing File, Item 234 at 10-15. That decision found that EGLE's process for receiving public comments on the proposed wood-fired power station discriminated against African Americans. District File, Item 321. Throughout the Ajax permitting process, the lead permit engineer repeatedly stated that she was not aware of the agency's civil rights obligations or the Genesee Power Station decision's determinations with respect to public participation. District File, Item 302 (commenting that Title VI is "SO not in my wheelhouse"); District File, Item 367 ("Much of the environmental justice comments [about] Title VI and [the] Genesee Power EJ [case]. . . [are] not my area of expertise."). In response to a comment from Appellant Environmental Transformation Movement of Flint regarding public participation issues and other concerns, the same permit engineer responded "[t]here is no law supporting that EGLE can deny a permit based on popularity or number of signatures. We have no law that says we shall deny all permit applications based on the project being proposed in an environmental justice area." EGLE Executive File, Item 48 at 4, 6.

In the end, EGLE issued Ajax a permit to install with minimal changes and serious flaws. EGLE took this action despite the chaotic and inadequate public participation process and in the face of the surrounding community's and the Appellants' unaddressed concerns about this plant's impacts.

STANDARD OF REVIEW

The Court's review is limited to deciding whether EGLE's action is "authorized by law." *Nat Res Def Council v Dep't of Env't Quality*, 300 Mich App 79, 87 (2013); Const 1963, art 6, § 28. An agency's decision is not authorized by law if it "violates a statute or constitution, exceeded the agency's statutory authority or jurisdiction, materially prejudiced a party as the result of unlawful procedures, or was arbitrary and capricious." *Id* at 88. Generally, courts "review *de novo* the interpretation and application of unambiguous statutes and administrative rules." *Id*. An agency's decision is arbitrary, "if it is without adequate determining principle, fixed or arrived at through an exercise of will or by caprice, without consideration or adjustment with reference to principles, circumstances, or significance, decisive but unreasoned" and capricious if it is "freakish, or whimsical." *City of Romulus v Michigan Dep't of Env't Quality*, 260 Mich App 54, 63 (2003) (cleaned up). While this Court may not disturb an agency's factual determinations, it can and must review the legal conclusions that the agency draws from those determinations and whether such conclusions—and administrative decisions made pursuant to them—comport with the law the agency is applying.

ARGUMENT

The primary purpose of the permit to install program is to ensure that new stationary sources of pollution will not cause a violation of federal or state air quality standards and emissions limits that exist to protect the public health. In this case, EGLE failed to analyze this plant's impacts before issuing Ajax a permit because Ajax has not provided the agency with a complete description of the emissions from the liquid asphalt cement storage tanks the company plans to build. Moreover, EGLE has not analyzed the worst-case emissions scenario for this plant that reflects its true design capacity. Finally, the monitoring data EGLE used in this matter was not representative of Flint and Genesee Township's air quality. In all, these errors led the agency to issue a legally deficient permit that should be vacated and remanded to the agency by this Court.

I. EGLE'S DECISION TO ISSUE A PERMIT TO AJAX WITHOUT A DESCRIPTION OF ALL AIR CONTAMINANT EMISSIONS WAS ARBITRARY AND CAPRICIOUS AND CONTRARY TO LAW

EGLE did not make reasonable judgments about critical compliance determinations, required under state and federal law, because it lacked a description of the air contaminants the Ajax plant's six 30,000 gallon liquid asphalt cement storage tanks will emit. Permit File, Item 527 at 60-81 (tables summarizing emissions for all emissions units except for the AC Tanks). As summarized in the Statement of Facts, the Appellants requested that the agency conduct modeling for air contaminants emitted from the AC Tanks. Hearing File, Item 234 at 47. Despite this, Ajax's final tables summarizing the air contaminants the plant will emit do not include a description of the air contaminant emissions from the six 30,000 gallon liquid asphalt cement storage tanks. EGLE was aware of the applicant's omission from the very beginning of the permit process and the agency failed to correct it by the end. Permit File, Item 3 (noting under "info needed" that Ajax's initial modeling package did not include emissions from the AC Tanks).

Ajax's failure to submit any emissions projections for its AC Tanks affects its compliance with EGLE's rules requiring complete information and descriptions regarding a new sources' emissions. Without complete information on a new source's emissions units and the contaminants it plans to emit, EGLE cannot reasonably judge the facility's compliance with the CAA and Michigan's SIP. The failure of the applicant to provide complete information on its potential to emit regulated air contaminants also renders the applicant's analysis of the best available control technology for the AC Tanks legally deficient because Ajax had no information regarding the AC Tanks' emissions when it conducted that assessment. The failure to assess the AC Tanks emissions is harmful to the community because numerous air contaminants that the AC Tanks will emit harm human health and welfare and EGLE cannot adequately mitigate or assess these risks without a complete accounting of the AC Tanks potential emissions. Allowing EGLE to ignore its rules requiring descriptions of Ajax's emissions and associated procedural requirements in this case will only encourage future agency corner cutting, harm public health, air quality and public confidence.

A. EGLE's Failure to Assess the Emissions from Ajax's AC Tanks Renders its Approval of the Ajax Permit to Install Unlawful Because the Approval is Not Based on Complete Information and Reasonable Judgments about Compliance.

