

## PROPOSED PROJECT SUMMARY

### MARATHON DETROIT PERMITTING PROJECT – DETROIT, WAYNE COUNTY, MICHIGAN

The Michigan Department of Environment, Great Lakes, and Energy (EGLE), Air Quality Division (AQD), is asking for comments from the public on proposed Permits to Install (PTI) for Marathon Petroleum Company LP (Marathon), Air Products and Chemicals, Inc. (Air Products), and MPLX Terminals LLC (MPLX). This request is called the Detroit Permitting Project, and all three companies are part of the Marathon Detroit Refinery stationary source. The AQD will accept comments on the proposed PTIs until the close of the comment period on June 3, 2024. A public hearing has been scheduled for May 22, 2024. We will review all comments before we make final decisions on the proposed permits.

#### WHAT IS MARATHON PROPOSING TO DO?

Marathon operates an existing facility at 1001 South Oakwood Boulevard in Detroit, Michigan (Figure 1). Marathon is proposing to remove some material throughput limits and increase the number of coker drum cycles so the existing refinery can operate at its full capacity.

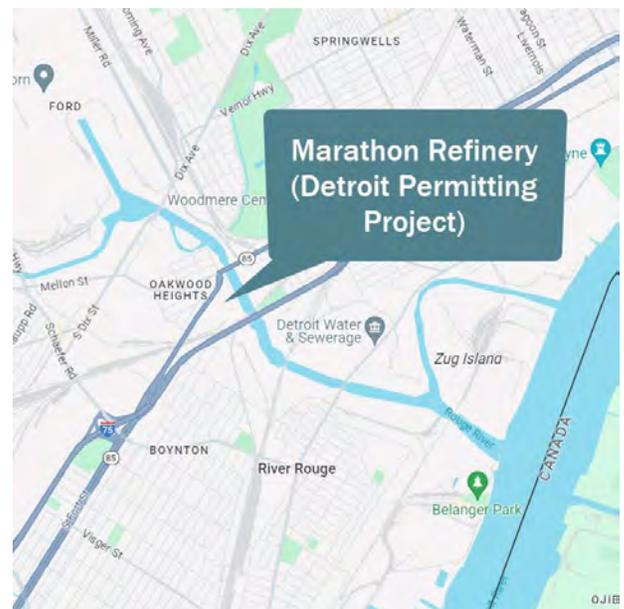
Additionally, they requested enforceable conditions related to items not required to meet the air quality rules and regulations. These voluntary conditions include emission limit caps on pollutant releases, pollution control projects, and an extension of the perimeter air monitoring program.

Marathon also requested to include two requirements from a [consent decree](#) between Marathon and the United States Environmental Protection Agency (USEPA) in the permit conditions so that Marathon must continue to comply with these requirements after the consent decree ends.

Details of what parts of the current air permits have proposed changes may be found in the Technical Fact Sheet.

#### HOW WOULD MARATHON'S REQUEST CHANGE EMISSIONS FROM THE FACILITY?

The throughput limits Marathon has asked to remove are monthly and annual average limits. The coker drum cycle limit Marathon has asked to



**Figure 1: Marathon Detroit Refinery Location**

increase is an annual limit. These limits do not affect the maximum hourly emissions, which are based on the physical capacity of the equipment. To meet the current throughput limits, they rely on periods of reduced operations.

Removing the throughput limits and increasing the coker drum cycles would allow Marathon to continuously operate at the maximum capacity, increasing annual emissions of some pollutants. These proposed increases must meet all applicable air quality rules and regulations.

## WHAT ARE THE PROPOSED POLLUTION CONTROL PROJECTS?

There are four pollution control projects, as follows:

1. Replace two process heaters with new heaters equipped with ultra-low NO<sub>x</sub> burners to reduce overall NO<sub>x</sub> emissions.
2. Remove the Crude Flare from service by re-routing streams to the Coker Flare System, which has a flare gas recovery system, to reduce flaring and lower emissions.
3. Install a geodesic dome on finished gasoline storage tank EUTANK110-S1 that has an external floating roof to reduce VOC emissions.
4. Expand the refinery's leak detection and repair program to include monitoring of at least 3,000 additional flanges and/or connectors to reduce VOC emissions.

These projects would reduce actual emissions from the facility even if Marathon does not increase production.

The emission reductions from these projects are not required for the Detroit Permitting Project to comply with the air quality rules and regulations. Despite not being required, if the permits are approved, these projects must be completed by December 31, 2025.

Marathon must comply with all conditions of their permit regardless of whether they are needed to comply with air quality rules and regulations. Please see the Technical Fact Sheet for more information.

