Ajax Materials Corporation

RESPONSE TO COMMENTS DOCUMENT

November 15, 2021

Permit Application No. APP-2021-0019
Permit to Install No. 90-21

Gretchen Whitmer, Governor

Air Quality Division
Michigan Department of Environment, Great Lakes, and Energy

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The purpose of the Response to Comments document is to discuss the public participation process as it occurred with the proposed project, detail the comments received during the comment period, and to discuss changes made in response to comments as well as documenting those changes, if they occurred. This document serves as the Decision Maker's review and response to the public's comments and contains the final decision on the proposed project.

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ACRONYMS
These acronyms are used on this page:

AQD – Air Quality Division of EGLE

EGLE – Michigan Department of Environment, Great Lakes and Energy

EJ – Environmental Justice

HMA – Hot Mix Asphalt

OEJPA – Office of Environmental Justice

PUBLIC PARTICIPATION PROCESS

Public participation and receipt of public comments are a cornerstone of the Michigan Department of Environment, Great Lakes, and Energy's (EGLE) work. Many programs, laws, and rules require public participation, where others may involve public participation as good public policy. The public is often invited to comment on a project or decision where there may be a range of interest on public impact, including those involving planning, policy setting, or decision making. Public participation is a process through which those who may be affected by, or are interested in a decision, have an opportunity to comment or provide information which may be used in the decision being made.

This public comment period was for Ajax Materials Corporation's (Ajax) request for a new Hot Mix Asphalt (HMA) Plant proposed to be located at 5088 Energy Drive, Flint, Michigan. The air permit application submitted by Ajax was given application No. APP-2021-0019. As part of the public participation process, information was provided for the public to review, including:

- a high-level summary of the proposed project,
- a technical fact sheet, and
- proposed permit terms and conditions.

The public comment period was extended beyond the minimum 30 days to allow for an in-person comment event, two public informational sessions and hearings which could be attended online or by phone. All written and verbal public comments were reviewed in making a decision on the Ajax application.

ENVIRONMENTAL JUSTICE AND TITLE VI CONSIDERATIONS

EGLE is committed to achieving equity and transparency as we interact with the public. Both EGLE's public comment and hearing processes have evolved to provide greater access and to be more inclusive. In 2019, the Office of the Environmental Justice Public Advocate (OEJPA) was created by Governor Whitmer's Executive Order 2019-06 to further EGLE's focus on achieving environmental justice (EJ) in Michigan. To help us achieve that goal, EGLE has established an updated Public Participation Policy and Procedure, created a new Nondiscrimination Policy, and developed its first Limited English Proficiency Plan. In addition, the OEJPA has trained all EGLE staff on environmental justice and ways to incorporate equitable treatment and meaningful engagement into our work. The OEJPA continues to work with the Air Quality Division (AQD) and other EGLE divisions to advise on engagement with communities. All EGLE policies, procedures, and guidance were followed during the public comment/hearing process for this proposed permit.

The AQD engaged early with the OEJPA regarding the location of Ajax's proposed new asphalt plant. This included identification of the proposed site as being within an existing EJ community.

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EJSCREEN – A screening tool used to evaluate if an area needs enhanced public outreach, translation, or may be an environmental justice community

LEP – Limited English Proficiency. When part of a population does not speak English as a first language.

OEJPA – Office of Environmental Justice Public Advocate

PM2.5 – Small particles less than 2.5 microns in size.

USEPA – United States Environmental Protection Agency

In addition to working with the OEJPA, the AQD also consulted EJSCREEN and did a Limited English Proficiency (LEP) Evaluation. EJSCREEN showed the community within a 1-mile radius of the proposed location was over the 90th Percentile, when compared to the State of Michigan, for eight of the eleven environmental justice indexes. An EJ Index combines demographic indicators such as percent low-income and percent people of color with a single environmental indicator. The environmental indicators for those indexes included: particulate matter less than or equal to 2.5 microns in diameter (PM2.5), ozone, air toxics cancer risk, respiratory hazard, lead paint, Superfund proximity, hazardous waste, and wastewater discharge.

The need for translation services was also evaluated using the United States Environmental Protection Agency's (USEPA) EJSCREEN in a 1-mile radius around the facility. With this information and following EGLE's Limited English Proficiency Plan, it was found translation was not needed based on the analysis showing 0% of people living in linguistically isolated households. A household in which all members age 14 years and over speak a non-English language and also speak English less than "very well" is linguistically isolated. Translation services are always available upon request.

STARTING THE PUBLIC COMMENT PERIOD AND OPPORTUNITIES TO PARTICIPATE

On July 1, 2021, the public comment period began and the AQD did the following to get the word out:

- Posted information on the AQD Public Comment Page at Michigan.gov/EGLEAirPublicNotice, including:
    - Notice of Air Permit Comment Period and Public Hearing,
    - Proposed Project Summary,
    - Technical Fact Sheet, and the
    - Draft terms and conditions
- Mailed notifications to persons who had previously expressed interest in the area and had provided a complete address. In addition,
- A notice announcing the Public Comment Period, Public Informational Session and Public Hearing was placed in the Flint Journal. The notice had information about the request from Ajax, where you could find more information, including by phone; the date, and time of the Informational session and Public Hearing; the initial closing date of the Public Comment Period; and the ways comments could be submitted.

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Virtual Informational Sessions and Public Hearings were held on August 3, 2021, and September 1, 2021, and were accessible by phone and online. AQD staff gave a presentation about the Ajax proposal and the permit review. Efforts were made to ensure those joining by phone were able to get as much information as possible. This included verbally reading information and repeating key information visually presented to online attendees. Each meeting began at 6:00 p.m. Jenifer Dixon was the Hearings Officer and the decision maker, Mary Ann Dolehanty, attended both hearings. Approximately 44 attended the first Public Hearing and 57 attended the second Public Hearing. The Public Hearings concluded after everyone who wanted to submit a verbal comment had spoken. Recordings of the informational sessions and public hearings are posted online at YouTube.com/c/MichiganEGLE. The slides from the first hearing are posted on the public information page.

An in-person comment opportunity was held on August 11, 2021, at the Genesee Township Hall, 7244 N Genesee Road, Genesee, Michigan. This meeting was an opportunity for those who may not have internet or phone access to be able to use EGLE phones and computers to leave comments. AQD staff was available in-person and online to answer questions regarding the proposed project. The township hall was selected due to its proximity to the facility, its availability, and access to power/internet. Approximately 54 people attended the in-person comment opportunity. The meeting began at 6:00 p.m. and concluded at approximately 8:00 p.m.

EXTENSION OF THE COMMENT PERIOD

The comment period was originally scheduled from July 1, 2021, to August 16, 2021. EGLE received requests to extend the comment period which was granted until September 7, 2021. An additional extension request was submitted and EGLE granted a second extension until September 22, 2021, when the comment period closed. This 83-day comment period provided 63 days beyond the minimum requirement found in the Natural Resources and Environmental Protection Act for public comment.

OVERVIEW OF COMMENTS

During the 83-day comment period, verbal and written comments were received from 242 individuals. A total of 238 individual commenters expressed opposition to the project and 1 commenter expressed support. Comments in opposition of the project were received from representatives of 17 citizen organization groups and two businesses. Letters of comments/concerns were received from the U.S Department of Housing and Urban Development Region V, the USEPA, and the Flint Housing Commission. The Mayor and City Council of Flint submitted an objection to the permitting action. There were three online petitions submitted in opposition of the project.

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IP – Interested Party

LEP – Limited English Proficiency. When part of a population does not speak English as a first language

OUTREACH

Because of the results of EJSCREEN and the LEP for the area, the AQD started an enhanced public outreach plan beyond the typical newspaper and email notification. The outreach provided updates for comment period extensions, meeting notifications, and web update notifications. The notifications included: one press release, 6 subscriber email notifications which included environmental justice advocates and media, 3 Tweets; Interested party (IP) Letters; Second set of IP Letters, email reminders to attendees of previous meeting, IP phone calls, mailings; and a flier drop-off to nearby resident's apartment offices for distribution. EGLE created a printed comment card for written comments and worked with St. Francis Prayer Center which volunteered to collect and submit written comments.

EGLE considers each comment received equally, regardless of whether it is submitted through the mail, email, on the public comment voicemail, or at a public hearing (virtual or in-person). EGLE must base a permit decision on a proposed project's ability to meet all applicable state and federal air quality rules and regulations in place to protect public health. A permit decision cannot be based on popularity or public opinion. However, it's possible for a single comment related to the review, process, or draft conditions to impact the final permitting decision. The decisions to have the in-person event, additional hearings, and extensions to the public comment period were in response to individual requests.

The remainder of this document contains the significant comments received during the public comment period about Ajax's proposed permit and the AQD's response. Part I discusses the comments received resulting in changes to the final permit terms and conditions and the basis for each change. Part II discusses the Department's response to all other significant comments not resulting in changes to the final permit. The original proposed permit conditions and final permit conditions are available on our webpage and upon request.

I. SUMMARY OF COMMENTS RESULTING IN CHANGES TO THE PERMIT

The comments in this section led to changes in the final permit conditions. The condition changes are shown below, and a red-lined version is attached as Appendix A of this document.

Comments and recommendations were received from the USEPA, the responses to their comments are addressed in this section as part of similar comments received from other commenters. The USEPA comments, and recommendations have also been answered specifically in Appendix B of this document.

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RUO – Recycled used oil

TAC – Toxic Air Contaminants

COMMENTS ON FUELS

1. Comment

A commenter requested the ability to burn recycled used oil (RUO) as an optional fuel be removed from the permit. If not, the commenter added that a review should be performed showing how the emissions from combusting RUO compare to combusting natural gas.

AQD Response

The ability of Ajax to burn RUO was removed from the final permit. Ajax's application states the company plans to burn natural gas only, and yet wanted the option to burn fuel oil #1, fuel oil #2, fuel oil #3, fuel oil #4, fuel oil #6, propane, or RUO in the hypothetical event where natural gas was unavailable or undesirable due to cost. The use of RUO is not fundamental to the process or operation of the facility and yet increases potential emissions including toxic air contaminants (TAC). The RUO is being removed from the permit to demonstrate compliance with Rule 224.

The emission limits were then re-evaluated based on the removal of RUO which resulted in worst-case emissions for most pollutants. The revised emission limits are also based upon 1% sulfur content for fuel oil #6 and 0.5% sulfur content for other fuel oils which was added to the permit conditions. The hourly throughput is being reduced to the drum capacity of 550 tph in addition to the removal of the RUO fuel.

Condition Change

EUHMAPLANT – II. MATERIAL LIMIT(S)

1. The permittee shall not burn any fuel other than natural gas, propane, and fuel oil #1-6 ~~and recycled used oil (RUO)~~ in EUHMAPLANT. Fuel oil #6 shall have no more than a 1% sulfur content, all other fuel oils are limited to 0.5%. **(R 336.1205(1)(a), R 336.1205, R 336.1225)**

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PTI – Permit to Install

COMMENTS ON PROCESSES AND MATERIALS

2. Comment

Several commenters expressed concerns about the application not including all the processes and materials that would be used at the Ajax plant.

AQD Response

A company is only allowed to install and operate equipment and release emissions as requested in their application and approved in their air permit. No changes are allowed unless specifically included under a permit exemption or as part of a new permitting action. A condition was added to the final permit to clarify this.

Condition Change

EUHMAPLANT - III. PROCESS/OPERATIONAL RESTRICTION(S)

5. The permittee shall install and operate the asphalt plant as reviewed in the permit application for PTI 90-21 except as allowed under Rules 201 and Rule 278(1)(b). **(R 336.1201(1), R 336.1205, R 336.1224, R 336.1225, 40 CFR 52.21(c) & (d))**

COMMENTS ON FUGITIVE DUST

3. Comment

A commenter requested a condition be added to the permit requiring all outgoing material transport trucks to go through a wheel wash station and pass over rumble strips.

AQD Response

The permit requires all main roadways at the site be paved. The dust from on-site unpaved areas is required to be controlled by use of water or calcium chloride. Any loose dirt or debris on truck tires is expected to fall off on the paved portion of roadway on-site prior to leaving the property. A requirement to have rumble strips to aid in this process has been added to the fugitive dust plan attached to the final permit. As such, there is no need for a wheel wash station at the facility.

Condition Change

Appendix A: FUGITIVE DUST CONTROL PLAN

2. MANAGEMENT OF ON-SITE ROADWAYS

c. The roadway shall have rumble strips installed where vehicles exit the plant site.

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4. Comment

A commenter stated the permit needs to address the issue of fugitive emissions from the top of the silos.

AQD Response

The proposed permit required capture of the emissions from the top of the silos but did not specify the captured emissions would be sent to the same control device as the emissions captured from the loadout operations. Additional language was added to the final permit to clarify.

Condition Change

EUSILOS – III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate EUSILOS unless the emission capture system for the top of each storage silo is installed, maintained, and operated in a satisfactory manner. The permittee shall vent emissions collected from the top of the silos into a filtering system or shall control the emissions by equivalent means. **(R 336.1224, R 336.1702, R 336.1910)**

COMMENTS ON SITE ACCESS

5. Comment

A commenter requested additional permit requirements restricting public access to the property be added. The commenter felt this was necessary because of a lack of modeling receptors on the facility's property. There was also a comment requesting the presence of tree topped berms and fence, windbreaks, or covered piles to be added to the permit requirements to minimize fugitive emissions.

AQD Response

A condition was added to the final permit requiring Ajax to install and maintain berms, fences, windbreaks and/or trespassing warning signage to secure their property boundaries. Other methods for reducing fugitive emissions are specified in the Fugitive Dust Control Plan in Appendix A of the permit.

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Condition Change

EUHMAPLANT – IX. OTHER REQUIREMENT(S)

1. The permittee shall install and maintain berms, fences, windbreaks, and/or trespassing warning signage as appropriate to secure the property boundary. Within 30 days of the first operation of EUHMAPLANT, the permittee shall submit to the AQD Supervisor confirmation of installation and a diagram of the location of each method being used. **(R 336.1225, 40 CFR 52.21(c) & (d))**

COMMENTS ON OPACITY/VISIBLE EMISSIONS

6. Comment

A commenter stated the Subpart I visual opacity limit and an ongoing compliance method should be added to the permit conditions. Also, a comment was received requesting the use of opacity cameras or other practically enforceable continuous compliance measures be required to ensure Ajax is meeting its permitted opacity limits and following industry best practices. In addition, a comment was received requesting opacity limits when the wind speeds are above 12 mph and an ongoing compliance method be added to the permit.

AQD Response

Subpart I limits emissions to less than 20% opacity. General Condition 11 of the proposed permit also limited opacity to a maximum of 20%. In the final permit, a second 20% opacity limit per Subpart I was added to the EUHMAPLANT along with a requirement to test opacity. The requirement includes a minimum of opacity observations every 3 hours from potential sources of opacity including at least one Method 9 opacity reading from these sources per day. There is also a requirement for the facility to act if the opacity limit is exceeded. Records are required of all opacity readings.

Condition Change

EUHMAPLANT - I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
28. Opacity	20%	6-minute average	Drum dryer; systems for handling, storing, and weighing hot aggregate; systems for loading, transferring, and storing mineral filler/aggregate and the loading, transfer, and storage systems associated with emission control systems	SC V.6	R 336.1301 40 CFR 60.92

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

6. The permittee shall perform a visible emission observation for the drum dryer; systems for screening, handling, storing, and weighing hot aggregate; systems for loading, transferring, and storing (including piles) mineral filler/aggregate; and the loading, transfer, and storage systems associated with emission control systems once every 3 hours of operation and at least once a day when EUHMAPLANT is operating during daylight hours, using a method acceptable to the AQD. If the permittee observes visible emissions, the permittee shall do one of the following:

   a) Perform a Method 9 for visible emissions. If after performing the Method 9 visible emissions reading, the permittee determines that visible emissions from the observation points exceed 20% opacity, the permittee shall immediately initiate an investigation to determine the cause of the visible emissions and initiate prompt corrective action: or

   b) Determine the cause of the visible emissions and initiate prompt corrective action.

   A minimum of one Method 9 observation is required per day, during daylight hours. Records will include the time of each visible emissions observation and Method 9 reading, the reason if an observation or reading is not taken, if visible emissions were observed, identification of the cause, the corrective action taken, and the time of completion of corrective action. **(40 CFR 60.92,~~,~~ R 336.2001, R 336.2003, R 336.2004)**

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CO – Carbon Dioxide

EGLE – Michigan Department of Environment, Great Lakes and Energy

EPA – Environmental Protection Agency

HAP – Hazardous Air Pollutants

NOx – Nitrogen Oxides

PM – Particulate Matter

PM2.5 – Small particles less than 2.5 microns in size

PM10 –Small particles less than 10 microns in size

SO2 – Sulfur Dioxide

TAC – Toxic Air Contaminants

VOC – Volatile Organic Compounds

COMMENTS ON TESTING

7. Comment

Several commenters requested periodic stack testing for demonstrating compliance with the CO, PM10, PM2.5, NOx, toxics, and lead emission limits. In addition, there was a comment that approval of modifications to the USEPA test methods can only be made by the USEPA.

AQD Response

Additional stack testing requiring all criteria pollutants and select TACs be tested on an annual basis, until three consecutive tests demonstrating compliance for each pollutant is achieved, was added to the final permit. After three consecutive tests demonstrating compliance for each pollutant is achieved, additional testing would be required upon the request of the AQD District Supervisor.

Condition Change

EUHMAPLANT – V. TESTING/SAMPLING

2. Within 180 days after a request by the Department, the permittee shall verify ~~carbon monoxide and any requested toxic~~ emission rates ~~from~~ for any requested pollutants from EUHMAPLANT by testing at the owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in the table below.

Pollutant	Test Method Reference
PM	40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules
PM10 / PM2.5	40 CFR Part 51, Appendix M
NO_x	40 CFR Part 60, Appendix A
SO2	40 CFR Part 60, Appendix A
CO	40 CFR Part 60, Appendix A
VOCs	40 CFR Part 60, Appendix A
Metals	40 CFR Part 60, Appendix A; 40 CFR Part 61, Appendix B; 40 CFR Part 63, Appendix A
Sulfuric Acid Mist	40 CFR Part 60, Appendix A
HAPs	40 CFR Part 63, Appendix A

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PM10 – Small particles less than 10 microns in size

SO2 – Sulphur Dioxide

VOC – Volatile Organic Compounds

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol and must meet the requirements of the federal Clean Air Act, all applicable state and federal rules and regulations, and be within the authority of the AQD to make the change. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1225, R 336.2001, R 336.2003, R 336.2004)**

3. Within 60 days after achieving the maximum production rate, but not later than 180 production days after commencement of trial operation, the permittee shall verify PM10, PM2.5, NOx, CO, SO2, VOC, arsenic, benzene and formaldehyde and Lead from EUHMAPLANT by testing at the owner's expense, in accordance with Department requirements. Testing for each pollutant shall be performed once every 12-month period until three consecutive tests demonstrate compliance with its applicable emission limit. The testing shall be performed using an approved EPA Method listed in the table below.

Pollutant	Test Method Reference
PM10 / PM2.5	40 CFR Part 51, Appendix M
NO_x	40 CFR Part 60, Appendix A
SO2	40 CFR Part 60, Appendix A
CO	40 CFR Part 60, Appendix A
VOCs	40 CFR Part 60, Appendix A
Metals	40 CFR Part 60, Appendix A; 40 CFR Part 61, Appendix B; 40 CFR Part 63, Appendix A
HAPs	40 CFR Part 63, Appendix A

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4. Within 60 days upon the initial burning of fuel oil ~~RUO~~ in EUHMAPLANT, the permittee shall verify PM10, PM2.5, NOx, VOC, ~~and~~ SO2, arsenic, benzene and formaldehyde .and lead from EUHMAPLANT by testing at the owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in the table below.

Pollutant	Test Method Reference
PM10 / PM2.5	40 CFR Part 51, Appendix M
NO_x	40 CFR Part 60, Appendix A
SO2	40 CFR Part 60, Appendix A
VOCs	40 CFR Part 60, Appendix A
Metals	40 CFR Part 60, Appendix A; 40 CFR Part 61, Appendix B; 40 CFR Part 63, Appendix A
Sulfuric Acid Mist	40 CFR Part 60, Appendix A
HAPs	40 CFR Part 63, Appendix A

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RAP – Recycled Asphalt Pavement

COMMENTS ON MATERIAL USAGES

8. Comment

A commenter suggested the recordkeeping for the 50% recycled asphalt pavement (RAP) be demonstrated on a shorter-term basis.

AQD Response

The averaging time and associated recordkeeping are changed from monthly to weekly in the final permit.

Condition Change

EUHMAPLANT – II. MATERIAL LIMIT(S)

~~4~~3. The permittee shall limit the asphalt mixture processed in EUHMAPLANT to a maximum of 50 percent RAP material, based on a weekly average. **(R 336.1224, R 336.1225, R 336.1702)**

VI. MONITORING/RECORDKEEPING

14. The permittee shall keep weekly records of the following production information for EUHMAPLANT
    a) The RAP feed rate, including the average percent of RAP per ton of hot mix asphalt produced containing RAP. **(R 336.1224, R 336.1225, R 336.1702)**

COMMENTS ON EMISSION CALCULATIONS

9. Comment

A commenter requested the emission calculation methods used to demonstrate compliance with annual emission limits be explained in the permit.

AQD Response

Appendix D describing the acceptable methods for calculating emissions was added to the final permit. Also, the recordkeeping conditions which outline the calculation methods were updated in the final permit to reference the new appendix.

Condition Change
EUHMAPLANT – VI. MONITORING/RECORDKEEPING

8. The permittee shall keep in a satisfactory manner, monthly and 12-month rolling time

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BACT – Best available control technology

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EGLE – Michigan Department of Environment, Great Lakes and Energy

HAP – Hazardous Air Pollutant

MAERS – Michigan Air Emission and Reporting System

PTI – Permit to Install

SO2 – Sulfur Dioxide

VOC – Volatile Organic Compounds

period emission calculation records of all criteria pollutants listed in the Emission Limit Table for EUHMAPLANT using the calculation methods in Appendix D or an alternate method acceptable to the AQD District Supervisor. If stack test results for EUHMAPLANT exist for any of the pollutants, the permittee may use those stack test results to estimate pollutant emissions subject to the approval of the AQD. In the event stack test results do not exist for a specific pollutant; the permittee shall use the applicable emission factor listed in the Emission Limit Table to estimate the emissions of a pollutant from EUHMAPLANT. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1205(1)(a), R 336.1205(3), R 336.1225, R 336.1702)**

EUYARD – VI. MONITORING/RECORDKEEPING

2. The permittee shall calculate, in a satisfactory manner, the annual fugitive dust emissions for EUYARD for each reporting year, using emission factors approved by the Department such as those used in MAERS or an approved PTI application using the calculation methods specified in Appendix D or an alternate method approved by the AQD District Supervisor. **(R 336.1371, R 336.1372)**

FGFACILITY – VI. MONITORING/RECORDKEEPING

2. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period CO, SO2, each individual HAP, and aggregate total HAPs emission calculation records using methods specified in Appendix D or an alternate method approved by the AQD District Supervisor for FGFACILITY, as required by SC I.1, SC I.2, SC I.3, and SC I.4. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1205(3))**

10. Comment

A commenter stated concerns about the lack of VOC emission limits in the proposed permit and how that does not demonstrate compliance with Rule 702. Commenters also stated a VOC emission limit must be included because VOC emission limits have been included in air permits for other asphalt plants in the state. Some commenters expressed concerns that the lack of a limit in the permit means an unlimited amount of that pollutant can be emitted.

AQD Response

The potential VOC emissions from the Ajax facility are restricted using fuel type and throughput restrictions. Long and short-term VOC limits have been added to the final permit, including a requirement to perform VOC emissions testing. The Rule 702 VOC best available control technology (BACT) demonstration is satisfied in the permit through restrictions of the use of a

condensation and recovery system on the asphalt tanks, blue smoke control system for controlling emissions from the silos, restrictions on fuel types and equipment parameters.

Condition Change

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
14.VOC	0.06 lb/ton[b]	Hourly	EUHMAPLANT	SC V.2, SC V.3, SC V.4	R 336.1205(1)(a), R 336.1702
15.VOC	26.29 tpy[a]	12-month rolling time period as determined at the end of each calendar month	EUHMAPLANT	SC VI.8	R 336.1205(1)(a), R 336.1702

[a] Annual limits based on 876,322 tons HMA paving material production.
[b] Pound pollutant per ton of HMA paving material produced.

ACRONYMS
These acronyms are used on this page:

AQD – Air Quality Division of EGLE

EGLE – Michigan Department of Environment, Great Lakes and Energy

HMA – Hot mix asphalt

Lb/ton – Pounds per ton

Tpy – Tons per year

VOC – Volatile Organic Compounds

The Emission Testing final permit conditions were modified to include VOC testing as specified in Comment #7.

COMMENTS ON LEAK DETECTION

11. Comment

A commenter stated a bag leak detection system should be required for the baghouse.

AQD Response

A bag leak detection system that monitors particulate levels was added to the final permit. The proposed permit referred to a bag leak detection system in the appendix on page 22. This was in reference to a pressure drop alarm system that monitors particulate emission levels and not a bag leak detection system. References to the pressure system as the bag leak detection system were removed.

Condition Change

EUHMAPLANT – IV. DESIGN/EQUIPMENT PARAMETER(S)

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EGLE – Michigan Department of Environment Great Lakes and Energy

1. The permittee shall install, maintain, and operate the fabric filter dust collector, associated parameter monitoring, recording system, and associated alarm systems for EUHMAPLNT in a satisfactory manner. The baghouse shall be equipped with a bag leak detection system. The alarm system will be calibrated and fully operational within 180 days of startup. Except as allowed in Appendix C, satisfactory operation of the fabric filter dust collector requires a pressure drop range between 2 and 10 inches of water column during operation. The minimum pressure drop shall not be less than 2 inches water gauge during operation, ~~except when a large number of filter bags have been replaced or other reason acceptable to the AQD~~. unless a reason acceptable to the AQD has been provided, such as when a large number of filter bags have been replaced. **(R 336.1910, 40 CFR 52.21(c) & (d)))**

VI. MONITORING/RECORDKEEPING

13. The permittee shall record all instances of alarms for the high temperature and bag leak detection system, once the system is calibrated, for the EUHMAPLANT fabric filter system including the reason the alarm was activated and the actions taken. **(R 336.1224, R 336.1225, R 336.1910)**

APPENDIX B
PREVENTATIVE MAINTENANCE PROGRAM FOR THE FABRIC FILTER DUST COLLECTOR

2. FABRIC FILTER DUST COLLECTOR / PLANT ALARM SYSTEM.

The fabric filter dust collector shall be equipped with a high temperature sensor with an alarm system and, a pressure detection sensor with an alarm system. The baghouse shall also be equipped with a bag leak detection system and alarm that directly monitors changes in particulate emissions. The high temperature alarm system shall be designed to set off an alarm when the high temperature set-point has been violated, and, to begin a sequential shut-down of the plant if the situation is not resolved within a very short period of time after the alarm sounds. The ~~bag leak~~ pressure detection sensor shall be designed to set off an alarm when the pressure drop across the baghouse drops below 2 inches or raises above 10 inches. A log of all alarm instances shall be maintained including the reason the alarm was activated and the actions taken.

COMMENTS ON FOOTNOTES

12. Comment

A commenter stated that EUHMAPLANT SC I.4 through I.7 include a reference to footnote c. However, footnote c does not appear to be included within the emission limit table.

AQD Response

Footnote c was removed in a previous version of the draft but the references in the table were missed. Those references are removed. (See redlined version of permit conditions in Appendix A of this document)

II. SUMMARY OF SIGNIFICANT COMMENTS

This section includes comments that were received and the AQD evaluated, however, did not result in changes to the permit or may not be under the AQD's authority to change.