EGLE's rules require that the agency deny a permit application if "[s]ufficient information has not been submitted by the applicant to enable the department to make reasonable judgments" about the new sources compliance with state and federal air quality requirements. Mich Admin Code R 336.1207(1)(d); *see also* Mich Admin Code R 336.1207(a)-(c). In order for EGLE's judgment about a regulated party's compliance with NREPA to be reasonable, EGLE must make specific findings "that a particular plant satisfies [regulatory] requirements for the issuance" of a permit on a "case-by-case" basis. *See City of River Rouge v EES Coke Battery Co,* No 314789, 2014 WL 6952368, at *4 (Mich Ct App Dec 9, 2014). Circuit Courts must overturn EGLE's

actions when the agency has veered away from the clear text or procedural requirements of its rules. *Id; see also DTE St Clair,* 2021 WL 69788, at *5 (overturning a lower court order affirming EGLE's decision to issue a permit when the agency did not conduct review of compliance information).

In this matter, EGLE's rules and the agency's permit to install application expressly require applicants for permits to install new sources of air pollution to submit:

> A description in appropriate detail of the nature, concentration, particle size, pressure, temperature, and the uncontrolled and controlled quantity of all air contaminants that are reasonably anticipated due to the operation of the proposed process equipment.

Mich Admin Code R 336.1203(1)(c); *see also* Permit File, Item 1 at 4 (permit to install application requiring a complete description of equipment and processes). In addition, applicants must also submit:

> [A] complete description, in appropriate detail, of each emission unit or process covered by the application. The description shall include the size and type along with the make and model, if known, of the proposed process equipment, including any air pollution control equipment. The description shall also specify the proposed operating schedule of the equipment, provide details of the type and feed rate of material used in the process, and provide the capture and removal efficiency of any air pollution control devices . . .

Id at (1)(a).

For its part, EPA recognizes that a description of air pollutant emissions from AC Tanks is necessary to evaluate an asphalt plant's CAA compliance. EPA requires applicants for federal CAA permits within Indian Country—reservation or trust lands—to submit a description of air contaminant emissions from AC Tanks. *See True Minor Source Hot Mix Asphalt Plant Request for Coverage under the General Air Quality Permit for New Minor Source Hot Mix Asphalt Plants in Indian Country*, EPA, (Jan. 2017) at 11, available here (last accessed Oct 6, 2022) (requiring emissions estimates from liquid asphalt storage tanks accounting for vapor pressure and other factors). 2017) at 11, available here (last accessed Oct. 6, 2022) (requiring emissions estimates

from liquid asphalt storage tanks accounting for vapor pressure and other factors). This underscores that it is common agency practice in evaluating CAA compliance to consider all air contaminants that a new source's emissions units will emit and characteristics of those emissions. Here, just as EPA requires, EGLE should have required Ajax to submit a description of its AC Tanks potential to emit air contaminants because that is one such emission unit the company plans to place into operation.

EGLE cannot make "reasonable judgments" about the Ajax plant's prospective compliance with CAA requirements if it has no information about the plant's prospective emissions. Mich Admin Code R 336.1207(1)(d). The Appellants' comments pointed out that the plant's description of its air contaminant emissions were incomplete because they lacked emissions calculations for the AC Tanks. Hearing File, Item 234 at 47 ("TACs are also emitted from . . . the asphalt cement storage tank. We recommend that you consider modeling each process or emission unit that does not exhaust to the drum dryer stack to avoid underestimating TAC impacts."). Ignoring these concerns, the agency issued a permit that fails to meet the prospective review requirements of the CAA and Michigan's SIP. *DTE St Clair*, 2021 WL 69788, at *5. EGLE erred when it issued the Ajax permit because it lacked a complete description of the AC Tanks as a regulated emissions unit as well as *any* description of the nature, concentration, size, pressure, or temperature of the AC Tanks' emissions of "all air contaminants," which include all criteria pollutants and HAPs. *See* Permit File, Item 527 at 60-81; Mich Admin Code R 336.1203(1)(a)-(c). EGLE even had EPA guidance in its record detailing how state agencies should measure emissions of criteria pollutants and hazardous air pollutants from AC Tanks. Toxics File, Item 87 at 394. EGLE appears to have required Ajax to use this EPA guidance to estimate emissions of one air contaminant, hydrogen sulfide, from the AC Tanks. Permit File, Item 526 at 57. But the applicant and the agency failed

to do anything to remedy the lack of any description of "all air contaminants" from the AC Tanks, even in light of the Appellants' comments. Mich Admin Code R 336.1203(c); *see also* Hearing File, Item 234 at 47.

Contrary to its rules, EGLE failed to require Ajax to submit a complete description of the AC Tanks criteria pollutant and toxic air contaminant emissions. This risks underestimating this plant's impacts, which will lead to serious public health consequences. And as previously noted, EGLE was fully aware at the beginning of the permitting process that Ajax's potential to emit estimates did not include emissions from the AC Tanks, but the agency failed to do anything about the omission. *See* Permit File, Item 3. As a result of EGLE's error, nobody—not EGLE, Ajax, the public, nor the Court—has a complete understanding of what this plant's AC Tanks will emit and the health consequences of these emissions. Without information specifically detailing a complete description of the AC Tanks and the nature of all air contaminant emissions they create, EGLE could not make reasonable judgments about this facility's compliance with the prospective requirements of NAAQS, NESHAPS, or the agency's own rules. Mich Admin Code RR 336.1203(a)-(c), 336.1207(1)(d). Consequently, the agency's issuance of the Ajax permit is not authorized by law. This requires the Court to remand this matter to the agency so that EGLE can undertake a proper analysis of this permit's CAA compliance with complete information on the Ajax plant's potential to emit all regulated air contaminants.

