

**COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR QUALITY**

COMMENT AND RESPONSE DOCUMENT

**PROPOSED TITLE V OPERATING PERMIT
RENEWAL**

**ENERGY TRANSFER MARKETING & TERMINALS, L.P.
MARCUS HOOK TERMINAL
TITLE V OPERATING PERMIT NO. 23-00119**

May 14, 2025

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On November 12, 2025, DEP held a public informational meeting in Marcus Hook, PA, regarding the TVOP renewal application submitted by ETMT for its Marcus Hook Terminal (MHT), which is located at 100 Green Street, Marcus Hook, PA 19061 (Marcus Hook Borough, Delaware County).

On January 4, 2025, pursuant to 25 Pa. Code § 127.424(a), DEP published a notice in the *Pennsylvania Bulletin* of its intent to issue a renewal of TVOP No. 23-00119 for ETMT's MHT. This notice initiated the public comment period for the TVOP renewal.

On January 4–6, 2025, pursuant to 25 Pa. Code § 127.424(b), ETMT published a notice in the *Delaware County Daily Times* of DEP's intent to renew the TVOP.

On January 7, 2025, pursuant to 25 Pa. Code § 127.424(b), DEP sent the proposed TVOP renewal to ETMT and the United States Environmental Protection Agency (EPA) to review and provide comments, and notified states within 50 miles of the MHT of DEP's intent to renew the TVOP.

On February 18, 2025, pursuant to 25 Pa. Code § 127.428(a), DEP held a public hearing in Marcus Hook, PA, regarding the proposed TVOP renewal.

On February 28, 2025, pursuant to 25 Pa. Code § 127.429(c), the public comment period closed.

DEP appreciates all the comments submitted, concerns expressed, and additional information provided by ETMT and the public regarding the proposed TVOP renewal and associated technical review memo and addendum. [Note: On March 20, 2025, EPA stated that it “has no comments at this time on TV Renewal 23-00119.”] To address the comments and concerns from ETMT and the public, DEP has prepared the below responses.

DEP has organized the public comments on the proposed TVOP renewal and associated technical review memo and addendum by topic and, in lieu of responding to each commenter individually, has referenced certain public comments that are representative of the comments submitted and concerns expressed. [Note: The public comments use the name “Energy Transfer” in reference to both ETMT and ET, the ultimate parent company of ETMT and owners of the Mariner East, Twin Oaks, and other pipelines. DEP's responses refer to ETMT when discussing the MHT, and ET otherwise.] However, some of the public comments pertain to concerns that, while important, are only indirectly or not at all related to the proposed TVOP renewal. As this comment and response document is intended to address comments and concerns that are directly related to the proposed TVOP renewal, DEP's responses to broader or divergent comments and concerns are limited.

Section 1. Listing of Public Commenters

Name (Title & Organization)	Business or Home Address	E-mail Address
Carl A. Marrara (Executive Director, Pennsylvania Manufacturers' Association)	The Frederick W. Anton III Center 225 State Street, Harrisburg, PA 17101	marrara@pamanufacturers.org
Patrick Henderson on behalf of Jim Welty (President, Marcellus Shale Committee)	300 North 2nd Street, Suite 1102, Harrisburg, PA 17101	phenderson@marcelluscoalition.org
Steven Kratz (President, Pennsylvania Chemical Industry Council)	20 North 2nd Street, Harrisburg, PA 17101	skratz@pcic.org
Adam Pope	44 S. 27th Street, Pittsburgh, PA 15203	adamc.pope@gmail.com
Matthew Sands	4334 Post Road, Trainer, PA 19061	Msands969@gmail.com
Jeff Nobers (Executive Director, Pittsburgh Works Together)	631 Iron City Drive, Pittsburgh, PA 15205	jeff@pghworks.com
Thom Nixon	Chester Resident	zrsigma78@gmail.com
Echo Alford (Clean Air Council)	963 Kingsman Road, Boothwyn, PA 19061	ealford@cleanair.org
Trish McFarland (President, Delaware County Chamber of Commerce)	1001 Baltimore Pike, Suite 9LL, Springfield, PA 19064	trishm@delcochamber.org
Jordan Grady (President, Butler County Chamber of Commerce)	P.O. Box 1082, Butler, PA 16003-1082	jordan@butlercountychamber.com
Jeff M. Kotula (President, Washington County Chamber of Commerce)	Southpointe Business Park, 1000 Horizon Vue Drive, Suite 1C80, Canonsburg, PA 15317	jeff@washcochamber.com
Amy Brinton (Dir., Government Affairs, Pennsylvania Chamber of Business and Industry)	417 Walnut Street, Harrisburg, PA 17101	abrinton@pachamber.org
Sister Joyce Bell	1725 S. Sproul Road, Springfield, PA 19064	sisterbell1031@yahoo.com
Kevin W. Smith (Supervisor –Environmental Compliance, ETMT)	100 Green Street, Marcus Hook, PA 19061-4800	kevin.smith2@energytransfer.com
Lauren Minsky		lnminsky@gmail.com
William Adams	21 Montgomery Lane, Aston, PA 19014	badams@ibew654.com
Faith Zerbe (Biologist, Delaware Riverkeeper Network)		faith@delawareriverkeeper.org
Sean Brechemin	421 Smith Street, Trainer, PA 19061	
David Kronheim	1104 Culhane Street, Chester, PA 19013	dkronheim@yahoo.com
Joniqua Ceasar, MD (Board of Directors, Physicians for Social Responsibility)		doctorceasar@gmail.com
Zulene Mayfield (Chester Residents Concerned for Quality Living [CRCQL])		zmmills@aol.com
Sister Nora M. Nash (Sisters of St. Francis of Philadelphia)	222 Spring Valley Way, Aston, PA 19014	nnash@osfphila.org
Robert Anstett	7 Nikhil Court, Claymont, DE 19703	ANSTETT.RE@gmail.com
Roberta Winters	326 Williams Road, Rosemont, PA 19010	rlwinters@comcast.net
Chris Folk	4924 Hazel Avenue, Philadelphia, PA 19143	christopherfolk@gmail.com

Name (Title & Organization)	Home or Business Address	E-mail Address
Brandon Weigand	17 W. 9th Street, Marcus Hook, PA 19061	mastronardo@aol.com
Michael Manerchia (Councilman, Marcus Hook Borough)	Marcus Hook Resident	
Dr. Nolan L. Fontaine (CRCQL)	Chester Resident	
Shannon Williams, Sr. Vice President, Advocacy, The Chamber of Commerce for Greater Philadelphia)	200 South Broad Street, Suite 700, Philadelphia, PA 19102-3813	asauter@chamberphl.com
Matt Osenbach on behalf of Pennsylvania Senator Gene Yaw (Chairman, Pennsylvania Senate Environmental Resources & Energy Committee)	362 Main Capitol Building, Senate Box 203023, Harrisburg, PA 17120-3023	mosenbach@pasen.gov
Michael Butler (Executive Director, Mid-Atlantic, Consumer Energy Alliance)	1 PPG Place, 31st Floor, Pittsburgh, PA 15222	mbutler@consumerenergyalliance.org
Lynn P. Robinson	44 Ashmead Place S., Philadelphia PA 19144	lpearlrobinson@gmail.com
Brenda Norris	313 E. Dutton Mill Road, Brookhaven, PA 19015	brenda@bnnote.net

Section 2. Comments on Requirements In/For DEP's Proposed Renewal of TVOP No. 23-00119 and DEP Responses

Section 2.1. Comments from ETMT

Comment A: ETMT objects to the inclusion of provisions of 40 CFR Part 60, Subpart VVb, within the TVOP renewal, as follows:

- “ETMT questions the basis for [DEP’s] proposed application of the leak definition from [40 CFR Part 60,] Subpart VVb to Source IDs 400-401, because [40 CFR Part 60,] Subpart VVb is not directly applicable to the Marcus Hook terminal or its operations. Specifically, while the federal NSPS [(New Source Performance Standards)] requirements governing leak detection and repair [(LDAR)] have been incorporated into various permitting actions for the facility, it is our understanding that they have been identified only by reference as constituting LAER [(Lowest Achievable Emission Rate)] for facility operations.”
- “[40 CFR Part 60,] Subpart VVa is not directly applicable to ETMT’s operations at Marcus Hook, nor is [40 CFR Part 60,] Subpart VVb. Both of these NSPS subparts apply to the ‘Synthetic Organic Chemicals Manufacturing Industry’ [(SOCMI)] which is defined to be the industry that produces, as intermediates or final products, one or more of the chemicals listed in 40 C.F.R. §60.489. ETMT’s ethane chilling operations at Marcus Hook do not fit this definition, because they are focused on the processing and production of refrigerated ethane, which is not a listed chemical subject to [40 CFR Part 60,] Subparts VVa or VVb. Accordingly, it is not appropriate for [DEP] to apply [40 CFR Part 60,] Subpart VVb to Source IDs 400-401 via the [TVOP] renewal.”
- “[DEP] has not identified a basis for reevaluating its LAER determination made in Plan Approval K, which incorporated aspects of the “28LAER” program established by the Texas Commission on Environmental Quality [(TCEQ)] and established a leak threshold of 500 ppm. There is no basis to apply the more stringent [40 CFR Part 60,] Subpart VVb standards to the sources in lieu of either 28LAER or [40 CFR Part 60,] Subpart VVa. ... In EPA’s proposed rule entitled *Clarifying the Scope of “Applicable Requirements” Under State Operating Permit Programs and the Federal Operating Permit Program*, ... EPA has noted that it will not utilize its Title V review procedures to re-evaluate conditions that were established in New Source Review (NSR) permits that were subject to appropriate procedures governing public comment and judicial review. ... Because the leak detection requirements and thresholds of 28 LAER and [40 CFR Part 60,] Subpart VVa were established via the duly issued Plan Approval [No. 23-0119]K, those standards should not be subject to further substantive review or revision in the [TVOP] renewal process.”

