

PROPOSED PROJECT SUMMARY

MARATHON PETROLEUM COMPANY LP – DETROIT, WAYNE COUNTY, MICHIGAN

MARATHON PETROLEUM COMPANY LP – DETROIT REFINERY

The Michigan Department of Environment, Great Lakes, and Energy, Air Quality Division (AQD), is asking for comments from the public on a proposed Permit to Install (PTI) for Marathon Petroleum Company LP’s Detroit Refinery (Marathon). The AQD will accept comments on the proposed PTI until the close of the comment period on August 10, 2022. A virtual public hearing is being held on August 1, 2022. We will review all comments before we make a final decision on the proposal.

WHAT IS MARATHON PROPOSING TO DO?

Marathon’s two sulfur recovery units (SRUs) currently have separate sulfur production limits of 130 long tons per day for the East Plant SRU and 260 long tons per day for the North Plant SRU. Marathon is proposing to remove the North Plant SRU sulfur production limit and instead have a combined sulfur production limit for both SRUs of 390 long tons per day, based on a 12-month rolling time period. (A long ton is 2,240 pounds per ton.) The East Plant SRU sulfur production limit would not change. This would allow Marathon to shift up to 130 long tons per day of sulfur production from the East Plant SRU to the North Plant SRU.

The project is not requesting an increase in the amount of crude oil processed.

WHAT IS AN SRU?

An SRU takes sulfur containing chemical compounds generated in a refinery and converts the compounds to elemental sulfur, which is sold as a product. The SRUs at the Detroit Refinery use thermal oxidizers to control air emissions.

WHY DOES MARATHON WANT THIS CHANGE?

According to Marathon, the North Plant SRU is more efficient than the East Plant SRU and has lower sulfur dioxide (SO₂) emissions per ton of sulfur produced than the East Plant SRU. This change could reduce SO₂ emissions from the facility.

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 the change in how the SRUs total allowed amount of sulfur is permitted.

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

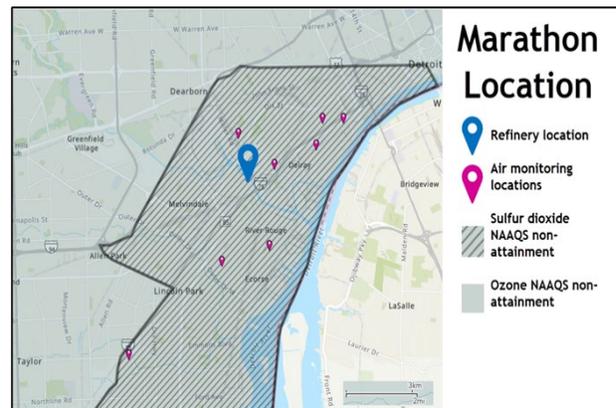


Figure 1: Marathon Detroit Refinery location and surrounding area

WHAT IS THE CURRENT AIR QUALITY IN THE AREA?

The United States Environmental Protection Agency 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 SO₂, nitrogen dioxide (NO₂), 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 (PM_{2.5}), ozone, and lead.

Poor air quality from high levels of pollution can cause health problems, like breathing problems in people with asthma. 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 the portion of Wayne County, Michigan which is currently meeting all of the NAAQS except for SO₂ and ozone. The AQD operates 11 [air monitoring stations](#) in Wayne County. The Trinity St. Marks station is one mile from Marathon and three other stations are within 2 miles of Marathon. The Trinity site measures NO₂, metals, CO, PM_{2.5}, SO₂, and black carbon. Ozone is regulated through its precursor's nitrogen oxides (NO_x) and VOCs. Marathon also operates 4 [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 SO₂, total reduced sulfur, CO, and particulate matter; VOCs are sampled every 6-days. Note, the purpose of the air monitoring stations is to assess the regional or area-wide air quality and is not used to determine if a specific source is complying with their air permit.

WAS 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 would be helpful. Services were provided for Spanish and Arabic, including

translation of the Notice of Hearing, the Proposed Project Summary, and the Interested Party Letter.