B. Ajax Has Failed to Demonstrate that it Makes Use of the Best Available Control Technology (BACT) to Control its VOC Emissions from the AC Tanks

Ajax's failure to describe the AC Tanks' potential to emit air contaminants means the company had no VOC emissions estimates for the AC Tanks. As a result, the agency was missing critical information needed to conduct a proper analysis of the best available control technology

for VOCs. Mich Admin Code R 336.1702. EGLE improperly approved this permit pursuant to this legally deficient analysis, and consequently its action is contrary to law.

Ajax is required to make use of BACT to reduce VOC emissions from all sources of VOCs it intends to operate. Mich Admin Code R 336.1702. For this reason, EGLE required Ajax to undertake a top down BACT analysis. The company's BACT analysis is flawed, though, because it could not assess the effectiveness of a control technology to limit emissions that are unaccounted for in the record. *See* Permit File, Item 527 at 123. Ajax states in its BACT analysis that "VOC emissions from the AC tanks have been estimated at less than 2 tpy without add-on controls." *Id*. However, as noted in preceding sections, there is no description of the amount of criteria pollutants, including VOCs, the AC Tanks could potentially emit in the record. The tons per year figure may come from the Silo emissions unit potential to emit estimate (1.7 tons per year), or the potential to emit estimate from the AC Tank Heater. *See id* at 60. It is clear, however, that there are no tables in the final permit materials that provide the AC Tanks' potential to emit VOCs. Permit File, Item 527 at 60-81. Without such an estimate there are no emissions to which the Rule 702 BACT analysis could be applied. EGLE issued the permit overlooking the arbitrary assumptions and omission of key information in Ajax's BACT analysis. As a result, this permit allows a source of VOC emissions to construct and operate without sufficient information to make reasonable determinations about its compliance with Rule 702 and is therefore contrary to law, requiring remand. Mich Admin Code R 336.1207(1)(d).

C. EGLE's Failure to Assess the AC Tanks' Potential to Emit Air Contaminants Will Harm the Neighboring Community.

EGLE's failure to assess the AC Tanks' potential to emit air contaminants will cause significant harm that necessitates close consideration by this Court.

AC Tank emissions can lead to serious air quality impacts affecting communities neighboring asphalt manufacturing plants. In 2020, EPA found that numerous facilities in the Northeast were in violation of NAAQS compliance requirements for failing to account for and control VOC emissions from their asphalt cement storage tanks. *EPA v Sprague Resources LP*, Civil No 1:20-cv-11026 (D Mass May 9, 2020). In a federal consent decree resolving that EPA enforcement action, the asphalt facilities admitted liability and were required to obtain air pollution permits to control VOC emissions from their asphalt storage tanks. *Id*. at 7-9. The defendants' unpermitted emissions created VOC pollution that significantly contributed to the deterioration of surrounding air quality, illustrating the need to pay close attention to similar emissions in this matter. *See Sprague Resources Settlement Information Sheet*, EPA, available here (last access Sep. 28, 2022); *see also eg*, *Environmental Protection Agency, Complainant v DH Mayou Roofing and Supply Company,* Respondent, 1973 WL 5504, at *2.

In addition, numerous other states have recognized the importance of regulating emissions from liquid AC Tanks because of the harmful pollution they can cause. *In the Matter of: Volatile Organic Material Emissions From Stationary Sources; Ract III*, Illinois Pollution Control Board, 1984 WL 46096, at *27 ("Yet another source of emissions, which precedes the manufacturing process, is the asphalt storage tanks."); *In the Matter of the Appeal of: World Asphalt Company, Employer,* 2000 WL 36722398, California Occupational Safety and Health Appeals Board at *1 (discussing emissions from AC Tanks with respect to occupational safety and exposure).

EGLE's issuance of the permit to install here raises the same concerns found at other asphalt plants. Upholding EGLE's errors may result in unaccounted for and uncontrolled emissions that will cause public health harms in the Flint and Genesee Township community. Without a proper calculation of the AC Tank emissions, EGLE cannot determine whether stricter

controls are required or whether the permit should be denied. Allowing this permit to stand, as is, may incentivize other permit applicants to cut corners in the future. Although EGLE is afforded some discretion and interpretive flexibility, it does not relieve EGLE of its responsibility to protect public health and make careful, reasonable, judgments based on complete information required under its rules. Nor can it swallow the clear text and purpose of Michigan's air quality rules and the CAA – to ensure that all people have clean air to breathe. 42 USC 7401(b)(1); *see also City of River Rouge*, 2014 WL 6952368, at *4.

D. EGLE Did Not Follow the Case-by-Case Regulatory Process for Exempting AC Tanks from the Purview of its Rules

While in some circumstances AC Tanks may be excluded from the permit to install requirements of Michigan's SIP, EGLE did not follow the process for considering and approving such an exemption in this case. Unless Ajax applied for an exemption from the PTI requirement for its asphalt cement storage tanks under specific procedures outlined in the SIP, Ajax must submit complete and accurate descriptions of its plant's potential to emit air contaminants, including emissions from its AC Tanks. *See* Mich Admin Code RR 336.1289, 336.1278. EGLE has discretion to implement its statutory mandate but it "may not change the laws." *City of River Rouge*, 2014 WL 6952368, at *4. When EGLE determines an applicant's eligibility for a permit to install it must exercise its judgment on information clearly required by the text of its administrative rules. The rules require "complete information" on all emissions units and at least *some* description "in appropriate detail of the nature, concentration, particle size, pressure, temperature, and the uncontrolled and controlled quantity of all air contaminants" proposed by the applicant. Mich Admin Code R 336.1203(1)(a)-(c). Unless the agency followed the specific case-by-case regulatory process to exclude AC Tanks from regulation, the applicant must include emissions information from that emissions unit in its totaling of its plant's overall potential to emit

air contaminants. *See also* Mich Admin Code R 336.1207(1)(d); *see also* Mich Admin Code R 336.1203(a)-(c). EGLE does not have the authority to eliminate whole categories of emissions units from its CAA review on a whim, and the Court should not tolerate its attempt to do so here.