Comments and recommendations were received from the USEPA, the responses to their comments are addressed in this section as part of similar comments received from other commenters. The USEPA comments, and recommendations have also been answered specifically in Appendix B of this document.

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EGLE – Michigan Department of Environment, Great Lakes and Energy

PUBLIC HEALTH AND ENVIRONMENT CONCERNS

13. Comment

Commenters expressed concerns that EGLE does nothing to help the environment.

AQD Response

EGLE's mission is to protect Michigan's environment and public health by managing air, water, land, and energy resources.

The AQD does this by regulating industrial sources of air pollutants to make sure they meet all the air related rules and regulations in place to protect public health. The air permitting process requires sources like Ajax to use best practices and use emission control equipment which reduce pollutants released into the air. The AQD sends inspectors to make sure that companies are complying with all air related rules or regulations.

EGLE has a staff of over 1,300 individuals who implement numerous state and federal programs across all portions of the environment to ensure public health and the environment are protected. The current air and water quality in Michigan are better than they have been for

several decades, while EGLE staffing levels for many program areas are at all-time highs and others, like the AQD, are seeing growth.

14. Comment

This type of plant will have a large environmental impact and release a large amount of toxins. Asphalt plants in general should not be permitted in the state

ACRONYMS
These acronyms are used on this page:

AQD – Air Quality Division of EGLE

Minor Source – A source that is not subject to major source regulations or permitting

NAAQS – National Ambient Air Quality Standards

PM – Particulate Matter

PM2.5 – Small particles less than 2.5 microns in size

PM10 – Small particles less than 10 microns in size.

PSD – Prevention of Significant Deterioration

TAC – Toxic Air Contaminants

VOC – Volatile Organic Compounds

AQD Response

The role of the AQD is to determine if the application for a new source of air emissions, meets the air quality rules and regulations in place to protect public health and the environment, including asphalt plants. Permits issued to asphalt plants include requirements restricting emissions in order to protect public health. Asphalt plant requirements in Michigan exceed those of many other states, including an air toxics evaluation and corresponding emissions limits, requiring the collection of emissions when loading into trucks, and for stationary plants to only use newer, lower emitting technology such as counter-flow or dual drums. This technology has been shown to be lower emitting than other types of drums.

Asphalt plants in general are minor sources of air pollutants and require use of air emission controls and equipment limiting emissions of PM, PM10, PM2.5, VOCs and toxic air contaminants. Specifically, the Ajax permit limits the allowed emissions to less than major source thresholds for all regulated pollutants and all hazardous air pollutants. In reviewing the Ajax application, the potential worst-case emissions of each pollutant were evaluated and found to meet all applicable state and federal health-based standards and screening levels in place to protect public health, including the NAAQS, the PSD Increments, and the State of Michigan toxics screening levels.

15. Comment

How will the proposed plant affect the natural environment in the area? How will it impact the soil and pets in the area?

AQD Response

Impacts of pollutants below the NAAQS are not expected to result in harmful effects to soils, vegetation, and wildlife. The secondary national ambient air quality standards are specifically set to provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings. For this application, the AQD compared the maximum facility impacts to allowed NAAQS and the results show all standards will be met.

Michigan has specific rules for regulating the emission of pollutants that are not the criteria pollutants. These other pollutants are referred to as TACs and are regulated based on both health-based risk assessment and control technology. Often for pollutants other than the criteria pollutants there is less known about the effects of the potential impacts on the surrounding environment.

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EGLE – Michigan Department of Environment, Great Lakes and Energy

ENVIRONMENTAL JUSTICE/PUBLIC NOTICE CONCERNS

16. Comment

Multiple comments were received concerning the proposed site selection for the facility. These comments included:

- Concerns about why the site was located in an area of high minority and low-income populations.
- Concerns that the plant was previously rejected in other areas.
- Concerns about its distance to recreational areas, schools, and residents.
- Statements that the site should have been modeled to see if alternative sites would have less of an impact on an existing environmental justice area during the site selection process
- Suggestions that EGLE use brownfield funds to subsidize Ajax to build elsewhere.
- Question if the State prefers or encourages the redevelopment of industrial land rather than to industrialize and take out of production agricultural land?
- Concerns about decreased property values and property taxes in the area.

AQD Response

EGLE does not participate in the site selection process, but rather evaluates applications for locations proposed by the applicants. Companies commonly obtain local permits to build and select properties that have been properly zoned, prior to submitting an air use permit application to the AQD. These local decisions, including zoning, determine where businesses may locate. EGLE cannot include local zoning decisions as part of our air quality air permit decision. The State of Michigan Attorney General issued a formal opinion (Opinion No. 6992) on this matter in 1998.

EGLE is aware of another asphalt plant for a different company that may not have been successful in their request for local rezoning. This would have happened prior to our involvement. The proposed Ajax site is properly zoned for installation and operation of an asphalt plant.

EGLE asked Ajax if other potential locations were considered. Ajax responded stating there is no legal requirement for an alternative site analysis for this minor source.

EGLE requested Ajax provide information about how the location was selected. Ajax identified the Genesee Township site based on the local market need for an asphalt facility and considered the site as well-suited for their industrial use based on the following:

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EGLE – Michigan Department of Environment, Great Lakes and Energy

EJ – Environmental Justice

HMA – Hot Mix Asphalt

- Local road repairs are needed around Genesee Township, Flint, etc.
- Limited transport radius for HMA given temperature, other material requirements
- Nearby supply of HMA facilitates local repairs and reduces longer truck travel (and related emissions)
- The area is underserved with respect to asphalt mix supply because there is only one existing asphalt plant in the Flint area
- The plant will create a competitive bidding environment that will benefit the taxpayers in the greater Flint area
- The site is zoned “heavy industrial”
- The site is situated on an all-season designated route specifically intended for truck traffic
- Nearby I-475 access to minimize local road traffic
- Large parcel – one of or possibly the largest parcel for an HMA plant in Michigan
- Industrial neighbors and natural wooded barriers
- Zoning and related approvals provided by Genesee Township

Any company, including Ajax, can apply for funding through the Brownfield Redevelopment Program, however EGLE does not have the authority to require any company to take part in the program.

Lastly, the permit application review included air dispersion modeling to demonstrate the facility will not exceed health-based standards in all areas surrounding the facility, including recreational, educational, and residential areas. In applying these standards consistently and fairly in the permit process the state is protective of all Michigan residents.

17. Comment

Multiple commenters stated that allowing any additional emissions in an existing environmental justice area has a discriminatory impact on a community and is therefore a violation of Title VI, regardless of intent.

AQD Response

The current state and federal air quality regulations do not prohibit the increase of emissions nor the installation of a new emission source in an EJ area. The AQD recognized and

acknowledged the proposed location of the facility is in an EJ area. This resulted in an additional analysis not typically done for a minor source permit. That additional analysis included criteria pollutant modeling incorporating fugitive emissions to ensure public health and safety would be met. Considerations of the demographics of the area were considered, resulting in additional outreach and accommodations during the public comment period as previously discussed.

ACRONYMS
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AQD – Air Quality Division of EGLE

EGLE – Michigan Department of Environment, Great Lakes and Energy

NAAQS – National Ambient Air Quality Standards

RUO – Recycled used oil

18. Comment

Commenters stated because the area has a higher portion of homes with lead-based paint in addition to previous possible lead exposure from water, EGLE should not allow or permit any additional lead in the area as the residents need clean air to recover.

AQD Response

AQD is tracking the historical issues with lead in this area to understand the larger context of the area surrounding the facility. As noted in the 2019 Flint and Genesee County Community Health Needs Assessment Report, this area has priority needs to address issues that stem from previous lead exposures.

While there is no known safe level of lead in blood, the NAAQS provide protection against the adverse effects from lead by limiting lead exposure. Under the draft proposed permit, the predicted maximum air concentration of lead the public might be exposed to from the facility was evaluated and found to meet the lead NAAQS. Furthermore, background levels of lead were added to the predicted maximum air concentration of lead the public might be exposed to from the facility. The resulting level was also found to meet the lead NAAQS.

The burning of RUO was the main source of the predicted lead emissions from the Ajax facility and was allowed in the draft proposed permit. However, in the final permit, the burning of RUO is not allowed, so predicted lead emissions from the facility are reduced. An even greater level of compliance with the NAAQS will be achieved now that Ajax is no longer allowed to burn RUO.

19. Comment

A commenter stated no asphalt plants are ever proposed in areas that are not minority or low income.

AQD Response
There are currently over 65 permitted stationary and several portable asphalt plants permitted to operate in Michigan. Most of these asphalt plants are not located in environmental justice areas. The public is not aware of most asphalt plants because generally speaking they have operated for many years without incident, or their level of emissions did not require public notice during the permitting process. Ajax was subject to public notice because the area is of “known public

controversy". Among other things, the proposed location is also an environmental justice area. It is important to note, the site selection lies with the facility and the local officials, not EGLE.

ACRONYMS
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AQD – Air Quality Division of EGLE

EGLE – Michigan Department of Environment, Great Lakes and Energy

MAC-EJ – Michigan Advisory Council of Environmental Justice

OEJPA – Office of Environmental Justice Public Advocate

Polyaromatic hydrocarbons – A type of chemicals that occur naturally in coal, crude oil, and gasoline

TAC – Toxic Air Contaminants

20. Comment

A commenter stated the Environmental Justice Public Advocate should be asked to make a comment. The Environmental Justice Response Team should be given the record of proceedings on this permit application and allowed to give comments too. A special, revised notice should be given to them when extending the public comment period and before scheduling an in-person public hearing.

AQD Response

The AQD recognized the location of the facility as an EJ area and engaged with EGLE's Office of Environmental Justice Public Advocate (OEJPA) throughout the entire permitting process. It is presumed the commenter, when referencing the Environmental Justice Response Team, is referring to the Michigan Advisory Council of Environmental Justice (MAC-EJ). The OEJPA engaged with the MAC-EJ on the proposed permit and communicated with them throughout the public comment period.

21. Comment

Multiple commenters requested a cumulative analysis be performed for toxics air contaminants (TACS). Most justified the need by citing the elevated risk factors for the area indicated USEPA's EJSCREEN and the existence of other nearby industry. One comment stated that a cumulative risk impact analysis should be done for all permit reviews regardless of location. It was also expressed that EGLE has the authority to require this review through Rule 228, Rule 901, and the USEPA's Title VI guidance. Commenters stated the existing higher asthma hospitalization rate in the area and the economic challenges to receive health care justifies the need for a cumulative impact analysis for toxic air contaminants. Also, commenters indicated the increased particulate concentrations from the fires out west should be considered in the cumulative impact analysis.

AQD Response

The AQD has authority to conduct limited cumulative risk assessments for TACs, depending on the proposed permit and equipment being asked for. However, this authority cannot be broadly applied to all permit reviews. For asphalt plants, a limited cumulative risk assessment is routinely done because the mixture of asphalt fumes is regulated using a health-based screening level for the combined risk of cancer from multiple polycyclic aromatic hydrocarbons. This assessment was done for asphalt fumes, and the predicted outdoor air concentration the public might breathe was below the initial risk screening level. However, this type of cumulative

risk assessment is limited for various reasons, for instance it does not typically consider local background levels of these pollutants.

ACRONYMS
These acronyms are used on this page:

AQD – Air Quality Division of EGLE

EGLE – Michigan Department of Environment, Great Lakes and Energy

EJSCREEN – A screening tool used to evaluate if an area needs enhanced public outreach, translation, or may be an environmental justice community

USEPA – United States Environmental Protection Agency

As stated before, the AQD uses state and federal air quality rules and regulations to protect public health and the environment. The predicted emissions from Ajax's facility were evaluated, compared to the national standards, and found to be below them. This evaluation included the addition of background levels of criteria pollutants based on monitored levels. The monitored levels reflect local air quality, including potential particulate from the wildfires out west.

Michigan Air Pollution Control Rule 225 requires predicted air concentrations from new or modified emission units to not exceed allowed screening levels established to prevent noncancer effects and to protect against cancer risks. In review of the Ajax application, which is composed of all new emission units, it was appropriate to do cumulative risk assessments for carcinogens under Rule 225 (2) and 225 (6). That assessment showed the sum of the carcinogenic risk for facility-wide emissions is less than the secondary risk screening level. This shows the facility does not pose an unacceptable carcinogenic risk.

In addition, adverse effects for the noncarcinogenic pollutants predicted to be emitted from the Ajax facility is not expected to occur from potential additive effects.

USEPA's EJSCREEN is a helpful screening tool to identify areas with minority and/or low-income populations and identifying potential environmental quality issues. EJSCREEN provides percentiles, which are relative values of potentially exposed sensitive populations. While EJSCREEN is a helpful screening tool, it has limitations regarding its use for risk assessment in the AQD's permitting process and results from EJSCREEN were not used in the permit health risk assessment.

For the purposes of information sharing, EJSCREEN results for a 1-mile radius around the Ajax site are discussed here. All environmental justice indices have higher percentile scores compared to the rest of the state. This is partially driven by the demographic indicators as there are relatively high populations of people of color as well as populations of people with low incomes in this area. To further understand the context of environmental risks based on results in EJSCREEN, the environmental indicator results around the proposed facility were reviewed. Major air quality-related environmental indicators (for particulate matter, ozone, diesel particulate matter, air toxics cancer risk, and respiratory hazard index) are at or below the 50th percentile, except for the environmental indicator for traffic proximity and volume. This area was at about the 60th percentile as compared to other areas of the state for traffic proximity and volume. However, percentiles for environmental indicators for lead-based paint housing stock and proximity to hazardous waste sources were relatively high for this area as compared to the rest of the state. These other environmental indicators may contribute to air quality as well.

22. Comment

Commenters stated other facilities in the area should be held accountable for their impact on the EJ area.

ACRONYMS
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AQD – Air Quality Division of EGLE

EGLE – Michigan Department of Environment, Great Lakes and Energy
Public Advocate

NAAQS – National Ambient Air Quality Standards

PSD – Prevention of Significant Deterioration

AQD Response

Neither EGLE nor the AQD have the authority to require companies to shut down or modify their compliant operations due strictly to their location being in an environmental justice area.

AQD staff regularly inspects emission sources, and any found to be in noncompliance with the requirements of their permit and/or in violation with any air pollution control rule are addressed through a return to compliance plan and may be subject to enforcement action. In addition, AQD staff responds to air quality complaints. Information about sources can be found on our Air Quality Source Information Page. This page has useful information regarding source permitting, compliance and inspection history.

23. Comment

Commenters had concerns about the Genesee Township public process and notification related to previous zoning and building permits. Specifically, the concerns mentioned Township failure to consider alternative locations and them not releasing a study on asthma in the area.

AQD Response

EGLE does not oversee local jurisdictions, requirements, or issues. This includes local zoning matters. Please contact Genesee Township at 810-640-2000 with any questions or concerns about zoning or building permits in Genesee Township.

24. Comment

A commenter stated that the application did not analyze other sites in the air dispersion modeling. The commenter felt that modeling for the proposed site should be compared with that of modeling for other sites to determine which site would have the least impacts on the surrounding community.

AQD Response

Each application submitted to the AQD is for a specific location. As a part of the application review process, a demonstration must show the proposed emissions will comply with all applicable state and federal health-based standards and screening levels, including the NAAQS, the PSD Increments, and the State of Michigan toxics screening levels. These demonstrations are typically made by using air dispersion modeling at the proposed location.

There is no requirement within either the state or federal air quality rules and regulations for a minor source, such as Ajax, to evaluate alternative sites to find one that will result in lower impacts on the surrounding community. As such, modeling for alternative sites was not completed as a portion of the review of this application.

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EGLE – Michigan Department of Environment, Great Lakes and Energy

OEJPA – Office of Environmental Justice Public Advocate

PUBLIC NOTICE CONCERNS

25. Comment

The "Project Summary" for public consumption contains the following passage: "Key areas that you may be interested in, or that you may want more details on, include.....Testing Requirements – this has testing Ajax would need to do to show they are meeting their emission limits". This language gives a false impression about the nature, effectiveness and frequency of testing, monitoring and recordkeeping requirements contained in the Draft Permit.

AQD Response

Emissions testing requirements are included in an air permit for a facility to demonstrate they are meeting their allowed emission limits. When a proposed permit is made available for public comment, it contains the amount of testing necessary for the facility, if granted the permit, to achieve that demonstration. The comment period seeks comments on the amount of testing, as well as all other requirements, included in the proposed permit, as well as all other aspects of AQD's review of the application. The language in the Proposed Project Summary, referenced by the commenter, is purposely intended to point out the testing requirements as presented in the draft permit conditions, are available for comment by interested parties.

Based upon the comments received, the AQD has added additional testing requirements to the final Ajax permit. Please see Section II Comment # 7 for a detailed discussion of the additional testing added.

26. Comment

Commenters referenced the Flint water crisis and the Genesee Power 1992 case stating the public notice process has not improved. Some commenters also stated they have no confidence in EGLE telling the truth about health and safety matters.

AQD Response

EGLE is committed to achieving equity and transparency as we interact with the public. Both our public meeting and hearing processes have evolved over time to provide greater access and to be more inclusive. In 2019, the OEJPA was created by Governor Whitmer's Executive Order 2019-06 to elevate our focus on achieving environmental justice in Michigan. To help us achieve that goal, EGLE established an updated Public Participation Policy and Procedure, created a new Nondiscrimination Policy and developed its first Limited English Proficiency Plan. The

OEJPA has trained all EGLE staff regarding environmental justice and ways to incorporate equitable treatment and meaningful engagement into our work and continues to work with the AQD and other EGLE divisions to advise on engagement with communities.

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EGLE – Michigan Department of Environment, Great Lakes and Energy

EJSCREEN – A screening tool used to evaluate if an area needs enhanced public outreach, translation, or may be an environmental justice community

OEJPA – Office of Environmental Justice Public Advocate

USEPA – United States Environmental Protection Agency

To ensure Environmental Justice concerns are evaluated, an analysis using an Environmental Justice screening tool, namely USEPA's EJSCREEN, was used for this proposed project. After the evaluation was completed the AQD notified Division Management and the OEJPA of the results. The subsequent application review, public engagement, and formal public comment process were then tailored to ensure an equitable and transparent process following all current policies and procedures.

Additionally, an evaluation following EGLE's Limited English Proficiency Plan was completed and showed no translation was needed for public participation.

In addition to the steps EGLE has taken, for the last several years the AQD has engaged in a process to continually make improvements in how we interact with the public, specifically during public comment periods for draft air permits. These improvements in communication have led to changes in how information is shared with the public, including inserting plain language into as many parts of the process as possible. Examples of our process improvements include: the public notice being posted in both a local newspaper and online, creating a high-level overview known as the Proposed Project Summary which describes what is being requested by the applicant, and how details about the proposed project are spoken about during informational and question and answer sessions prior to the formal hearing. The Department has also been holding longer public comment periods; expanded the methods in which comments may be received; and has taken actions to provide better access to staff so questions may be better answered.

27. Comment

Multiple commenters expressed dissatisfaction with the way residents were notified during the public comment period.

AQD Response

Both Michigan and the USEPA require public comment periods to be a minimum of 30-days. Likewise, both require a minimum 30-day notice prior to a public hearing being held. Due to constraints around the Covid 19 pandemic, the AQD has not held a single in-person public hearing since March 2020. Based upon EJSCREEN evaluations, as well as the known history of the area around the Ajax facility, the AQD determined more outreach beyond the required newspaper posting was needed for this application. To that end, the AQD extended the initial comment period for the proposed permit; posted the public notice as a press release and online;

sent a letter directly to people in the area known to have expressed past interest in environmental activities; and engaged with known environmental justice advocates in the area to ensure information was widely cast.

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EGLE – Michigan Department of Environment, Great Lakes and Energy

When a request was received to extend the comment period so more residents could engage in the process, the AQD extended and put out additional press releases, interested party letters and emails to notify residents. Citizens who provided their email address were also sent notification of the second hearing. Those who did not provide an email address but had given their phone numbers were called. Additional engagement was done with environmental justice advocates and community leaders. Additional information and flyers were shared with the River Park complex and the Ridgecrest Village Townhomes to help inform their residents.

In the time between the two public hearings, the AQD hosted an in-person event to answer questions and to take in-person comments. Notifications announcing this event were mailed and emailed to many individuals and groups. A press release was also put out about this event, and it too was posted on our website. Finally, additional engagement was done with environmental justice advocates and community leaders.

In all, the public comment period for this application lasted 83 days and included two virtual public informational sessions and two virtual public hearings as well as an in-person event to answer questions and take in-person public comments.

28. Comment

Multiple commenters criticized the public meetings held during the comment period. The criticisms included:

- Concerns about the format for the informational sessions and public hearings.
- Concerns about the date the first hearing was held.
- Concerns about the location of the in-person event.
- Citizens being intimidated by EGLE staff greeting them and “blocking tables” at the in-person event.
- Concern that the public was discouraged from discussing odor issues at the in-person event and told to focus on technical, non-odor/nuisance issues related to the permit, despite the fact that quality of life must be considered.

AQD Response

Typical public comment periods include the opportunity for both a public informational session and a public hearing. While they are usually held back-to-back on the same evening, it’s important to note they are two separate and distinct meetings with two different purposes.

ACRONYMS
These acronyms are used on this page:

AQD – Air Quality Division of EGLE

CDC – Centers for Disease Control

EGLE – Michigan Department of Environment, Great Lakes and Energy

The purpose of a public informational session is for EGLE staff to present an overview of the applicant's proposed project and to answer questions about the AQD's technical review. The intent is to provide information to help the public understand the proposal and decide if they would like to make comment. The information provided by EGLE staff may also assist in formulating comments which could impact the permitting decision. EGLE staff taking part in the discussions during the informational sessions do not include the decision maker and statements made during the informational session are not considered comments.

The purpose of a public hearing is to receive verbal comments on a proposed permit and AQD's review of the application. During the public hearing, public statements are taken on the record, and while the decision maker is present to hear the public comments, there is no discussion during the formal part of the hearing. When a hearing is held in-person, EGLE staff is available outside the hearing room to answer questions. The public hearing is only one of many ways to provide comment on a proposed agency action. Official comments may also be submitted via email, U.S. Mail, or voicemail. All comments regardless of the format in which they are submitted are evaluated equally.

The Ajax public comment period consisted of two virtual public informational sessions followed by two virtual hearings held on August 3 and September 1, and an in-person public opportunity held on August 11th to meet with AQD staff and to provide comments. The public hearings were held virtually due to the Covid 19 crisis and limitations on our ability to ensure CDC safety recommendations could be met. This is consistent with AQD public hearings which have been held virtually since March of 2020; the exception being the August 11 event as the only in-person meeting the AQD has held involving the public during that time. Based upon the comments received, the AQD will make efforts to avoid holding future public informational sessions and hearings on certain days when there are other conflicting events, such as local elections.

The second virtual public informational session, second hearing, and the in-person opportunity to meet with AQD staff and to provide comments were both held in-response to concerns and requests raised by the public. The location of the in-person event was selected based on its availability on the date of the event, internet/phone access, its proximity to the proposed site, as well as the neutral environment. As recommended by a commenter, access to public transit may be evaluated in future location selections.

The in-person event was held in a town-hall format rather than a panel format because it is AQD's experience that more questions are asked and addressed in this format. The same staff presenting and answering questions at the two virtual public informational sessions were available at this in-person event to also answer questions. AQD staff greeted everyone, offering assistance to make the process as easy as possible. Staff was available at every informational station (table) as well mingling to help those who may need assistance. No restrictions were placed on the nature of people's comments. Phones and laptops were provided to allow for the submittal comments.

Staff shared information on the type of comments which could impact the permitting decision, including those involving the technical review, the draft conditions, and the permitting process.

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AQD – Air Quality Division of EGLE

EGLE – Michigan Department of Environment, Great Lakes and Energy

EIS – Environmental Impact Statement

HUD – US Housing and Urban Development

NEPA – National Environmental Policy Act

PTI – Permit to Install

The technical review and proposed permit included considerations for odor and health-based concerns, and these issues were discussed among AQD staff and commenters during the session. Not all citizens wanted to discuss the review and simply wanted to voice their concerns or verbally state their comment to AQD staff who directed them to submit an official comment. Many simply wanted to "vote" no on the proposed plant and were frustrated when told the decision to issue or deny the permit could not be based on popularity of the proposal.

29. Comment

A commenter questioned if EGLE was required to produce an Environmental Impact Statement (EIS) in accordance with the National Environmental Policy Act (NEPA) of 1969 for the proposed project.

AQD Response

EIS is required for actions by federal departments or agencies conducting or supporting public work activities which "significantly affecting the quality of the human environment." This includes projects such as new highway or railway corridors over long distances. EGLE air permits are not subject to EIS requirements.

30. Comment

The U.S. Department of Housing and Urban Development (HUD) requested to take part in any future discussions of any projects that have the potential to impact HUD residents.

AQD Response

The AQD has noted this request from HUD and will look for ways to provide earlier notification of applications requiring public comment, having the potential to impact HUD communities. Additionally, all permit applications under review by the AQD are listed at our Air Permits Webpage, Pending PTI Applications List.

31. Comment

Commenters stated that EGLE did not engage the public early in the review process. The commenters stated the application was submitted in December 2020 and the public should get 6 months to review the application because that is how long EGLE took to review it.

ACRONYMS
These acronyms are used on this page:

AQD – Air Quality Division of EGLE

EGLE – Michigan Department of Environment, Great Lakes and Energy

PTI – Permit to Install

AQD Response

Ajax's application was received by the AQD on December 28, 2020 and was listed publicly on the AQD website which lists PTI applications under review. The public comment period began on July 1, 2021, approximately 6-months after the application was received. During that time, AQD staff reviewed the entire application including the emissions calculations, the regulatory analysis, and the dispersion modeling; wrote and negotiated the proposed permit with Ajax; and wrote and published the public comment documents. The purpose of the public comment period is to obtain comments on the proposed permit conditions and the AQD's review of the application. Thus, it is unable to begin until both of those are completed.

The required public comment period is 30 days and involves an opportunity for an informational session and public hearing. In response to concerns received from the public, the Ajax public comment period was extended to 83 days and included two virtual public informational sessions and public hearings, and an in-person opportunity to speak with AQD staff and submit public comments.

Although a proposed permit is not open for formal public comment until the comment period officially begins, the AQD understands residents may want to have more notice that a permit is being proposed. Such early notice will help them be ready to make comments. As previously mentioned, all permit applications under review by the AQD are listed at our Air Permits Webpage, Pending PTI Applications List. In addition, the AQD will post applications for proposed permit actions where there is known public interest and will be subject to public involvement (based on the criteria in Part 5511(3) of the Natural Resources and Environmental Protection Act), on AQD's Applications of Interest webpage. Going forward, the AQD will review how, where, and when we post the application material to ensure this is happening in as expeditious and transparent manner possible.

Also, in cases where public interest may be high and the permit will be open for comment once the draft is complete, the AQD encourages companies to do their own community outreach early in the process. It is up to the company to initiate this initial outreach and let the community know what they are planning. In the case of the Ajax proposal, the AQD encouraged Ajax to undertake such outreach and they chose not to.

NOTE: Current applications undergoing review by the AQD Permit Section can be found on our Air Permits Webpage, Pending PTI Applications List. This list is updated weekly, and applications remain posted here until a final decision is made.

32. Comment

What steps did EGLE take to identify the needs of the community beyond listing an email address to request language interpretation or other accommodations? The resources made available through EGLE's website are neither easily accessible nor presented in a way that

matches the literacy levels of the surrounding community.