## WHY ARE THERE THREE APPLICATIONS?

Removing Marathon's throughput limits could affect emissions from Air Products' hydrogen plant heater. To make the proposed emission limit caps apply to Air Products, Air Products had to apply to obtain a permit that includes these caps.

Additionally, it was determined that making the exhaust stack of the truck loading rack vapor recovery unit at MPLX taller would improve

dispersion. MPLX had to apply to obtain a permit that requires this stack to be taller.

## WHAT IS A PTI AND WHY IS ONE NEEDED?

A PTI, commonly known as an air use permit, is required for projects that involve installing, constructing, reconstructing, relocating, or modifying most processes or process equipment that emit, or may emit, air contaminants, such as changes like those included in the Detroit Permitting Project.

The AQD has reviewed the applications and written proposed permit conditions that include requirements to make sure the proposed project complies with all applicable air rules and regulations.

## WHY DID MARATHON WITHDRAW THEIR PREVIOUS APPLICATION?

After the public comment period started, Marathon realized they did not ask for all the changes they wanted to make to their permit. These changes were included in the technical review, including the emission calculations and modeling, but were not discussed in the application. In order to include these changes in the proposed draft permit, Marathon had to submit a new application that listed all of the changes they want to make.

## WHY ARE THE PROPOSED PERMITS GOING OUT TO PUBLIC COMMENT?

There has been historical public interest in the Marathon Detroit Refinery. The AQD has determined that the public should have the opportunity to comment on the proposed permit conditions.

## WHAT IS THE CURRENT AIR QUALITY IN THE AREA?

The USEPA has developed health-protective standards for specific air pollutants. These standards are called the National Ambient Air Quality Standards (NAAQS).

There are NAAQS for [some pollutants](#), including sulfur dioxide (SO<sub>2</sub>), nitrogen dioxide (NO<sub>2</sub>), carbon

monoxide (CO), particulate matter equal to or less than 10 microns in diameter (PM10), particulate matter equal to or less than 2.5 microns in diameter (PM2.5), ozone, and lead.

Poor air quality from high levels of pollution can cause health problems. The NAAQS are developed from research studies and set at levels to protect public health. This includes health protection for sensitive groups, like those with heart and lung problems.

The facility is located in Wayne County, Michigan which is currently meeting all of the NAAQS except for SO<sub>2</sub>. The AQD operates eleven [air monitoring stations](#) in Wayne County, seven of which are in the City of Detroit. The Trinity St. Marks station is one mile from Marathon and four other stations are within two miles of Marathon. The Trinity site measures NO<sub>2</sub>, metals, CO, particulate matter (PM2.5), SO<sub>2</sub>, and black carbon. One of the seven air monitoring stations in the City of Detroit is located in the 48217 Zip Code at the New Mount Hermon Baptist Church, which is one mile away, and measures SO<sub>2</sub>, particulate matter (PM2.5), and metals. Marathon, through the use of an environmental contractor, also operates [four ambient air monitoring stations](#). Three are on the Marathon property and the fourth is located at Mark Twain Middle School. Marathon's monitors continuously measure SO<sub>2</sub>, total reduced sulfur, CO, and particulate matter (PM10); volatile organic compounds (VOC) are sampled every six days. The purpose of the air monitoring stations is to assess the regional or area-wide air quality and they are not used to determine if a specific source complies with their air permit.

### **WILL MARATHON CONTINUE THEIR AIR MONITORING?**

Marathon's current permit has a condition that required an enhanced air monitoring program that had to continue for at least ten years after November 5, 2012. While this requirement expired in 2022, Marathon has continued the air monitoring

program. Marathon has proposed extending the requirement for the monitoring program. If Marathon's PTI is issued, they would be required to continue the monitoring program for three years.

### **WILL AIR QUALITY STANDARDS BE MET?**

A computer model was used to look at the expected impacts of the emissions from the proposed project on the air quality in the area surrounding the Marathon Detroit Refinery. This type of computer model is called an air dispersion model and considers many factors, such as the amount and type of emissions, prevailing wind direction and other factors.

The model showed that the expected impacts of the project emissions for SO<sub>2</sub>, CO, NO<sub>2</sub>, PM2.5, and PM10 are less than the applicable Significant Impact Levels (SILs). When impacts are less than the SILs, further modeling is not required as the emissions are not expected to cause or contribute to a violation of the NAAQS. The Technical Fact Sheet has more detailed information about the modeling that was done.