In *City of River Rouge,* EGLE (then DEQ) was sued for similarly unlawful and unprocedural exemptions from its rules. There, DEQ approved DTE's application for a tax exemption based on a non-public memorandum of understanding between the agency and the utility. 2014 WL 6952368, at *4. The circuit court held that EGLE's action was not authorized by law because the agency failed to follow the case-by-case procedure for the tax exemption outlined in its rules. Affirming, the Michigan Court of Appeals held that while the agency has the authority to enter into a MOU with regulated entities, it does not have the authority or the discretion to replace clear procedures for approval of an exemption with its preferred process when that process conflicts with the rules, even if it is more efficient. *Id*; *see also DTE St Clair*, WL 69788, at *5. As in that case, here this Court cannot allow EGLE to exclude whole classes of emissions when its rules clearly require complete information regarding a plant's potential to emit all air contaminants. *Id*. Moreover, there is a specific process for excluding AC Tanks from the permit to install requirement entirely, but neither EGLE nor Ajax follows those procedures in this case. *See* Mich Admin Code R 336.1289(2)(b).

The record is clear: Ajax has not provided, and EGLE has not reviewed, a complete description of the plant's potential to emit air contaminants from the six 30,000 gallon liquid bitumen tanks Ajax intends to construct and operate. EGLE approved this permit without complete information on Ajax's true potential to emit air contaminants rendering it impossible for the agency to make reasonable judgments about the plant's compliance with NREPA and the CAA. These omissions occurred despite EGLE's awareness of the omission at the very beginning of the permit

process, the Appellants' comments urging further analysis of the AC Tanks' emissions, the presence of the methodology to carry out such analysis in the record, and Ajax's demonstration it is capable of undertaking this analysis for at least one pollutant. *See* Permit File, Item 3; Hearing File, Item 234 at 47; Toxics File, Item 87 at 384; *see also* Permit File, Item 527 at 60-81. EGLE's issuance of this permit is arbitrary and capricious and is contrary to the agency's permit to install requirements. For this reason, the Court must remand this matter for further consideration of the plant's prospective emissions and CAA compliance.

II. EGLE'S DECISION TO PERMIT THE AJAX PLANT WITH A FLAWED ANALYSIS OF ITS MAXIMUM IMPACT IS ARBITRARY AND CAPRICIOUS AND CONTRARY TO LAW

EGLE issued Ajax a permit to install authorizing the company to process 550 tons of material per hour in the counterflow drum mixer, provided it maintained an average of 12,000 tons per day. This limit was set according to air contaminant potential to emit estimates that do not represent a permissible analysis of the maximum emissions and associated impacts of the plant. Permit File, Item 526 at 145. In order for the maximum emissions impact of this plant and arbitrarily selected processing rates that are less than the plant's maximum to assess this plant's compliance with the CAA. The agency's actions are contrary to EPA regulations and the Michigan SIP's requirement that EGLE consider the maximum potential air pollution impacts of new sources, in line with the new source's design, before issuing a permit to install. Mich Admin Code R 336.1902(1)(b)(viii) (incorporating 40 CFR pt. 51 Appx W §§ 8.2, 8.3). For the maximum impact analysis for this plant to comport with its design and comply with Michigan's SIP, the analysis must include a description of this plants emissions when operating at 600 tons per hour and at 14,400 tons per day because that rate reflects the Ajax asphalt plant's maximum potential emission impact when accounting for unpredictability inherent in the plant's design and drum capacity. Further, the

agency arbitrarily selected differing processing rates – or "throughput rates" – across emissions units such as the silos, load out, aggregate piles, and the drum dryer without a reasonable explanation. *See* Permit File, Item 527, Tables 5.1 (71), 5.4 (73), 5.6a (78), 5.4 (81), 14 (96) (tables reflecting varying hourly maximum production rates). The Appellant groups alerted the agency to these errors in their comments, but the final permit still does not provide an appropriate analysis of the plant's maximum impact reflecting the intended operation of the plant and the Appellants' concerns remain extant. *See* Hearing File at 234, at 22-24. The Court must remand this permit to the agency in light of these legal errors.