Response A: On March 27, 2025, DEP discussed these comments with ETMT. DEP concurs that the provisions of 40 CFR Part 60, Subparts VVa and VVb, are not directly applicable to volatile organic compound (VOC) leaks from the natural gas liquids (NGLs)-related sources and equipment at the MHT (i.e., chiefly from fugitive emissions components, including valves, connectors, relief valves, open-ended valves or lines, pumps, compressors, agitators, sampling connection systems, and instrumentation systems) based on the operations at the MHT not being part of the SOCMI. Nonetheless, as alluded to by ETMT in its comments, the provisions of these regulations serve as a basis for certain LDAR requirements in the proposed TVOP renewal that DEP applied to the NGLs-related sources and equipment at the MHT as part of its overall LAER determination. To indicate that the provisions of 40 CFR Part 60, Subpart VVa, are not directly applicable to the NGLs-related sources and equipment at the MHT while maintaining their basis for certain LDAR requirements in the TVOP renewal, DEP has removed the direct and additional authority citations to the regulation, as well as the references to the EPA Administrator, from the affected conditions in Section D (under Source ID 401), of the proposed TVOP renewal, in favor of a note at the end of each affected condition in the TVOP renewal indicating the provision(s) that serve as a basis for the LDAR requirement(s).¹

¹ For the same reason, DEP has removed the direct citations to 40 CFR Part 60, Subpart VV (for VOC equipment leaks associated with the legacy, non-NGLs-related sources and equipment at the MHT), and references to the EPA Administrator from the conditions in Section D (under Source ID 801), of the proposed TVOP renewal.

The only reference to 40 CFR Part 60, Subpart VVb, that DEP included in the proposed TVOP renewal is a footnote stating that “[t]he applicable provisions of 40 CFR Part 60, Subpart VVb, including the leak definition for valves of 100 ppm required in 40 CFR § 60.482-7b(b), apply to all new fugitive emissions components that are subject to the LDAR requirements specified in Section D (under Source IDs 400–401), of this permit, upon commencing operation.” DEP applied the applicable provisions of 40 CFR Part 60, Subpart VVb (i.e., the more stringent leak definition for valves in gas and light liquid service, excluding relief valves), to the NGLs-related sources and equipment approved under Plan Approval Nos. 23-0119J and 23-0119K based on the facts that they have yet to be installed and the provisions of this regulation are applicable to VOC leaks from equipment “for which construction, reconstruction, or modification commenced after April 25, 2023.” Based on the fact that EPA did not promulgate 40 CFR Part 60, Subpart VVb, until after the issuance dates of Plan Approval Nos. 23-0119J and 23-0119K,² and accounting for EPA’s position, as stated in the proposed rule cited by ETMT, that “once an NSR permit is issued, the limitations and other terms of that permit establish all relevant NSR-related requirements of the SIP ... that apply to construction or modification of the source, and should be incorporated into the [TVOP] without further review,” DEP concurs that the provisions of 40 CFR Part 60, Subpart VVb, should not be applied to the NGLs-related sources and equipment approved under these Plan Approvals.³

Pursuant to 25 Pa. Code § 127.1, DEP considers it appropriate for the provisions of 40 CFR Part 60, Subpart VVb, to serve as a basis for certain LDAR requirements in the TVOP renewal for any NGLs-related sources and equipment authorized or approved after the promulgation date of the regulation, including those under Request for Determination of Changes of Minor Significance and Exemption from Plan Approval/Operating Permit (RFD) No. 10816 and any future RFDs or Plan Approvals. Therefore, DEP has removed the footnote at the end of Condition # 022, Section D (under Source ID 400), of the proposed TVOP renewal, in favor of the following additional work practice requirements in the TVOP renewal:

Condition # 026, Section D (under Source ID 401), of the TVOP renewal: “The permittee shall ensure that any valve in gas and light liquid service, excluding a relief valve, that is authorized or approved on or after May 16, 2024, subject to the LDAR requirements specified in Section D (under Source IDs 400–401), of this permit, and found to be leaking during an AVO inspection, is repaired or monitored using an approved gas analyzer within 15 calendar days to determine whether it is leaking VOCs at a concentration of equal to or greater than 100 ppmv. If the valve is found to be leaking VOCs at a concentration of equal to or greater than 100 ppmv, it shall be subject to the repair and replacement requirements specified in Condition #s 008, 012–014, 021, and 023, Section D (under Source ID 400), of this permit, and Condition #s 012, 016–017, 019–021, and 023, Section D (under Source ID 401), of this permit.”

Condition # 006, Section D (under Source ID 501), of the TVOP renewal: “If using a gas analyzer other than an FID for instrument monitoring of any valve in gas and light liquid service, excluding a relief valve, that is authorized or approved on or after May 16, 2024, and subject to the LDAR requirements specified in Section D (under Source ID 501), of this permit, the permittee shall develop a site-specific leak definition that would provide an equivalent response to 100 ppm as methane using a FID (e.g., 2.1 eV for a PID with a specified isobutylene concentration).”

Comment B: ETMT requests “that [DEP] streamline the LDAR requirements within the permit for clarity and ease of reference.” ETMT “propose[s] a consolidated set of streamlined conditions that would reduce contradictions and confusion within the permit language. ... [T]he consolidated set of conditions would be based on the TCEQ 28LAER program and would exclude any references to [40 CFR Part 60,] Subparts VVa or VVb, which are not applicable to the facility. Instead, the LDAR conditions would identify [DEP’s] general authority to establish permit conditions as the basis for these requirements.”

² EPA promulgated 40 CFR Part 60, Subpart VVb, on May 16, 2024, while DEP issued Plan Approval Nos. 23-0119J and 23-0119K on February 12, 2021, and April 18, 2024, respectively.

³ For the same reason, DEP considers the two refrigerated ethane storage tanks approved under Plan Approval No. 23-0119J to not be subject to the provisions of 40 CFR Part 60, Subpart Kc (for volatile organic liquid storage vessels for which construction, reconstruction, or modification commenced after October 4, 2023).

Response B.: During its March 27, 2025, discussion with ETMT, DEP requested that ETMT draft a proposed set of conditions that consolidate the VOC LAER requirements included in Section D (under Source IDs 400–401), of the proposed TVOP renewal, into one set of conditions. On April 4, 2025, DEP received the proposed conditions from ETMT. After reviewing the proposed conditions, DEP has determined that the reorganization of conditions and streamlining of VOC LAER requirements is significant enough to necessitate that EPA and the public be given an opportunity to review the changes before issuance. As such, DEP does not consider it appropriate to incorporate the proposed changes at this point. Moreover, for the sake of conciseness, DEP has maintained many of the references to provisions of 40 CFR Part 60, Subpart VVa, included in the bodies of the conditions.

Section 2.2. Comments from the Public

Comment A.: “The standards for compliance are too low for a facility located in an environmental justice [(EJ)] zone, provisions and requirements that are intended to address the Commonwealth’s reasonably available control technology [(RACT)] under the Clean Air Act for the 2015 8-hour ozone National Ambient Air Quality Standards [(NAAQS)] are insufficient. All sources of carbon monoxide [(CO)], nitrogen oxides [(NO_x)], particulates, sulfur oxides [(SO_x)], lead, and [(VOCs)] at this site should be held to the highest standards using the best available control technology [(BACT)]. ...

In the interest of those who live in the highly-populated areas in and around Marcus Hook, an emergency alarm system should be required by DEP. In the event of an unanticipated, significant release or planned cleaning of systems, it’s important to alert residents to stay inside. This can be accomplished through a multifaceted alarm network that incorporates social media, outdoor auditory signals, and other communications. ...

Ongoing real-time monitoring should be required since averaging data can fail to show dangerous peaks and harmful pollutants. ...

[I]t is imperative that DEP extend existing regulations and strengthen such standards beyond that which are federally required.”