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EJSCREEN – A screening tool used to evaluate if an area needs enhanced public outreach, translation, or may be an environmental justice community

LEP – Limited English Proficiency

AQD Response

The need for translation services was also evaluated using EJSCREEN in a 1-mile radius around the facility as detailed in the LEP Plan. It was found translation was not needed based on the analysis showing less than 4% of the population spoke English "less than very well." Additionally, 0% of the population is a linguistically isolated population (4% is the national average, 2% is the state average). We do recognize there are some residents in the area who do not speak English as their primary language. Translation services are always available upon request.

The AQD is aware everyone has a different level of understanding and familiarity with air quality rules, regulations, and procedures. We strive to offer information about proposed permits at different levels of technical content, while still meeting our regulatory requirements to include specific technical and legal information. The AQD has recently participated in a plain language project where several of the typical permit related documents were evaluated and changed for easier understanding.

In addition, we frequently update our documents based upon input from the public. For instance, both the Notice of Hearing and the Proposed Project Summary, which offers the plainest language version of the proposed project, have been simplified. The Proposed Project Summary is intended to present a high-level description of the proposal along with some health and outdoor air quality information to help the public decide if they would like a more in-depth look. That more in-depth look is available in the Technical Fact Sheet which includes much more detailed information about the emissions calculations; the applicable rules and regulations; the review performed by AQD staff; and the proposed permit requirements. Together, all the documents are intended to allow the public to have as high level or as deep of a dive as possible into the information regarding the proposal and to allow the highest level of transparency. Also, these documents contain contact information for AQD staff if a resident has further questions, needs clarification, and/or wants additional information.

In addition to providing the written documents, the AQD staff provided information about and answered questions from the public at two virtual public informational sessions and hearings held for the Ajax application on August 3 and September 1. Also, staff was available to answer question and provide information at an in-person opportunity to provide public comments held on August 11.

33. Comment

Commenters noted that the printed notices dated July 1, 2021, did not successfully arrive at the mailboxes of some community members until weeks later.

AQD Response

The AQD strives to provide open and transparent communication for all public engagement opportunities and actions requiring public comment. There is a detailed discussion about our outreach efforts in Section I of this document. To ensure there was ample notification for the meetings and extensions for Ajax the AQD used many avenues to provide information, those included:

- Mailing individuals through the U.S. Mail where the AQD only had a mailing address
- Email to those who provided an email address
- Provided fliers for distribution
- Delivered fliers to the Ridgecrest Village Townhouses

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U.S. Mail – United States mail

While it's possible a few of the initial letters may have not arrived in a timely manner due to the U.S. Mail process, all individuals and organizations on the original list were sent four different correspondences concerning the comment period from the AQD. The proposed project, virtual hearings, and opportunities for comment were also covered by local media. In all, the comment period was 83-days long, providing all citizens ample time to review the information and provide comment.

34. Comment

Commenters indicated that inconsistent information about the comment period closing date was posted in the various public documents visible on the AQD website. The commenters felt the documents were not updated, potentially leading some residents to see only the original August closure date. Not realizing the comment period was extended, residents may have been led to believe their opportunity to provide public comment had already closed.

AQD Response

All new and updated documents extending the length of the public comment period were added to the AQD website on the day they took effect. However, the original or earlier documents were not removed or updated. The AQD understands how this may have been confusing if a person was viewing the Notice of Hearing document after the comment period had been extended. To avoid similar misunderstandings in the future, the AQD will add a note on the hyperlink name of the original documents indicating the comment period has been extended.

35. Comment

A comment stating that EGLE's Ajax Proposed Project Summary mischaracterized the location of the proposed site as being in "Flint Township" rather than Genesee Township. Flint Township is on the far west side of the City of Flint, whereas Genesee Township is northeast of Flint. There also was a comment stating that, in the original Public Notice, the period at the end of the sentence with the email address makes it "the wrong email address."

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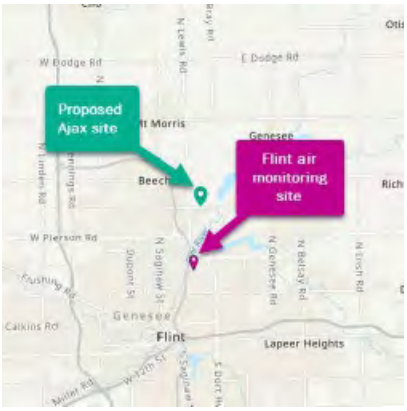
AQD Response



The Proposed Project Summary listed the proposed location of the Ajax facility as 5088 Energy Drive, Flint, Michigan. On the first page, the document also contained a map (copy also shown here) showing the proposed location of the facility. The document was in error on the second page when it stated that it was zoned by Flint Township, however, the document was clear on the location of the proposed site itself.

The email address in question was in a bulleted list with every line ending with a period which may have caused an issue for some people. EGLE staff was contacted about this at the end of the comment period. In future drafts of the Notice of Hearing, the periods at the ends of the bulleted list will be removed, to avoid confusion.

36. Comment

Concerns indicated that AQD staff was giving pat answers rather than sufficient explanations to the questions asked by the public during the informational session prior to the first hearing on August 3.

AQD Response

AQD welcomes questions from the public on proposed permits and strives to provide complete answers. AQD staff make every effort to give thorough answers to questions from the public before, during and after informational sessions. Efforts are also taken to follow up to make sure the answers were understood. Informational sessions, whether online or in-person, are designed to provide high-level information about the AQD, how the permitting process works, details on the proposed project, details about the review of the application, insight into the proposed permit, and then to interact with attendees on further questions they may have. The AQD purposefully includes all staff, not just the permit engineer, who were involved in the review of the application in these sessions. This is done so questions can be answered in detail and using information directly related to the proposal. Contact information is provided for AQD staff so individuals may follow-up on additional questions or the need for clarification.

37. Comment

A commenter stated that If there are changes to the application or review needed resulting from the comments received, the company should have to submit a new application and be subject to another public comment period.

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AQD Response

The air permit application review process has many steps, including those that allow for the submittal of information to supplement an application. Often, permit applications are not complete when received by the AQD and additional information requests are necessary and an important part of the review process. All information submitted by the applicant throughout the review process becomes part of the final permit application file. This includes any information or additional review in response to the public comments received.

The decision maker has three options they may pursue after reviewing all comments received on an application. They may issue the final permit with no changes; issue the final permit with modifications to the proposed permit based on comments received during the comment period; or deny the permit. If the final changes to the permit conditions are substantial and result in a relaxation from what was initially presented for public review, a second public comment period may be required. For example, allowing higher emissions or changing the applicability of a federal standard.

38. Comment

Several commenters expressed that they wanted to "Vote No" on the proposed asphalt plant. They also stated the decision on the permit should be delayed until the people have a chance to accept or reject the location of the plant.

AQD Response

The AQD cannot base a permit decision on the popularity of a proposal. The permit decision must be based on the ability of the proposed project to meet the state and federal air pollution control laws established by the legislative process.

The process of selecting a location for a proposed facility starts in many cases well before a permit to install application is submitted to EGLE. Local zoning is evaluated and determined at the city or township level. EGLE does not have oversight of local zoning boards. If there are questions or concerns with the location of the facility or local zoning ordinances, those should be addressed to local Township officials.

39. Comment

Commenters stated the laws and standards need to change and be structured with a much higher bar to allow more decisions to be based on environmental justice. The commenters also stated that governmental leaders need to put action behind their words that we hear at election time.

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OEJPA – Office of Environmental Justice Public Advocate

USEPA – United States Environmental Protection Agency

AQD Response

The comment is noted, however the Ajax permitting decision is based on the air quality laws and standards currently in place. The state laws that govern EGLE's decisions are set by the Michigan Legislature and the Governor. Through the work of the OEJPA and the Interagency Environmental Justice Response Team created by Executive Order 2019-06, the state is developing policies and procedures to assist in assuring environmental justice principles are incorporated into departmental and agency decision making and practices. Part of this work also includes identifying and making recommendations to address discriminatory public health or environmental effects of state laws, regulations, policies, and activities on Michigan residents, including the examination of disproportionate impacts. EGLE is also working with our federal partner, USEPA, to identify ways to address environmental justice concerns.

40. Comment

A commenter expressed concerns that allowing the short-term throughput limit over the drum rating at this location is racial and economic discrimination when it was not allowed at a different Ajax facility.

AQD Response

A permit to install application contains information regarding the facility's proposed emissions and equipment specifications. The throughput restrictions included in a permit are based on information provided in the application and how emission levels compare to health-based standards. This varies from facility to facility and is based on the proposal meeting applicable air quality rules and regulations.

The other Ajax facility referenced by the commenter has throughput restrictions equal to the drum capacity based on a daily average without any limit on a true hourly basis. The proposed conditions for the Ajax Flint facility included both a daily restriction equal to the drum capacity and a true hourly throughput limit. Thus, making the Ajax Flint proposed permit more restrictive than the permit for the other Ajax facility which had no limit on true hourly production.

It is worth noting the true hourly throughput limit in the final permit was lowered to 550 tons per hour.

ACRONYMS
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EGLE – Michigan Department of Environment, Great Lakes and Energy

NAAQS – National Ambient Air Quality Standard

NATA – National Air Toxics Assessment

AIR TOXICS AND RISK ASSESSMENT

41. Comment

Multiple commenters expressed concerns about the air quality for nearby residents and the effects the Ajax facility will have on green spaces, the St. Francis Prayer Center, and nearby wildlife and pets.

AQD Response

In order to assess this, the AQD does a review of the proposed emissions in comparison to the NAAQS. There are two types of federal NAAQS:

- Primary NAAQS - The primary standards protect public health and the environment. They are designed to protect the health of the general public, including sensitive groups like children, elderly, and those with chronic respiratory ailments.
- Secondary NAAQS - The secondary standards are designed to provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings.

Review of the application showed the emissions from the Ajax facility will meet both the primary and secondary NAAQS. A NAAQS demonstration is done via computerized air dispersion modeling which takes into account the emissions from the proposed facility, nearby sources and local background levels in the surrounding community. A NAAQS demonstration uses a cumulative modeling approach for a single pollutant to show the standard is met.

For emitted pollutants that do not have NAAQS, Michigan health-based screening levels were used to evaluate the proposed emissions. All were found to be meeting their respective screening levels.

Also, while not included in the permit review, information from other air quality assessments is discussed here for informational purposes. There is the National Air Toxics Assessment (NATA), which can be used to estimate local, outdoor air quality based on emissions data from sources like regulated industries, traffic, and secondary pollution that forms in the air from reactive pollutants. With NATA, there are health risk estimates for breathing approximately 140 various pollutants other than the criteria pollutants for which the NAAQS have been established. There are also estimates for the risk of breathing multiple pollutants that can cause cancer or noncancer effects, like respiratory problems. In the latest version of NATA, which is based on 2014 emissions data, the cumulative outdoor air cancer risk from estimates of emissions in this area is approximately 23 in one million, which is similar to the national average of 32 in one million and the statewide average of 24 in one million. Based on the 2014 emissions data, the cumulative risk of a noncancer adverse effect in the respiratory system did not reach a level of a health concern. Due to citizen complaints and violation notices issued to regulated facilities near the Ajax site, there are local air quality issues that have been noted in the past. These air quality

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NAAQS – National Ambient Air Quality Standards

NATA – National Air Toxics Assessment

TAC – Toxic Air Contaminants

issues are being addressed through compliance and enforcement measures but are noteworthy because they may not be reflected in local air monitoring or assessments like NATA. Taken together, assessments of local air quality show compliance with NAAQS and is similar to other areas in the state.

42. Comment

Multiple commenters were concerned about exposures of sensitive groups in the area to pollutants including those who may have chronic obstructive pulmonary disease, asthma, need supplemental oxygen, or have had previous lead exposure.

AQD Response

The AQD uses state and federal air quality rules and regulations to protect public health and the environment. The federal Clean Air Act includes the NAAQS which are developed from research studies and set at levels to protect public health. This includes health protection for sensitive groups, like people who have heart problems or asthma. The predicted emissions from the Ajax facility were evaluated, compared to the standards, and found to meet them.

In addition, chemicals that do not have an established NAAQS must meet the applicable allowed State of Michigan health-based screening levels. These screening levels are developed to protect the public from cancer and noncancer effects based on toxicological research. This includes health protection for sensitive groups, like people who have asthma. The predicted TAC emissions from the Ajax facility were modeled to determine outdoor air concentrations that the public might be exposed to and were then compared to the applicable screening levels. All emissions are below the applicable allowed health-based screening levels.

Of note, the AQD also tracks information like local community health assessments and health statistics because it is important to understanding the larger context of the area surrounding the Ajax facility. These assessments include the 2019 Flint and Genesee County Community Health Needs Assessment Report that lists priority needs, including the need to address issues that stem from previous lead exposure. There is also 2016-2019 data collected by the Michigan Department of Health and Human Services that shows age-adjusted asthma hospitalization rates. The asthma hospitalization rates at that time were higher for ZIP codes surrounding the Ajax facility as compared to the statewide rate, which was 6.3 in 10,000 people. The local hospitalization rates were approximately 19.9 in 10,000 people for ZIP codes 48503, 48504, 48505, and 48506. These rates were similar to Detroit area rates, which were 20.2 in 10,000 people. While the AQD follows this information, it is not directly used in the evaluation of proposed emissions from a permit application. However, the health-based NAAQS and screening levels are designed to be protective against adverse health effects even in sensitive groups, like asthmatics.

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AQD – Air Quality Division of EGLE

EGLE – Michigan Department of Environment, Great Lakes and Energy

OSHA – Occupational Safety and Health Administration

TAC – Toxic Air

43. Comment

Commenters stated OSHA indicates asphalt fumes contain carcinogens and can cause headaches, skin rashes, fatigue, reduced appetite, throat and eye irritation, and coughing. Asphalt paving workers, for example, have reported breathing problems, asthma, bronchitis, and skin irritation, according to OSHA, and studies have reported lung, stomach, and skin cancers following chronic exposures to asphalt fumes

AQD Response

Some sources of asphalt fumes have been shown to contain carcinogens. To protect against the extra risk of developing cancer over a lifetime exposure, the AQD has developed health-based screening levels for asphalt fumes. To protect public health, the emissions from the Ajax facility will be captured and controlled. The asphalt fumes along with all other TACs that will be emitted from the facility, were reviewed and found to meet all applicable health-based screening levels.

44. Comment

Some commenters were concerned about the compliance status of other facilities in the area near Ajax. They were also concerned that inspections have not been sufficient in determining their current compliance status, because of this advanced notice provided to the companies.

AQD Response

AQD facility inspections take many forms including unannounced and announced inspections, record review, virtual inspections, and other methods. Due to the COVID 19 pandemic and restrictions, AQD field inspectors began conducting announced inspections as of approximately March 19, 2020. Many reasons contributed to the decision to conduct announced inspections, including:

- Staff safety (ensuring company personnel at the facility being inspected did not have positive COVID 19 cases)
- Maximizing staff resources – Not traveling to a facility that was idled, shut down, or partially shut down due to COVID 19
- Being prepared – Verifying EGLE inspectors had any personal protection equipment (PPE) necessary to do a site visit

Due to a decrease in COVID 19 numbers and restrictions related to the pandemic, EGLE staff switched back to more unannounced inspections as of July 12, 2021. Since July 12, 2021, the AQD has conducted at least ten unannounced inspections in Genesee County including several near the proposed Ajax plant, but not associated with it. Eight of the ten inspections found the facility in compliance with their permits and all applicable air quality rules and regulations. Two inspections identified compliance issues. A Violation Notice was sent to one noncompliant

facility on September 23, 2021, and a Violation Notice for the second noncompliant facility is being written.

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45. Comment

A commenter stated that Ajax did not consider hydrogen sulfide (H_2S) emissions and did not propose any H_2S emission controls for the asphalt tanks. The commenter also expressed concerns about methyl mercaptan, chromium VI, and calcium chloride emissions not being evaluated.

AQD Response

The AQD evaluated H_2S emissions in response to the comment and 0.0274 lbs/hr of H_2S were calculated from the asphalt tank. The emissions were also added to the Rule 225 toxics analysis done for the application. The results were 5.5% of the allowed screening level on a 24-hour averaging period and 5.0% of allowed screening level on an annual averaging period. Given the small emission rate and the allowed screening levels being met, add-on H_2S control is not warranted.

Emissions calculations for both total chromium and chromium VI were included in the application. To be conservative, the total chromium emissions were evaluated against the allowed health-based screening level for chromium VI. The results were 6.8% of the allowed annual screening level.

Neither the AQD nor Ajax has information documenting methyl mercaptan is emitted from an asphalt plant. The commenter was contacted and asked about the basis of their concern for this pollutant, however they did not respond.

Calcium chloride is the material that Ajax plans to apply to their roadways to control fugitive dust. It is applied in a liquid form and works by absorbing moisture in the air. It is considered to be a heavy particle and is not expected to become airborne after its application. Ajax's use of calcium chloride is not expected to be a source of air emissions.

46. Comment

A commenter expressed concerns about the location of the gasses exhausted from the vapor condensation and recovery system on the asphalt tank.

AQD Response

In response to this comment, Ajax submitted to the AQD additional information and details concerning their process and emissions capture systems. The asphalt tank vapor condensation and recovery system exhausts gases externally while captured liquids are directed back to the tank.

47. Comment

A commenter indicated that, without sufficient description, some fugitive emission sources may be subject to NSPS Subpart OOO.

AQD Response

NSPS Subpart OOO applies to nonmetallic mineral crushing facilities. It does not apply to asphalt plants. The Ajax facility will not include any crushers or crushing activities. All aggregates used at the facility will be delivered from off-site and used as received.

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NSPS – New Source Performance Standard

PM – Particulate Matter

PM2.5 – Small particles less than 2.5 microns in size

PM10 –Small particles less than 10 microns in size

VOC – Volatile Organic Compounds

48. Comment

Comments about the control equipment, other equipment, and processes not being sufficiently described in the application were received. Another related comment requested more information about the processes as they relate to Rule 203 which specifies "Applications for complex or multiple processes shall also include a block diagram showing the flow of materials and intermediate and final products." They indicated that the Ajax application did not include this.

AQD Response

The control equipment to be installed at the Ajax facility includes:

IV. A fabric filter or baghouse dust collector on the drum dryer to control PM, PM10, and PM2.5 emission.
V. A vapor condenser and recovery system on the six liquid asphalt cement storage tanks to control VOC emissions.
VI. An emissions capture system on the top of each eight asphalt storage silos to control VOC emissions and odors.
VII. An emissions load-out control system on the asphalt load-out system to control VOC emissions and odors.
VIII. The gases from the vapor condensation and recovery system on the asphalt tank is exhausted externally while the collected liquids are returned to the tank.

Requirements for each of these pieces of control equipment was included in the proposed permit made available for public comment. Also included in the proposed permit was a preventative maintenance program for the fabric filter outlining how it should be maintained.

49. Comment

A commenter requested air quality alerts in the area for high wind conditions, stating that emissions carried from Ajax would increase need for doctor visits and psychological distress.

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AQD – Air Quality Division of EGLE

EGLE – Michigan Department of Environment, Great Lakes and Energy

NWS – National Weather Service

PCBs – Polychlorinated biphenyls

RAP – Recycled asphalt pavement

RUO – Recycled used oil

AQD Response

AQD meteorologists forecast ozone and fine particulate levels for both rural and urban settings across the state. Air quality alerts (Clean Air Action Day) are issued if either of those pollutants is expected to reach up to or higher than the unhealthy for sensitive groups level. Air pollution levels are tied to weather conditions, so those conditions are first forecast, then expected pollution levels are determined. One of the criteria used during the forecasting are current and expected wind conditions, including high winds. Therefore, high wind conditions are included in determining the necessity of an air quality alert.

To inform the public, the AQD sends an email notification to two outreach groups, the West Michigan Clean Air Coalition, and the Southeast Michigan Council of Governments in Southeast Michigan. These groups help spread the message by posting information on their websites, and by contacting local television and media outlets. The AQD also contacts the local National Weather Service (NWS) office(s) for the counties where the Clean Action Day is in effect. The NWS posts the location of the Clean Air Action Day and shares the steps people can take to help keep air quality levels low and measures individuals can take to protect their health. Finally, the AQD also posts Clean Air Action Days on our website at http://www.deqmiair.org/. For more information about Clean Air Action Days or to register for notifications please visit the website: Michigan Air Quality: Email Notifications (deqmiair.org)

50. Comment

Commenters shared concerns about how Polychlorinated Biphenyls (PCBs) from the air emissions would impact the Riskin Drain, an impaired stream on the Ajax property.

AQD Response

The PCBs emissions from the Ajax facility is from the burning of recycled used oil (RUO) and the use of recycled asphalt pavement (RAP). While RUO was allowed in the draft proposed permit, the burning of RUO is not allowed in the final permit. RAP may potentially contain certain products like asphalt tack, crack sealer, and asphalt release agent that may be sources of PCBs. Data, albeit limited, suggests if PCBs are present in RAP, it is likely a certain percentage of them are entrained in the final product as opposed to emitted to the outdoor air. There is no data suggesting PCBs from asphalt operations result in impacts to nearby waterways

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EGLE – Michigan Department of Environment, Great Lakes and Energy

EJ – Environmental Justice

NAAQS – National Ambient Air Quality Standards

USEPA – United States Environmental Protection Agency

AMBIENT MONITORING CONCERNS

51. Comment

Requests were received to conduct ambient air monitoring in the area due to the Ajax facility being located in an EJ area. Additional comments were received stating the permit should require fence line monitors to confirm Ajax is meeting their permit requirements.

AQD Response

The purpose of the air monitoring stations is to measure air pollution for a regional area over long periods of time to determine if the NAAQS are being met. The data from these monitors is seldom able to be linked to a specific location or industrial source which is why they are not used for industrial compliance.

The individual air monitoring stations are located to represent a large area, county, or region. Most of the monitoring requirements are based on the population data obtained by the census. The more populated areas are required to have more monitors. For Flint, one station for ozone and particulate matter is required. The Flint station is within 2 miles of the Ajax location. That station is representative for the City of Flint and surrounding townships. Another ozone monitoring station is in Genesee County in Otisville.

The AQD currently operates various air monitoring instruments to measure air pollution at over 40 separate locations throughout the state. This is called the air monitoring network. By law, the AQD is required to evaluate its monitoring network in May each year and opens the review up for the public to comment on. After the comment period, staff responds to any questions and comments and the plan is sent to the USEPA for their review and approval. The USEPA ensures Michigan's air monitoring network is meeting all federal rules and requirements. If the air monitoring locations and measurements meet the requires and are deemed to be representative, the plan is approved. When opened, the network review will be posted at Michigan.gov/EGLEAirPublicNotice.

The AQD does not have the authority to require Ajax to install or operate fence line monitors. Compliance with their permit requirements will be demonstrated through emissions testing, compliance inspections, emissions calculations, and record keeping.

DISPERSION MODELING

52. Comment

Concerns about the wind blowing regularly in the area carrying emissions away from the plant property and may end up in areas where they could affect the local community. There were also general concerns about air quality within a 5-mile radius of the plant.

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RAP – Recycled Asphalt Pavement

TAC – Toxics Air Contaminant

PM10 - Small particles less than 10 microns in size

PM2.5 - Small particles less than 2.5 microns in size

AQD Response

As a part of the review of the application, a computer program called “air dispersion modeling" was performed to determine maximum ground level concentration of both regulated pollutants and toxic air contaminants. All were found to be meeting their applicable standards or screening levels. Within the dispersion model, wind speed and direction data was applied to the maximum facility emissions to determine the location and maximum concentration of each pollutant once the plume reaches ground level. Initial modeling followed AQD protocol by evaluating one year of meteorological data to encompass “worst case” meteorology conditions over the year. However, the AQD re-evaluated modeling for criteria pollutants to include a five-year modeling analysis. Again, this meteorological dataset included regularly occurring wind speed and direction information. The modeling evaluated concentrations around the property line of the facility out to roughly 6.5 miles in every direction surrounding the facility. All were found to be meeting their applicable allowed standards or screening levels.

In addition to demonstrating that the emissions meet health-based standards, Ajax is required to follow a fugitive dust plan. This plan is part of the final permit and requires measures to minimize fugitive dust such as, site monitoring, site roadway maintenance and best practices for material handling. This plan coupled with the air dispersion modeling ensure that the health protective standards will be met.

53. Comment

Commenters stated that neither nearby sources nor all of the fugitives from the proposed facility were reviewed, included in the dispersion modeling, or sufficiently described. Commenters were also concerned that only criteria pollutants were modeled.

AQD Response

The original modeling done for the application did not account for a surge bin on the silos described in the application. However, Ajax stated that the mention in the application text was in error and no surge bins are being proposed. In the re-evaluation of the fugitive emission sources, emissions of toxic air contaminants from the RAP aggregate piles were added to the review. No other sources of fugitive emissions were discovered to be omitted. The final application has a condition requiring the process and equipment as reviewed in the application.

The updated toxics modeling again showed the projected emissions of each TAC to be meeting their respective allowed health-based screening level(s).

Also, in response to comments received, an updated criteria pollutant analysis was performed. The updated modeling, as well as the original modeling, included PM10 and PM2.5 emissions

from all fugitive sources including truck and loader traffic, truck loading and unloading, and storage piles. The updated modeling also included emissions from additional nearby sources and was based upon five years of meteorological instead of one.

ACRONYMS
These acronyms are used on this page:

AQD – Air Quality Division of EGLE

EGLE – Michigan Department of Environment, Great Lakes and Energy

NAAQS – National Ambient Air Quality Standard

PSD – Prevention of Significant Deterioration

TAC – Toxic Air Contaminant

It is EGLE's practice to exclude emissions of nearby sources below a certain threshold because, in our experience, it is unlikely these emissions would share the same maximum impact as a proposed facility. Additionally for minor sources, the use of one year of meteorological data is acceptable in the model for both regulated pollutants and toxic air contaminants. To provide for a more conservative model, the updated modeling included emissions from additional nearby sources and was based upon five years of meteorological instead of one as originally presented for comment. The updated criteria pollutant modeling again showed each pollutant to be meeting their applicable respective allowed NAAQS and PSD increments, including carbon monoxide and lead which were not evaluated in the initial modeling analysis.

54. Comment

A commenter stated the AQD did not consider actual exposure due to wind and maximum short--term emissions. The commenter also stated the modeling did not include "inversion" events and should have.

AQD Response

Within the dispersion modeling, wind speed and direction data over a one-year period for TACs and a five-year period for criteria pollutants was applied to the projected maximum facility emissions. The wind data used in modeling was compiled from 1-minute meteorology data collected by the National Weather Service at the Bishop International Airport in Flint. Applying meteorology through dispersion modeling to the emissions at the facility was done to determine the location and maximum concentration of each pollutant when the exhaust plume reaches ground level. The one to five years of meteorological data are used in modeling to ensure "worst case" meteorology is evaluated. This data includes time periods when inversions occur. By inputting recorded actual wind speed and direction, both at the surface and at upper levels, into the model; wind affects were indeed taken into consideration when determining the pollution impacts from the Ajax facility.

55. Comment

Commenters expressed concerns the generic TAC modeling inappropriately represented other sources of the emissions as coming from the drum dryer stack. There were also concerns that different pollutants would disperse differently.