A. Ajax Failed to Assess and EGLE Failed to Review the Maximum Emission Impact of the Ajax Plant in a Manner That Reflects the Plants Processing Rates and Operational Design

EGLE's actions in assessing the Ajax plant's maximum emissions impacts are contrary to EPA regulations and the Michigan SIP. Michigan's rules incorporate specific requirements for analyzing a new sources emissions impact. EGLE must consider the maximum potential air pollution impacts of new sources over short and long term intervals to adequately evaluate their compliance with the CAA before issuing a permit to install. Mich Admin Code R 336.1902(1)(b)(viii) (incorporating 40 CFR Pt 51 App W § 8.2); *see also* 40 CFR App W, § 8.3.2(e) ("[T]he plant layout stack parameters, boiler size and type, potential operating conditions, and pollution control equipment parameters . . . are required inputs to air quality models and are needed to determine maximum potential impacts."); *see also* Mich Admin Code R 336.1203(1)(a)-(c) (prospective information requirements for a new source of emissions), Mich Admin Code R 336.1207(1)(a)-(c). The maximum emissions impact analysis must reflect the plant's design and processing capacity. 40 CFR App W, § 8.2.2(d) ("For stationary source applications . . . the source should be modeled using the design capacity (100 percent load)"). If EGLE assessed Ajax's

emissions based on a processing rate lower than what the record demonstrates is the maximum operating capacity of the plant, then the agency has failed to meet its obligation to prospectively analyze the plant's air contaminant emissions before issuing a PTI. *See Matter of PolyMet Mining, Inc*, 965 NW2d 1, 10 (Minn Ct App 2021), *review denied* (Sept 30, 2021); *see also State ex rel Ohio AG v Shelly Holding Co,* 191 Ohio App 3d 421, 427 (2010) (discussing the maximum emissions impact review requirements for new asphalt plants). Effectively, by not analyzing the Ajax plant's maximum impact, EGLE is failing to account for uncertainty inherent in predicting the plant's CAA compliance as it is required to do under its rules. *Id*.

In *PolyMet*, the Minnesota Court of Appeals reversed the Minnesota Pollution Control Agency's decision to issue a CAA permit to a mine. The agency there erred, in part, because it analyzed the new sources emissions and the mine's compliance with the CAA based on a processing rate that did not reflect PolyMet's intended operation:

> The Agency had before it documents that called into question whether PolyMet could be expected to comply with the throughput limits [limit on processing rate] of [its] permit. [One such document] suggested that . . . PolyMet was evaluating the profitability of the project with higher throughput.

965 NW2d 1, 10. Given the record evidence, the court in that case remanded the issue to the agency to consider the maximum impact of emissions at the higher throughput rate and concluded "that the Agency has not adequately explained the reasons for its conclusions." *Id* at 10-11. The court did not disrupt the agency's analysis of any evidence, it simply required it to make "reflective findings" regarding the information before it when it made its permitting decision as required under its rules. *Id*. at 12. An analogous situation is present before the Court in this matter.

The final description of the maximum potential proposed emissions for the Ajax plant produced with the final permit to install does not reflect how the company intends to operate the plant. EGLE based its throughput limit on the flawed assumption that the company will maximally

process 550 tons per hour and an average of 12,000 tons per day. Permit File, Item 526 at 145. Ajax made EGLE aware that operating its counterflow drum mixer would not be feasible if the permit did not allow for a short-term hourly processing capacity of at least 600 tons per hour to accommodate unpredictable variation in how much material passes through the drum in any one hour. The record shows that EGLE recognizes this processing capacity of 600 tons per hour as the "original design" of the Ajax plant and the company's early pollutant modeling reflects that it would process up to 600 tons in any one hour. District File, Item 76, at 2; Item 77.

Ajax submitted a letter from the manufacturer of the plant stating that the tonnage processed can vary by 15% given small changes in the moisture content of the aggregate material. EGLE Executive File, Item 204 at 5. In the manufacturer's example he states that moisture can increase the tonnage processing rates by up to 75 tons. *Id*. Given that this variability is uncontrolled due to factors like rainy weather, it is entirely possible that the plant will process up to 600 tons per hour for 24 hours per day. *See e.g.,* District File, Item 96 at 2 (describing the impact of rain on aggregate pile particulate emissions due to wetting prior to entering the drum dryer). In addition, the record shows that EGLE recognized the 600 tons per hour processing capacity as the "original design" of the Ajax plant and the company's early pollutant modeling reflects that it would process up to 600 tons per hour. District File, Item 76, at 2, Item 77. Because the unpredictable nature of the variation in moisture, and the consequent increase in the tonnage processed as highlighted by the plant's manufacturer, EGLE must assess this plant's emissions at a higher rate of production that accurately reflects the maximum impacts of the plant. Reassessing this plant's maximum impact at 14,400 tons per day and 600 tons per hour is required to account for uncertainty inherent in the design of this production process. At the very least, EGLE must

explain how it accounted for the plant's variation in throughput rates in its prospective compliance analysis.

The fact that water, rather than aggregate or bitumen, is increasing the tonnage inside the drum is irrelevant because evaporating water is a central component in the design of the hot mix asphalt drum mix process. Moreover, water vapor is a critical component of the pollution emitted from a counterflow drum mixer. EPA recognizes that emissions from a counterflow drum dryer consist of "water as steam evaporated from the aggregate, particulate matter, products of combustion such as carbon dioxide, NOx, and sulfur oxides and VOCs, methane, and HAPs." Toxics File, Item 087, 384. EPA's guidance makes clear that "water as steam" is an important factor in determining the total emissions from the HMA Drum Dryer and should not be ignored in assessing the plant's maximum impact. Ajax's drum dryer has a design capacity of 600 tons of material processing per hour to account for variation of water within the drum. EGLE is required under its rules to assess the impact of this plant consistent with that design.