Michigan has developed health-based screening levels for additional pollutants referred to as toxic air contaminants (TACs) under its Air Toxics rules. The proposed TAC emissions from the project would also comply with the AQD's health-based screening levels. Note, the TAC modeling is based on the highest hourly emission rates, which are not increasing, and includes fugitive emissions. Please see the Technical Fact Sheet for more information including maps of the gasoline impact areas.

### **WHAT ABOUT FUGITIVE EMISSIONS?**

Fugitive emissions from the Marathon Detroit Refinery were included in the application review, including the TAC compliance evaluation.

### **WHAT ABOUT MARATHON'S PREVIOUS VIOLATIONS?**

Marathan has been cited for violations of the air quality rules and regulations in the past and

currently has three active consent orders. The fact that a source has had past violations cannot be used as a reason to deny a permit if the request can meet the applicable rules and regulations.

More detailed information about Marathon’s air quality related activities can be found at [Michigan.gov/EGLEMarathon](http://Michigan.gov/EGLEMarathon).

### **WAS ANY TRANSLATION INTO OTHER LANGUAGES DONE?**

An evaluation of the number of people who speak English “less than very well” within a 1-mile radius of the proposed project’s location was done. This is required by EGLE’s [Limited English Proficiency Plan](#) using an environmental justice screening tool like [USEPA’s EJSCREEN](#). The evaluation found that translation was needed. Services were provided for Spanish and Arabic, including translation of the Notice of Public Comment and Hearing, the Proposed Project Summary, and the Interested Party Letter.

### **WHERE CAN I FIND MORE INFORMATION?**

Other information can be found at [Michigan.gov/EGLEAirPublicNotice](http://Michigan.gov/EGLEAirPublicNotice), choose “Applications Open for Comment.” Marathon’s, Air Product’s, and MPLX’s applications and important correspondence with the AQD can be found under “Marathon Detroit Permitting Project” on the [Other Applications of Interest](#) page.

The Technical Fact Sheet has additional details about the project and how it will meet the rules and regulations, such as:

- A summary of the reviews completed by AQD staff.
- How the project will affect air quality and public health.
- A summary of what the proposed permits would require the companies to do.
- A summary of the allowed emissions that are included in the proposed permits.

- The rules and regulations that apply to the proposed project.

AQD staff can provide additional information upon request.

### **SUMMARY:**

We have reviewed the applications submitted for the Detroit Permitting Project and prepared proposed permits. If the proposed permits are approved, they will ensure the applicable air quality requirements are met. Therefore, we recommend approving the proposed permits.

However, before the AQD acts on these applications, we are requesting comments from the public. We will review all comments received during the public comment period and public hearing, then decide whether to approve, approve with modifications or deny the PTI applications. If approved, the AQD may decide to add or change permit conditions based on the comments received.

### **WHO CAN I CONTACT?**

For more information about the proposed permits, please contact Andrew Drury, AQD, at: [DruryA@Michigan.gov](mailto:DruryA@Michigan.gov) or 517-648-6663.

### **WHAT PUBLIC COMMENTS CAN EGLE CONSIDER?**

Comments from the public are very important. It is also important to know the law is clear about what we can and cannot consider when we make our decision. Some examples are below.

What we can consider	What we can't consider
✓ Technical mistakes in the review	• Air, land, or water issues not part of the project
✓ Grammar and spelling mistakes	• Indoor air pollution
✓ Other rules the action should consider and why	• Traffic
✓ Why the action will not follow the rules	• Noise and lights
	• Zoning issues
	• Anything unrelated to the project

**HOW CAN I MAKE A COMMENT?**

The AQD welcomes comments from the public during the comment period. Prior to making a comment, it is a good idea to “[View an Example](#)” of how to do it. You may also want to read the “[Public Hearings - What you should know](#)” card.

Documents for the Detroit Permitting Project can be found at: [Michigan.gov/EGLEAirPublicNotice](https://Michigan.gov/EGLEAirPublicNotice)

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Comments must be received by **June 3, 2024**.



**Via email**

[EGLE-AQD-PTIPublicComments@Michigan.gov](mailto:EGLE-AQD-PTIPublicComments@Michigan.gov)



**Via US mail**

Cindy Smith, Permit Section Manager, EGLE, AQD, P.O. Box 30260  
Lansing, MI 48909-7760



**Via voicemail**

by calling 517-284-0900



**At the Virtual/In-Person Public Hearing**

The in-person public hearing on May 22, 2024, starting at 5:30 p.m. at the Kemeny Center, at 2260 South Fort Street, Detroit, MI 48217. The meeting and hearing will also be broadcast. The public may join the broadcast at: <https://bit.ly/3vtrly7>. EGLE staff will be available to answer questions and provide assistance if needed.