AQD Response

Air dispersion modeling for TACs is performed for a one-year period and each pollutant will disperse in the same location and distance based on the averaging time being evaluated. TAC

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PSD – Prevention of Significant Deterioration

USEPA – United States Environmental Protection Agency

averaging times include 1-hour, 8-hour, 24-hour and annual. For a generic toxics modeling analysis, a generic emission rate (ex. 1 pound per hour) is emitted from the stack to determine the maximum ground level impacts for all averaging times. Pollutant specific impacts can then be calculated by multiplying the pollutant emission rate (in pounds per hour) by the generic impacts for the associated averaging time. The calculated impacts will be the same impact found through modeling if the pollutant specific emission rate and associated averaging time were input into the model. Using the generic model simply allows several pollutants to be evaluated within one model run in lieu of modeling each pollutant separately. Another common factor in generic toxics modeling is assuming all the facility emissions exist via a single common stack. Releasing all emissions from the same location is done to assume a "worst case" concentration since dispersing emissions from multiple points could lessen combined impacts from all the emission points. Therefore, the TAC analysis completed as part of the air permit review was done conservatively and found to be protective of public health.

56. Comment

A commenter requested justification of the applicant's use of wind speed thresholds as it applies to the storage piles in the dispersion modeling.

AQD Response

The equation used for calculating wind erosion from storage piles involves the percentage of time where wind speed exceeds 12 miles per hour (mph) in a year. The equation results in an emission rate for the year which was attributed to all of the hours where emissions were assumed to occur (i.e. those hours with a wind speed of greater than 12 mph). To be conservative, Ajax used 11.5 mph as the threshold where wind erosion was expected to occur to instead of 12.0 mph. Please note, this threshold only impacted the emissions from wind erosion and did not impact emissions from activities at the storage piles, which were included in the application.

57. Comment

Some commenters stated the criteria pollutant and TAC modeling analyses done for the Ajax application should have been done using five years of meteorological data rather than the one year that was used.

AQD Response

It is AQD policy, per Rule 241 (R 336.1241 Air quality modeling demonstration requirements.), to allow for the use of one year of meteorological data for all toxic air contaminant modeling and criterial pollutant modeling for minor sources. In AQD's experience, one year of meteorology data will encompass "worst case" meteorology conditions in dispersion modeling for this type of

review. While not required by either USEPA and/or AQD policy, the AQD updated the criteria pollutant modeling analysis to encompass five years of meteorological dataset. The updated modeling results showed that all criteria pollutants continued to meet their applicable allowed PSD Increment and/or NAAQS levels.

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TAC – Toxic Air Contaminants

PM10 - Small particles less than 10 microns in size

PM2.5 - Small particles less than 2.5 microns in size

AQD originally followed its policy and procedure regarding the toxics modeling analysis by utilizing one year of meteorological data. The AQD continued to use one year of meteorological data for air toxics and all impacts were found to be below their allowed health-based screening levels.

58. Comment

Commenters expressed concerns with how the wind speeds were used for determining when emissions of wind erosion from the storage piles were included in the dispersion modeling.

AQD Response

One-minute wind readings (wind speed and wind direction) were averaged over each hour of the day to compile 24 samples of hourly meteorology data. If wind speeds for a certain hour exceeded the 11.5 mile per hour threshold, then emissions from wind erosion were assumed to take place for that specific hour and were included in the modeling. The emissions calculations were based on those same number of hours. Please note the PM10 and PM2.5 NAAQS and PSD increments have minimum averaging times of 24 hours.

59. Comment

Comments were received expressing concerns the storage piles evaluated in the emission calculations may not represent the worst-case scenario.

AQD Response

The emissions were calculated using an equation for wind emissions from continuously active storage piles and included the maximum silt content of any materials to be stored on-site. These calculations also conservatively assumed the entire storage pile area would be active at one time. The emissions from the dumping onto the piles and from the loading back off the piles were based on emission factors for trucks loading crushed stone. The emissions from the transfer of materials were based on the maximum allowed daily average of 500 tons/hr for every

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EGLE – Michigan Department of Environment, Great Lakes and Energy

Km - Kilometer

NAAQS – National Ambient Air Quality Standards

PSD – Prevention of Significant Deterioration

SER – Significant Emission Rate

hour of the day. No credit was given for any emission controls to conservatively look at worst case.

60. Comment

Comments were received expressing concerns that emissions from the active storage pile were not calculated and included in the dispersion modeling.

AQD Response

Emissions from placing materials onto the storage piles and removing materials from the storage piles were included in Table 5.6b of the emission calculations submitted by Ajax. AQD staff reviewed and concurred with these calculations. The calculated emissions values were also included in the dispersion modeling done for the application.

61. Comment

Commenters expressed concerns about the selection of the existing facilities included in the criteria pollutant modeling.

AQD Response

After the review of the comments received, the AQD updated the criteria pollutant modeling analysis to include five years of meteorological data in lieu of one year. As a part of this update, the AQD also expanded the number of additional nearby sources included in the PSD increment and NAAQS analyses. Based on current policy, the AQD typically only includes nearby sources within a few kilometers (km) of the facility and with emissions greater than each pollutants Significant Emission Rate (SER). To expand upon what was previously modeled, all nearby sources within 5 km of the proposed facility which emit one of the criteria pollutants were included in the modeling analysis for that pollutant, regardless of the amount of the emissions. Other larger emitting sources ranging from 11 km – 19 km from the proposed facility were also included in the cumulative modeling analysis of certain criteria pollutants. The selection of existing facilities explicitly included in modeling followed USEPA Guidance on Air Quality Models (40 CFR 51, Appendix W), specifically section 8.3.1.1.i. The updated modeling showed the facility to be meeting all applicable PSD increments and NAAQS for all pollutants.

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PM10 - Small particles less than 10 microns in size

NOx – Nitrogen Oxides

NAAQS – National Ambient Air Quality Standards

SO2 – Sulfur Dioxide

62. Comment

A commenter expressed concerns about the selection of monitors used to establish background concentrations. The commenter also stated the applicant should install monitors at the site to establish site-specific background concentrations.

AQD Response

The purpose of a background monitor used in a cumulative NAAQS modeling analysis is to account for regional background concentrations of a pollutant, such as NOx. The AQD follows USEPA Guidance on Air Quality Models (40 CFR 51, Appendix W) when determining regional monitors included in the NAAQS analysis. As stated in Section 8.3.1.a.ii, regional monitors should encompass "That portion of the background attributable to natural sources, other unidentified sources in the vicinity of the project, and regional transport contributions from more distance sources." Nearby sources were explicitly included within the model. Inclusion of a background monitor that has contributions from the proposed facility or other nearby facilities in the model would lead to double counting of emissions within the modeling analysis. Background monitors used in the NAAQS analysis are located upwind of the proposed Ajax facility and represent regional transport into the area. The Lansing monitor used in the NOx analysis and the Grand Rapids monitor used for PM10 and SO2 are considered representative since the monitors are both located upwind of the proposed facility, have similar geography, and with a predominant southwest wind flow over the region, the monitors represent regional transport of more distant sources, and background attributable to natural sources, traveling into the Flint region.

ODOR CONCERNS

63. Comment

Commenters are concerned about nearby residents, schools, and recreational areas experiencing odors from the facility and the odors being in violation of Rule 901. Commenters were concerned about health issues related to odors. The commenters also expressed concerns that the proposed permit contained no requirements or controls related to odor and did not contain an odor mitigation plan. They indicated the facility should be equipped with a wet scrubber. The commenters referenced the smell of asphalt being paved on roads as to what they expect the facility to smell like.

AQD Response

The application review and proposed conditions addressed potential odors by requiring the use of control equipment to help reduce odors as well as emissions. These include a counterflow

drum dryer, top-of-silo capture and control, truck loadout capture and control, and a vapor condensation and recovery system for the liquid asphalt cement storage tanks.

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NAAQS – National Ambient Air Quality Standards

PEAS – Pollution Emergency Alert System

At the Ajax plant, materials with a higher likelihood of having odors will be stored and processed in enclosed equipment and the emissions will be captured and controlled resulting in significantly less odors. Scrubbers are an older technology for this source type and are less efficient at capturing emissions than baghouses. New asphalt plants like Ajax are required to use the more effective control technology.

Considering this, the facility is not anticipated to be a source of objectionable odors and as such an odor mitigation plan is not warranted.

The commenter is correct in that the AQD regulates odors from all sources, including asphalt plants, under Rule 901.

If odors from a facility cause "unreasonable interference with the comfortable enjoyment of life and property", the AQD considers those in violation of Rule 901. The AQD investigates odors based on odor complaints and other compliance methods to determine whether odors are unacceptable. If they are determined to be in violation of Rule 901, the regulated source will be required to take additional measures to resolve them.

Citizens having odor or other issues/complaints about Ajax or other nearby facilities are encouraged to contact the EGLE Environmental Assistance Center when the odors are objectionable. During normal business hours:

Contact	Telephone Number
Environmental Assistance Center	800-662-9278

For air pollution complaints during non-business hours:

Pollution Emergency Alert System (PEAS) Operates 24 hours a day	800-292-4706

If Ajax is found to be in violation of their permit and/or any applicable rule, including Rule 901, they will be cited by the AQD and will need to take all necessary measures to come back into compliance.

Based on the predicted emissions, the AQD does not expect the Ajax facility to cause health problems when it is operating properly and in compliance with its permit. Health-based NAAQS and state-specific screening levels are developed to be protective of health effects identified

ACRONYMS
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AQD – Air Quality Division of EGLE

DNR – Department of Natural Resources

EGLE – Michigan Department of Environment, Great Lakes and Energy

RUO – Recycled used oil

from research studies. These standards and screening levels were used to evaluate Ajax's predicted emissions. The results were below that allowed levels for all pollutants and showed that the predicted emissions are not expected to be a health concern.

64. Comment

A commenter stated that EGLE has the authority to deny a permit based on Rule 901 and cited a previous Department of Natural Resources ("DNR") decision for a Rochester Hills Landfill. The commenter urged EGLE to deny Ajax's permit application because of the nature of asphalt plants operations make it likely to cause a nuisance for the surrounding community.

AQD Response

Provided Ajax operates in compliance with its approved permit, a Rule 901 violation is not anticipated. If Ajax is found to be in violation of their permit and/or any applicable rule, including Rule 901, they will be cited by the AQD and will need to take all necessary measures to come back into compliance.

PERMIT REQUIREMENTS

General

65. Comment

A commenter stated, based upon its projected percentage of the allowed screening level, a cobalt emission limit should be added to the final permit, if one is issued.

AQD Response

The original projected cobalt emissions were calculated with a large margin of compliance (for example, a multiplier to account for variability in emissions). Based upon the comment, the AQD recalculated the projected emissions using an emission factor with a smaller margin of compliance and the elimination of RUO as an allowed fuel in the final permit. These changes to calculation methodology and permit restrictions lowered the emission rate of cobalt. The updated cobalt projected emissions were then evaluated and found to have a projected impact of less than 25% of its allowed annual health-based screening level. As such, a cobalt emission limit was not added to the final permit.

66. Comment

A commenter indicated concerns that the restriction on the volume of production included in the proposed permit is not sufficient at reducing emissions.

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AQD – Air Quality Division of EGLE

CO – Carbon Monoxide

CO2 – Carbon Dioxide

EGLE – Michigan Department of Environment, Great Lakes and Energy

PM – Particulate matter

PM10 - Small particles less than 10 microns in size

PM2.5 - Small particles less than 2.5 microns in size

VOC – Volatile organic compounds

AQD Response

Emissions will be restricted by the hourly and annual restrictions on the facility production and the multiple pieces of pollution control equipment required by the permit. The baghouse will reduce PM, PM10, and PM2.5 emissions from the drum dryer by 98%. The top-of-silo capture and control, the truck loadout capture and controls, and the vapor condensation and recovery systems on the liquid asphalt cement storage tanks will all reduce VOC emissions and odors. The fugitive dust control plan attached to the final permit requires measures to reduce fugitive dust emissions. Finally, the counterflow drum dryer, will also reduce odors and potential emissions.

67. Comment

Commenters stating that the carbon monoxide handheld monitoring requirement included in the proposed permit is ineffective and not grounded in any emission limitations or standards.

AQD Response

The purpose of the handheld CO monitor is to ensure the drum dryer is operating properly. Proper operation results in more complete combustion converting CO to CO2. Higher levels of CO indicate that incomplete combustion may be occurring, and the drum may not be operating properly. This may signal the need to make adjustments to the air and fuel rates or check for obstructions in the combustion area. Incomplete combustion would negatively impact emissions of different pollutants from the drum, including CO. However, the handheld monitor is not intended to be used as a direct compliance and testing method for CO emissions.

In response to other comments received, a requirement that Ajax perform CO emissions testing on the drum dryer was added to the final permit as described in Section II, Comments on Testing.

68. Comment

A commenter stated that no information was contained in the proposed permit about the contents of the fugitive dust plan or the point source emissions.

AQD Response

The emission unit EUYARD (see pages 14 and 15 of the final permit) contains requirements for fugitive emissions and states the facility must operate in compliance with the approved fugitive dust plan, attached as Appendix A of this document.

ACRONYMS
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AQD – Air Quality Division of EGLE

EGLE – Michigan Department of Environment, Great Lakes and Energy

Mph – Miles per hour

NAAQS – National Ambient Air Quality Standards

PM10 - Small particles less than 10 microns in size

PM2.5 - Small particles less than 2.5 microns in size

PSD – Prevention of Significant Deterioration

Point source emissions are those which are emitted from a single point like an exhaust stack. All of the emission limits within EHHMAPLANT (see pages 7 and 8 of the previous draft proposed permit), are considered point source emissions as they will occur from the drum dryer exhaust stack.

69. Comment

A commenter expressed concerns about the facility enclosure not having a roof, only walls. Another commenter stated there is no enclosure to prevent wind carrying fumes being proposed for loadout and that the emissions due to lack of the enclosure were not considered.

AQD Response

The loadout control area will have an enclosure to reduce and capture fumes. The design of the enclosure is to prevent wind from carrying the fumes and will include a roof as well as walls. The roof area will contain a system that pulls air from the loadout zone to the filtration control system. The minimum requirements for this enclosure are outlined in the final permit (EUSILOS SC III.2). Although the emissions from the loadout area will be captured and controlled, the emission calculations and review conservatively assumed there were no emission controls. This was done to provide a worst-case emissions evaluation for the truck loading area.

70. Comment

A commenter indicated the wind speed monitor and continuous recording system requirement is not justified. The commenter went on to request the condition be changed to not require it be operated when the plant is inactive during the paving season.

AQD Response

The comment is referring to emissions related to wind erosion on storage piles which are not impacted by the other activities at the plant. The purpose of the wind speed monitor and continuous recording system condition is to demonstrate compliance with the opacity limit for the aggregate storage piles. This includes no visible emission from wind erosion at wind speeds less than 12 mph and a 20% opacity limit when the wind is at least 12 mph. Emissions from wind erosion decrease when a pile has not been disturbed after wind exposure, so wind records are not necessary during the extended period of shutdown between paving seasons.

The wind erosion emissions were not included in the air dispersion model at wind speeds less than 11.5 mph, as it was assumed at these low wind speeds there would be no emissions coming from the piles attributed to wind erosion. As the emissions input into the air dispersion model excluded those at wind speeds below 11.5 mph, and this assumption was a critical

component of the compliance demonstrations for the PM10 and PM2.5, NAAQS, and PSD increments, it is appropriate for the wind speed monitoring requirements to remain in the final permit. The wind speed data will be integral in Ajax's evaluation to confirm any visible emissions documented from the storage piles are occurring at wind speeds of at least 12 mph.

ACRONYMS
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EGLE – Michigan Department of Environment, Great Lakes and Energy

Lb/ton – Pound per ton

NAAQS – National Ambient Air Quality Standards

PM – Particulate matter

PM10 - Small particles less than 10 microns in size

PM2.5 - Small particles less than 2.5 microns in size

RUO – Recycled used oil

SO2 – Sulfur dioxide

Emissions

71. Comment

Concerns were received about no short-term emission limits in pounds per hour being included in the proposed permit.

AQD Response

The limits in both the proposed and the final permit are expressed in terms of pounds of emissions per ton (lb/ton) of throughput. A pound per ton limit is more stringent than an emission limits expressed in pounds per hour. Emission limits expressed in pound per hour remain constant regardless of throughput rates. Emission limits based on lb/ton restrict the emissions to lower values based upon the hourly production rate. So, if the hourly production rate is reduced in any given hour, the corresponding allowed hourly emissions would also be reduced. Limiting short-term emissions by linking them to the short-term production is an effective way of restricting emissions, and in practical terms, also restricts the pound per hour emissions in a more effective way.

The draft permit contained both a 600 ton per hour throughput limit on an hourly basis as well as a daily throughput limit equal to 500 tons per hour averaged over the day. The throughput limit on an hourly basis was lowered to 550 tons per hour in the final permit.

72. Comment

A commenter stated the AQD had an error in the annual calculated emissions for PM, PM10, PM2.5 and SO2. Because of these errors, the commenter felt the facility cannot assure compliance with the emission limits contained in the proposed permit. Also, the commenter stated the error was used to demonstrate compliance with the short-term modeling.

AQD Response

The concern was based on the emission factors (lb/ton) in the proposed permit being rounded. While these emissions were rounded in the draft permit conditions, they were not rounded in either the emission calculations or the modeling analysis. As such, the verification of compliance

with state and federal requirements remains valid. Of note, in lieu of adjusting the emission limits to address the rounding issue, most of the emission limits have been lowered in the final permit to account for the prohibition on burning RUO. With the lowered emission limits, there is more of a compliance margin with the state and federal requirements.

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EGLE – Michigan Department of Environment, Great Lakes and Energy

CEMS – Continuous Emissions Monitoring System

Lb/ton – Pounds per ton

F – Degrees Fahrenheit

TACs – Toxic Air Contaminants

73. Comment

A commenter stated that to be enforceable, the ton/year emission limit can only be measured directly using a continuous emissions monitoring system (CEMS). Also, a commenter stated to demonstrate continuous compliance with emission limits, a CEMS should be required for all criteria pollutants and TACs.

AQD Response

A CEMS is not required for emission limits to be enforceable. In Ajax's case, the combination of an emission limit expressed in lb/ton of throughput accompanied by a throughput limit results in an enforceable limit. Pollutants with emission limits in lb/ton, along with the throughput limits on an hourly and 12-month rolling basis, legally restrict emissions. For example, an emission limit of 1 lb of pollutant X per ton of throughput with a throughput limit of 1,000 tons per year means that emissions are limited to 1,000 lbs per year of pollutant X. The actual emissions directly relate to throughput. Ajax is required to maintain records of their throughput on an hourly and annual basis. Ajax is required to calculate their actual emissions based on their actual throughput and those records shall be maintained and reviewed by AQD staff. Typically, the use of CEMS is limited to major sources of pollutants and is required for specific equipment or in federal standards. Asphalt plants are not major sources and there are no regulations requiring CEMS use, nor are CEMS available for all criteria pollutants and/or TACs.

74. Comment

A commenter requested the permit require better control for condensable particulates.

AQD Response

A baghouse, as required in the Ajax permit, is an appropriate control device for condensable particulates. The condensable particulates emitted from an asphalt plant have similar properties as the asphalt itself, in that they are very sticky if they condense on surfaces. Therefore, they tend to plug most types of control equipment, making their capture technically infeasible. To avoid this and to ensure proper operation and capture of filterable particulates, the baghouse (filtering system) temperature at an asphalt plant must be maintained above a minimum temperature of 250F. This prevents the particles from condensing on the filters and allows the operation of the emission controls.

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USEPA – United States Environmental Protection Agency

VOC – Volatile Organic Compound

Testing

75. Comment

The odor testing requirements contained in the proposed permit only go in effect upon request of the district. This gives a false impression to the public on the amount and level of odor regulation of the facility. The commenter also questioned the meaning and value of the term "Department requirements" in the odor testing requirement and stated that nothing in the odor testing condition asserts any findings that odor emissions from the facility will meet Rule 901. Another comment was received stating that nothing in the draft permit, the Proposed Project Summary, the Technical Fact Sheet, or any other AQD publicly released document constitutes a certification by AQD that the facility, once completed and put into operation, will not cause community odor impacts and exposure that would violate Rule 901. Another comment received requested recurring odor testing.

AQD Response

Per Rule 207, the AQD may not issue a permit if we do not believe the facility will comply with all rules, including Rule 901. Often times odors result from operator errors, not from improper or inadequate control equipment being installed. In new permits for fixed asphalt plants, the AQD requires the use of a counterflow drum, top of silo control, a condensation capture system on the asphalt cement tanks, and updated loadout control standards. Due to these odor reduction requirements, a violation of Rule 901 is not expected from these facilities.

The purpose of the odor testing condition is to give the district the ability to require a Rule 901 demonstration and a plan for addressing any problem odors as necessary, should they occur. This condition does not need to be enacted if a facility does not produce odors or proactively takes responsibility for odor issues and implements steps to reduce them. The permit language clearly states when the odor testing would be required. All testing, including odor testing, must be performed in accordance with the Department requirements and standards using a pre-approved method. Ajax is required to submit a proposed test plan to the AQD Technical Programs Unit for review and approval prior to conducting testing. The test plan must outline the specific test methods that will be used.

76. Comment

A comment was received stating the specific test method protocols should be specified for each pollutant for which the proposed permit requires testing. The commenter added that USEPA Method 18 be listed for VOC testing.

AQD Response

PTI's issued by the AQD contain standardized language requiring the use of appropriate USEPA test methods. This is done to avoid the need for a facility to get a new permit any time the USEPA modifies a test method. Ajax is required to submit a proposed test plan to the AQD

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EGLE – Michigan Department of Environment, Great Lakes and Energy

HMA – Hot Mix Asphalt

USEPA – United States Environmental Protection Agency

Technical Programs Unit for review and approval prior to conducting testing. The test plan must outline the specific USEPA test methods that will be used. The AQD may make adjustments, within our authority, when appropriate.

Compliance Monitoring

77. Comment

A commenter expressed concerns about the company self-monitoring.

AQD Response

Ajax's permit, as well as other permits issued by the AQD, requires facilities to maintain records and perform certain calculations. For Ajax, the records include the amount of asphalt produced, the amount and types of fuels burned, inspections and maintenance activities performed by facility personnel, applications of fugitive dust suppressants, and operational parameters of the control equipment. The required calculations are to be made for emissions of several pollutants. It is required that these records and calculations be kept on file at the facility and be made available to the AQD upon request.

Review of these documents is one of several ways the AQD uses to determine a facility's compliance status. Other ways include emissions stack testing (which Ajax is required to perform), on-site inspections, and complaint investigations. The AQD typically conducts inspections at least once every year for HMA plants. As part of these inspections, the District Inspector will look at past inspection reports, the permit, applicable rules and regulations, compliance history of the facility, emissions reports, past stack test results, and any correspondence. Inspections typically include a walkthrough of the facility to examine processes and process equipment, including control equipment, as well as going over required operational and emissions records. One purpose of the inspection is to help ensure the facility is operating equipment and following the proper work practices to minimize emissions as much as possible.

If it is determined that a facility is not operating in compliance with their permit and/or any applicable rule or regulation, corrective action will be taken, potentially including violation notices and fines.

78. Comment

Commenters requested that data regularly generated by Ajax to comply with the permit be made publicly available on an easily accessible website. The commenters felt the transparency of such data will promote public engagement and help build trust among all stakeholders

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EGLE – Michigan Department of Environment, Great Lakes and Energy

FOIA – Freedom of Information Act

Mph – Miles per hour

NAAQS – National Ambient Air Quality Standards

PSD – Prevention of Significant Deterioration

AQD Response

The AQD posts air permits, compliance activity and inspection reports, and testing information and results. This information can be found on the Air Quality Source Information Page. Anyone may request from the AQD at any time non-confidential information related to a source by filing a request under the Freedom of Information Act (FOIA).

In response to this comment, AQD asked Ajax if they would consider posting additional operational information online on a publicly accessible website as the commenter suggested. Ajax responded that it was not necessary, due to the AQD's already publicly accessible information. The AQD does not have the legal authority to require Ajax to host a website containing such information.

79. Comment

A commenter questioned why the proposed permit references as applicable requirements 40 CFR 52.21 (c) and (d) instead of Michigan Air Pollution Control Rules 1803 and 1804.

AQD Response

Michigan Rules 1803 and 1804 apply to major sources or major modifications subject to the PSD regulations. The AQD uses citations of 40 CFR 52.21 (c) and (d) when air dispersion modeling was conducted to comply with NAAQS and PSD Increment for minor sources. As the Ajax facility is a minor source and air dispersion modeling was conducted for criteria pollutants, the references to 40 CFR 52.21 (c) and (d) are correct.

80. Comment

A commenter requested the wind speed threshold for allowing visual opacity from the storage piles due to wind erosion be changed from 12 mph to 11.5 mph. The purpose of this is so the permit matches the dispersion modeling.

AQD Response

To be conservative, both the dispersion modeling and the emission calculations from wind erosion on the storge piles included in the application were based upon wind erosion happening at a minimum of 11.5 mph wind speed rather than the default 12 mph. However, the draft permit prohibited visible emissions at wind speeds less than 12 mph. This is more restrictive than allowing visible emissions at wind speeds of at least 11.5 mph since visible emissions would not be allowed between 11.5 mph and 12.0 mph.

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EGLE – Michigan Department of Environment, Great Lakes and Energy

Mph – Miles per hour

NAAQS – National Ambient Air Quality Standards

PM10 - Small particles less than 10 microns in size

PM2.5 - Small particles less than 2.5 microns in size

PSD – Prevention of Significant Deterioration

81. Comment

A commenter requested the measures that will be employed to control fugitive dust from the aggregate storage piles (both active and inactive) be included in the fugitive dust plan.

AQD Response

The emissions calculations preformed included no credit for the control of fugitive emissions from the storage piles. The fugitive dust control plan attached to the permit requires minimizing the drop height of the material when it is dumped onto the storage piles and that the piles be maintained to prevent fugitive dust. It also requires the height of the front-end loader buckets be minimized during the loading onto conveyors. In addition, the permit includes opacity limits for the storage piles. Finally, Ajax will be installing berms, trees, or fences at the facility to reduce fugitive dust and to limit access to the site.

82. Comment

A commenter requested that measures to minimize emissions be taken when the wind is approaching 12 mph or the permit limit activities when the wind speed reaches 12 mph.

AQD Response

Below 12 mph, wind erosion is not expected nor allowed by the permit. The 12 mph wind speed threshold is not related to emissions from the piles actively being disturbed. This was also the scenario included in the modeling and permit review. To be conservative, all the storage pile emissions were reviewed and modeled without any credit for fugitive dust control.

As the review showed the projected PM10 and PM2.5 emissions from the facility to be meeting their respective allowed NAAQS and PSD increments, no additional requirements are necessary in the permit. It should also be noted the wind speeds can vary greatly throughout the day or even over a period as short as a few minutes, it is impractical to require the facility to take actions or to modify their activities whenever wind speeds approach or reach 12 mph.

83. Comment

A commenter requested the permit require Ajax to make updates to meet industry best practices as they evolve.

ACRONYMS
These acronyms are used on this page:

AQD – Air Quality Division of EGLE

EGLE – Michigan Department of Environment, Great Lakes and Energy

AQD Response

Air use permits for minor sources are good for the life of a facility or equipment for which they were issued and only require updating if the equipment and/or its operations are modified. A proposed project must meet the current standards for control equipment and best practices as of the date of permit issuance. Neither state or federal rules allow permits to require facilities to make updates to meet industry best practices as they evolve, unless new source review is triggered. A facility may however need to comply with new state or federal regulations which take effect after the facility obtained its permit. Also, if a facility wishes to modify its equipment and/or operations in a nonexempt way, it must first apply for and receive a new permit. This new permit will require the facility to meet standards for control equipment and best practices in place at that time.

84. Comment

A commenter stated that allowing the fugitive dust control plan changes to be pre-approved in writing by the AQD District Supervisor cannot be considered as being federally enforceable as a practical matter since they would not be subjected to public notice and public comment.

AQD Response

Public notice and comment are not a requirement for making something federally enforceable as a practical matter. The rules allow for attachments to a permit to be modified after the issuance date if the attachment remains as restrictive or becomes more restrictive.