All of the models in the final permit materials assume that the plant will not exceed 550 tons per hour and 12,000 tons per day. But the agency fails to explain how it arrived at this limit in light of the applicant's submissions demonstrating that the plant is designed to accommodate up to 75 tons of variation resulting from small and unpredictable changes in moisture. The agency is fully aware that rain and moisture are important in accurately assessing a plant's maximum pollutant impacts – the record reflects as much. *See e.g.,* District File, Item 96 at 2; Toxics File, Item 087 at 384. But the compliance analysis underlying this permit does not account for the plant's design and what it means for assessing the plant's maximum impact. Given that the moisture content is uncontrolled, and small variations can lead to large jumps in the tonnage the drum is processing in any one hour, the maximum emissions impact analysis must account for a

worst case scenario in which the drum dryer is processing wetted material at 600 tons per hour for a 24 hour period. By not conducting this analysis, EGLE has failed to conduct a proper 24 hour maximum emissions analysis reflecting the plant's design as required under its rules. Mich Admin Code R 336.1902(1)(b)(viii); 40 CFR Pt. 51 App W § 8.2.2(d)). Consequently, the Ajax permit is not supported by an analysis of the plant's maximum emissions impact operating consistent with its design. This leaves EGLE with insufficient information on this plant's potential to violate federal or state air quality standards that Ajax must comply with based on hourly and daily intervals. Mich Admin Code R 336.1207(1)(d). To remedy this error, the Court must remand this matter to EGLE with instructions to assess this plant's maximum impacts consistent with its design.

B. The Throughput Rates Used to Model the Maximum Emissions Impacts of Ajax's Storage Silos, Piles, and Yard Emissions Units Are Arbitrary.

The throughput rate of the HMA Drum Dryer determines the maximum production rate for other emissions units that are critical parts of the asphalt manufacturing process and that precede the asphalt mixing in the drum. As described in the Statement of Facts, these emissions units include the storage silos, the aggregate piles, the aggregate feed bins, the conveyor, and other constituent sources of the manufacturing process. The tables in EGLE's final permit materials include arbitrary hourly production rates for emissions units such as the piles, silo filling, and load out that do not reflect the drum dryer's maximum production rate of 600 tons per hour and 14,400 tons per day. *See* Permit File 527, Tables 5.1 (71), 5.4 (73), 5.6a (78), 5.4 (81), 14 (96) (tables reflecting varying hourly maximum production rates). Some tables use 500 tons per hour, others 550, and still others at 600, to analyze this facility's pollution impacts. *See* Permit File, Item 527 at 61 – 74 (analysis of the plant's impacts at an hourly production rate of 550 tons per hour), 75-82 (analysis of impacts at 500 tons per hour), 100 (analyzing HCI emissions at a throughput rate

of 600 tons per hour). Nowhere does EGLE explain how it selected these processing rates and if they represent the maximum impact. Accurately assessing the emissions impacts of this plant's emissions units in a consistent fashion is paramount to ensuring that the facility complies with NAAQS and Michigan's SIP, which contain hourly and daily emissions requirements. *See e.g., Ozone NAAQS Fact Sheet*, Environmental Protection Agency, *available* here (last accessed November 1, 2022). Moreover, this information is key to avoiding unnecessary and unaccounted for health impacts on the local populace of Flint and Genesee Township.

In considering the Ajax application, EGLE has failed to follow its rules and the CAA by not assessing this plant's maximum impact consistent with the plant's design and intended operation. The resulting permit does not meet the requirements of Michigan's rules. Mich Admin Code R 336.1902(1)(b)(viii) (incorporating 40 CFR Pt 51 App W); *see also* 40 CFR App W at 8.2.2(d), 8.3.2(e); Mich Admin Code RR 336.1203(1)(c), 1207(1)(a)-(c). Failure to analyze all pollutant emissions consistent with the plant's potential processing capacity of 600 tons of material per hour and 14,400 tons per day does not represent a legally permissible maximum emissions impact analysis. *See Matter of PolyMet Mining, Inc*, 965 NW2d at 10. To remedy this permit, the agency must undertake new analysis of this plant's maximum emission impacts at a processing rate of 600 tons per hour and a daily production rate of 14,400 tons per day because that is what the plant is designed to process and what it may actually process under the right conditions as described by the plant's manufacturer. The Court should remand this permit to the agency and order EGLE to fully analyze the impacts of this plant at a processing rate that reflects the design of the plant.

III. EGLE'S DECISION TO USE AIR QUALITY MONITORING DATA FROM LANSING AND GRAND RAPIDS TO ESABLISH BACKGROUND POLLUTION CONCENTRATIONS AROUND THE PROPOSED PLANT IS ARBITRARY AND CAPRICIOUS AND CONTRARY TO LAW

Gathering air quality data is an essential component of the permitting process because it enables EGLE to establish a baseline level of air quality in the areas that will be the most impacted by the proposed plant's air pollution. This information enables EGLE to determine whether or not the proposed plant's emissions in combination with the baseline level of air quality will cause or contribute to a violation of any air quality standard. In this case, the permit applicant was required to conduct its air impact analysis and collect air quality monitoring data for NOx, PM-10, and SO2. While the proposed asphalt plant is to be located in Genesee Township, the permit applicant opted to submit data collected from air quality monitors in Lansing for nitrogen dioxide (approximately 50 miles from the proposed plant) and in Grand Rapids for PM-10 and sulfur dioxide (approximately 100 miles from the proposed plant). Permit File, Item 1, Appendix 3. The permit applicant used data from these monitors to establish a baseline level of air quality for each of these pollutants in Genesee Township to demonstrate that the emissions from the proposed plant, when combined with data from these monitors in Grand Rapids and Lansing, will not cause a violation of NAAQS in Genesee Township.