Response A.: Concerns pertaining to EJ are discussed in DEP’s response to Topic 1. in Section 3.2, below. DEP’s purview in its review of Plan Approval and Operating Permit applications is limited to ensuring that companies comply with all applicable air quality-related federal and Commonwealth regulations and requirements for their sources and facilities. Regarding the various Plan Approvals that DEP has issued for the MHT and its sources (since 2013) and subsequently incorporated into its TVOP, DEP has considered the following federal and/or Commonwealth regulations:

- Prevention of Significant Deterioration of Air Quality (PSD) [42 U.S.C. § 7471 → 40 CFR § 52.21; incorporated by reference at 25 Pa. Code § 127.83].
- NSR [42 U.S.C. §§ 7511a and 7512a; 25 Pa. Code §§ 127.203 and 127.203a].
- RACT [42 U.S.C. § 7502(c); 25 Pa. Code §§ 129.96–129.100 (for RACT II) and 129.111–129.115 (for RACT III)].
- BACT [42 U.S.C. § 7475].
- Lowest Achievable Emission Rate (LAER) [42 U.S.C. § 7503(a)(2); 25 Pa. Code § 127.205].
- New Source Performance Standards (NSPS) [40 CFR Part 60, Subparts A, Db, Kb, VV, VVa, VVb, and IIII].
- Maximum Achievable Control Technology (MACT) [40 CFR Part 63, Subparts R, Y, EEEE, ZZZZ, and DDDDD].
- Best available technology (BAT) [35 P.S. § 4006.6; 25 Pa. Code § 127.1].

RACT requirements apply to existing stationary sources of pollutants at major facilities in areas that are designated as nonattainment for a NAAQS. As the Southeast Pennsylvania air basin, including Delaware County, has been/is currently designated as nonattainment for the ozone NAAQS, and NO_x and VOCs are precursors to ozone, existing stationary sources of NO_x and VOC emissions at major NO_x- or VOC-emitting facilities are required to meet RACT, at a minimum. To address the original nonattainment designation for, as well as subsequent updates to, the ozone NAAQS, DEP established RACT requirements for existing stationary sources of NO_x and VOC emissions at major NO_x- or VOC-emitting facilities in 1994, 2016, and 2022. These requirements are incorporated into Pennsylvania's State Implementation Plan, as (or to be) approved by EPA, and are based on various criteria for the sources and facility, including the commencement of operation date, potentials to emit NO_x and VOCs, source type, and technical and economic feasibility of available air pollution control technologies.

As the MHT was previously a major NO_x- and VOC-emitting facility (when operated as a petroleum refinery by Sunoco, Inc. (R&M)) and is also one in its current incarnation as an NGLs processing, storage, and distribution facility, RACT requirements apply to certain existing stationary sources of NO_x and VOC emissions at the facility (including legacy sources that are still in operation from when operated as a petroleum refinery). DEP has previously addressed RACT for the existing stationary sources of NO_x and VOC emissions at the MHT, more recently in significant modifications to the TVOP in 2017 and 2024 in which DEP determined that the existing TVOP requirements already satisfied RACT.

Contrary to RACT, BACT requirements apply to new and modified stationary sources that contribute to significant net emissions increases of pollutants at facilities in areas that are designated as attainment for a NAAQS (i.e., triggered PSD requirements). In Plan Approval No. 23-0119K, which DEP issued in 2024 and has since incorporated by reference into the TVOP, DEP addressed BACT for CO, greenhouse gases (GHGs), and NO_x for the new and existing cold flares and piping and fugitive emissions components in GHG service at the MHT. To the extent that the commenter means to refer to BAT instead of BACT, please be aware that, for each of the various Plan Approvals that DEP has issued for the MHT and its sources, including Plan Approval No. 23-0119K, in accordance with 25 Pa. Code § 127.1, DEP determined “the emission of air pollutants [to be controlled] to the maximum extent, consistent with [BAT] ... as of the date of issuance of the plan approval.” Accordingly, today's BAT is not intended to be imposed on existing sources.

It is not DEP's purview to mandate that ETMT install an emergency alarm system to notify residents of releases, etc. Nonetheless, as discussed further in Section 3.4., below, Marcus Hook maintains a communications system called Code Red that can alert its residents of any emergency incidents. In addition, all Air Quality Operating Permits, including the proposed TVOP renewal, include a requirement in Section C for the permittee to promptly report malfunctions, emergencies, or incidents of excess emissions.

Regarding real-time monitoring, ETMT operates and maintains CO and NO_x continuous emissions monitoring systems (CEMS) for the auxiliary boilers at the MHT. In addition, ETMT performs auditory, visual, and/or olfactory (AVO) inspections for the respective process areas within the MHT on a per-shift basis.

Comment B.: “Eliminate ‘de minimis emissions allowances’ from the [TVOP renewal] so that total MHT emissions are securely limited to the expected annual amounts, published in the PA Bulletin and elsewhere.”

Response B.: DEP does not concur. De minimis emission increases from sources and facilities are permitted under 25 Pa. Code § 127.449, and all Air Quality Operating Permits include associated conditions in Sections B and C to provide operational flexibility. De minimis emission increases must be authorized by DEP and cannot exceed emission thresholds regulated under section 112 of the Clean Air Act or subject the facility to PSD or NSR requirements. The condition will remain in the TVOP renewal as is.

Comment C.: “ETMT has 30 days to repair leaks in some parts of the facility. Oil burner leaks may not cause a quick explosion, but they add to air pollution, since petroleum emits benzene. Change the [TVOP] to require any detected leak be repaired right away, or within 48 hours.”

Response C.: DEP does not concur. ETMT does not operate any sources at the MHT with oil-fired burners. For each leak associated with an existing or new fugitive emissions component in VOC or GHG service, ETMT is

required to make a first attempt at repair within 5 calendar days and complete the repair within 15 calendar days. These requirements mirror the timeframes prescribed for VOC equipment leaks in TCEQ's 28LAER program and the NSPS standards for the SOCMIs [40 CFR Part 60, Subparts VV, VVa, and VVb] that, as discussed in DEP's response to Comment A. in Section 2.1., above, serve as a basis for certain LDAR requirements in the proposed TVOP renewal. For each leak associated with an existing cooling tower or new wet surface air cooler, ETMT is required to complete the repair within 45 days. This requirement mirrors the timeframe prescribed for heat exchange systems in the MACT standards for the SOCMIs and for petroleum refineries [40 CFR Part 63, Subparts F and CC, respectively]. Therefore, the timeframes will remain in the TVOP renewal as is.

Comment D.: "Flaring is a significant source of air pollution from MHT. The [TVOP renewal] could require that when flares are not functioning properly the problem is classified as a leak and reported to [DEP]."

Response D.: DEP recognizes that the flares at the MHT have the potential to emit appreciable amounts of CO, GHG, NO_x, and VOC emissions. However, DEP does not concur with classifying instances of when the flares are not functioning properly as a leak. The term 'leak,' as used in the current TVOP and proposed TVOP renewal, refers to fugitive emissions of VOCs and GHGs that are measured to be above a certain concentration. The current TVOP and proposed TVOP renewal include requirements to continuously monitor for and maintain records of the presence of a pilot flame for each flare, as well as requirements to submit a semiannual report indicating all periods of operation during which a pilot flame was absent. Therefore, the requirements will remain in the TVOP renewal as is.

Comment E.: "[DEP] should add a statement to the [TVOP renewal] in a prominent appropriate place communicating that [DEP] will publish detailed explanations for past and any future air quality violations and fines."

Response E.: It is critical for DEP to provide permitting, inspection, and compliance information about individuals, businesses, and local governments to the public. These entities are subject to environmental requirements and reporting is a fundamental part of all environmental protection programs. The Commonwealth's Environment Facility Application Compliance Tracking System (eFACTS) webpage (accessible at <https://www.ahs.dep.pa.gov/eFACTSWeb/default.aspx>) allows individuals to search for authorizations, clients, sites, and facilities. Users can also search the database to find inspection and pollution prevention visits as well as inspection results data, including enforcement information when violations are noted. DEP has also provided a name search to use when it is not known if the entity is a client, site, or facility. eFACTS contains DEP compliance information only. Federal compliance information, including federal compliance reports and data for individual entities, can be found on EPA's Enforcement and Compliance History Online (ECHO) and Envirofacts websites (accessible at <https://echo.epa.gov> and <https://enviro.epa.gov>, respectively).

DEP also maintains records of all Notices of Violation (NOVs) and enforcement actions, including Consent Assessments of Civil Penalties (CACPs) and Consent Orders & Agreements (CO&As), for all facilities located within the Southeast Pennsylvania air basin, at its Southeast Regional Office (SERO). To schedule an informal file review, please refer to the procedures located on DEP's Public Records webpage (accessible at <https://www.pa.gov/agencies/dep/about-dep/public-records/informal-file-review.html>).

Section 3. General Comments from the Public (i.e., E-mails, Letters, and/or Testimony at the Public Hearing) on DEP’s Proposed Renewal of TVOP No. 23-00119 and DEP Responses

Section 3.1. General Comments in Support of DEP’s Proposed Renewal of TVOP No. 23-00119

1. Impact to the Environment:

Comment A: “Over the past decade, [ETMT] has been transforming the [MHT], a former oil refinery, into a cleaner, world-class natural gas liquids (NGLs) hub. ... Throughout this transition, the facility has significantly reduced emissions over the past 10 years and is committed to a safer and cleaner environment.”

Comment B: “[A]s economic activity and processing capacity has significantly increased over the past five years at the [MHT], [ETMT] has continued to meet aggressive targets on reduced emissions. In fact, several criteria pollutant emissions are down over 99%—even while activity has increased.”