85. Comment

Commenters requested specific items be added to the fugitive dust plan.

AQD Response

The final permit contains a fugitive dust plan that includes requirements for reducing fugitive emissions from the roadways, the plant yard, and the storage piles. If the fugitive dust plan does not adequately control emissions, the permit requires Ajax to submit modifications to the plan, upon the request of the AQD District Supervisor. Any changes made to the fugitive dust plan must be pre-approved by the AQD prior to their implementation.

The following suggested additions were reviewed, and responses are as follows:

> *-Control measures should be in place for all transfer points, transport by trucks, roadways, and outdoor storage piles*.

Emissions resulting from the transfer of the asphalt material to the haul trucks will be controlled by a capture and control system. The material transfer from the drum to the silos will be under negative pressure so emissions will also be captured and controlled. The emissions from the

ACRONYMS
These acronyms are used on this page:

AQD – Air Quality Division of EGLE

EGLE – Michigan Department of Environment, Great Lakes and Energy

Mph – Miles per hour

roadways will be controlled using water or calcium chloride as required in the fugitive dust plan. The watering of transfer points or material storage piles would increase the moisture content of these materials causing more fuel to be used in the dryer drum to dry the materials. This in turn, would increase the overall emissions from the facility.

-Require total enclosure of materials during transfer, including for truck loading and unloading.

Total enclosure of the truck loading area presents a potential safety hazard as a driver could be trapped in the enclosure during an emergency. The common practice is to have a partial enclosure of the truck loading area with an active fan system drawing air from the area via a giant hood. Total enclosure of truck unloading would require aggregate storage piles, which is approximately 5 acres in size, to be enclosed. An enclosure of that size is not feasible. The enclosing of conveyors would prevent the ability to monitor the product as it is being produced and could interfere with operation and maintenance.

-For transfers of materials that cannot be enclosed, as determined by EGLE, require a water spray system either through direct application, mobile misters (appropriate for materials that shouldn't get too wet), or dry foggers (which are appropriate during freezing temperatures).

As was discussed above, the use of water controls would add to the overall emissions from the facility by requiring additional fuel to be burned in the drum dryer. While use of dry foggers may be appropriate for screening or crushing operations, Ajax is not permitted to perform crushing or screening. they have not traditionally been used at asphalt plants.

-Minimize material drop heights.

The fugitive dust plan in Appendix A of both the proposed and final permits states: "The drop heights of all material transfer points and screening operations shall be minimized"

-Consider wind speeds, plan ahead and do not conduct transfer operations during wind speeds over 12 mph. Disturbance of outdoor storage piles must be suspended during wind conditions that exceed 12 mph.

The 12 mph wind speed is related to the emissions from wind erosion from piles not being disturbed and unrelated to emissions from activity on the piles. It is also not related to any other activities at the site. In addition, as wind speeds can vary greatly over a short period of time, it is not practical to require the stoppage or curtailment of activities whenever wind speeds exceed 12 mph.

-All vehicles should be subject to 10 mph or less speed limit and signage should be posted.

The fugitive dust plan in Appendix A of both the proposed and final permits states:
"The speed of vehicles on the site will be limited to 10 miles per hour or less. Signs will be

ACRONYMS
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EGLE – Michigan Department of Environment, Great Lakes and Energy

HMA – Hot Mix Asphalt

posted to advise drivers entering the facility of the speed limitation."

-All outgoing material transport trucks should be cleaned so no loose material is on the exterior tire surfaces and the removed material should also be collected.

The asphalt trucks entering and leaving the facility will only travel on the main roads which are required to be paved. Thus, they should pick up little or no loose materials. While the aggregate trucks traveling on unpaved surfaces treated with water or calcium chloride to control fugitive emissions. As such, the aggregate trucks are also not expected to pick up any considerable particulate. The final permit does however require that rumble strips be installed to help knock off dirt on the wheels from all trucks exiting the facility. In addition, the fugitive dust plan also restricts track-out from the site.

-Transport trucks should not be allowed access to unpaved areas.

As the material storage piles will be in an unpaved portion of the facility, it is impossible to not allow transport trucks onto unpaved areas. The emission calculations and modeling done for the application, considered truck traffic traveling on different parts of the facility including aggregate transport trucks accessing unpaved areas.

-Trucks carrying materials out of the facility should be covered.

The fugitive dust plan in Appendix A of both the proposed and final permits states: "OUT-GOING TRUCKS: All trucks leaving the site with HMA paving materials will be required to cover their loads prior to leaving the site. A sign shall be posted to advise drivers of this requirement."

-All internal roads used for transporting or moving material shall be paved or maintained so that fugitive emissions from them are not susceptible to become windborne. All internal roads should be swept with a street sweeper with a water spray and vacuum system multiple times per day and records of this work should be maintained.

The fugitive dust plan in Appendix A of both the proposed and final permits states:
"All the roadways on which the HMA haul vehicles and aggregate haul trucks will travel must be paved with HMA. This includes the roadway on which the vehicles travel around the process equipment to be loaded with HMA paving materials but excludes the aggregate storage yard." and "Dust on all areas where vehicular traffic will travel shall be controlled by the application of water, sweeping, vacuuming, or other acceptable dust control method. This will occur a minimum of two times per month if using calcium chloride or weekly if using water during periods of operation. Watering may not be required during periods with precipitation. The dust control method shall be acceptable as determined by the District Supervisor. If fugitive emissions are observed from haul roads or track-out occurs, abatement actions such as sweeping/watering shall increase in frequency until no further fugitive emissions or track-out occurs."

ACRONYMS
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AQD – Air Quality Division of EGLE

EGLE – Michigan Department of Environment, Great Lakes and Energy

-For any piles that EGLE determines cannot be covered or enclosed, pile heights must be limited to no more than 10 feet

The potential height of a pile of materials is limited by the equipment used to load and unload the materials from the pile. The friction of the ground surface does impact the potential wind erosion, but then has less impact as the height of the pile increases. The emission calculations method did not account for the height of the pile. There is not adequate justification for a 10-foot pile height and the reduction of pile height would result in more land needing to be used and cleared for accommodating shorter wider piles with the same volume.

-External truck routes within one mile of the facility should be cleaned by Ajax with a street sweeper with a water spray and vacuum system at least once per day.

The AQD has no authority to require Ajax to take any actions off their property. Air use permits can only regulate on-site roads and activities.

-Dust suppressant systems—including water sprayers, misters, or water trucks, or chemical stabilizers--should be in place and operable throughout the entire year.

As was discussed above, watering of the storage is not practicable as doing so would increase the overall emissions from the facility. When the site is not active, there will be no trucks or loaders causing emissions from paved or unpaved roadways on the site. There will also be no activity from transferring materials at the piles. The fine particulates from the piles would also disperse from wind erosion soon after activity ceased reducing any potential emissions from inactive piles. As such, there is no need to require activities during the winter months.

-Prevent runoff from piles onto public ways, neighboring parcels, or waterways. The company needs to obtain discharge permits for any runoff that will enter any stormwater collection systems. They should also need to grade site so that proper drainage occurs.

The air permit to install permitting process and decision are based upon air related rules and regulations and anything related to water matters is outside of our authority. The commenters may contact the EGLE Water Resources Division for information related to water discharge from the facility.

-Develop written plan for spills and/or migration of pollutants on-site or off-site.

The fugitive dust plan included in Appendix A of both the proposed and final permits contains requirements pertaining to track-out and requires any aggregate spillage on on-site roads to be removed immediately.

-Add Recordkeeping, data retention, and reporting provisions.

ACRONYMS
These acronyms are used on this page:

AQD – Air Quality Division of EGLE

BACT – Best Available Control Technology

EGLE – Michigan Department of Environment, Great Lakes and Energy

HMA – Hox mix asphalt

NOx – Nitrogen Oxides

EUYARD of the permit section VI. Monitoring/Recordkeeping specifies in item #3 "The permittee shall maintain a record of all activities required by the fugitive dust plan in Appendix A. (R 336.1371, R 336.1372)"

Appendix A specifies "Records of dust control activities on travel surfaces and other surfaces where fugitive dust emissions occur shall be kept on file and made available to EGLE staff upon request until the end of the paving season. The records will indicate the date, time, what was observed or the reason for the dust control activity (routine or other), and what action was taken. The record shall be maintained in the Operations Log"

The fugitive emissions are also subject to the 20% opacity limit and new opacity testing and recordkeeping specified in HMAPLANT. This includes a record of any necessary actions taken to reduce opacity for these sources of fugitive emissions.

-Graphic depictions of each of the portions of the site affected by the fugitive dust plan should be provided.

The fugitive dust plan identifies the applicable equipment and the portions of the facility that it applies to. A site plan showing the location of all equipment, the plant roadways, and the storage piles was provided as a part of the permit application.

PERMIT REVIEW PROCESS

86. Comment

There is no evidence the AQD nor the applicant evaluated low-NO_x burners for the drying kiln.

AQD Response

The requested NO_x emissions were evaluated without low-NO_x burners and were found to meet all the applicable rules and regulations in-place to protect public health. The proposed facility is a minor source of NOx emissions and not subject to a BACT review.

87. Comment

A commenter stated that no explanation was provided in any available materials of how the AQD's depiction of PM10 and PM-2.5 emissions went from 33.2 to 34.1 lbs/hr in the model.

ACRONYMS
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AQD – Air Quality Division of EGLE

EGLE – Michigan Department of Environment, Great Lakes and Energy

Lb/hr – Pounds per hour

PM10 - Small particles less than 10 microns in size

PM2.5 - Small particles less than 2.5 microns in size

AQD Response

PM10 and PM2.5 emissions calculations were posted on the AQD public notice website in the Additional Supporting Info document. The 33.2 lb/hr emission rate represents the emissions from the drum dryer alone. However, to be conservative, the modeling assumed all the point source emissions were coming out of a single stack rather than being diluted by being spread among the other exhaust points. The 0.9 lb/hr difference represents the additional emissions from the loadout operations, the asphalt tank heater, and the silo loading operations, for a total of 34.1 lb/hr.

88. Comment

A commenter stated the application did not contain a site map that identified all locations of vents and potential fugitive emission points as is required by the AQD rules.

AQD Response

The purpose of a site map and stack parameters being required in an application is to be able to confirm locations of emission points in the dispersion modeling are correct. As a part of the dispersion modeling submittal, Ajax included a site map that identified all necessary locations and exhaust parameters for the emission sources.

89. Comment

A commenter stated that Michigan Air Pollution Control Rule 336.1203(1)(c) requires an applicant's Permit to Install submittal to include uncontrolled emission rates and that these emission rates were not provided by Ajax.

AQD Response

Rule 203(c) requires that "... the uncontrolled and controlled quantity of all air contaminants that are reasonably anticipated due to the operation of the proposed process equipment" be included in a permit application.

Pieces of equipment that are required to only operate with emission controls, such as Ajax's drum dryer, are not anticipated to have any uncontrolled particulate emissions. Therefore, the

application only included controlled PM, PM10, and PM2.5 emissions from that unit. For other pieces of equipment, the uncontrolled quantity of emissions were submitted and properly included in the application.

ACRONYMS
These acronyms are used on this page:

AC – Air conditioning

AQD – Air Quality Division of EGLE

BACT – Best Available Control Technology

EGLE – Michigan Department of Environment, Great Lakes and Energy

PM – Particulate matter

PM10 - Small particles less than 10 microns in size

PM2.5 - Small particles less than 2.5 microns in size

RAP – Recycled Asphalt Pavement

T-BACT – Toxics Best Available Control Technology

VOC – Volatile organic compounds

90. Comment

A commenter expressed concerns about asphalt millings and how the emissions were considered and being controlled.

AQD Response

Recycled Asphalt Pavement (RAP) includes millings and other pieces of roadway material to be recycled by the asphalt plant. In the review of asphalt plants, RAP is considered a type of aggregate and included in both the aggregate emission calculations and dispersion modeling.

The fugitive emissions from millings storage piles tend to be lower than those from the storage piles of other materials. This is because the millings contain asphalt binder that reduce loose particles. Also, the silt content of milling piles is often lower than that of other aggregate piles.

91. Comment

Commenters stated Ajax should perform a full top-down VOC BACT analysis and T-BACT analysis for Rules 702 and 224 compliance, respectively. The commenters indicated that AP-42 does not represent VOC BACT.

AQD Response

In response to this comment, Ajax submitted an updated VOC BACT analysis evaluating the control of VOC emissions from the drum dryer using a thermal oxidizer, oxidation catalyst, vapor condensation and recovery system (tanks), and routing silo emissions to the burner zone of the drum. The T-BACT analysis discussed the use of a scrubber instead of the proposed baghouse for the drum and blue smoke filtration system for the tanks. The analysis showed the project met VOC BACT and T-BACT requirements as originally proposed. The AC tanks are required to use a condensation and recovery system. The drum is required to use a baghouse, and the silos are required to operate a capture and control system for the top and loadout areas.

ACRONYMS
These acronyms are used on this page:

AQD – Air Quality Division of EGLE

EGLE – Michigan Department of Environment, Great Lakes and Energy

NSPS – New Source Performance Standards

PM – Particulate matter

PM10 - Small particles less than 10 microns in size

PM2.5 - Small particles less than 2.5 microns in size

PTE – Potential to Emit

SO2 – Sulphur Dioxide

Tph – Tons per hour

92. Comment

A commenter indicates the application did not disclose short term potential to emit (PTE) information and sufficient information about the emission units. Concerns were also expressed that the short-term PTE was misrepresented as being based on a throughput of 500 tph for some pollutants. The commenters indicated the PM, PM10, PM2.5, and SO2 should have been based upon the 600 tph throughput. In addition, they stated that modeling did not match what was in the original application. Finally, they stated Ajax should have to resubmit the application to make these changes and undergo another public comment period.

AQD Response

The review of the proposed permit looked at the appropriate throughput based upon the averaging time for each pollutant. Throughput is the amount of material that is processed by the plant. The draft and final permit contained throughput restrictions of 12,000 tons on a daily average, which equates to 500 tons per hour. The final permit also contains throughput limits of 550 tph on a true hourly basis. Emission calculations and modeling often change from what was in the original application submittal. They can also change in result of additional review in response to comments. This decrease in true hourly throughput in the final permit is more stringent than was in the previous draft so another public comment is not warranted.

93. Comment

Commenters stated that emissions of condensable particulates were not included in the review of the proposed permit. The commenters also criticized the moisture content and the emission factor used in the PM emission calculation. In addition, the commenters stated the emission factor used was not specific to Ajax's control equipment.

AQD Response

Condensable particulate emissions are expected from heated emission sources like the asphalt dryer drum. By definition, and per stack testing, PM10 and PM2.5 include condensable particulates, whereas PM does not. As both PM10 and PM2.5 were quantified, evaluated, and modeled, condensable particulates were included in the review of Ajax's application.

The moisture content used was the manufacturer's specified maximum moisture content of 5%. The PM emission factor used was based on the emission limit in NSPS Subpart I for hot mix asphalt facilities like Ajax's.

94. Comment

Nothing in the proposed permit or the AQD materials shows how the new facility, that would discharge over 22,000 tons per year of new carbon dioxide equivalents emissions (CO2e), comports with Governor Gretchen Whitmer's executive orders as to state greenhouse gas emission reduction goals. In addition, neither the application nor the proposed permit includes any attempt to mitigate or offset these new greenhouse gas emissions.

ACRONYMS
These acronyms are used on this page:

AQD – Air Quality Division of EGLE

BACT – Best Available Control Technology

CO2e – Carbon Dioxide Equivalent

EGLE – Michigan Department of Environment, Great Lakes and Energy

GHG – Greenhouse gases

GHGRP – Greenhouse Gas Reporting Program

PSD – Prevention of Significant Deterioration

AQD Response

The primary strategy to reduce greenhouse gas (GHG) emissions through the permitting process is under the Prevention of Significant Deterioration (PSD) program. New major sources of greenhouse gases under the PSD program emit at least 150,000 tons per year of CO2e. The PSD program includes a requirement for BACT which may reduce potential emissions from these major sources of CO2e. The Ajax facility is not a major source of CO2e and therefore not subject to any additional review for their GHG emissions. The minimum emission rate requiring reporting of CO2e emissions to the USEPA greenhouse gas reporting program (GHGRP) is 25,000 tons of CO2e per year. Ajax's potential CO2e emissions of 22,000 tons per year were based upon worst-case emissions and their actual emissions are expected be less than that value.

95. Comment

A commenter requested a denial of the permit based on the stack height being lower than a height to building ratio used to avoid downwash. A commenter also stated that different stack heights should be modeled and compared to determine if a taller stack is required.

AQD Response

Downwash is created when wind travels over an elevated structure. The dispersion model used by Ajax and the AQD, incorporates downwash when determining the maximum pollutant concentrations in the area. If the resulting concentrations are found to exceed allowable levels, one of the options is to make sure downwash is not causing the issue. The 80-foot stack height for the drum proposed by Ajax exceeds the 1.5 times the influencing structure height of 40 feet, which is the general rule of thumb for avoiding downwash effects. All the modeling for the project met the applicable allowed levels.

The air pollution control rules do not require the applicant to perform multiple evaluations to determine if there is an exhaust stack design and/or operating scenario that would result in lower impacts. As the projected emissions from Ajax's proposed stack height were found to meet all applicable standards and screening levels, additional stack designs were not required to be evaluated.

MISCELLANEOUS

96. Comment

Multiple comments were received about the following items:

- That the environmental impacts of asphalt plants are not worth the benefits for the roads, potential jobs, or business profits. Also, that the use of alternative paving materials should be considered.
- Concerns about well water supply, ground water usage, damage to local roads, vibration, light pollution, unwanted and increased traffic, noise, and water use/runoff.
- Concerns about potential lower property values and local taxes.
- Concerns that the permitting decision would be motivated by economic incentives.

ACRONYMS
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AQD – Air Quality Division of EGLE

EGLE – Michigan Department of Environment, Great Lakes and Energy

PTI – Permit to Install

USEPA – United States Environmental Protection Agency

AQD Response

The permit review process is a technical and legal review of the proposed air pollution source and the decision to issue a permit is based on compliance with all applicable state and federal air related rules and regulations. The AQD can only base a permit decision on whether a proposal meets applicable air quality requirements. Other media and local issues such as noise and zoning are handled by other agencies or Departments. In making its decision, the AQD cannot consider potential jobs, business profits, or potential benefits to infrastructure when evaluating an air permit application

97. Comment

Several commenters are concerned about the construction that has occurred at the site prior to permit issuance. Many feel it indicates the public participation process is meaningless.

AQD Response

Ajax was required to obtain their permit prior to beginning actual construction of their emission sources. A company may perform certain activities such as minor preparation and land clearing prior to obtaining a PTI. Any activities done prior to obtaining a permit are done at the company's own risk. Such actions are not related to and have no impact on the permitting decision.

The AQD Lansing District inspector visited the site, to check for installation of unpermitted process or process equipment, on January 29, February 17, March 5 and 19, April 15, and June 16, 2021. The inspector also visited the Ajax site on August 11, 13, 18, and 30, September 3 and 14, and October 6, 12, 27 and 28, 2021, to ensure the activities initiated did not constitute installation of a process or process equipment, in violation of Rule 201. USEPA guidance

considers pouring of concrete footings to be commencement of installation at a site, and this was not found to have taken place. Additionally, on September 16, 2021, the AQD made the company aware that installation of the concrete drainage pipes which were presently stored at the site would be considered as unpermitted installation. Based on AQD investigation, construction has not commenced at the site.

ACRONYMS
These acronyms are used on this page:

AQD – Air Quality Division of EGLE

EGLE – Michigan Department of Environment, Great Lakes and Energy

NAAQS – National Ambient Air Quality Standards

PSD – Prevention of Significant Deterioration

98. Comment

Under Michigan law, when a new plant would cause impairment or destruction of a public resource, the plant should not be allowed if there is a feasible and reasonable alternative. The Michigan Environmental Protection Act requires the state, local agencies, and the courts to consider all pollution, impairment and destruction of resources.

AQD Response

Review of the application showed the facility to be meeting the federal NAAQS, the federal PSD increments, and the applicable State of Michigan air toxic screening levels, all of which are intended to protect public health. As to the consideration of pollution, impairment, and destruction of resources, AQD's review found the proposal to meet the secondary NAAQS, which are concerned with protecting the environment. They are designed to address visibility, damage to crops, vegetation, buildings, and animals. Based upon these reviews the Ajax facility should have no impairment on any public resource.

99. Comment

Ajax should not be allowed to buy carbon credits and no new carbon credits should be allowed for the area.

AQD Response

The United States currently has a voluntary system of carbon trading, with most of it operating through the Chicago Carbon Exchange. Companies may voluntarily take part in the program to minimize or eliminate their effective carbon footprint in relation to greenhouse gases. Neither EGLE nor the AQD is associated with this voluntary program and cannot require any company to take part in it or to forbid any company from taking part in it.

SUMMARY OF COMMENT RECEIVED IN SUPPORT

One comment of general support was received concerning the Ajax application. The comment stated support of business in Genesee Township.

APPENDIX A – FINAL PERMIT CONDITIONS

PERMIT TO INSTALL

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COMMON ACRONYMS

AQD	Air Quality Division
BACT	Best Available Control Technology
CAA	Clean Air Act
CAM	Compliance Assurance Monitoring
CEMS	Continuous Emission Monitoring System
CFR	Code of Federal Regulations
COMS	Continuous Opacity Monitoring System
Department/department/EGLE	Michigan Department of Environment, Great Lakes, and Energy
EU	Emission Unit
FG	Flexible Group
GACS	Gallons of Applied Coating Solids
GC	General Condition
GHGs	Greenhouse Gases
HVLP	High Volume Low Pressure*
ID	Identification
IRSL	Initial Risk Screening Level
ITSL	Initial Threshold Screening Level
LAER	Lowest Achievable Emission Rate
MACT	Maximum Achievable Control Technology
MAERS	Michigan Air Emissions Reporting System
MAP	Malfunction Abatement Plan
MSDS	Material Safety Data Sheet
NA	Not Applicable
NAAQS	National Ambient Air Quality Standards
NESHAP	National Emission Standard for Hazardous Air Pollutants
NSPS	New Source Performance Standards
NSR	New Source Review
PS	Performance Specification
PSD	Prevention of Significant Deterioration
PTE	Permanent Total Enclosure
PTI	Permit to Install
RACT	Reasonable Available Control Technology
ROP	Renewable Operating Permit
SC	Special Condition
SCR	Selective Catalytic Reduction
SNCR	Selective Non-Catalytic Reduction
SRN	State Registration Number
TBD	To Be Determined
TEQ	Toxicity Equivalence Quotient
USEPA/EPA	United States Environmental Protection Agency
VE	Visible Emissions

*For HVLP applicators, the pressure measured at the gun air cap shall not exceed 10 psig.

POLLUTANT / MEASUREMENT ABBREVIATIONS

acfm	Actual cubic feet per minute
BTU	British Thermal Unit
°C	Degrees Celsius
CO	Carbon Monoxide
CO_2e	Carbon Dioxide Equivalent
dscf	Dry standard cubic foot
dscm	Dry standard cubic meter
°F	Degrees Fahrenheit
gr	Grains
HAP	Hazardous Air Pollutant
Hg	Mercury
hr	Hour
HP	Horsepower
H_2S	Hydrogen Sulfide
kW	Kilowatt
lb	Pound
m	Meter
mg	Milligram
mm	Millimeter
MM	Million
MW	Megawatts
NMOC	Non-Methane Organic Compounds
NO_x	Oxides of Nitrogen
ng	Nanogram
PM	Particulate Matter
PM10	Particulate Matter equal to or less than 10 microns in diameter
PM2.5	Particulate Matter equal to or less than 2.5 microns in diameter
pph	Pounds per hour
ppm	Parts per million
ppmv	Parts per million by volume
ppmw	Parts per million by weight
psia	Pounds per square inch absolute
psig	Pounds per square inch gauge
scf	Standard cubic feet
sec	Seconds
SO_2	Sulfur Dioxide
TAC	Toxic Air Contaminant
Temp	Temperature
THC	Total Hydrocarbons
tpy	Tons per year
µg	Microgram
µm	Micrometer or Micron
VOC	Volatile Organic Compounds
yr	Year

GENERAL CONDITIONS

1. The process or process equipment covered by this permit shall not be reconstructed, relocated, or modified, unless a Permit to Install authorizing such action is issued by the Department, except to the extent such action is exempt from the Permit to Install requirements by any applicable rule. **(R 336.1201(1))**

2. If the installation, construction, reconstruction, relocation, or modification of the equipment for which this permit has been approved has not commenced within 18 months, or has been interrupted for 18 months, this permit shall become void unless otherwise authorized by the Department. Furthermore, the permittee or the designated authorized agent shall notify the Department via the Supervisor, Permit Section, Air Quality Division, Michigan Department of Environment, Great Lakes, and Energy, P.O. Box 30260, Lansing, Michigan 48909-7760, if it is decided not to pursue the installation, construction, reconstruction, relocation, or modification of the equipment allowed by this Permit to Install. **(R 336.1201(4))**

3. If this Permit to Install is issued for a process or process equipment located at a stationary source that is not subject to the Renewable Operating Permit program requirements pursuant to Rule 210 (R 336.1210), operation of the process or process equipment is allowed by this permit if the equipment performs in accordance with the terms and conditions of this Permit to Install. **(R 336.1201(6)(b))**

4. The Department may, after notice and opportunity for a hearing, revoke this Permit to Install if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of this permit or is violating the Department's rules or the Clean Air Act. **(R 336.1201(8), Section 5510 of Act 451, PA 1994)**

5. The terms and conditions of this Permit to Install shall apply to any person or legal entity that now or hereafter owns or operates the process or process equipment at the location authorized by this Permit to Install. If the new owner or operator submits a written request to the Department pursuant to Rule 219 and the Department approves the request, this permit will be amended to reflect the change of ownership or operational control. The request must include all of the information required by subrules (1)(a), (b), and (c) of Rule 219 and shall be sent to the District Supervisor, Air Quality Division, Michigan Department of Environment, Great Lakes, and Energy. **(R 336.1219)**

6. Operation of this equipment shall not result in the emission of an air contaminant which causes injurious effects to human health or safety, animal life, plant life of significant economic value, or property, or which causes unreasonable interference with the comfortable enjoyment of life and property. **(R 336.1901)**

7. The permittee shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant which continue for more than one hour in excess of any applicable standard or limitation, or emissions of any air contaminant continuing for more than two hours in excess of an applicable standard or limitation, as required in Rule 912, to the Department. The notice shall be provided not later than two business days after start-up, shutdown, or discovery of the abnormal condition or malfunction. Written reports, if required, must be filed with the Department within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal condition or malfunction has been corrected, or within 30 days of discovery of the abnormal condition or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5). **(R 336.1912)**

8. Approval of this permit does not exempt the permittee from complying with any future applicable requirements which may be promulgated under Part 55 of 1994 PA 451, as amended or the Federal Clean Air Act.

9. Approval of this permit does not obviate the necessity of obtaining such permits or approvals from other units of government as required by law.

10. Operation of this equipment may be subject to other requirements of Part 55 of 1994 PA 451, as amended and the rules promulgated thereunder.

11. Except as provided in subrules (2) and (3) or unless the special conditions of the Permit to Install include an alternate opacity limit established pursuant to subrule (4) of Rule 301, the permittee shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of density greater than the most stringent of the following. The grading of visible emissions shall be determined in accordance with Rule 303 (R 336.1303). **(R 336.1301)**
    a) A six-minute average of 20 percent opacity, except for one six-minute average per hour of not more than 27 percent opacity.
    b) A visible emission limit specified by an applicable federal new source performance standard.
    c) A visible emission limit specified as a condition of this Permit to Install.

12. Collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in Rule 370(2). **(R 336.1370)**

13. The Department may require the permittee to conduct acceptable performance tests, at the permittee's expense, in accordance with Rule 1001 and Rule 1003, under any of the conditions listed in Rule 1001. **(R 336.2001)**

EMISSION UNIT SPECIAL CONDITIONS

EMISSION UNIT SUMMARY TABLE

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date / Modification Date	Flexible Group ID
EUHMAPLANT	Hot mix asphalt (HMA) facility including: aggregate conveyors, a 500 tph counter-flow drum, and a 100,000 cfm baghouse	TBD	NA
EUYARD	Fugitive dust sources including: plant roadways, plant yard, material storage piles, material handling operations (excluding cold feed aggregate bins).	TBD	NA
EUACTANKS	Six 30,000 gallon liquid asphalt cement storage tanks with a total heat capacity of 2 MMBtu/hr	TBD	NA
EUSILOS	Eight 300 ton capacity hot mix asphalt (HMA) paving material product storage silo.	TBD	NA

Changes to the equipment described in this table are subject to the requirements of R 336.1201, except as allowed by R 336.1278 to R 336.1291.

EUHMAPLANT
EMISSION UNIT CONDITIONS

DESCRIPTION

Hot mix asphalt (HMA) facility including: aggregate conveyors, a 500 tph counter-flow drum, and a 100,000 cfm baghouse

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

Fabric filter dust collector.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. PM	0.04 gr/dscf	Hourly	EUHMAPLANT	SC V.5, SC VI.4	40 CFR 60.92
2. PM	0.0436 lb per ton[b]	Hourly	EUHMAPLANT	SC V.2, SC V.5, SC VI.4	R 336.1205(1)(a),
3. PM	15.95 tpy[a]	12-month rolling time period as determined at the end of each calendar month	EUHMAPLANT	SC VI.8	R 336.1205(1)(a)
4. PM10	0.057 lb per ton[b,c]	Hourly	EUHMAPLANT	SC V.2, SC V.3, SC V.4, SC VI.8	R 336.1205(1)(a), R 336.1205(3), 40 CFR 52.21(c) & (d)
5. PM10	29.121.91 tpy[a,c]	12-month rolling time period as determined at the end of each calendar month	EUHMAPLANT	SC VI.8	R 336.1205(1)(a), R 336.1205(3)
6. PM2.5	0.057 lb per ton[b,c]	Hourly	EUHMAPLANT	SC V.2, SC V.3, SC V.4, SC VI.8	R 336.1205(1)(a), R 336.1205(3), 40 CFR 52.21(c) & (d)
7. PM2.5	29.121.91 tpy[a,c]	12-month rolling time period as determined at the end of each calendar month	EUHMAPLANT	SC VI.8	R 336.1205(1)(a), R 336.1205(3)
8. CO	0.201 lb per ton[b]	Hourly	EUHMAPLANT	SC V.2, SC V.3	R 336.1205(1)(a), R 336.1205(3)
9. CO	88.187.63 tpy[a]	12-month rolling time period as determined at the end of each calendar month	EUHMAPLANT	SC VI.8	R 336.1205(1)(a), R 336.1205(3)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
10. SO_2	0.1618 lb per ton[b] 0.089 lb per ton[b]	Hourly when burning Fuel Oil #6 Hourly when burning Fuel Oils #1-5, propane, or natural gas	EUHMAPLANT	SC V.2, SC V.3, SC V.4	R 336.1205(1)(a), R 336.1205(3)
11. SO_2	78.070.11 tpy[a]	12-month rolling time period as determined at the end of each calendar month	EUHMAPLANT	SC VI.8	R 336.1205(1)(a), R 336.1205(3)
12. NO_x	0.0712 lb per ton[b]	Hourly	EUHMAPLANT	SC V.2, SC V.3, SC V.4	R 336.1205(1)(a), R 336.1205(3)
13. NO_x	52.630.67 tpy[a]	12-month rolling time period as determined at the end of each calendar month	EUHMAPLANT	SC VI.8	R 336.1205(1)(a), R 336.1205(3)
14.VOC	0.06 lb/ton[b]	Hourly	EUHMAPLANT	SC V.2, SC V.3, SC V.4	R 336.1205(1)(a), R 336.1702
15.VOC	26.29 tpy[a]	12-month rolling time period as determined at the end of each calendar month	EUHMAPLANT	SC VI.8	R 336.1205(1)(a), R 336.1702
164. Lead	1.003.0 $\times 10^{-5}$ lb per ton[b,1]	Hourly	EUHMAPLANT	SC V.2, SC V.3, SC V.4	R 336.1225
1517. Benzene	0.000751 lb per ton[b,1]	Hourly	EUHMAPLANT	SC V.2	R 336.1224, R 336.1225
1618. Toluene	0.0063 lb per ton[b,1]	Hourly	EUHMAPLANT	SC V.2	R 336.1224, R 336.1225
1719. Ethylbenzene	0.001 lb per ton[b,1]	Hourly	EUHMAPLANT	SC V.2	R 336.1224, R 336.1225
1820. Xylene	0.001 lb per ton[b,1]	Hourly	EUHMAPLANT	SC V.2	R 336.1224, R 336.1225
1921. Naphthalene	00.00078.001 lb per ton[b,1]	Hourly	EUHMAPLANT	SC V.2	R 336.1224, R 336.1225
2022. Formaldehyde	0.00541 lb per ton[b,1]	Hourly	EUHMAPLANT	SC V.2	R 336.1224, R 336.1225
2123. Acrolein	0.00126 lb per ton[b,1]	Hourly	EUHMAPLANT	SC V.2	R 336.1224, R 336.1225
2224. Arsenic	3.02.0 $\times 10^{-6}$ lb per ton[b,1]	Hourly	EUHMAPLANT	SC V.2	R 336.1224, R 336.1225

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
~~23~~25. Nickel	0.000076~~1~~ lb per ton[b,1]	Hourly	EUHMAPLANT	SC V.2	R 336.1224, R 336.1225
~~24~~26. H_2SO_4	0.0032 lb per ton[b,1]	Hourly	EUHMAPLANT	SC V.2	R 336.1224, R 336.1225
~~25~~27. Manganese	3.5~~5.0~~ $\times 10^{-5}$ lb per ton[b,1]	Hourly	EUHMAPLANT	SC V.2	R 336.1224, R 336.1225
28. Opacity	20%	6 minute average	Drum dryer; systems for handling, storing, and weighing hot aggregate; systems for loading, transferring, and storing mineral filler/aggregate and the loading, transfer, and storage systems associated with emission control systems	SC V.6	40 CFR 60.92, R 336.1301

[a] Annual limits based on 876,322 tons HMA paving material production.
[b] Pound pollutant per ton of HMA paving material produced.

II. MATERIAL LIMIT(S)

1. The permittee shall not burn any fuel other than natural gas, propane, and fuel oil ~~#1-6, and recycled used oil (RUO)~~ in EUHMAPLANT. Fuel oil #6 shall have no more than a 1% sulfur content, all other fuel oils are limited to 0.5%. **(R 336.1205(1)(a), R 336.1224, R 336.1225~~, R 336.1702~~)**

~~2. The permittee shall not burn in EUHMAPLANT any hazardous waste (as defined in state or federal law), blended fuel oil or specification recycled used oil (RUO) containing any contaminant that exceeds the following concentrations or for which the flash point, ash content, or acidity vary from the standards specified in the following table. (R 336.1225)~~

~~Contaminant~~	~~Limit~~	~~Units~~
~~Arsenic~~	~~5.0~~	~~ppmw~~
~~Cadmium~~	~~2.0~~	~~ppmw~~
~~Chromium~~	~~10.0~~	~~ppmw~~
~~Lead~~	~~100.0~~	~~ppmw~~
~~PCBs~~	~~1.0~~	~~ppmw~~
~~Total Halogens~~	~~4000.0~~	~~ppmw~~
~~Sulfur~~	~~1.5~~	~~Weight %~~
~~Minimum Flash Point~~	~~100.0~~	~~°F~~
~~Maximum Ash Content~~	~~1.0~~	~~Weight %~~

~~Contaminant~~	~~Limit~~	~~Units~~
~~Acidity~~	~~Minimum pH = 4~~ ~~Maximum pH = 10~~	~~N/A~~

~~3~~2. The permittee shall not use any asbestos tailings or waste materials containing asbestos in EUHMAPLANT pursuant to the National Emission Standards for Hazardous Air Pollutants, 40 CFR Part 61, Subpart M. **(R 336.1225, 40 CFR Part 61 Subparts A & M)**

~~4~~3. The permittee shall limit the asphalt mixture processed in EUHMAPLANT to a maximum of 50 percent RAP material based on a ~~monthly~~ weekly average. **(R 336.1224, R 336.1225, R 336.1702)**

~~5~~4. The permittee shall not process more than 876,322 tons of HMA paving materials in EUHMAPLANT per 12-month rolling time period as determined at the end of each calendar month. **(R 336.1205(1)(a), R 336.1205(3))**

~~6~~5. The permittee shall not process more than ~~600~~ 550 tons of HMA paving materials in EUHMAPLANT per hour as determined at the end of each hour. **(R 336.1224, R 336.1225, R 336.1702, 40 CFR 52.21(c) & (d),)**

~~7~~6. The permittee shall not process more than 12,000 tons of HMA paving materials per day in EUHMAPLANT as determined at the end of each calendar day. **(R 336.1224, R 336.1225, R 336.1702, 40 CFR 52.21(c) & (d))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate EUHMAPLANT unless the Fugitive Dust Control Plan for EUYARD specified in Appendix A, or alternative as approved by the district supervisor, has been implemented and is maintained. **(R 336.1371, R 336.1372, Act 451 324.5524)**

2. The permittee shall not operate EUHMAPLANT unless the Preventative Maintenance Program specified in Appendix B, or alternative as approved by the district supervisor, has been implemented and is maintained. **(R 336.1910, R 336.1911)**

3. The permittee shall not operate EUHMAPLANT unless the Emission Abatement Plan for Startup, Shutdown and Malfunctions specified in Appendix C, or alternative as approved by the district supervisor, has been implemented and is maintained. **(R 336.1911, R 336.1912)**

~~4. The permittee shall not operate EUHMAPLANT unless the Compliance Monitoring Plan (CMP) for Recycled Used Oil (RUO) specified in Appendix D, or an alternate plan approved by the AQD District Supervisor, is implemented and maintained. (R 336.1225, R 336.1371, R 336.1372, R 336.1910, R 336.1911, Act 451 324.5521, 40 CFR 279.55)~~

~~5~~4. The permittee shall maintain the efficiency of the EUHMAPLANT drum mix burners, to control CO emissions, by fine tuning the burners for proper burner operation and performance. The permittee shall fine tune the burners at the startup of the drum mix fuel burners; upon each paving season; after every 500 hours of operation thereafter or upon a malfunction of EUHMAPLANT as shown by the CO emission monitoring data, whichever occurs first. **(R 336.1205, R 336.1224, R 336.1225, R 336.170240, 40 CFR 52.21(c) & (d))**

5. The permittee shall install and operate the asphalt plant as reviewed in the permit application for PTI 90-21 except as allowed under Rules 201 and Rule 278(1)(b). **(R 336.1201(1), R 336.1205, R 336.1224, R 336.1225, 40 CFR 52.21(c) & (d))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall install, maintain, and operate the fabric filter dust collector, associated parameter monitoring, recording system, and associated alarm systems for EUHMAPLNT in a satisfactory manner. The baghouse shall be equipped with a bag leak detection system and alarm. The bag leak alarm system that will be calibrated and fully operational within 180 days of startup. Except as allowed in Appendix C, sSatisfactory operation of the fabric filter dust collector requires a pressure drop range between 2 and 10 inches of water column during operation. The minimum pressure drop shall not be less than 2 inches water gauge during operation, unless a reason acceptable to the AQD has been provided, such as when a large number of filter bags have been replaced. ~~except when a large number of filter bags have been replaced or other reason acceptable to the AQD.~~ **(R 336.1910, 40 CFR 52.21(c) & (d)))**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The verification and quantification of odor emissions from EUHMAPLANT, by testing at owner's expense, in accordance with Department requirements may be required for continued operation. Within 60 days upon notification from the AQD District Supervisor, the permittee shall submit to the AQD Technical Programs Unit and District Office, a complete stack sampling and odor threshold analysis plan using the Dynamic Dilution Method. The stack sampling plan shall include provisions for various fuel usages, plant operating conditions, and odor neutralizer system operation (if any). The AQD must approve the final plan prior to testing. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 120 days from notification from the AQD District Supervisor. **(R 336.1901, R 336.2001, R 336.2003, R 336.2004)**

2. Within 180 days after a request by the Department, the permittee shall verify ~~carbon monoxide and any requested toxic~~ emission rates ~~from~~ for any requested pollutants from EUHMAPLANT by testing at the owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in the table below.

Pollutant	Test Method Reference
PM	40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules
PM10 / PM2.5	40 CFR Part 51, Appendix M
NO_x	40 CFR Part 60, Appendix A
SO_2	40 CFR Part 60, Appendix A
CO	40 CFR Part 60, Appendix A
VOCs	40 CFR Part 60, Appendix A
Metals	40 CFR Part 60, Appendix A; 40 CFR Part 61, Appendix B; 40 CFR Part 63, Appendix A
Sulfuric Acid Mist	40 CFR Part 60, Appendix A
HAPs	40 CFR Part 63, Appendix A

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol and must meet the requirements of the federal Clean Air Act, all applicable state and federal rules and regulations, and be within the authority of the AQD to make the change. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1225, R 336.2001, R 336.2003, R 336.2004)**

3. Within 60 days after achieving the maximum production rate, but not later than 180 days after commencement of trial operation, the permittee shall verify PM10, PM2.5, NOx, CO, SO2, VOC, arsenic, benzene and formaldehyde and Lead from EUHMAPLANT by testing at the owner's expense, in accordance with Department requirements. Testing for each pollutant shall be performed once every 12-month period until three consecutive tests demonstrate compliance with its applicable emission limit. The testing shall be performed using an approved EPA Method listed in the table below.

Pollutant	Test Method Reference
PM10 / PM2.5	40 CFR Part 51, Appendix M
NO_x	40 CFR Part 60, Appendix A

SO_2	40 CFR Part 60, Appendix A
CO	40 CFR Part 60, Appendix A
VOCs	40 CFR Part 60, Appendix A
Metals	40 CFR Part 60, Appendix A; 40 CFR Part 61, Appendix B; 40 CFR Part 63, Appendix A
HAPs	40 CFR Part 63, Appendix A

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol and must meet the requirements of the federal Clean Air Act, all applicable state and federal rules and regulations, and be within the authority of the AQD to make the change. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1205(1)(a), R 336.1205(3), R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21(c) & (d))**

4. Within 60 days upon the initial burning of fuel oil~~RUO~~ in EUHMAPLANT, the permittee shall verify PM10, PM2.5, NOx, VOC, ~~and~~ SO_2, ~~,~~ arsenic, benzene and formaldehyde and lead from EUHMAPLANT by testing at the owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in the table below.

Pollutant	Test Method Reference
PM	40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules
PM10 / PM2.5	40 CFR Part 51, Appendix M
NO_x	40 CFR Part 60, Appendix A
SO_2	40 CFR Part 60, Appendix A
VOCs	40 CFR Part 60, Appendix A
Metals	40 CFR Part 60, Appendix A; 40 CFR Part 61, Appendix B; 40 CFR Part 63, Appendix A
HAPs	40 CFR Part 63, Appendix A

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol and must meet the requirements of the federal Clean Air Act, all applicable state and federal rules and regulations, and be within the authority of the AQD to make the change. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1205(1)(a), R 336.1205(3), R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21(c) & (d))**

5. Within 60 days after achieving the maximum production rate, but not later than 180 days after commencement of trial operation, the permittee shall verify particulate emission (PM) rates from EUHMAPLANT, as required by federal Standards of Performance for New Stationary Sources, by testing at owner's expense, in accordance with 40 CFR Part 60 Subparts A and I. The permittee shall notify the AQD District Supervisor in writing within 15 days of the date of commencement of trial operation in accordance with 40 CFR 60.7(a)(3). Stack testing procedures and the location of stack testing ports shall be in accordance with the applicable federal Reference Methods, 40 CFR Part 60 Appendix A. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(40 CFR Part 60 Subparts A & I))**

6. The permittee shall perform a visible emission observation for the drum dryer; systems for screening, handling, storing, and weighing hot aggregate; systems for loading, transferring, and storing (including piles) mineral filler/aggregate; and the loading, transfer, and storage systems associated with emission control systems once every 3 hours of operation and at least once a day when a EUHMAPLANT is operating during daylight hours, using a method acceptable to the AQD. If the permittee observes visible emissions, the permittee shall do one of the following:

a. Perform a Method 9 for visible emissions. If after performing the Method 9 visible emissions reading, the permittee determines that visible emissions from the observation points exceed 20% opacity, the permittee shall immediately initiate an investigation to determine the cause of the visible emissions and initiate prompt corrective action: or

b. Determine the cause of the visible emissions and initiate prompt corrective action.

A minimum of one Method 9 observation is required per day, during daylight hours. Records will include the time of each visible emissions observation and, Method 9 reading, the reason if an observation or reading is not taken, and if visible emissions were observed, identification of the cause, the corrective action taken, and the time of completion of corrective action. **(40 CFR 60.92, R 336.2001, R 336.2003, R 336.2004)**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1205(1)(a))**

2. The permittee shall monitor and record, in a satisfactory manner, the virgin aggregate feed rate and the RAP feed rate to EUHMAPLANT on a continuous basis during operation. **(R 336.1224, R 336.1225, R 336.1702)**

3. The permittee shall monitor, with a handheld CO monitor, the CO emissions from EUHMAPLANT and the production data associated with the time the emissions data were collected. The CO emissions should be less than 500 ppmv to ensure EUHMAPLANT is operating properly. One data set shall be recorded for each of the following occurrences:
   a) Upon start-up of each paving season.
   b) Upon a malfunction of the drum dryer or its associated burner.
   c) After every 500 hours of operation.

   A data set shall consist of at least eight separate CO readings and shall be taken over a total time period of 30 minutes or longer. The permittee shall submit any request for an alternate monitoring schedule in writing to the AQD District Supervisor for review and approval. Data collected by this method shall be used for determining proper burner operation. **(R 336.1205(1)(a), R 336.1205(3), R 336.1224, R 336.1225, R 336.1702)**

4. The permittee shall monitor emissions and operating information in accordance with the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60 Subparts A and I for EUHMAPLANT. The permittee shall keep records of all source emissions data and operating information on file at the facility and make them available to the Department upon request. **(40 CFR Part 60 Subparts A & I)**

5. The permittee shall conduct all necessary maintenance and make all necessary attempts to keep all drum mixer/burner and fabric filter dust collector components of EUHMAPLANT maintained and operating in a satisfactory manner. The owner or operator shall maintain a log of all significant maintenance activities conducted and all significant repairs made to EUHMAPLANT. Maintenance records for the fabric filter dust collector shall be consistent with the Preventative Maintenance Program specified in Appendix B. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1910, R 336.1911, 40 CFR 52.21(c) & (d)))**

6. The permittee shall keep the following records for each calendar month that EUHMAPLANT is operated:
   a) Identification, type and the amounts (in gallons) of all fuel oils combusted and first date of use.
   b) Sulfur content (percent by weight), specific gravity, flash point, and higher heating value (BTU/lb) of all fuel oils being combusted.
   c) Tons of hot mix asphalt containing RAP produced, ~~including the average percent of RAP per ton of hot mix asphalt produced containing RAP.~~

The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1205(1)(a), R 336.1205(3), R 336.1224, R 336.1225, R 336.1402, R 336.1702)**

7. The permittee shall keep daily records of the following production information for EUHMAPLANT, updated upon the start of each new blend:
   a) The virgin aggregate feed rate.
   b) The RAP feed rate.
   c) The asphalt paving material product temperature.
   d) Information sufficient to identify all ingredients of the asphalt paving material mixture.

   Upon start-up, the permittee shall record the initial mix design and time. When a new mix design is activated after start-up, the permittee shall record the time and new mix design. The permittee shall keep all records on file until the end of the paving season in which they were recorded and make them available to the Department upon request. **(R 336.1205(1)(a), R 336.1205(3), R 336.1224, R 336.1225, R 336.1702)**

8. The permittee shall keep in a satisfactory manner, monthly and 12-month rolling time period emission calculation records of all criteria pollutants listed in the Emission Limit Table for EUHMAPLANT using the calculation methods in Appendix D or an alternate method acceptable to the AQD District Supervisor. If stack test results for EUHMAPLANT exist for any of the pollutants, the permittee may use those stack test results to estimate pollutant emissions subject to the approval of the AQD. In the event that stack test results do not exist for a specific pollutant, the permittee shall use the applicable emission factor listed in the Emission Limit Table to estimate the emissions of a pollutant from EUHMAPLANT. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1205(1)(a), R 336.1205(3), R 336.1225, R 336.1702)**

9. The permittee shall keep records, as described in SC VI.3, of all CO emissions and related production data including the dates and times emissions were monitored. This data shall be used to ensure proper operation of the drum dryer or associated burner. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1205(1)(a), R 336.1205(3), R 336.1224, R 336.1225, R 336.1702)**

10. The permittee shall keep, in a satisfactory manner, hourly, daily, monthly and 12-month rolling time period records of the amount of HMA paving materials produced from EUHMAPLANT. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1205(1)(a), R 336.1205(3))**

11. The permittee shall keep, in a satisfactory manner, daily, monthly and 12-month rolling time period records of the hours of operation of EUHMAPLANT. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1205(1)(a), R 336.1205(3))**

12. The permittee shall monitor and record, in a satisfactory manner, the pressure drop for the fabric filter controlling EUHMAPLANT emissions on a continuous basis during operation. **(R 336.1224, R 336.1225, R 336.1910)**

13. The permittee shall record all instances of ~~all~~ alarms for the high temperature and bag leak detection ~~alarm~~ system, once the system is calibrated, ~~instances~~ for the EUHMAPLANT fabric filter system including the reason the alarm was activated and the actions taken. **(R 336.1224, R 336.1225, R 336.1910)**

14. The permittee shall keep weekly records of the RAP feed rate, including the average percent of RAP per ton of hot mix asphalt produced containing RAP. **(R 336.1224, R 336.1225, R 336.1702)**

VII. REPORTING

1. Within 30 days after completion of the installation, construction, reconstruction, relocation, or modification authorized by this Permit to Install, the permittee or the authorized agent pursuant to Rule 204, shall notify the AQD District Supervisor, in writing, of the completion of the activity. Completion of the installation, construction, reconstruction, relocation, or modification is considered to occur not later than commencement of trial operation of EUHMAPLANT. **(R 336.1201(7)(a))**

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVHMADRUM	68	80	R 336.1225, 40 CFR 52.21(c) & (d)

2. The permittee shall locate SVHMADRUM at least 255 feet from the closest property line. **(R 336.1225, 40 CFR 52.21(c) & (d)**

IX. OTHER REQUIREMENT(S)

1. The permittee shall install and maintain berms, fences, windbreaks, and/or trespassing warning signage as appropriate to secure the property boundary. Within 30 days of the first operation of EUHMAPLANT, the permittee shall submit to the AQD Supervisor confirmation of installation and a diagram of the location of each method being used. -**(R 336.1225, 40 CFR 52.21(c) & (d))**

~~NA~~

Footnotes:
[1] This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

EUYARD
EMISSION UNIT CONDITIONS

DESCRIPTION

Fugitive dust sources including: plant roadways, plant yard, material storage piles, material handling operations (excluding cold feed aggregate bins).

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

Controls as specified in the Fugitive Dust Control Plan in Appendix A

I. EMISSION LIMIT(S)

1. During the operating season, the permittee shall control the emissions from all roads and unpaved travel surfaces by the application of water, sweeping, vacuuming, or other acceptable dust control method on a frequency sufficient to meet the visible emission opacity standard of five (5) percent opacity on a continuous basis. **(40 CFR 52.21(c) & (d), Section 5524 of Article II, Chapter 1, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451)**

2. The permittee shall not allow any visible emissions from any aggregate storage pile in EUYARD unless the visible emissions are the direct result of activity on the applicable pile or wind speeds of at least 12 miles per hour. The visible emissions when there is activity on the pile or the wind speeds are at least 12 miles per hour shall not exceed 20% opacity as specified in GC11 and EUHMAPLANT SC I.28 . **(40 CFR 52.21(c) & (d))**

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate EUYARD unless the fugitive dust control plan specified in Appendix A has been implemented and is maintained. The permittee shall submit modifications to this fugitive dust control plan if it does not adequately control the emissions upon request of the District Supervisor. Any changes made to the fugitive dust plan must be pre-approved in writing from the district prior to implementation. **(R 336.1371, R 336.1372, Act 451 324.5524, 40 CFR 52.21(c) & (d))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall install, maintain, and operate a wind speed monitor and continuous recording system in a satisfactory manner. Satisfactory operation includes operating the wind speed monitor and recording system at all times except for the period between paving seasons when the plant is inactive. **(40 CFR 52.21(c) & (d))**

V. TESTING/SAMPLING

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1371, R 336.1372)**

2. The permittee shall calculate, in a satisfactory manner, the annual fugitive dust emissions for EUYARD for each reporting year, using emission factors approved by the Department such as those used in MAERS or an approved PTI application using the calculation methods specified in Appendix D or an alternate method approved by the AQD District Supervisor. **(R 336.1371, R 336.1372)**

3. The permittee shall maintain a record of all activities required by the fugitive dust plan in Appendix A. **(R 336.1371, R 336.1372)**

4. The permittee shall maintain a record of the recorded wind speeds in a format acceptable to the AQD District Supervisor and make them available upon request. **(40 CFR 52.21(c) & (d))**

5. The permittee shall make available upon request by the Department the silt content for each aggregate stored onsite based on the percent by weight passing the #200 sieve. **(40 CFR 52.21(c) & (d))**

VII. REPORTING

1. The permittee shall report the actual emission levels for EUYARD to the AQD through the annual emission reporting required under Section 5503(k) of Article II, Chapter 1, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451). **(R 336.1371, R 336.1372)**

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

Footnotes:
[1] This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

EUACTANKS
EMISSION UNIT CONDITIONS

DESCRIPTION

Six 30,000 gallon liquid asphalt cement storage tanks with a total heat capacity of 2 MMBtu/hr

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

vapor condensation and recovery system

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate EUACTANKS unless the vapor condensation and recovery system is installed, maintained, and operated consistent with manufacturers recommendations. **(R 336.1224, R 336.1702, R 336.1910)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall maintain records for maintenance activities on EUACTANKS consistent with the manufacturers recommendations to determine that the vapor condensation and recovery system is operating properly. All records shall be kept on file and made available to the Department upon request. **(R 336.1224, R 336.1702, R 336.1910)**

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

Footnotes:
[1] This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

EUSILOS
EMISSION UNIT CONDITIONS

DESCRIPTION

Eight 300 ton capacity hot mix asphalt (HMA) paving material product storage silo.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

Top of silo emission controls and loadout controls

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate EUSILOS unless the emission capture system for the top of each storage silo is installed, maintained, and operated in a satisfactory manner. The permittee shall vent emissions collected from the top of the silos into a filtering system or shall control the emissions by equivalent means. **(R 336.1224, R 336.1702, R 336.1910)**

2. The permittee shall not operate EUSILOS unless emissions from the load-out area are properly captured and controlled. Unless otherwise specified by the District Supervisor, proper capture includes enclosing the truck load-out area with sides that extend to five feet above the top of the road grade at the entrance to the scale and, if appropriate, include wind blocking for entrance and exit points. If the load-out area inadequately captures and controls load-out emissions, the permittee shall modify the system or operation as requested by the District Supervisor. The permittee shall vent emissions collected from the truck load-out area into a filtering system or shall control the emissions by equivalent means. Any plans considered by the permittee as equivalent means shall be pre-approved in writing by the District Supervisor. The permittee shall not operate EUSILOS unless the silo load-out control system is installed, maintained and operated in a satisfactory manner **(R 336.1224, R 336.1702, R 336.1901, R 336.1910)**

3. The permittee shall conduct all necessary maintenance and make all necessary attempts to keep all load-out components of EUSILOS maintained and operating in a satisfactory manner. The owner or operator shall maintain a log of all significant maintenance activities conducted and all significant repairs made to EUSILOS. Maintenance records for the load-out control shall be consistent with the Preventative Maintenance Program specified in Appendix B. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1224, R 336.1702, R 336.1901,R 336.1910, R 336.1911)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

NA

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

Footnotes:
[1] This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

FGFACILITY CONDITIONS

DESCRIPTION: The following conditions apply source-wide to all process equipment including equipment covered by other permits, grand-fathered equipment and exempt equipment.