EGLE's duty in this permit process was to ensure that any air quality data collected from off-site monitors was "representative" of air quality in Genesee Township to ensure that the operation of the plant will not interfere with the attainment or maintenance of any NAAQS in that community. 40 CFR Part 51 Appendix W, Section 8.3; Mich Admin Code R 336.1207(a)-(c). Instead of carrying out its duty, EGLE approved the use of far flung data gathered from monitors across the State without any meaningful analysis of whether the data was representative of air quality around the proposed Ajax plant. Without this analysis, the agency cannot conduct a

reasonable assessment of whether this plant will interfere with the attainment of NAAQS in the area surrounding the Ajax plant.

A. EGLE's Reasoning Justifying its Use of Far-Flung Monitors is Conclusory, Lacks a Reasonable Basis in the Record and is Arbitrary and Capricious

In an attempt to justify the use of data collected from Lansing and Grand Rapids to establish a baseline level of air quality in Genesee Township, EGLE provides only conclusory statements to show that the data from monitors it selected to evaluate this permit is "representative" of air quality in Genesee Township. *See* Hearing File, Item 266, at 49. The agency claims that the monitors are representative of regional air quality because they have similar geography and weather to Genesee Township. This legal conclusion is not supported by reasoned analysis of the record.

1. EGLE's Determination That the Grand Rapids and Lansing Monitors Are Capable of Being "Regional Monitors" Is Arbitrary and Capricious

EGLE suggests that the Grand Rapids and Lansing monitors are "regional monitors" and represent air quality across a region that stretches from Grand Rapids to Genesee Township. *See* Hearing File, Item 266, at 49. However, this assertion is contradicted by its most recent annual review of its ambient air quality monitoring network. *Annual Ambient Air Monitoring Network Review Plan for 2023*, EGLE, at 55, 67, and 73 *available* here (Jul. 1, 2022). In that review, EGLE assessed its air quality monitoring network and demonstrated how it complies with the EPA's network design criteria described in 40 CFR Part 58, Appendix D. Appendix D specifies that each monitor is sited in a given location in order to be representative of a defined spatial scale. 40 CFR Part 58, Appendix D, Section 1.2. The EPA specifies six spatial scales of representativeness in Appendix D: microscale, middle scale, neighborhood scale, urban scale, regional scale, and national/global scale. *Id*.

Relevant to this case are the neighborhood scale and the regional scale. A neighborhood scale monitor "[d]efines concentrations within some extended area of the city that has a relatively uniform land use." *Id*. at 1.2.b.3. Data from a neighborhood scaled monitor is meant to be representative of air quality in a 0.5 to 4 kilometer range. *Id*. A regional scaled monitor "[d]efines usually a rural area of reasonably homogeneous geography without large sources." *Id*. at 1.2.b.5. Data from a regional scaled monitor is meant to be representative of air quality from tens to hundreds of kilometers. *Id*. In its 2023 review, EGLE noted that the Grand Rapids and Lansing monitors are each "neighborhood scale" monitors for PM-10, sulfur dioxide, and nitrogen dioxide. *Annual Ambient Air Monitoring Network Review Plan for 2023*, EGLE, at 55, 67, and 73 *available* here (Jul. 1, 2022). As such, data from these monitors is meant to be considered representative of air quality within a short 0.5 to 4 kilometer range. EGLE's assertion that these monitors are capable of representing regional air quality is contradicted by its own report and is arbitrary and capricious.

2. EGLE's unsupported claim that the air pollution measured by the Lansing and Grand Rapids monitors travels to Genesee Township is arbitrary and capricious

EGLE also states that data from the Grand Rapids and Lansing monitors is representative of air quality in Genesee Township because the pollutants at these monitors can be expected to travel across the state to Genesee Township. *See* Hearing File, Item 266, at 49. The travel of pollutants across broad regions depends on the physical characteristics of the pollutant and meteorological conditions, such as wind speed and direction. EGLE has provided no information to support its assertion that pollutants in the area of the Lansing and Grand Rapids monitors can reasonably be expected to travel 50 and 100 miles respectively to Genesee Township based on the physical characteristics of each pollutant and meteorological conditions. In fact, there are significant reasons to doubt EGLE's assertion. For example, sulfur dioxide has been characterized

by EPA as a "localized" pollutant not susceptible to traveling long distances. *See,* 75 FR 35520 (Jun. 22, 2010); 40 CFR Part 51, Appendix W, § 4.2.3.3. As such, EGLE's assumption that a Grand Rapids monitor for sulfur dioxide is capable of assessing the regional transportation of a localized and inert pollutant 100 miles across the State to Genesee Township is arbitrary and capricious and underscores the flaws in the agency's use of air quality data gathered in Grand Rapids and Lansing to represent air quality in Genesee Township in evaluating the Ajax plant.

B. EGLE Fails to Explain How it Selected Monitors to Establish Background Concentrations of Each Regulated Pollutant.

While EGLE relied on Ajax's sulfur dioxide and PM10 data from the Grand Rapids monitor and nitrogen dioxide data from the Lansing monitor, it failed to explain why it was permissible for the company to select data from these locations and not others. For example, there are several air quality monitors in the metro-Detroit area that could have been used. Additionally, for certain pollutants the Grand Rapids monitor was utilized in lieu of the Lansing monitor and vice versa. Ajax's strategy for selecting air quality data appears fairly simple – pick the monitors with the most favorable data. *See*, Michigan Department of Environment, Great Lakes, and Energy, *Air Quality Annual Report* at 49, Figure 7.5 (stating that the 24-hour design value for PM-10 at the Grand Rapids monitor is less than 40 ug/m3 for the 2018-2020 timeframe while it is above 60 ug/m3 at the Southwest Detroit monitor); *id* at 32-37; *id*. at 25-28 (showing differences in ambient concentrations of NOx across the state).