Response: Thank you for providing these comments. DEP has records of the following emissions data (in tons) reported for the facility for calendar years 2010 (the last full year that the facility operated as a refinery) and 2024:

Pollutant	2010	2024
CO	718.49	58.85
NO _x	1,438.53	62.54
Particulate Matter (PM) < 10 µm in Aerodynamic Diameter (PM ₁₀)	357.23	1.49
PM < 2.5 µm in Aerodynamic Diameter (PM _{2.5})	357.23	1.15
SO _x	1,807.89	0.47
VOCs	432.07	146.81
2,2,4-Trimethylpentane (VOC hazardous air pollutant [HAP])		0.15
Antimony (PM ₁₀ HAP)	0.22	
Arsenic (PM ₁₀ HAP)		0.01
Benzene (VOC HAP)	7.10	0.43
Benzo(a)pyrene (PM ₁₀ HAP)	0.39	
Cadmium (PM ₁₀ HAP)		0.01
Chromium (PM ₁₀ HAP)		0.03
Cyanide Compounds (PM ₁₀ HAP)	3.62	
Formaldehyde		0.10
Hexane (VOC HAP)	5.48	1.75
Lead (PM ₁₀ HAP)	0.02	0.01
Manganese (PM ₁₀ HAP)		0.29
Nickel (PM ₁₀ HAP)	0.37	0.10
Toluene (VOC HAP)	12.73	1.46
Xylenes (Isomers and Mixture) (VOC HAP)	0.77	0.58
o-Xylene (VOC HAP)	2.45	
Ammonia	5.85	
Butane (VOC)	1.94	21.38
Carbon Dioxide (CO ₂)	Not Reported	158,454.15
Copper		0.01
Ethane	< 0.01	0.68
Methane	0.1	70.51
Nitrous Oxide (N ₂ O)		1.73
PM, Condensable		2.39
Pentane (VOC)	< 0.01	15.84
Propane (VOC)	4.27	65.02

Pollutant	2010	2024
Propylene (VOC)		8.59
Sulfuric Acid		0.05

DEP recognizes that emissions of the criteria pollutants and certain other pollutants have decreased from the time that the facility operated as a refinery. However, as ETMT did not propose to change any of the emission restrictions specified in the TVOP for the MHT as part of the TVOP renewal application, the reduction in emissions is not relevant to the proposed TVOP renewal and had no bearing on DEP’s review of the application.

2. Energy Benefits:

Comment A.: “[ETMT’s MHT] is an essential part of the U.S. energy infrastructure, helping to ensure a stable and reliable supply of natural gas liquids and other energy products. The extension of these permits would ensure that this facility can continue to support the energy needs of the region, enhance U.S. energy independence, and ... [support] the supply chain for energy-related industries.”

Comment B.: “The facility is now the supplier of the majority of the region’s propane demand from its truck racks at Marcus Hook and the NGLs the facility processes and stores are a vital feedstock for chemicals and polymers used to manufacture the products we all rely on for modern life.”

Response: Thank you for providing these comments. However, DEP must note that any energy benefits associated with the MHT are not relevant to the proposed TVOP renewal and had/have no bearing on DEP’s review of the associated application.

3. Economic Benefits:

Comment A.: “While this site currently employs 200 Pennsylvanians and supports the employment of 50 more contractors, the terminal continues to grow, adding even more jobs and uplifting the greater community.”

Comment B.: “While the [MHT] is located more than 300 miles from the Pittsburgh region, it represents a critical outlet for the energy industry of Western Pennsylvania and the thousands of members of the Pittsburgh area building trades who benefit from the growing energy sector.”

Comment C.: “Pennsylvania is a crucial hub for both traditional and emerging energy markets, with affordable energy being a cornerstone of our economic competitiveness. As energy costs remain a top concern for businesses, facilities like the [MHT] play a vital role in stabilizing prices and meeting future energy demands. As such, renewing the [MHT’s] permit is essential to ensuring that Pennsylvania maintains our leadership in both national and global energy markets.”

Comment D.: “The opportunities created by [the MHT] facility enable local residents to purchase homes, pay taxes, raise their families, and send their kids to college. Their efforts help to create a better economic standard of living for all area residents. Companies like [ETMT] should be commended for their standard to consistently choosing to employ local workers and supporting local collective bargaining agreements, apprenticeship programs, pensions and healthcare for workers.”

Comment E.: “[ETMT] plays an important role in our community by supporting local events, providing jobs for residents in Marcus Hook and surrounding areas, and contributing to the local tax base which directly benefits our schools.”

Response: Thank you for providing these comments. However, DEP must note that any economic benefits associated with the MHT are not relevant to the proposed TVOP renewal and had/have no bearing on DEP’s review of the associated application.

4. (Pennsylvania) NGLs Benefits:

Comment: “These natural gas liquids, including propane, are utilized in our daily life and are critical to the production of everything from everyday consumer goods to lifesaving medical supplies and equipment. The ability to produce, transport and process these natural gas liquids here in Pennsylvania—under the highest of environmental standards and protections—as opposed to importing them has contributed greatly to protecting and enhancing our shared environment.”

Response: Thank you for providing this comment. However, DEP must note that any Pennsylvania NGLs benefits associated with the MHT are not relevant to the proposed TVOP renewal and had/have no bearing on DEP’s review of the associated application.

5. Safety/Permitting Requirements

Comment: “To protect the health and safety of the community and the environment, [ETMT] employs various environmental teams to comply with state and federal regulations that govern its operations in Marcus Hook. [ETMT] deploys a Leak Detection and Repair [(LDAR)] program to identify any anomalies associated with [VOCs] for 42,000 components in VOC service at the facility. More than 500 components are monitored on an average day and terminal operators perform visual inspections on all components once per shift. They also deploy additional air monitoring methods including boiler stacks that apply a [CEMS] for ongoing monitoring of several pollutants. [ETMT’s TVOP] renewal is straightforward with no requested changes in permitted emissions.”

Response: Thank you for providing this comment. DEP concurs that the TVOP renewal includes requirements pertaining to LDAR for fugitive emissions components in VOC service and CEMS for monitoring CO and NO_x emissions from the auxiliary boilers, and does not include any changes to the emission restrictions contained in the current TVOP. However, as discussed in DEP’s response to Comment A. in Section 2.1., above, the proposed TVOP renewal included the application of additional requirements based on the promulgation of a new regulation. In addition, as discussed in DEP’s response to Request A. in Section 4., below, twenty-eight storage tanks that are listed in the current TVOP have been taken out of service (OOS) by ETMT and not included in the proposed TVOP renewal. Therefore, DEP does not concur with the TVOP renewal being ‘straightforward’ or, further, with any impression that Operating Permit renewal applications only go through a cursory or rubber-stamp review.

Section 3.2. General Concerns Pertaining to ETMT, the MHT, ET, and Legacy Environmental and Health Impacts/General Comments in Opposition to DEP’s Proposed Renewal of TVOP No. 23-00119

1. Public Health/Quality of Life/Cumulative Impacts/EJ:

Concern/Comment A.: “[ET] has proven themselves to not be a good neighbor with their spills and accidents that impact the health and quality of living of citizens residing in Marcus Hook/Chester/ Trianer [sic]. Southeast Pennsylvania citizens are paying the price for our company that values profits over people.”

Concern/Comment B.: “Marcus Hook and surrounding municipalities are host to a concentrated cluster of major polluting facilities. But the DEP does not require an accurate and realistic assessment of the effects from all of these existing pollution sources on our community. These cumulative impacts exacerbate health inequalities and racial and social injustices and should be considered by DEP in its permitting process. Our community deeply feels the effects of living in close proximity to so many polluting facilities. Residents complain of constant odors, headaches, nosebleeds, asthma. The cancer rates that we’re finding are truly stunning. Burning eyes, nose and throat, etc.”

Concern/Comment C.: “I’ve been working with my students since last summer to try to map out a number of different disease conditions across Delaware County. And what we find when we’re mapping things like asthma, chronic obstructive pulmonary disease, that if you take a map of Delaware County, it just lights up in the

southeast corner. And no part of Delaware County, frankly, more than Marcus Hook. But it's more recently that we turned our attention to studying cancer rates. ... [W]e calculated the average annual incident rates in each of the different townships and we compared it to the annual incidence rate for the U.S. at large. The U.S. number is an age adjusted number, which is done because cancer incidence increases with age. ... [T]he age distribution for Marcus Hook and for Trainer and for Lower Chichester and Chester is significantly younger than the U.S. national average, which means that the numbers I'm about to read are underrepresenting the actual incidence as compared to the U.S. figures.

"So, in Marcus Hook, adults have 9.6 times the U.S. rate of laryngeal cancer, 6 times the rate of esophageal cancer, 5.4 times the rate of liver and bile cancer, 5.1 times the rate of lung and bronchial cancer, 5 times the rate of Hodgkin's lymphoma primarily a disease actually of younger people, 3.3 times the rate of oral and pharyngeal cancer, 2.8 times the rate of pancreatic cancer, 2.4 times the rate of kidney and renal cancer, 2.4 times the rate of colorectal cancer, and 1.8 times the rate of melanoma, which is a disease that is also shaped by exposure to toxins.