POLLUTION CONTROL EQUIPMENT

Watering and cleaning of roads to control of fugitive emissions, top of silo control, loadout controls, and vapor condensation and recovery system on asphalt tanks, and fabric filter dust collector on drum exhaust.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. CO	~~89.9~~89.5 tpy*	12-month rolling time period as determined at the end of each calendar month	FGFACILITY	SC VI.2	R 336.1205(3)
2. SO_2	~~78.1~~70.2 tpy*	12-month rolling time period as determined at the end of each calendar month	FGFACILITY	SC VI.2	R 336.1205(3)
3. Each Individual HAP	Less than 8.9 tpy*	12-month rolling time period as determined at the end of each calendar month	FGFACILITY	SC VI.2	R 336.1205(3)
4. Aggregate HAPs	Less than 22.5 tpy*	12-month rolling time period as determined at the end of each calendar month	FGFACILITY	SC VI.2	R 336.1205(3)
* Potential emissions are limited by the annual throughput restriction of 876,322 tons of HMA paving materials in EUHMAPLANT and the heat rate capacities of other equipment at time of issuance					

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1205(3))**

2. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period CO, SO_2, each individual HAP, and aggregate total HAPs emission calculation records using methods specified in Appendix D or an alternate method approved by the AQD District Supervisor for FGFACILITY, as required by SC I.1, SC I.2, SC I.3, and SC I.4. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1205(3))**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

Footnotes:
[1] This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

APPENDIX A
FUGITIVE DUST CONTROL PLAN

PURPOSE: This plan provides dust control strategies for the areas adjacent to and associated with the equipment operations involved in the manufacture of Hot Mix Asphalt (HMA) paving materials.

1. SITE MAINTENANCE

a. Dust on all areas where vehicular traffic will travel shall be controlled by the application of water, sweeping, vacuuming, or other acceptable dust control method. This will occur a minimum of two times per month if using calcium chloride or weekly if using water during periods of operation. Watering may not be required during periods with precipitation. The dust control method shall be acceptable as determined by the District Supervisor. If fugitive emissions are observed from haul roads or track-out occurs, abatement actions such as sweeping/watering shall increase in frequency until no further fugitive emissions or track-out occurs.

b. The speed of vehicles on the site will be limited to 10 miles per hour or less. Signs will be posted to advise drivers entering the facility of the speed limitation.

c. The drop heights of all material transfer points and screening operations shall be minimized

d. The permittee shall visibly monitor all potential areas of fugitive emissions including material transfer points, storage piles, loadout, and facility entrance.

2. MANAGEMENT OF ON-SITE ROADWAYS

a. All the roadways on which the HMA haul vehicles and aggregate haul trucks will travel must be paved with HMA. This includes the roadway on which the vehicles travel around the process equipment to be loaded with HMA paving materials but excludes the aggregate storage yard.

b. Any aggregate spillage on roads shall be removed immediately.

c. The roadway shall have rumble strips installed where vehicles exit the plant site.

3. ON-SITE MANAGEMENT OF HAUL VEHICLES

a. INCOMING TRUCKS: All trucks entering the site to deliver aggregates will be required to have the loads covered.

b. OUT-GOING TRUCKS: All trucks leaving the site with HMA paving materials will be required to cover their loads prior to leaving the site. A sign shall be posted to advise drivers of this requirement.

4. MANAGEMENT OF FRONT-END LOADER OPERATIONS

The front-end loader operator shall be directed to avoid overfilling the bucket of the loader and the feed hoppers to prevent spillage, and to minimize the drop height of the material when loading the feed hoppers or transferring material to stockpiles.

5. RECORDKEEPING

Records of dust control activities on travel surfaces and other surfaces where fugitive dust emissions occur shall be kept on file and made available to EGLE staff upon request until the end of the paving season. The records will indicate the date, time, what was observed or the reason for the dust control activity (routine or other), and what action was taken. The record shall be maintained in the Operations Log Book.

6. FUGITIVE EMISSIONS FROM PROCESS EQUIPMENT AND FABRIC FILTER DUST COLLECTOR

Any fugitive emissions from leak(s) and malfunction(s) from any transfer system, storage bin, mixer, hopper, or fabric filter dust collector shall be immediately corrected to prevent further fugitive emissions.

7. FUGITIVE EMISSIONS FROM MINERAL AGGREGATE STOCKPILES

a. Stock piling will be performed in a manner that minimizes freefall drop distance. The height of the front-end loader bucket shall be minimized to reduce the material drop height.

b. Piles will be maintained to prevent fugitive dust in compliance with EUYARD SC I.1.

APPENDIX B
PREVENTATIVE MAINTENANCE PROGRAM FOR THE FABRIC FILTER DUST COLLECTOR

The Preventative Maintenance Program for the Fabric Filter Dust Collector is for the purpose of keeping the dust collector in good operating condition, and thereby, maintaining the rated capture efficiency of the dust collector for the control of particulate matter. ALL REFERENCES TO VISIBLE EMISSIONS IN THIS DOCUMENT, PARTICULARLY IN SEC. 5, REFER SPECIFICALLY TO VISIBLE EMISSIONS CAUSED BY A DUST (PARTICULATE) EMISSION.

1. FABRIC FILTER DUST COLLECTOR OPERATING PRESSURE DROP.

a. The pressure drop across the fabric filter dust collector shall be continuously measured and the minimum pressure drop shall not be less than 2 inches, water gauge, unless a reason acceptable to the AQD has been provided, such as when a large number of filter bags have been replaced.~~except when a large number of filter bags have been replaced or other reason acceptable to the AQD.~~

b. The pressure drop across the fabric filter dust collector shall be recorded continuously during operation and kept available on-site.

2. FABRIC FILTER DUST COLLECTOR / PLANT ALARM SYSTEM.

The fabric filter dust collector shall be equipped with a high temperature sensor and alarm system and pressure detection sensor and alarm system. The baghouse shall also be equipped with a bag leak detection system and alarm that directly monitors changes in particulate emissions. The high temperature alarm system shall be designed to set off an alarm when the high temperature set-point has been violated, and, to begin a sequential shut-down of the plant if the situation is not resolved within a very short period of time after the alarm sounds. The ~~bag leak~~pressure detection sensor shall be designed to set off an alarm when the pressure drop across the baghouse drops below 2 inches or raises above 10 inches. A log of all alarm instances shall be maintained including the reason the alarm was activated and the actions taken.

3. HANDLING AND STORAGE OF FABRIC FILTER DUST.

Accumulated fabric filter dust (particulate) shall be stored and/or be disposed of in a manner which minimizes the introduction of the air contaminants to the outer air.

4. PIPING AND SEALS MAINTENANCE.

Piping and seals shall be replaced as needed.

5. VISIBLE EMISSIONS AND ACTIONS TO BE TAKEN IN THE EVENT OF.

In the event visible emissions, which appear to exceed the standard allowed in General Condition No. 11 of this Permit to Install, are observed at the discharge point of the stack, the following actions shall be taken:

If no certified visible emissions reader can be on-site within 60 minutes of observing the visible emissions in excess of General Conditions No. 11 to verify the emission density, operations shall be ceased immediately and the cause of the visible emissions determined and corrected prior to operating the plant again.

REMINDER: If the visible emissions continue for more than 2 hours, in excess of an emission standard, per Rule 912 an excess emissions report must be made to EGLE.

6. BLACK LIGHT INSPECTIONS.

A black light test shall be conducted at least once per year - within one week of the beginning of operation for each paving season. Black light inspection equipment and materials shall be available for use at the facility and used as needed during the paving season.

7. INVENTORY OF FILTER BAGS.

An inventory of fabric filter bags shall be maintained by the facility owner or operator so that filter bags will be available to this site within four hours of requesting the filter bags. In addition, a minimum of 15 filter bags shall be kept on-site at all times. An inventory of other replacement parts for the fabric filter dust collector shall be maintained at all times.

8. FABRIC FILTER DUST COLLECTOR INSPECTION RECORD.

A written record in a bound notebook or digital format of the following shall be maintained by the owner or operator of the facility:

- Visual inspections of the interior components of the fabric filter dust collector, including date, time, and findings;
- Black light inspections, including date, time, and findings;
- Number of filter bags installed as a result of each inspection to replace filter bags already in use in the fabric filter dust collector, including date, time, location, and whether the replacement filter bag was brand new or a cleaned, previously used filter bag;
- An explanation (i.e., a description of the damage found) for each filter bag removed from the fabric filter dust collector and confirmation that another filter bag was installed to replace it;
- Each observation of visible emissions at the stack discharge point and description of response to the observed visible emission, including date and time of visible emission occurrence and results of EPA Method 9 observation, if any. Any such visible emission shall be recorded in the Daily Operations Log Book and made available upon request to the AQD.
- All significant maintenance activities performed on the fabric filter dust collector.

APPENDIX C
EMISSION ABATEMENT PLAN FOR STARTUP, SHUTDOWN AND MALFUNCTIONS

NORMAL STARTUP PROCEDURE

The plant computer controls plant startup. At startup the plant operator will enter the mix design, the tons per hour and the number of tons to be produced into the plant operations computer. Once the operator starts the equipment the computer will start the cold feed bins and set the feed rate (tons per hour) requested. The feed rate will be different for each mix design and production rate.

When the plant computer senses that aggregate is crossing over the belt scale, a timer that has been previously calibrated for the particular mix, starts to count down. When the timer reaches zero the asphalt is started and fed to the mixer. The two products (aggregate and asphalt cement) meeting together at the correct time will eliminate most dust that would escape from the mixing drum.

Material that is discharged at startup is removed by way of the drag slat and discharge gate. This material is dropped into a loader bucket, dump truck or a holding area. The material is then moved to the recycle pile.

The drop height from the discharge gate is kept to the very minimum to keep any escaping dust from blowing.

NORMAL SHUTDOWN PROCEDURE

When shutting down the mixing operation, the plant computer stops the cold feed bins first. Material that is in process is allowed to proceed down the weigh belt. When the weigh belt senses that all material has cleared the belt a timer starts counting down to shut off the asphalt cement. This timer allows all of the aggregate to clear the drying drum and enter the mixer. The asphalt cement is timed for each mix design so that the last of the aggregate and the asphalt cement meet at the mixing drum together.

Any mix that is waste is discharged into the loader bucket, dump truck or into a holding area under the drag slat discharge gate and is taken to the RAP pile for later crushing

HOT STOPS - HOT STARTS

If the silos become too full, the plant operator may have to make a hot stop, (dryer and mixer full of material). No material is discharged during a hot stop. The plant can remain in this mode for up to two hours.

After a hot stop, the plant will make a hot start. The exhaust fan and burner will be started and once running, the rest of the plant will be started. Cold or off-spec material is discharged through the drag slat discharge gate and placed in the RAP pile for later use.

MALFUNCTION STOPS

If a malfunction (computer or mechanical) occurs during drying/mixing operations, a hot stop will be initiated until the problem is corrected. If the problem cannot be corrected and the dryer/mixer must be emptied, the asphalt cement can be controlled manually. This will be done only after all attempts to correct the problem are exhausted.

If the asphalt pump fails and cannot be repaired, the drum will be emptied of mixed material until the discharged aggregate gets dusty. The drum will then be stopped and the asphalt pump repaired.

A water supply at each location can be used to knock down any blowing dust.

IDENTIFICATION OF SUPERVISORY AND MAINTENANCE PERSONNEL

An updated list of current supervisory and maintenance personnel shall be kept at the plant. Descriptions of the responsibilities of these individuals for operation of the plant during startups, shutdowns, or malfunctions, as well as inspections and repairs, shall be stated on the updated list.

Appendix C – Continued

DESCRIPTION OF INSPECTED ITEMS

A daily walk around inspection will be done each morning while the plant is warming up. After startup, observations will be carried out continuously throughout the day by the plant operator and the loader operator during operations. The following items shall be inspected/observed:

- Roadways (fugitive dust)
- Cold feed bins (falling aggregate)
- Aggregate feed belts (falling aggregate)
- Dryer (seals for dust escaping)
- Bucket elevator (seals for dust escaping)
- Aggregate chutes (seals for dust escaping)
- Screen (door seals for dust escaping)
- Weigh hopper (seals for dust escaping)
- Mixer (seals for dust escaping)
- Baghouse stack (opacity)
- Baghouse screws (shaft and door seals for dust escaping)
- Chutes, screw augers, and housings (for any leaks)

A more thorough inspection will be done during the winter shutdown (between December 1 and April 1) for maintenance and repairs. The following items will be inspected and repairs made as needed:

- Cold feed bins (seals and belts rollers)
- Belt lines (belts and rollers)
- Dryer (shell, seals, flights)
- Bucket elevator (chain, buckets, bearings, seals)
- Chutes (liners, seals)
- Screen (door seals, fugitive ductwork)
- Weigh hopper (seals, calibration)
- Mixer (seals, wear plate)

The baghouse will get a thorough inspection from the front inlet to the rear exhaust fan. This inspection will be done every spring before the paving season starts. (Additional visual inspections may be required before and during the paving season as required by Appendix B). The following items to be inspected are:

- Ductwork (inspected for thickness, will it last for the season)
- Blow pipes, diaphragm valves (are they working, good connections)
- Bags and cages (condition of bags, age, number replaced during last season)
- Dust screws - shaft seals and screw cover doors

REPLACEMENT PARTS

As required by Appendix B, the following shall be kept in stock at all times:

- A minimum of 15 bags.
- A minimum of 5 pounds of black light powder. (Recommended quantity for the number of square feet of baghouse cloth.)
- A minimum of two (2) tubes of silicone caulk for minor leaks around doors and seals.

Appendix C – Continued

BAGHOUSE VARIABLES AND MONITORING

The baghouse is monitored continuously (as specified in Appendix B) by the use of a magnehelic gage. The pressure differential between the dirty and clean side of the baghouse shall be maintained above 2 inches water gauge. If the pressure rises above 10 inches water gauge, signaling an inoperative diaphragm valve, the plant shall be stopped and the defective valve repaired or replaced. If the differential pressure drops below 2 inches water gauge the company shall inspect for a torn bag or a problem with the tubesheet between the dirty and clean side of the baghouse. This problem will also result in a dirty stack. The only time the baghouse will normally drop below 2 inches water gauge is if a large number of filter bags are replaced.

If a large number of bags are replaced ~~(over 100)~~ the pressure on the magnehelic will drop slightly. This drop will only last for a day or less depending on the production.

Monitoring of the baghouse is done by observation, magnehelic gage, pressure detection alarm, or by the high temperature alarm that is set to go off at a stack temperature of 375/400 degrees Fahrenheit.

CORRECTIVE PROCEDURES AND RESPONSIBLE PERSONS

This startup, shutdown, malfunction plan shall be followed to meet the compliance limits. If the limits are exceeded it is the responsibility of the plant supervisor, or in his absence the plant operator, to stop the plant and correct the problem immediately. Rule 336.1912 shall be followed when abnormal conditions exist.

DRUM MIX AND BATCH - NORMAL STARTUP PROCEDURES

During startup, operation and shutdown the following items will be monitored continuously:

Stack Temperature - As material starts through the plant the temperature must be brought up slowly by manually adjusting the burner. As the operator opens the burner, the exhaust fan damper must also be opened to maintain one quarter to one half inch of suction on the burner end of the drum.

Mix Temperature - As material starts flowing through the plant it is critical to watch mix discharge temperature in addition to the stack temperature. A discharge temperature that is too high will cause blue smoke. A temperature that is too low will produce an unacceptable product.

Exhaust Magnehelic - As material is fed into the drum and the burner is opened up, the differential pressure in the baghouse will increase. As the plant reaches normal operating parameters the pressure differential will settle between 2 and 10 inches water gauge. The differential pressure can be adjusted by opening or closing the exhaust damper. The operator shall keep between one quarter and one half-inch draw on the burner end for maximum efficiently.

Along with monitoring the above items the operator shall monitor the weather to determine any changes to the moisture levels in the aggregate and RAP. The moisture content determines how to adjust the burner to reach the desired mix discharge temperature.

APPENDIX D
COMPLIANCE MONITORING PLAN (CMP)
FOR FACILITIES BURNING RECYCLED USED OIL (RUO)

A. All RUO must be acceptable for use as a fuel under federal and state used oil regulations. A certificate of analysis must accompany each delivery and must be kept on file.

Each shipment from the used oil supplier must be accompanied by documentation demonstrating that the used oil meets specification levels in 40 CFR 279.11 (Standards for the Management of Used Oil) and R 299.9809, promulgated pursuant to Part 111, Hazardous Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. The documentation shall include supplier certification and analytical data. The analysis must be for the batch of used oil accepted for use as a fuel by the permittee. Separate truckloads may have identical documentation from the supplier if they are loaded from a unique batch from a single supplier. A batch is a quantity of used oil contained in one storage unit (i.e., tank, tanker truck, barge, etc.) where no additional oil is put into the storage unit after testing. If additional oil is added to a storage unit after testing, a new batch has been created.

The supplier certificate of analysis shall be reviewed by the permittee to ensure that the RUO properties and constituents do not exceed any of the used oil specifications contained in the following table prior to acceptance and off-loading of the shipment.

TABLE 1 - ALLOWABLE LEVELS FOR RUO

Contaminant	Limit	Units
Arsenic	5.0	ppmw
Cadmium	2.0	ppmw
Chromium	10.0	ppmw
Lead	100.0	ppmw
PCBs	1.0	ppmw
Total Halogens	4000.0	ppmw
Sulfur	1.5	Weight %
Minimum Flash Point	100.0	°F
Maximum Ash Content	1.0	Weight %
Acidity	Minimum pH = 4 Maximum pH = 10	N/A

Verification: Shipping records for each load received shall be maintained a minimum of 5 years.

B. All RUO deliveries shall be screened for halogens.

Upon receipt of each RUO fuel shipment and prior to off-loading the RUO fuel, the permittee shall obtain a representative sample according to methods described in EPA publication SW-846 "Test Methods for Evaluation Solid Waste, Physical/Chemical Methods." The sample shall be screened for Total Halogens using SW-846 Method 9077.

Verification: Records of the Total Halogens test results shall be maintained a minimum of 5 years.

C. Required Laboratory Analysis

A split sample of the RUO shall be submitted by the facility to an independent laboratory to verify the information provided on the supplier certificate of analysis for the batch. The laboratory analysis shall include the properties and constituents listed in Table 1. A second split sample shall be maintained by the facility until the end of the calendar year and shall be made available to the AQD upon request.

Appendix D– Continued

Any independent laboratory used by the facility for RUO analysis shall develop a Quality Assurance Plan (QAP). A copy of the QAP shall be submitted by the facility to the AQD District Supervisor 30 days prior to the use of that laboratory. Detailed in the QAP shall be the QA/QC procedures, sample handling, storage, chain of custody procedures, analytical methods for all analyses, a description of the laboratory instrumentation, and the instrumental detection limits. The analytical methods used by the independent laboratory should be consistent with the methods identified in the RUO Supplier's Analysis Plan pursuant to 40 CFR 279.55. A list of acceptable QA/QC requirements may be obtained from AQD, Technical Programs Unit. The facility shall maintain a copy of the approved QAP on site or at the corporate offices.

D. Laboratory Analysis Frequency

The laboratory analysis required in this CMP shall be completed per Method 1 and/or Method 2 as applicable.

Method 1 - Pre-Qualification: For a dedicated tank of RUO, one split sample analysis is required.

For a single batch of RUO, the laboratory analysis shall be required once prior to any shipments from that batch being received at the facility. For Method 1 pre-qualification, a batch is a quantity of RUO contained in the supplier's storage unit where no additional oil is put into the storage unit after a representative sample has been collected for analysis. If additional oil is added to the storage unit, both a new supplier certificate of analysis and laboratory analysis are necessary.

Upon receipt of a shipment of RUO, the shipping paper shall be reviewed to determine if the RUO originated from a pre-qualified batch. All RUO shipments which are not from a pre-qualified batch are required to complete the quarterly sample analysis in Method 2.

Verification: A list of RUO batches that have been pre-qualified, along with records of the RUO analytical data from both the supplier and the permittee for the same batch, shall be maintained a minimum of 5 years.

Method 2 - On-Site Qualification: For all shipments which are not a pre-qualified batch, a quarterly split sample analysis is required.

When the permittee accepts RUO that is not pre-qualified by Method 1, a minimum of one sample per calendar quarter shall be submitted for the required laboratory analysis. The quarterly sample(s) shall be selected from all RUO batches accepted by the permittee that are not pre-qualified by Method 1. Unless an alternative plan is approved by the AQD District Supervisor, the time interval between collection of samples shall be a minimum of 45 days.

Verification: A list of all RUO batches accepted and those that have been selected for quarterly sampling, along with records of the RUO analytical data from both the supplier and the permittee for the same batch, shall be maintained a minimum of 5 years.

APPENDIX D
METHOD FOR CALCULATING ANNUAL EMISSIONS

EUHMAPLANT

The permittee shall keep in a satisfactory manner, monthly and 12-month rolling time period emission calculation records of all criteria pollutants listed in the Emission Limit Table for EUHMAPLANT. If stack test results for EUHMAPLANT exist for any of the pollutants, the permittee may use those stack test results to estimate pollutant emissions subject to the approval of the AQD. In the event that stack test results do not exist for a specific pollutant, the permittee shall use the applicable emission factor listed in the Emission Limit Table to estimate the emissions of a pollutant from EUHMAPLANT. The permittee shall keep all records on file and make them available to the Department upon request.

Until stack testing is completed for an applicable pollutant, monthly emissions shall be calculated based on the pound per ton emission limit applicable for each pollutant as shown in Special Condition I in EUHMAPLANT. Once stack testing has been performed, the stack test results shall be used for the fuel type running at the time of the test.

Monthly Emissions:

The sum of the daily production volumes for a given month shall be calculated to determine the monthly production in tons.

The monthly production in tons shall be multiplied by the either the emission limit or emission factor determined by stack testing in pounds per ton of each pollutant to determine the monthly pounds of emissions which shall be divided by 2,000 pounds per ton.

An example for PM is provided below:

$$PM\ Emissions\ \left(\frac{tons}{month}\right) = 0.04 \frac{lb\ PM}{ton\ HMA\ Produced}\ x\ \frac{tons\ HMA\ Produced}{month}$$

For monthly HAP emissions, the same methodology as described for criteria pollutants shall be used. For HAPs with emission limits in Special Condition I, the emission limit shall be used to calculate emissions until emissions of a pollutant have been determined by stack testing. For HAPs that do not have associated emission limits, the AP-42 emission factors applicable for each fuel type shall be used for EUHMAPLANT to calculate the monthly emissions.

12-Month Rolling Emissions:

The permittee shall sum the criteria pollutant emissions from EUHMAPLANT in a given month to the emissions from EUHMAPLANT from the previous eleven (11) months to calculate the 12-month rolling emissions.

EUYARD:

The permittee shall calculate, in a satisfactory manner, the annual fugitive dust emissions for EUYARD for each reporting year using the following emission factors or alternatives approved by the Department such as those used in MAERS or an approved PTI application

Activity	PM Emission Factor		Control Efficiency[1]
	Quantity	Units	
Front End Loader Traffic	7.84	Lbs/VMT	90%
Truck Traffic– Unpaved	7.81	Lbs/VMT	90%
Truck Traffic – Paved Roads	1.19	Lbs/VMT	90%
Aggregate Load in/Load Out	0.0001	Lbs/ton aggregate	
Wind Erosion	10	Lb/day/acre	

VMT – Vehicle mile travelled

[1]Control efficiencies listed are for implementation of the fugitive dust plan detailed in Appendix A. If the permittee implements additional fugitive dust control measures, the permittee may work with the Department to determine equivalent control efficiencies for added control measures.

APPENDIX B - EPA COMMENTS AND RECOMMENDATIONS

The EPA emailed to the AQD comments and recommendations regarding the proposed permit for Ajax. These comments and recommendations have been addressed below.

1. EPA Comment

We recommend that you evaluate whether additional nearby stationary sources and fugitive sources from the proposed facility should be included as part of the air quality modeling EGLE has required for this permit. The cumulative impacts analysis only considered the impacts associated with the proposed project. Neither nearby sources nor fugitives from the proposed facility were included in the modeling. We observe that Ajax is proposing to construct in an area where other stationary sources are already located and may be impacting the local community. Additionally, the toxic air contaminant (TAC) modeling does not consider all sources of stack and fugitive emissions. We recommend this analysis include an assessment of whether the source-wide TAC emissions from both fugitive and non-fugitive sources exceed EGLE's initial threshold screening level (ITSL) or initial risk screening level (IRSL).

AQD Response

As stated before, the AQD uses state and federal air quality rules and regulations to protect public health and the environment. The predicted emissions from Ajax's facility were evaluated, compared to the national standards, and found to be below them. This evaluation included the addition of background levels of criteria pollutants based on monitored levels. The monitored levels reflect local air quality, including potential particulate from the wildfires out west. It is EGLE's practice to exclude emissions of nearby sources below a certain threshold because, in our experience, it is unlikely these emissions would share the same maximum impact as a proposed facility. To provide for a more conservative model, the updated modeling included emissions from additional nearby sources. The updated criteria pollutant modeling again showed each pollutant to be meeting their applicable respective allowed NAAQS and PSD increments, including carbon monoxide and lead which were not evaluated in the initial modeling analysis.

Michigan Air Pollution Control Rule 225 requires predicted air concentrations from new or modified emission units to not exceed allowed screening levels established to prevent noncancer effects and to protect against cancer risks. In review of the Ajax application, which is composed of all new emission units, it was appropriate to do cumulative risk assessments for carcinogens under Rule 225 (2) and 225 (6). That assessment showed the sum of the carcinogenic risk for facility-wide emissions is less than the secondary risk screening level. This shows that the facility does not pose an unacceptable carcinogenic risk. In addition, adverse effects for the noncarcinogenic pollutants predicted to be emitted from the Ajax facility is not expected to occur from potential additive effects.

The AQD has authority to conduct limited cumulative risk assessments for TACs, depending on the proposed permit and equipment being asked for. However, this authority cannot be broadly applied to all permit reviews. For asphalt plants, a limited cumulative risk assessment is routinely done because the mixture of asphalt fumes is regulated using a health-based screening level for the combined risk of cancer from multiple polycyclic aromatic hydrocarbons. This assessment was done for asphalt

fumes, and the predicted outdoor air concentration the public might breathe was below the initial risk screening level. However, this type of cumulative risk assessment is limited for various reasons, for instance it does not typically consider local background levels of these pollutants.