WHAT DO I REALLY NEED TO KNOW ABOUT THE PROPOSED PERMIT?

The proposed permit has specific requirements Marathon must follow if the permit is approved; most of these requirements are already in Marathon's air permit. Key areas you may be interested in, or that you may want more details on, include:

- Emission limits – amount of specific air pollutants Marathon is allowed to emit. This project does not change Marathon's existing emission limits.
- Material limits – amount of sulfur allowed for each SRU. Marathon is proposing to remove the sulfur production limit on the North Plant SRU and replace it with a limit on the total amount of sulfur produced by the two SRUs combined.
- Process restrictions – requirement to use thermal oxidizers to limit pollutant emissions from the SRUs.
- Monitoring and Recordkeeping – records that must be kept to prove permit requirements are being met, including the combined sulfur production limit.

WILL THE FACILITY MEET AIR QUALITY STANDARDS?

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

The model showed the expected impacts of the emissions of SO₂, PM₁₀, and PM_{2.5} from the SRUs after the project are less than the applicable Significant Impact Levels (SILs). The impacts will be

the same as, or lower than, the impacts before the project. The project will not cause or contribute to a violation of the NAAQS.

Michigan has developed health-based levels for additional pollutants referred to as toxic air containments (TACs) under its Air Toxics rules. The proposed TAC emissions from the project would also comply with the AQD’s health-based screening levels.

WHAT ABOUT THOSE WITH PRE-EXISTING LUNG DISEASE WHO SPEND TIME NEAR THE PROPOSED FACILITY?

The AQD used the computer air model to look specifically at the expected impacts of pollutants like particulate matter, SO₂, and sulfuric acid to see if existing breathing problems may worsen. The impacts from the SRUs are expected to stay the same or go down slightly, so the project is not expected to result in increased breathing problems.

WHERE CAN I FIND MORE INFORMATION?

The [Technical Fact Sheet](#) has additional details about the project and how it will meet the rules and regulations.

Marathon’s application and important correspondence about the application can be found on our [Marathon webpage](#). Here are some examples of information you may find useful:

- A summary of the reviews completed.
- How the project will affect air quality and public health.
- What the proposed permit would require Marathon to do.
- The allowed emissions included in the proposed permit.
- The rules and regulations that apply.
- Example emission calculations.

AQD staff can provide additional information upon request.

SUMMARY:

The AQD has reviewed the PTI application and prepared a proposed permit. If the proposed permit is approved, it will ensure the facility meets the applicable air quality requirements. Therefore, we recommend approving the proposed permit.

However, before the AQD acts on the PTI application, we are requesting comments from the public. The AQD will review all comments received during the public comment period and public hearing, then decide whether to approve, approve with modifications or deny the proposed PTI application. 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 permit, please contact Andrew Drury, AQD, at: DruryA@Michigan.gov or 517-648-6663.

WHAT PUBLIC COMMENTS CAN EGLE CONSIDER?

Comments from the public are very important. But 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 VIEW THE VIRTUAL HEARING?

Attendees may join virtually from any computer or smart phone at <https://bit.ly/3zx9ifd>, call in at the number provided, or residents may participate by watching along at the Kemeny Recreation Center, 2260 South Fort Street in Detroit. All attendees will be able to ask questions of EGLE staff and provide comments, if desired.

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 pertaining to Marathon can be found at: Michigan.gov/EGLEAirPublicNotice

Comments must be received by **August 10, 2022**.



Email

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US mail

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Lansing, MI 48909-7760



Voicemail

by calling 517-284-0900



At the Virtual Public Hearing

The virtual public hearing will be held on **August 1, 2022**.

EGLE promotes the equitable treatment and meaningful involvement of Michigan’s residents regarding the development, implementation, and enforcement of laws, regulations, and policies. Equitable treatment means that no group of people bears a disproportionate share of the negative consequences resulting from governmental, industrial, or commercial operations and policies. Meaningful involvement means all people have an opportunity to participate in decisions that affect their environment and/or health.

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