"Women have 2.5 times the rate of uterine cancer, 2.3 times the rate of ovarian cancer, and 2 times the rate of breast cancer. And if one does a 10- to 20-year look back, it's clear that these rates are pretty consistent for this community. But, also, what would appear on this record would be leukemia, which roughly comes to about 2.3 times the U.S. average. So, with these numbers, they are the highest by far in all of Delaware County. They're the absolute worst. But they're also really elevated: 3-4 times the national average in Chester and Lower Chichester."

Concern/Comment D: "The [MHT] emits dangerous pollutants including [NO_x], [VOCs], and fine [PM]. These toxins don't just stay in the air. They enter the lungs of children, the bloodstream of the elderly, and the hearts of those with pre-existing conditions. They cause disease and death. Exposure to these pollutants has been well documented to increase asthma attacks, emergency room visits, and long-term risk of cancer and heart disease. Flaring at the [MHT] releases additional methane and benzene, both of which are linked to chronic lung disease, cancer, and neurological disorders.

"The approval of this [TVOP renewal] will only facilitate these emissions, continuously placing residents at greater risk. I worry that these repeated exposures will prematurely end the lives of exposed residents, young and old. I don't want to have to tell a mom that her young child in the hospital connected to life support because of an asthma attack, won't make it. I don't want another child to deal with a deadly risk of asthma knowing we could have done more to protect that child's constitutional right to clean air. ...

"[T]he pollution from [the MHT] disproportionately affects vulnerable communities, making them sacrifice zones for corporate profit. ... Health is not negotiable. We cannot wait until more of our neighbors develop chronic diseases, until more children struggle to breathe, or until yet another air quality alert warns us to stay inside."

Concern/Comment E: "[DEP] could have denied the original [TVOP] for ETMT on the grounds of perpetually out-of-compliance regional ozone levels and because the EJ community with cancer rates are 4 and 5 times the national average. ... Community 'stakeholders,' backed by health professionals and academics, are asking [DEP] to deny the [TVOP renewal], seeking better air quality and improved health. ... Just considering how fine and ultra-fine [PM] affect[s] children's brains is enough reason to have prohibited the original [TVOP]. ...

"If an honest 'Needs Assessment' for ETMT's MHT had been done before ETMT's [TVOP] application was ever written, it would have not been approved (unless politicians had been paid off to push it). The consumers in PA do not need or want every item we buy to be packaged and encased in single-use plastics, made from ethane or petroleum. The health consequences of microplastics in our bodies are profound, and these microplastics are everywhere in air, land and water, even wilderness areas."

Response: Thank you for providing these comments. While DEP is not a health-based agency, maintaining safe air quality is a priority for the DEP. Sensitive groups living in the area, such as young children, the elderly, and those with respiratory problems, including asthma, emphysema, and bronchitis, are especially vulnerable to the effects of air pollution and should check the local air quality forecast when planning any outside activity. (Local

air quality data, forecasts, and related information can be found on EPA's AirNow website at:
<https://www.airnow.gov>.)

Using the *Pennsylvania Environmental Justice Mapping and Screening Tool* (*PennEnviroScreen*; accessible at <https://gis.dep.pa.gov/PennEnviroScreen>), in accordance with Appendix B of DEP's Interim Final EJ Policy (Document No. 015-0501-002), effective September 16, 2023, DEP considers Marcus Hook Borough, Trainer Borough, the City of Chester, and portions of other municipalities in the vicinity of the MHT to be EJ areas. In accordance with Appendix C of this policy, DEP has determined that the TVOP renewal warrants special consideration as an Opt-In Permit subject to enhanced public participation.

DEP's Interim Final EJ Policy is implemented by agency personnel to ensure Pennsylvanians within EJ areas have a respected voice in the review process of specific projects in their communities. DEP recognizes the importance of ensuring every citizen of Pennsylvania is safeguarded from illegal pollution and environmental harm. The agency is committed to the fair treatment and meaningful involvement of all people with respect to the identification of environmental issues, and the development, implementation, and enforcement of environmental policies, regulations, and laws. DEP is bound to uphold its regulatory, statutory, and constitutional obligations of protecting Pennsylvania's air, land, and water from pollution and providing for the health and safety of its citizens through a cleaner environment. The reality is certain communities, which are often predominately low-income or people of color, have experienced a disproportionate impact of DEP engaged in outreach efforts to provide residents in the communities around the site with information on facilities and how to submit public comments and attend public hearings regarding permits.

Concerns pertaining to accidents and emergency incidents, as expressed in Concern/Comment A., are discussed in DEP's response to Topic 2. in this section.

Concerns pertaining to air pollution, as expressed in Concerns/Comments B., D., and E., are discussed in DEP's responses to Topic 1. in Section 3.1, above, and Topic 3. in this section.

Regarding concerns pertaining to inhabitants in the vicinity of the MHT complaining of odors, headaches, nosebleeds, asthma, and burning eyes, nose, or throat, as expressed in Concerns/Comments B.–E., DEP has not received many such complaints by citizens in the area. To report complaints to DEP, please contact DEP's Southeast Regional Office at 484.250.5900 or complete an Environmental Complaint Form (accessible on DEP's GreenPort webpage at <https://greenport.pa.gov/obPublic/EnvironmentalComplaintForm>). Please provide as much information regarding the complaint as possible, including the time frame of the issue, a description of the issue/odors, the wind direction, etc.

Regarding concerns pertaining to cancer and other non-cancer risks, as expressed in Concerns/Comments B.–E., DEP has reviewed cancer risk and non-cancer hazard index data for Census Tract ID 42045406600, the tract that comprises Marcus Hook, using EPA's Air Toxics Screening Assessment (AirToxScreen) screening tool (accessible on EPA's AirToxScreen webpage at: <https://www.epa.gov/AirToxScreen/previous-air-toxics-assessments>). Based on this data, DEP has calculated the following total cancer risk and non-cancer hazard index ranges for calendar years 2017–2020,⁴ as follows:

- Total Cancer Risk: 34.43–39.05 in a million (lowest in 2019).
- Non-cancer Hazard Index: 0.679–0.773 (lowest in 2019; less than or equal to 1 is considered negligible risk).

In its review of Plan Approval No. 23-0119K for the MHT, DEP determined that the emissions increases for the NGLs-related sources and equipment at the MHT would not cause or contribute to air pollution in violation of any NAAQS or PSD increments. Therefore, in accordance with the PSD provisions of 40 CFR § 52.21 and EPA

⁴ These are all the years since 2015, the year in which the first NGLs-related sources and equipment at the MHT commenced operation, for which AirToxScreen data is available, except that non-cancer hazard index data is not readily available for calendar year 2020.

policy,⁵ ETMT was not required to complete a cumulative source impact analysis for air contaminant emissions involving other sources in the area.

Concerns pertaining to the appropriateness of DEP’s review and approval of the TVOP renewal application, as expressed in Concern/Comment E., are discussed in DEP’s response to Section 3.3., below.

2. Safety:

Concern/Comment A.: “[N]atural gas liquids have no place in any community that holds a dense population. Not only do they accelerate climate change through the extraction of this fossil fuel, they create a dangerous situation that through explosion risks and health hazards to the populations living beside these pipelines.”

Concern/Comment B.: “The [MHT] can store about 2 million barrels per day of natural gas liquids in underground caverns, and 4 million barrels per day in above ground tanks. ... In the event of an accident or terrorist event igniting the 6 million barrels ... these barrels would have the explosive force of 454 times the explosive force of the atomic bomb that was dropped on Hiroshima, Japan. ... In the event of ignition of 13,200 (600 x 22) barrels of NGLs at the Energy Transfer Marcus Hook Terminal, the explosive force of the Hiroshima bomb would be levied on Marcus Hook, Trainer, Chester City, and beyond, killing thousands. Nothing this destructive should be anywhere near a populated area. Yet, the Marcus Hook Terminal is in a densely populated area. To ensure our safety, [the TVOP renewal] should be denied.”

Concern/Comment C.: “There are no plans or procedures to evacuate the population in the event of an accident or terrorist event. ... In the event of an accidental or willful explosion of the aboveground or underground barrels of NGLs, this entire area would be burnt, people and building and cars and everything extending into New Jersey, Delaware, and Philadelphia.”

Concern/Comment D.: “And to think what would happen if [a massive fire] happens [at the MHT] and a little fire station there that would not be able to deal with anything if that happened.”

Response: Thank you for providing these comments. In general, the air quality-related federal and Commonwealth regulations and associated requirements included in the proposed TVOP renewal, as largely incorporated from previously-issued Plan Approvals, are intended to directly and indirectly address safety concerns through ensuring that environmental impacts from the operations at the MHT are minimized.

The siting/zoning of the MHT within Marcus Hook, including its proximity to residential zones, is not DEP’s purview. That being said, based on the fact that industrial operations have occurred at the MHT since over 100 years ago, as stated in Section 3.4., below, it is apparent that this siting is a vestige of when the nature of transportation necessitated that workers live in close proximity to their place of work.