2. Comment

40 CFR 60.92(a)(2) establishes an opacity requirement applicable to each hot mix asphalt facility. This opacity requirement does not appear within the draft permit. EGLE should include the necessary opacity limit in the permit and incorporate opacity testing requirements consistent with 40 CFR 60.93. To ensure ongoing compliance and practical enforceability of this limit, EGLE should also establish a periodic (at least quarterly) opacity testing requirement applicable to the affected facility.

AQD Response

The AQD considered this comment and added additional opacity requirements and readings, see comments that resulted in permit conditions changes above in Section II.

3. Comment

EUHMAPLANT Special Condition (SC) V.2 – V.4 lists the general test methods Ajax is to use to ensure compliance with the applicable permit conditions. The current draft permit only contains general citations to the appendices containing relevant test methods for Parts 60, 61, and 63. We recommend that EGLE specify in the permit the particular test method protocols for each pollutant that Ajax will be using to ensure compliance once the facility is constructed and operating. The permit can include a provision that requires EGLE approval of the test plan submitted by the permittee prior to testing, but approval of modifications to EPA test methods, as found in the appendices to Parts 60, 61, and 63, can only be done by EPA. EPA is available to assist EGLE in determining the appropriate test methods for each pollutant in order for Ajax to ensure compliance with the permit limit conditions.

AQD Response

PTI's issued by the AQD contain standardized language requiring the use of appropriate EPA test methods. This is done to avoid the need for a facility to get a new permit any time the EPA modifies a test method. Ajax is required to submit a proposed test plan to the AQD Technical Programs Unit for review and approval prior to conducting testing. The test plan must outline the specific EPA test methods to be used. The AQD may adjust, within our authority, when appropriate.

4. Comment

EUHMAPLANT SC V.5 requires particulate matter testing pursuant to 40 CFR Part 60 Subparts A and I. Although this condition incorporates the testing required by the federal requirement, permit condition SC V.5 does not require periodic testing to determine compliance with the particulate matter emission limit in 40 CFR 60.92. To ensure ongoing compliance with the emission limit and improve enforceability of the NSPS Subpart I PM limit, we request that the permit include periodic PM testing performed according to the procedures included within 40 CFR 60.93.

AQD Response

The filterable PM emission limit is in place to demonstrate compliance with the Federal NSPS Subpart I. The testing requirement in the proposed permit was written to match the federal requirement in Subpart I which includes a one-time test for compliance.

5. Comment

FGFACILITY SC I.3 and I.4 contains facility-wide general limits on hazardous air pollutants (HAPs) for individual and aggregate HAPs of less than 8.9 and 22.5 tons per year, respectively, on a 12-month rolling average. The monitoring and recordkeeping requirements for these conditions (FGFACILITY SC VI.2) only state that the permittee is required to use emission calculation records to ensure compliance with the limits. We request the permit specify the methodology Ajax will use to demonstrate compliance with the HAP limits, and that the permit record include an explanation of how this methodology will ensure that HAP emissions remain below the major source threshold.

AQD Response

The AQD considered this comment and added calculation methodologies as an Appendix to the permit, see comments that resulted in permit conditions changes above in Section II.

6. Comment

EUHMAPLANT SC V.1 and V.2 requires the permittee to verify via stack testing carbon monoxide (CO) and toxic air pollutant emissions upon EGLE's request. This condition does not require periodic testing to determine compliance with the hourly CO emission limit established in SC I.8, nor does it require periodic testing to determine compliance with the air toxics emission limits established in SCs I.14 through I.25. We request that you require periodic testing to determine compliance with the emission limits in SCs I.8 and I.15 through I.25. Periodic testing would help ensure that the source is complying with its CO and air toxics emission limits, which improves the practical enforceability of each limit and further ensures that the local community is not subjected to emissions exceeding the corresponding limit.

AQD Response

The AQD considered this comment and periodic stack testing was added to the permit, see comments that resulted in permit conditions changes above in Section II.

7. Comment

EUHMAPLANT SC V.3 requires a one-time test to verify PM10, PM2.5, NOx, and lead emissions from the plant. EUHMAPLANT SC V.4 is a similar requirement that applies when the source combusts recycled used oil (RUO) and includes testing for SO2 emissions. It is not clear whether a one-time test ensures that each emission limit is enforceable as a practical matter, however, as it is unclear whether emissions vary over time or with the type of asphalt being produced or fuel being combusted, suggesting that periodic testing may be appropriate to ensure ongoing compliance with each limit. We request that you revise SC V.3 and V.4 to require periodic testing to better ensure that the PM10, PM2.5, NOx, lead, and SO2 emission

limits are enforceable as a practical matter. For any pollutant where EGLE determines one-time testing is sufficient, we request that EGLE provide justification as part of the permit record.

AQD Response

The AQD considered this comment and more frequent stack testing was added to the permit, see comments that resulted in permit conditions changes above in Section II. Multiple tests were not required for fuel oil #6 since this is a back-up fuel.

8. Comment

EUYARD SC I.2 restricts all visible emissions from the pile when winds are below 12 miles per hour (mph) and limits opacity to 20% when winds exceed 12 mph. Since the modeling analysis relies on a windspeed threshold that exceeds approximately 11.50 mph, we recommend that you revise this condition to apply to winds that are below 11.50 mph. Also, the draft permit does not require the permittee to perform periodic visible emissions monitoring when winds are below 12 mph nor to quantify opacity when winds are at least 12 mph. To ensure ongoing compliance with the visible emissions requirements and to ensure practical enforceability of the opacity limit, we request that you incorporate periodic visible emissions monitoring and periodic opacity monitoring to evaluate and quantify fugitive dust emissions.

AQD Response

To be conservative, both the dispersion modeling and the emission calculations from wind erosion on the storge piles included in the application were based upon wind erosion happening at a minimum of 11.5 mph wind speed rather than the default 12 mph. However, the draft permit prohibited visible emissions at wind speeds less than 12 mph. This is more restrictive than allowing visible emissions at wind speeds of at least 11.5 mph since visible emissions would not be allowed between 11.5 mph and 12.0 mph. This restriction allows a factor of compliance when demonstrating reviewed emissions are not exceeded.

Visible emission reading requirements were added to the permit conditions, see above in Section II.

9. Comment

The fugitive dust control plan in Appendix A requires the permittee to maintain piles to prevent fugitive dust consistent with EUYARD SC I.1 (see Appendix A, condition 7.b). As 1 5.14 m/s ≈ 11.50 mph written, it is unclear what fugitive dust control measures will be implemented to prevent fugitive dust emissions from the pile. EUYARD SC I.1 appears to apply to all roads and unpaved travel surfaces, not the piles. To ensure the enforceability of the fugitive dust control plan and SC III.1, we request that you specify the measures that will be employed to control fugitive dust from the mineral aggregate piles. We request that you require each material storage pile to be covered or enclosed to mitigate potential fugitive dust emissions. In addition to reducing fugitive particulate emissions, covered piles may also require less water to control fugitives, potentially reducing the amount of fuel required to dry aggregate and other materials to specification. For any uncovered piles, we request that you specify the conditions which require the application of water or other chemical wetting agents or other methods that may be required to control fugitive emissions. For active piles, we request that the fugitive dust control plan specify the measures the permittee will employ to minimize fugitive dust emissions. Once

these control measures have been identified, the fugitive dust control plan should be updated to require recordkeeping to ensure any fugitive dust control measures have been implemented.

AQD Response

The AQD has considered this recommendation and clarification and as a result detail has been added to the fugitive dust plan. It is discussed above in Section II regarding updates to permit conditions.

10. Comment

EUYARD SC IV.1 requires the applicant to monitor wind speeds to determine compliance with the applicable visible emissions requirement in SC I.2. However, neither the fugitive dust control plan in Appendix A nor the draft permit section EUYARD require the permittee to implement fugitive dust control measures when winds are measured at or above 12 mph. To ensure fugitive dust is minimized when winds are above 12 mph and to better ensure compliance with the opacity limit in SC I.2, we request that you require the implementation of fugitive dust control measures when measured winds exceed 12 mph. We further recommend implementing fugitive dust control measures when measured winds are near, but do not exceed, 12 mph to mitigate potential fugitive dust emissions and further ensure compliance with the opacity limit.

AQD Response

The AQD has considered this recommendation and clarification and has added detail to the fugitive dust plan. It is discussed above in Section II regarding updates to permit conditions.

11. Comment

The PM10 and PM2.5 modeling analyses consider one year of meteorological data instead of five years and considers emissions from the larger pile when winds for a particular hour exceed 5.14 m/s (approximately 11.50 mph). We are concerned that the applicant's modeling analysis may underestimate ambient particulate impacts associated with this project. We recommend reevaluating the modeling analysis to ensure that the project's ambient PM10 and PM2.5 impacts are not underestimated.

AQD Response

It is AQD policy, per Rule 241 (R 336.1241 Air quality modeling demonstration requirements.), to allow for the use of one year of meteorological data for all toxic air contaminant modeling and criterial pollutant modeling for minor sources. In AQD's experience, one year of meteorology data will encompass "worst case" meteorology conditions in dispersion modeling for this type of review. While not required by either USEPA and/or AQD policy, the AQD updated the criteria pollutant modeling analysis to encompass five years of meteorological dataset. The updated modeling results showed that all criteria pollutants continued to meet their applicable allowed PSD Increment and/or NAAQS levels.

The AQD originally followed its policy and procedure regarding the toxics modeling analysis by utilizing one year of meteorological data. The AQD continued to use one year of meteorological data for air toxics and all impacts were found to below their allowed health-based screening levels.

12. Comment

EUHMAPLANT SC V.1 requires the permittee to verify and quantify odor emissions upon EGLE's request. We recommend that EGLE evaluate whether recurring odor emission testing is appropriate pursuant to R 336.2001(1)(c). Recurring odor emission testing would allow EGLE to better determine compliance with R 336.1901 and more readily address the local community's potential odor concerns.

AQD Response

Per Rule 207, the AQD may not issue a permit if we do not believe the facility will comply with all rules, including Rule 901. In new permits for fixed asphalt plants, the AQD requires the use of a counterflow drum, top of silo control, a condensation capture system on the asphalt cement tanks, and updated loadout control standards. Due to these odor reduction requirements, a violation of Rule 901 is not expected from these facilities.

The purpose of the odor testing condition is to give the district the ability to require a Rule 901 demonstration and a plan for addressing any problem odors as necessary, should they occur. This condition does not need to be enacted if a facility does not produce odors or proactively takes responsibility for odor issues and implements steps to reduce them. The permit language clearly states when the odor testing would be required. All testing, including odor testing, must be performed in accordance with the Department requirements and standards using a method preapproved by the AQD.

13. Comment

We recommend that EGLE consider whether it has the authority or discretion to include in the permit a requirement that the results of recurring compliance testing be made available to the public on an easily accessible website. The public posting of, e.g., the results of odor and opacity testing, virgin aggregate/RAP continuous monitoring (required by EU HMAPLANT SC VI.2), particulate and HAP emission testing, and wind speed measurements (required by EU HMAPLANT SC VI.1), would ensure transparency for the affected community.

AQD Response

The AQD posts air permits, compliance activity and inspection reports, and testing information and results. This information can be found on the Air Quality Source Information Page. Anyone may request from the AQD at any time non-confidential information related to a source by filing a request under the Freedom of Information Act (FOIA).

In response to this comment, the AQD asked Ajax if they would consider posting additional operational information online on a publicly accessible website as the commenter suggested. Ajax responded that it was not necessary, due to the AQD's

already publicly accessible information. The AQD does not have the legal authority to require Ajax to host a website containing such information.

14. Comment

Additional justification should be provided in the permit record to support the air quality analysis and the applicant's use of wind speed thresholds as it applies to the storage pile. Although the applicant cites Wisconsin's Air Dispersion Modeling Guideline as support, we note that Wisconsin's guideline does not provide justification for the approach and is nonbinding on other air permitting authorities. EGLE, as the air permitting authority for this action, has the discretion and authority to request certain air quality analyses for minor NSR permit applications. Michigan's R 336.1241, a requirement approved into Michigan's state implementation plan, requires EGLE to follow procedures and measures listed in the Guideline on Air Quality Models at 40 CFR Part 51 Appendix W (Appendix W). In addition to establishing certain requirements and recommendations applicable to NAAQS compliance demonstrations, Appendix W Section 1.0 encourages the use of sound scientific judgment in an air quality analysis and considers the judgment of meteorologists, scientists, and analysts essential. For this permit action, the analysis EGLE conducted and the judgment it exercised as part of the decision-making process should be fully documented within the permit record. Should EGLE choose to allow this approach for any proposed pile, the approach should be evaluated on a case-specific basis that is well documented within the permit record.

AQD Response

The equation used for calculating wind erosion from storage piles involves the percentage of time where wind speed exceeds 12 mph in a year. The equation results in an emission rate for the year which was attributed to all of the hours where emissions were assumed to occur (i.e. those hours with a wind speed of greater than 12 mph). To be conservative, Ajax used 11.5 mph as the threshold where wind erosion was expected to occur instead of 12.0 mph. Please note, this threshold only impacted the emissions from wind erosion and did not impact emissions from activities at the storage piles, which were included in the application

15. Comment

For all pollutants, the dispersion modeling conducted for this permit relies on one year of National Weather Service (NWS) meteorology collected from Bishop International Airport. Appendix W Section 8.4.2(e) recommends acquiring enough meteorological data to ensure that worst case meteorological conditions are adequately represented in the model results and requires the use of 5 years of representative NWS data. We request that you conduct the criteria pollutant and TAC analysis using 5 years of meteorological data. We recognize that R 336.1241 provides EGLE discretion to allow the use of only 1 year of NWS data for nonmajor PTIs. The PM10 and PM2.5 analyses restrict the hours that the pile may emit fugitives based on hourly wind speeds, suggesting that a larger meteorological database may be necessary to capture worst case meteorological conditions. The TAC analysis may also be improved to capture worst case meteorological conditions that may not be present in one year of NWS data. Modeling based on 5 years of meteorological data increases the likelihood that the worst-case meteorological conditions are considered as part of this analysis and would be consistent with NAAQS analyses conducted for other regulatory purposes.

AQD Response

It is AQD policy, per Rule 241 (R 336.1241 Air quality modeling demonstration requirements.), to allow for the use of one year of meteorological data for all toxic air contaminant modeling and criterial pollutant modeling for minor sources. In the AQD's experience, one year of meteorology data will encompass "worst case" meteorology conditions in dispersion modeling for this type of review. While not required by either EPA and/or AQD policy, the AQD updated the criteria pollutant modeling analysis to encompass five years of meteorological dataset. The updated modeling results showed that all criteria pollutants continued to meet their applicable allowed PSD Increment and/or NAAQS levels.

The AQD originally followed its policy and procedure regarding the toxics modeling analysis by utilizing one year of meteorological data. The AQD continued to use one year of meteorological data for air toxics and all impacts were found to be below their allowed health-based screening levels.

16. Comment

Dispersion modeling for particulate emissions relies on a critical wind speed threshold of approximately 11.50 mph for the purpose of considering fugitive emissions from the pile. From information included in the permit record, it appears that the applicant analyzed the daily fastest mile and daily surface friction velocity. However, it is unclear whether the analysis considers hourly wind speeds and sub-hourly gusts. It is not clear whether the modeling excludes emissions from the pile during hours where gusts exceed the critical wind speed threshold. AP42 Section 13.2.5.2, a document cited by the applicant, suggests that "estimated emissions should be related to the gusts of the highest magnitude" and that "peak 2 R 336.1241 states in relevant part that "[…] the demonstration may be based on the maximum ambient predicted concentration using the most recent calendar year of meteorological data from a representative national weather service […] station." winds can significantly exceed the daily fastest mile." This suggests that gusts play a large role in fugitive dust emissions and should be evaluated as part of this analysis. The meteorology used in the modeling analysis is based on 1-minute National Weather Service (NWS) data, enabling an analysis of sub-hourly winds. We recommend that the applicant analyze the 1-minute data to determine whether certain hours contain sub-hourly gusts exceeding the critical wind threshold to further ensure that the analysis does not underestimate ambient PM10 and PM2.5 impacts.

AQD Response

Within the dispersion modeling, wind speed and direction data over a one-year period for TACs and a five-year period for criteria pollutants was applied to the projected maximum facility emissions. The wind data used in modeling was compiled from 1-minute meteorology data collected by the National Weather Service at the Bishop International Airport in Flint. Applying meteorology through dispersion modeling to the emissions at the facility was done to determine the location and maximum concentration of each pollutant when the exhaust plume reaches ground level. The one to five years of meteorological data are used in modeling to ensure "worst case" meteorology is evaluated. This data includes time periods when inversions occur. By inputting wind speed and direction, both at the surface and at upper levels, into the model; wind affects

were indeed taken into consideration when determining the pollution impacts from the Ajax facility.

17. Comment

The applicant cites several documents suggesting that the critical wind speed threshold for the pile is 12 mph. However, it is unclear whether and to what extent the stockpiles analyzed in each document are representative of the applicant's proposed pile. Although the information provided in each document may be helpful to estimate emissions for applicability purposes, it is less clear whether this information is sufficient to determine the critical wind threshold for the proposed stockpile. None of the documents appear to analyze asphalt plants in particular. Would the applicant's proposed pile contain material with the same particle size distribution as that analyzed within each cited document? Are there other asphalt plant pile parameters that may affect the critical wind speed threshold that are not reflected in the cited documents, such as moisture content or how well each pile is mixed? We recommend that the applicant evaluate the composition of the proposed pile to further justify whether the comparison is adequate. Lack of a case-specific analysis of the composition of the proposed pile at the source may understate fugitive particulate emissions from the pile, potentially underestimating the modeled impacts attributed to the pile.

AQD Response

The emissions were calculated using an equation for wind emissions from continuously active storage piles and included the maximum silt content of any materials to be stored on site. These calculations also conservatively assumed the entire storage pile area would be active at one time. The emissions from the dumping onto the piles and from the loading back off the piles were based on emission factors for trucks loading crushed stone. The emissions from the transfer of materials were based on the maximum allowed daily average of 500 tons/hr for every hour of the day. No credit was given for any emission controls to conservatively look at worst case.

18. Comment

It is not clear whether the modeling considered other activities that may generate fugitive emissions from the pile. The analysis offered by the applicant appears to focus solely on wind-blown emissions without considering how working the pile may affect the generation of fugitive particulate emissions. We recommend that the applicant address potential fugitive emissions that may be generated while the source works the pile and evaluate whether the current analysis adequately evaluates emissions generated at these times. The permit does not otherwise restrict the applicant from working the pile, suggesting that fugitive emissions associated with working the pile should be included as part of the analysis.

AQD Response

In response to the comment, the sources of fugitive emissions were re-evaluated, and additional fugitive emissions were included in the toxics analysis from the RAP aggregate piles. The updated toxics modeling again showed the projected emissions of each TAC to be meeting their respective allowed health-based screening level(s).

Also, in response to comments received, an updated criteria pollutant analysis was performed. The updated modeling, as well as the original modeling, included PM10 and PM2.5 emissions from all fugitive sources including truck and loader traffic, truck loading and unloading, and storage piles. The updated modeling also included emissions from additional nearby sources and was based upon five years of meteorological instead of one.

19. Comment

The modeling analysis excludes receptors within the proposed property line. Section 6.1.3.1 of the December 21, 2020 application states that the applicant will "prevent access to the property by the general public through a combination of fencing, berms, trees, and shrubs" around the property line. Given the lack of further detail in the application, it is unclear whether this combination of measures as stated within the application would be effective in precluding access to the land by the general public. Appendix W section 9.2.2 recommends the placement of receptors throughout the modeling domain. The December 2, 2019 Revised Policy on Exclusions from Ambient Air4 states that receptors may be excluded over land owned or controlled by the stationary source "where the source employs measures, which may include physical barriers, that are effective in precluding access to the land by the:

- AP-42 Chapter 13.2.5 – Industrial Wind Erosion is available online at https://www.epa.gov/sites/default/files/2020-10/documents/13.2.5_industrial_wind_erosion.pdf.
- The Revised Policy on Ambient Air is available online at https://www.epa.gov/sites/default/files/2019-12/documents/revised_policy_on_exclusions_from_ambient_air.pdf. general public.

We recommend that the applicant identify where each proposed measure will be employed so that EGLE can evaluate whether the proposed measures effectively preclude the general public's access to land owned or controlled by the proposed source.

AQD Response

A condition was added to the final permit requiring Ajax to install and maintain berms, fences, windbreaks, and/or trespassing warning signage to secure their property boundaries. Other methods for reducing fugitive emissions are specified in the Fugitive Dust Control Plan in Appendix A of the draft and final permit. Language can be found above in the discussion regarding changes to the permit.

20. Comment

The proposed fugitive dust controls described by the applicant include "the presence of berms (approximately 7 feet tall), trees on top of those berms (approximately an additional 7 feet tall when planted), and the fence next to the berm." We support the implementation of berms and windbreaks to mitigate fugitive dust emissions from the source. However, neither the draft permit nor fugitive dust control plan requires the applicant to install and maintain berms, windbreaks, and covered piles to control fugitive dust emissions. We recommend that EGLE include enforceable permit conditions requiring the source to implement and maintain the selected fugitive dust control measures such as berms, windbreaks, and covered piles.

AQD Response

A condition was added to the final permit requiring Ajax to install and maintain berms, fences, windbreaks, and/or trespassing warning signage to secure their property boundaries. Other methods for reducing fugitive emissions are specified in the Fugitive Dust Control Plan in Appendix A of the draft and final permit. Language can be found above in the discussion regarding changes to the permit.

21. Comment

The TAC analysis uses the results of generic TAC modeling to estimate the TAC impacts in relation to the appropriate ITSL or IRSL. The generic TAC modeling result is based on modeled impacts from the drum dryer stack. Although most TAC emissions are emitted from the drum dryer stack, TACs are also emitted from the silo heater, silo filling and loadout processes, and 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. Dispersion characteristics may differ depending upon the process, potentially resulting in underestimated TAC impacts where a given process has worse dispersion characteristics than the drum dryer stack.

AQD Response

Air dispersion modeling for TACs is performed for a one-year period and each pollutant will disperse in the same location and distance based on the averaging time being evaluated. TAC averaging times include 1-hour, 8-hour, 24-hour and annual. For a generic toxics modeling analysis, a generic emission rate (ex. 1 pound per hour) is emitted from the stack to determine the maximum ground level impacts for all averaging times. Pollutant specific impacts can then be calculated by multiplying the pollutant emission rate (in pounds per hour) by the generic impacts for the associated averaging time. The calculated impacts will be the same impact found through modeling if the pollutant specific emission rate and associated averaging time were input into the model. Using the generic model simply allows several pollutants to be evaluated within one model run in lieu of modeling each pollutant separately. Another common factor in generic toxics modeling is assuming all the facility emissions exist via a single common stack. Releasing all emissions from the same location is done to assume a “worst case” concentration since dispersing emissions from multiple points could lessen combined impacts from all the emission points. Therefore, the TAC analysis completed as part of the air permit review was done conservatively and found to be protective of public health.

22. Comment

Although the NAAQS and PSD increment analysis considers the impact of fugitive emissions from several sources, it is unclear whether the TAC analysis considers fugitive emissions from similar sources. Are there any fugitive TAC emissions that should be considered as part of the TAC analysis? We suggest that you either revise the TAC analysis to include fugitive TACs not already considered or provide justification explaining why fugitive emissions do not need to be included in the analysis.

AQD Response

The original modeling done for the application before the start of the public comment period included both a toxics analysis and a criteria pollutant analysis. The toxics analysis showed the projected emissions of each TAC to be meeting their respective allowed health-based screening level(s). The criteria pollutant analysis showed each pollutant to be meeting their applicable respective allowed NAAQS and PSD increments. These original analyses were done consistently with air dispersion modeling protocols for other minor sources.

In response to the comment, the sources of fugitive emissions were re-evaluated, and additional fugitive emissions were included in the toxics analysis from the RAP aggregate piles. The updated toxics modeling again showed the projected emissions of each TAC to be meeting their respective allowed health-based screening level(s).

23. Comment

EUHMAPLANT SC II.4 limits recycled asphalt pavement (RAP) to a maximum of 50 percent on a monthly average. We recommend EGLE require compliance with this limit on a shorter-term basis than monthly (such as daily). We note that the draft permit requires the source to continuously monitor the RAP feed rate (see EUHMAPLANT SC VI.2), suggesting that the permittee would already collect data that can be used to determine compliance with the limit on a shorter-term basis. AP-42 section 11.1.1.3 suggests that RAP can be processed at ratios up to 50 percent with little or no observed effect upon emissions. AP-42 is silent with respect to emissions above the 50 percent ratio and does not differentiate between averaging times.

AQD Response

The AQD has considered this recommendation and the recordkeeping was reduced to weekly. It is discussed above in Section II regarding updates to permit conditions.

24. Comment

EUHMAPLANT SC I.4 through I.7 include a reference to footnote c. However, footnote c does not appear to be included within the emission limit table. We request that you specify footnote c or revise each special condition to remove the reference to this footnote.

AQD Response

The AQD reviewed the permit conditions and verified that this was a typographical error and it was removed. It is discussed above in the section regarding updates to permit conditions.

25. Comment

EUHMAPLANT SC I.4 and I.6 each cite 40 CFR 52.21 (c) and (d) as an underlying applicable requirement. We recommend that you verify whether each special condition cites the appropriate underlying authority. We note that Michigan has a SIP-approved version of each requirement at R 336.2803 and R 336.2804, respectively.

AQD Response

Michigan Rules 1803 and 1804 apply to major sources or major modifications subject to the PSD regulations. The AQD uses citations of 40 CFR 52.21 (c) and (d) when air dispersion modeling was conducted to comply with NAAQS and PSD Increment for minor sources. As the Ajax facility is a minor source and air dispersion modeling was conducted for criteria pollutants, the references to 40 CFR 52.21 (c) and (d) are correct.

26. Comment

EUHMAPLANT SC II.1 allows the permittee to burn recycled used oil (RUO). We recommend that the permittee consider not using RUO as a fuel for the proposed source. Although EGLE has established requirements that apply when combusting RUO, eliminating the use of RUO as a fuel could reduce air toxics and sulfur impacts on the local community. Should the permittee choose to combust RUO as part of this process, we recommend that the permittee or EGLE analyze the additional impact combusting RUO could have on the local community over the impact of using other fuels such as natural gas.

AQD Response

The ability of Ajax to burn RUO was removed from the final permit. Ajax's application states the company plans to burn natural gas only, and yet wanted the option to burn fuel oil #1, fuel oil #2, fuel oil #3, fuel oil #4, fuel oil #6, propane, or RUO in the hypothetical event where natural gas was unavailable or infeasible due to cost. The use of RUO is not fundamental to the process or operation of the facility and yet increases potential emissions including toxic air contaminants. The RUO is being removed from the permit to demonstrate compliance with Rule 224.

The emission limits were then re-evaluated based on the removal of RUO which resulted in worst-case emissions for most pollutants. The increased emissions due to the operation of the drum beyond its rated capacity is not accounted for in the revised emission factors. The hourly throughput is being reduced to the drum capacity of 550 tph in addition to the removal of the RUO fuel.

27. Comment

EUHMAPLANT SC IV.1 requires continuous pressure drop monitoring for the proposed baghouse. We request that EGLE consider the use of a bag leak detection system (BLDS). BLDS would help verify that the fabric filters are not leaking or developing a leak. A BLDS, combined with the requirement to operate the baghouse in a satisfactory manner, would help ensure that the baghouse is operating properly, enable the permittee to react promptly to leaking bags, and further ensure compliance with the particulate matter special conditions.

AQD Response

The AQD reviewed the proposed and updated the permit conditions to add this requirement. It is discussed above in Section II regarding updates to permit conditions.

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