The enormous discrepancies in emissions between monitors, and the impacts for human health those emissions will cause, underscores the importance of EGLE thoroughly evaluating Ajax's decision to select non-local monitors to evaluate its permit and EGLE thoroughly explaining its decision. Instead, EGLE rubberstamped Ajax's decision unquestioningly and, as

highlighted throughout this section, provided only a conclusory justification without evidentiary support in the administrative record which can only be described as arbitrary and capricious.

C. The Air Quality Data Collected From Grand Rapids and Lansing Cannot Be Considered "Representative" of Air Quality in Genesee Township In Accordance With EPA Guidance

EGLE also failed to explain how it accounted for the concentration of industry around the proposed Ajax site given its use of distant monitors. The reliance on the Grand Rapids and Lansing monitors as "representative" of air quality in Genesee Township is unsupported by EPA guidance and EGLE's own rules. In determining whether data from a monitor may be considered "representative" of air quality nearby a proposed source, EPA guidance instructs permitting agencies to consider whether the proposed source will be located in an area with other sources of air pollution – referred to in EPA guidance as a multisource area – or whether it will be an isolated single source. EPA, Ambient Monitoring Guidelines for Prevention of Significant Deterioration, at 6 (May 1987). If a proposed source is to be located in an area that is generally free from the impact of other sources of air pollution, such as other industrial facilities as well as cars, trucks, and railroads, then monitoring data from a regional site may be considered "representative." *Id*. However, the EPA cautions that the use of regional monitors should be limited to "relatively remote areas" and should not be used in "areas of multisource emissions." *Id*. If a proposed source is located in a multisource area, the EPA instructs that off-site monitoring sites may be considered representative of air quality at the project location if it "is within 10 km of the points of proposed emissions, or . . . is within or not farther than 1 km away from either the area(s) of the maximum pollutant concentration from existing sources or the area(s) of the combined maximum impact from existing and proposed sources." *Id* at 6-7.

As for EGLE's regulatory requirements, Appendix W of 40 CFR Part 51 describes how a permit applicant should go about collecting air quality data. As discussed, this appendix has been incorporated by reference in EGLE's rules. Mich Admin Code R 336.1902(1)(b)(viii). Similar to the EPA Guidance discussed in the paragraph above, Appendix W's requirements for monitoring also vary depending on whether the proposed plant will be an isolated single source or will be located in a multisource area. Even for isolated single sources, Appendix W specifies that a regional monitor may be used to determine background concentrations, but only if it is "impacted by similar or adequately representative sources." *See,* 40 CFR Part 51 Appendix W, 8.3.2. For multisource areas, Appendix W does not mention the use of regional monitors as an acceptable method to establish background concentrations. *See,* 40 CFR Part 51 Appendix W, 8.3.3. In this case, Ajax's plant is clearly in a multisource area as discussed at length in the Statement of Facts and will not be an isolated single source. Because the Ajax plant seeks to build in a multisource area, the use of regional monitors located 50 and 100 miles from the proposed source is against EPA guidance and Appendix W. Instead, EGLE should have followed EPA guidance and Appendix W and required Ajax to utilize air quality data collected from monitors that are no more than 10 kilometers away from the proposed source or within 1 kilometer of the source's maximum pollutant impact. EPA's internal appeals board has remanded CAA permits for failure to explain why regional single-source monitors are representative of local air quality conditions in multisource areas. *See, In re: Vulcan Construction Materials, LP,* 15 EAD 163, 183 (2011) (remanding CAA permit to a state agency because of its conclusory justifications for using air quality data collected from off-site); *In re: Northern Michigan University Ripley Heating Plant,* 14 EAD 283, 328 (2008). EGLE's reasoning fails to address these key issues identified by EPA guidance and Michigan's SIP.

Even if Ajax's plant can be considered an "isolated single source" and the use of regional monitors is appropriate, the Lansing and Grand Rapids monitors have been assigned a neighborhood scale rather than a regional scale by EGLE. Additionally, EGLE has not demonstrated that the Lansing and Grand Rapids monitors are impacted by sources similar to those found around the site of the new proposed Ajax plant. Mich Admin Code R 336.1902(1)(b)(viii) (incorporating App W 8.3.1); s*ee also, In re: Vulcan Construction Materials, LP,* 15 EAD 163, 183 (2011). In this case, EGLE has done nothing to explain whether the Grand Rapids and Lansing monitors are in multisource areas like the proposed Ajax plant. Because EGLE has done nothing to account for the differences in the concentration of industrial sources between the Lansing and Grand Rapids monitors and the proposed Ajax site, the permit applicant has not submitted sufficient information to enabling EGLE to make reasonable judgements about this plant's compliance with NAAQS affecting Genesee Township and Flint. Mich Admin Code R 336.1207(1)(d).

RELIEF REQUESTED

For the reasons forwarded in this brief, EGLE's approval of the Ajax permit is arbitrary and capricious and contrary to law. The Court should reverse EGLE's decision to issue Ajax a Permit to Install (No 90-21) and remand this matter to the agency for further proceedings.

Sincerely,

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