While not relevant to the proposed TVOP renewal, regarding concerns pertaining to accidents and emergency incidents (including spills, releases, and fires) at the MHT, as expressed in Concerns/Comments A.–D., ETMT stated in the plain language summary it submitted during DEP’s review of the application for Plan Approval No. 23-0119K that the “MHT has its own emergency response organization[, which is] ... made up of 65 members trained in fire, rescue, hazardous materials response, emergency medical services, and spill response. Members of the team are on-site 24/7. The fixed fire protection system currently contains 76 suppression systems, 46 detection systems and 10 fixed fire pumps. Emergency response assets include three engine trucks, one foam tanker, three tactical units, two high-flow trailers, three marine units, one aerial tower truck, two super pumpers and one high-expansion foam unit.” Moreover, ETMT stated in its September 2023 newsletter (mailed out to residents of Marcus Hook & Trainer Boroughs and Lower Chichester, Upper Chichester, Aston, &

⁵ See, for example, PSD for PM_{2.5}—Increments, Significant Impact Levels (SILs) and Significant Monitoring Concentration (SMC), 75 FR 64864, October 20, 2010: “Our longstanding policy under the PSD program is that when a preliminary screening analysis based on the SIL [(significant impact level)] is sufficient to demonstrate that the source’s emissions throughout the area modeled will not cause or contribute to a violation of the increment, there is no need for a comprehensive source impact analysis involving a cumulative evaluation of the emissions from the proposed source and other sources affecting the area.”

Brookhaven Townships) that its aerial tower truck can “operate at 22 feet below grade and 180 feet above grade, in order to reach the top of our tanks at the [MHT]. We are proud to say we have only used the [aerial tower truck] for training exercises, parades and mutual aid throughout the community.”

Lastly, while not DEP’s purview and not relevant to the proposed TVOP renewal, as discussed in Section 3.4., below, Marcus Hook has an evacuation plan in the event of an accident or emergency incident at the MHT.

3. Air Pollution:

Concern/Comment A.: “The [MHT] is now slated to add an additional 10,000 barrels a day of ethane chilling operation that will require many new air pollution sources. This expansion is also inherently tied to other fossil fuel expansion projects across the state such as Project Phoenix, which will further endanger and pollute vulnerable communities.”

Response A.: Thank you for providing this comment. DEP approved these projects for the MHT under previously-issued Plan Approval Nos. 23-0119K and 23-0119J, respectively. DEP issued these Plan Approvals in 2024 and 2021, respectively, and has since incorporated them by reference into the TVOP. As stated in DEP’s response to Topic 1. in this section, “[i]n its review of Plan Approval No. 23-0119K ..., DEP determined that the emissions increases for the NGLs-related sources and equipment at the MHT would not cause or contribute to air pollution in violation of any NAAQS or PSD increments.”

Concern/Comment B.: “[A]ir pollutants fail to abide by municipal and county boundaries. ... According to the American Lung Association, adjacent Philadelphia has failing air quality and Delaware County as a whole has a low level. This means that emissions from ETMT are a threat to public health in our communities. Data regarding asthma rates, cardiovascular incidents, and maternal health issues in the neighboring City of Chester confirm the seriousness of air pollution in this area.”

Response B.: Concerns pertaining to public health are discussed in DEP’s response to Topic 1. in this section.

Concern/Comment C.: “The [MHT] publicly reports emitting carbon monoxide, lead, NO_x, PM, SO_x, and VOCs. Given the frequent flaring and proposed addition of three new flares, it also releases methane, benzene and heavy metals. The DEP should require continuous and publicly available monitoring noting repeated decreases in emissions.”

Response C.: Thank you for providing this comment. The emissions from the MHT for calendar year 2024 are listed in DEP’s response to Comment 1. in Section 3.1., above. Methane emissions are discussed in DEP’s response to Topic 7. in this section. Benzene and heavy metals emissions from the MHT for calendar year 2024 were all less than 1.0 ton.

ETMT operates three existing flares at the MHT, and DEP has approved the installation of a fourth flare under previously-issued Plan Approval No. 23-0119J. Continuous monitoring is discussed in DEP’s response to Comment A. in Section 2.2., above. To schedule an informal file review, please refer to the procedures located on DEP’s Public Records webpage (accessible at <https://www.pa.gov/agencies/dep/about-dep/public-records/informal-file-review.html>).

4. Compliance Status/Violations/Criminal Charges:

Concern/Comment A.: “[ETMT] has received several consent assessments of civil penalties (CACP) which means they were cited for violations identified during an inspection. When people’s lives are in danger from faulty equipment or pollution there is no place for consensual agreement. Violations must be remediated with improved air quality and preventive measures.”

Concern/Comment B.: “The [MHT] is listed as currently being in a high-priority violation of the Clean Air Act by [EPA].”

Concern/Comment C: “[The MHT] and [ET] have a long history of permit violations, while [ET] has even been indicted on multiple criminal charges related to the construction of Mariner East in Pennsylvania.”

Concern/Comment D: “The Twin Oaks pipeline in Upper Makefield, Pennsylvania, Bucks County. ... [P]eople are upset, they’re coming out, they smell gas in their wells for a couple weeks, for a couple months. This pipeline was actually repaired during COVID. ... [E]ssentially part of it ruptured, it’s a slow release and what [ET] sent was their wonderful state-of-the-art technology to look at and ... could not pick up this leak. The PHMSA [(U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration)] says, I believe, there are over 40 other sites along that pipeline, again, connecting to the plant here that have the same sort of engineering process. It’s an old pipe from the ‘50s or the ‘30s. ... But essentially, there’s absolutely no reason right now for DEP not to just pause this and not provide any updates or upgrades or renewals.”

Concern/Comment E: “[ET] has already amassed over 120 violations across Pennsylvania, demonstrating a pattern of disregard for both environmental regulations and public health. [ET] as a company alone has \$30 million in penalties for multiple violations of the state’s Clean Streams Law. They include 22 counts related to the discharge of industrial waste, 22 counts of pollution, two misdemeanors, and the felony charge related to not reporting pollution. A company with such a track record should not be rewarded for continued operations.”

Response: Thank you for providing these comments. DEP and EPA have entered into a Memorandum of Understanding (MOU) that defines policies, procedures, and responsibilities of the air compliance program. Likewise, DEP operates its inspection programs in compliance with EPA’s policy and guidelines. DEP’s Full Compliance Evaluations (FCE) are comprehensive evaluations that incorporate all regulated pollutants at all regulated emission units within the facility. An FCE addresses the current compliance status of each emission unit, as well as the continuing ability of the facility to maintain compliance at each emission unit.

DEP takes violations very seriously. High Priority Violations (HPV) are a subset of violations that result in additional scrutiny by EPA. DEP discusses the status of any outstanding HPVs with EPA quarterly so that they can be assured that DEP is handling the violations timely and appropriately. All civil penalties are designed to be sufficient to reflect the gravity of the violation, recover any economic benefit, and achieve effective deterrence. If EPA feels that DEP is not handling the violations properly, they have the ability to overfile and handle the violations themselves. EPA has not overfiled on any DEP actions pertaining to ETMT.

On November 26, 2024, DEP and ETMT entered into a CACP, in which ETMT consented to the assessment of a civil penalty in settlement of air quality violations that occurred at the MHT between December 30, 2022–June 3, 2024. ETMT has addressed these and all prior air quality violations at the MHT through appropriate corrective actions.

Violations pertaining to ET, including for the Mariner East and Twin Oaks pipelines, are not associated with DEP’s review of ETMT’s TVOP renewal.

5. End Use of Ethane and NGLs:

Concern/Comment A: “Exporting ethane may be profitable right now, but most ethane is used to manufacture single use plastics. Harm done before export is not worth the sacrifice after the export. The next step is a highly polluting manufacturing process creating plastics which immediately become waste after one use, and spread microplastics worldwide in drinking water, food, oceans, streams, soil, and air.”

Concern/Comment B: “This is a facility that does not produce energy to power homes, businesses or public works in our community or even our country. The NGLs that are processed here in Marcus Hook go on to become mostly single-use plastics for overseas markets. So not only do they perpetuate the extraction of fossil fuels and accelerate climate change, it also creates explosion risk and health hazards for our communities and then ultimately goes on to pollute the world further with more plastic waste.”

Response: Thank you for providing these comments. However, DEP must note that the end uses of ethane and NGLs are not relevant to the proposed TVOP renewal and had no bearing on DEP’s review of the associated application.

6. Economic Impacts of Exporting NGLs

Concern/Comment: “[ET] exports more NGLs than any other company or country, in comparison about 20% of the world market. ... Increased NGLs exports can lead to a noticeable increase in domestic natural gas prices with estimates of around 15–30% under a scenario of unconstrained exports, ... which could translate to increased costs for American households by over \$100 per year.”

Response: Thank you for providing this concern/comment. However, DEP must note that any economic impacts associated with the MHT are not relevant to the proposed TVOP renewal and had no bearing on DEP’s review of the associated application.

7. Climate Change:

Concern/Comment: “Climate change is in serious peril. [ETMT] are contributing to the problem. [The MHT] facility, known solely for its petroleum products, now operates and maintains sources of equipment for [NGLs] as well as processing, storage, and distribution. Its recorded emissions of carbon dioxide and greenhouse gas is over 159,000 tons per year. Any methane released in LNG processing, storage, and/or distribution exacerbates the climate dilemma.”

Response: Thank you for providing this concern/comment. As presented in DEP’s response to Topic 1. in Section 3.1., above, the actual CO₂ and methane emissions from the MHT for calendar year 2024 were 158,454.15 tons and 70.51 tons, respectively. Based on 100-year time horizon global warming potential (GWP) values for CO₂ and (non-fossil) methane of 1 and 27.0, respectively, from the Intergovernmental Panel on Climate Change’s (IPCC’s) Sixth Assessment Report, 2020 (AR6), the GHG emissions from the MHT for calendar year 2024, expressed as CO₂ equivalents (CO₂e), were 160,357.92 tons. Based on an average annual GHG emission rate per gasoline-powered passenger vehicle (i.e., cars, vans, pickup trucks, and sport utility vehicles) of 4.29 metric tons CO₂e, as calculated by EPA, the GHG emissions from the MHT for calendar year 2024 correspond to the amount generated by approximately 33,910 passenger vehicles per year. (The calculation can be found on EPA’s website at: <https://www.epa.gov/energy/greenhouse-gases-equivalencies-calculator-calculations-and-references>.) For comparison, the annual average daily traffic (AADT) on I-95 in the vicinity of Marcus Hook and Chester in calendar year 2023, as indicated on the Pennsylvania AADT Traffic Volume Map prepared by the Pennsylvania Department of Transportation (PennDOT) (accessible on PennDOT’s website at: https://gis.penndot.pa.gov/BPR_PDF_FILES/MAPS/Traffic/Traffic_Volume/Statewide/Statewide_2023_tv.pdf) and the Interactive Traffic Counts Map prepared by the Delaware Department of Transportation (DelDOT) (accessible on DelDOT’s website at: <https://deldot.maps.arcgis.com/apps/webappviewer/index.html?id=4f76a1fa5b5c493cb3e1fad44a50dad1>) exceeded 100,000 passenger vehicles. Therefore, DEP considers the GHG emissions from the MHT to have relatively minor impact.

Section 3.3. General Concerns Pertaining to the Appropriateness of DEP’s Permitting of the MHT

Concern A.: “It is the DEP’s job to hold them accountable for the harm that they have and continue to commit against this community and communities across the state. It would be wildly irresponsible and even disrespectful for DEP to approve this permit while Energy Transfer continues to violate regulations and do less than the bare minimum to protect the lives of the families in this community and even their own workers.”

Concern B.: “[I]f Pennsylvania is going to continue to permit facilities and companies like Energy Transfer’s, especially given a criminal record, they need to be taking into account the actual health consequences of these industries and what it’s doing to the people who live in this area. I think that this is frankly, you know, again, somewhat criminal. ... [ETMT] clearly is one of the number in this region. But they’re allowed to pollute and to cause rates of cancer that are this elevated, in many cases, you can read about cancer clusters that are 1.3 times the

national average. I mean, we're talking, you know, five, six, nine times. ... I would call on you to take into account, again, the incidence of the disease rate in considering your decision to re-permit [ETMT's MHT] facility."

Concern C. "Marcus Hook and surrounding municipalities are host to a concentrated cluster of major polluting facilities. But the DEP does not require an accurate and realistic assessment of the effects from all of these existing pollution sources on our community. These cumulative impacts exacerbate health inequalities and racial and social injustices and should be considered by DEP in its permitting process."

Concern D. "Our state constitution declares that people have a right to clean air, pure water, and to the preservation of the natural, scenic, historic, and aesthetic values of the environment. ... [DEP's] role is to protect the people, not protect and shield repeat offenders. Instead of renewing this [TVOP], the DEP should enforce stricter regulations, require continuous public emission monitoring, and demand a reduction of pollutants, not allow an increase. ... The DEP has the power and the responsibility to prioritize public health over corporate interest. I urge you to deny this [TVOP] renewal."

Concern E. "They [ETMT] don't care what they emit into the air because they can do better. But it's only when they're made to do better. That's why I'm asking for the DEP to deny this [TVOP renewal]. You have a known criminal operation who has consistently broken the law and got caught. Got caught many times by citizen advocates like us, community citizen inspectors, community citizen scientists and doctors and analysts and people that have—and do—testing: soil testing and air testing and water testing. ... [U]ntil they can do better, no permit should be approved."

Concern F. "Pennsylvania and its citizens have been raped by fracking, corporate greed, and a lack of listening to the voices of the people. Is it okay that the energy, economic, and environmental assessment of U.S. LNG exports indicated that the proliferation of LNG exports facilities was not in the public interest when considering climate, economy, health, and the safety of nearby communities and especially Environmental Justice. [DEP] has firsthand knowledge of Chester EJ problems since 1990. ... Do[es DEP] have the integrity to stop LNG from adding another menace to our region?"

Concern G. "I ... implore you to reconsider the renewal of the [TVOP] for [ETMT]. ... The standards for compliance are too low for a facility located in an [EJ] zone, provisions and requirements that are intended to address the Commonwealth's [RACT] under the Clean Air Act for the 2015 8-hour ozone [NAAQS] are insufficient. All sources of [CO], [NO_x], [PM], [SO_x], lead, and [VOCs] at this site should be held to the highest standards using the [BACT]. ...

"Ongoing health and environmental risk assessment that evaluate multimedia exposures that incorporate chemical and nonchemical stressors in their interactions are needed to guide decision-making by DEP. ... [L]ooking at [ETMT] as a single source of air pollution fails to provide a comprehensive view of the cumulative impact of emissions in this [EJ] area. Thanks to AI [(artificial intelligence)] and other technological advances, DEP can do better in setting regulations and monitoring compliance. ... DEP should take the lead in this area [cumulative environmental assessments] and embrace the opportunity to be at the cutting edge of these efforts. ...

"In the interest of those who live in the highly-populated areas in and around Marcus Hook, an emergency alarm system should be required by DEP. In the event of an unanticipated, significant release or planned cleaning of systems, it's important to alert residents to stay inside. This can be accomplished through a multifaceted alarm network that incorporates social media, outdoor auditory signals, and other communications. ...

"Given the track record of violations by [ET], it is imperative that DEP holds its facilities accountable and levitate [*sic*] appropriate fines to promote compliance. Ongoing real-time monitoring should be required since averaging data can fail to show dangerous peaks and harmful pollutants. Additionally, the risk of explosion must be minimized. ...

"Article 1, Section 27, of the Pennsylvania Constitution reads: 'The people have a right to clean air, pure water, and the preservation of the natural, scenic, historic, and aesthetic values in the environment.' This is a challenge

for our Commonwealth in general and [DEP] specifically. If we look to the future, it is imperative that DEP extend existing regulations and strengthen such standards beyond that which are federally required.”

Concern H: “[DEP] could have denied the original [TVOP] for ETMT on the grounds of perpetually out-of-compliance regional ozone levels and because the EJ community with cancer rates are 4 and 5 times the national average. ... Community ‘stakeholders,’ backed by health professionals and academics, are asking [DEP] to deny the [TVOP renewal], seeking better air quality and improved health. ... Just considering how fine and ultra-fine particulates affect children’s brains is enough reason to have prohibited the original [TVOP]. ...

“If an honest ‘Needs Assessment’ for ETMT’s MHT had been done before ETMT’s [TVOP] application was ever written, it would have not been approved (unless politicians had been paid off to push it). The consumers in PA do not need or want every item we buy to be packaged and encased in single-use plastics, made from ethane or petroleum. The health consequences of microplastics in our bodies are profound, and these microplastics are everywhere in air, land and water, even wilderness areas.”

Response: Thank you for providing these comments. Concerns pertaining to violations, fines, and criminal charges, as expressed in Concerns A.–B., D.–E., and G., are discussed in DEP’s response to Topic 4. in Section 3.2, above.

Concerns pertaining to air pollution, as expressed in Concerns A.–E. and G.–H., are discussed in DEP’s responses to Topic 1. in Section 3.1, above, and Topic 3. in Section 3.2, above.

Concerns pertaining to public health, as expressed in Concerns A.–E. and G.–H., are discussed in DEP’s response to Topic 1. in Section 3.2, above.

Concerns pertaining to monitoring, as expressed in Concerns D. and G., are discussed in DEP’s response to Comment A. in Section 2.2., above.

Concerns pertaining to the installation of an emergency alarm system, as expressed in Concern G., are discussed in DEP’s response to Comment A. in Section 2.2., above.

As stated in DEP’s response to Comment A. in Section 2.2., above, “DEP’s purview in its review of Plan Approval and Operating Permit applications is limited to ensuring that companies comply with all applicable air quality-related federal and Commonwealth regulations and requirements for their sources and facilities.” Therefore, DEP’s review and approval of a Plan Approval and Operating Permit application does not include a ‘Needs Assessment’ of a project or operations at a facility, as Concern H. suggests should have been performed. Moreover, DEP’s approval of a Plan Approval and Operating Permit application, including for ETMT, is in no way influenced or dictated by politicians, as Concern H. suggests may have occurred, and DEP strongly rejects any such notion.

DEP has thoroughly reviewed ETMT’s TVOP renewal application for the NGLs- and non-NGLs-related sources and equipment at the MHT and determined that ETMT has satisfied all applicable federal and Commonwealth statutory, regulatory, and legal requirements for issuance, including those pertaining to Article 1, Section 27, of the Pennsylvania Constitution. These requirements, the application submissions by ETMT, DEP’s thorough review process, as well as the terms and conditions of the TVOP renewal, satisfy Article 1, Section 27, of the Pennsylvania Constitution.

Section 3.4. Additional Information Presented at Public Hearing by Marcus Hook Borough Councilman Michael Manerchia

Additional Information: “[Marcus Hook] does have an evacuation plan, not just for [the MHT], but for [Monroe], for Conrail and for SEPTA. So, everybody in this town works through the two biggest plants. ... We can even evacuate by water if we want. ...

“[Marcus Hook is] aware of incidents that happen in the town. We do have a communications system. It’s not up to us in Marcus Hook, to supply your towns with your systems. If you want them to have systems, it’s called

Code Red. All you do is enter your phone number in and when a Code Red goes out in your area, you'll be alerted that there's an incident. ...

"The first refinery over there was not in 1907. It wasn't Sunoco. It was Bear Oil, and that was in 1870. So, this was predominantly a fishing town, and then the industry moved in. ...

"[T]he fire department in [Marcus Hook], with the assistance of then-Sunoco's fire department and Monroe's ... fought the biggest volunteer fire in the United States and put it out. [A] super tanker from across the river ran into another ship and it blew up here in Marcus Hook. A million barrels of crude oil went up in smoke. So, we take pride in our fire department."

Response: Thank you for providing this additional information.

Section 4. Requests from the Public for DEP to Publicize Certain Information for the MHT and DEP Responses

Request A. “Please ... publicize the status of the 27 storage tanks at the MHT that are currently [OOS], including whether (and when) each tank was removed, dismantled, cleaned out, and/or permanently closed off. All of these actions can create air pollution and residents deserve to know when these actions are/were taking place and the result of those actions.”

Response A. Thank you for providing this request. Please note that, subsequent to DEP’s submittal to the *Pa. Bulletin* of its notice of intent to issue the TVOP renewal, ETMT stated that a 28th storage tank at the MHT that is listed in the current TVOP has also been “closed-in-place” (CIP) and taken OOS.

To address this request, DEP requested and obtained the following information from ETMT on the status of each of the twenty-eight storage tanks. In addition, ETMT stated that “[e]ach tank was cleaned when it was taken [OOS]. Prior to closing or demolishing a tank,... all of the tank piping is removed, the tank is blinded, and a date of closure is painted on to the side of the tank. Soil samples are also collected from the perimeter of each tank to verify the tank did not leak. The tank is then inspection by a [DEP] licensed inspector to confirm all of the aforementioned activities were completed. ... For the tanks listed as temporarily out of use [(TOOU)], the closure activities will be completed prior to the dates listed. These tanks still have active storage tank permit [*sic*]; however, the maintenance plans have expired under the [TVOP].”

Storage Tank No.	Source ID No.	OOS Status	OOS Date
344	146	TOOU	September 23, 2026
524	177	TOOU	August 26, 2025
528	179	CIP	September 10, 2021
529	180	CIP	March 8, 2023
594	182	CIP	July 11, 2022
3	202	TOOU	September 23, 2026
638	225	TOOU	March 7, 2027
5	300 (part of)	CIP	February 21, 2022
18	300 (part of)	CIP	October 21, 2021
20	300 (part of)	CIP	October 21, 2021
25	300 (part of)	CIP	October 21, 2021
200	300 (part of)	CIP	May 2, 2022
202	300 (part of)	TOOU	September 19, 2026
204	300 (part of)	CIP	March 8, 2023
205	300 (part of)	CIP	March 8, 2023
207	300 (part of)	CIP	May 2, 2022
209	300 (part of)	CIP	February 21, 2022
213	300 (part of)	CIP	February 21, 2022
247	300 (part of)	CIP	March 8, 2023
265	300 (part of)	CIP	May 2, 2022
339	300 (part of)	TOOU	August 26, 2025
343	300 (part of)	CIP	March 8, 2023
347	300 (part of)	CIP	February 8, 2018
861	300 (part of)	CIP	October 21, 2021
870	300 (part of)	Demolished/Removed	Unknown
V-13	300 (part of)	Demolished/Removed	November 7, 2014
2	300 (part of)	TOOU	September 23, 2026
97	N/A	CIP	July 11, 2022

OOS = Out-of-Service

CIP = Closed-in-Place

TOOU = Temporarily Out of Use

Request B.: “DEP operates a [VOC] and carbonyl (formaldehyde) air monitoring station in Marcus Hook, PA, but does not make the air pollution data from this monitoring station public, aside from [PM_{2.5}] pollution. The VOC and air toxics monitoring data from this station is vital to identifying whether current air pollution controls at the [MHT] are functioning correctly. Please publicly present VOC and air toxics air monitoring data collected in Marcus Hook, PA.”

Response B.: Thank you for providing this request. DEP actively performs air sampling for toxics (i.e., VOCs [most of which are also HAPs] and metal HAPs), PM_{2.5}, and other pollutants at several monitoring sites throughout the Commonwealth, including ones in Marcus Hook and Chester. Regarding toxics, after every sixth day, DEP sends the air samples from the monitoring sites to a laboratory for analysis. Once the laboratory analyzes these air samples and DEP quality assures the associated VOC and HAP data (i.e., puts the data through validation and certification procedures, in accordance with federal regulations, to ensure that it meets certain quality objectives), DEP submits the data to EPA for inclusion in its Air Quality System (AQS) database. EPA posts the data from its AQS database (as pre-generated data files that are updated periodically) on its Outdoor Air Quality Data webpage (accessible at <https://www.epa.gov/outdoor-air-quality-data>). This webpage includes VOC data for the Marcus Hook monitoring site for calendar years 2015–2018, and VOC and metal HAP data for the Chester monitoring site for calendar years 2013–2023 (i.e., the last calendar years for which DEP has quality assured the data).

On April 6, 2024, DEP began sampling for carbonyls, which includes formaldehyde, at both the Marcus Hook and Chester monitoring sites. As such, DEP has not yet quality assured any of the associated data or submitted it to EPA for inclusion in its AQS database.

Request C.: “ETMT’s current [TVOP] includes many federally required daily, monthly and quarterly leak inspections that are performed by ETMT staff. ETMT is then required to submit records of these inspections to DEP, including whether leaks were discovered and repaired, or if repairs failed. DEP should publicize these semiannual reports so that impacted residents have information regarding how much air pollution is generated by malfunctioning equipment at MHT. EPA has standards regarding the timelines in which leaks must be repaired and impacted residents deserve to know if these standards are being followed.”

Response C.: Thank you for providing this request. DEP maintains records of all semiannual monitoring reports and annual compliance certifications. To schedule an informal file review, please refer to the procedures located on DEP’s Public Records webpage (accessible at <https://www.pa.gov/agencies/dep/about-dep/public-records/informal-file-review.html>).

Request D.: “DEP should publicize the results of its announced and unannounced inspections at MHT.”

Response D.: Thank you for providing this request. DEP maintains records of all its inspections, whether announced or unannounced. To schedule an informal file review, please refer to the procedures located on DEP’s Public Records webpage (accessible at <https://www.pa.gov/agencies/dep/about-dep/public-records/informal-file-review.html>).

Request E.: “Flaring is a significant source of air pollution from MHT. Residents deserve information specifying when flaring has occurred at MHT and when flares are not functioning properly, like if flare pilot flames are absent.”

Request F.: “When flaring is not functioning properly, those events should be published, either as leaks or as a separate issue where excess pollution escapes.”

Response E.–F.: Thank you for providing these requests. These requests are addressed in DEP’s response to Comment D. in Section 2.2, above.

Request G.: “[P]ublish the revised Tech Memo document, making it easily accessible to the public.”

Response G.: Thank you for providing this request. DEP intends to post the TVOP renewal, associated technical review memo, and (this) comment and response document to its SERO Community Information webpage for ETMT (accessible at <https://www.dep.pa.gov/ETMT>) shortly after issuance.

Request H.: “[DEP] should post in 3 major publications, detailed explanations for past and any future air quality violations and fines. Impacted residents have the right to know this information. My knowledge is that over the last 5 years, Energy Transfer has been fined \$1,069,196 for air quality violations at MHT. Violations were issued in early June (violation ID: 8190529-8190532) and DEP also issued violations in June, August and September for not properly maintaining storage tanks.”

Response H.: Thank you for providing this request. This request is addressed in DEP’s response to Comment E. in Section 2.2, above.

Request I.: “The [TVOP renewal] application for [the MHT] includes two 25-million-gallon ethane storage tanks with an associated flare (Sources 124, 125, C04). These new sources have been permitted but not constructed at the site. DEP needs to publish:

- The evacuation plan for the public, even if it’s done by elected officials
- The dates when these new sources will be constructed
- The results of the required leak inspections of these new pollution sources”

Response I.: Thank you for providing this request. As discussed in DEP’s response to Topic 2. in Section 3.2., above, Marcus Hook’s evacuation plan is not DEP’s purview. DEP will maintain the records of the date(s) on which ETMT completes construction of the refrigerated ethane storage tanks and associated flare approved under Plan Approval No. 23-0119J and the associated leak inspections. To schedule an informal file review, please refer to the procedures located DEP’s Public Records webpage (accessible at <https://www.pa.gov/agencies/dep/about-dep/public-records/informal-file-review.html>).