COMMONWEALTH OF PENNSYLVANIA

Department of Environmental Protection

Southeast Regional Office February 14, 2023

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Subject: Technical Review Memo

Extension of Plan Approval No. 23-0119E [Revised] APS ID 880945, AUTH ID 1409701, PF ID 757998

255)2/14/23

Energy Transfer Marketing & Terminals, L.P.—Marcus Hook Terminal

100 Green Street

Marcus Hook, PA 19061

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I. Introduction/Purpose of Authorization

Energy Transfer Marketing & Terminals, L.P. (ETMT), owns and operates a natural gas liquids (NGLs) processing, storage, and distribution facility located at its Marcus Hook Terminal (MHT) in Marcus Hook Borough, Delaware County (hereinafter referred to as "the facility"). ETMT operates the facility under Title V Operating Permit (TVOP) No. 23-00119 and Plan Approval Nos. 23-0119E [revised] and 23-0119J. The purpose of this authorization is to extend Plan Approval No. 23-0119E [revised] (see *Justification for Plan Approval Extension* section, below, for further discussion).

In accordance with the Department of Environmental Protection's (DEP's) Environmental Justice (EJ) Public Participation Policy (Document No. 012-0501-002), effective April 24, 2004, and based on 2015 data from the United States Census Bureau, the facility is located in an EJ Community.

II. Relevant Facility Permitting History

On April 1, 2016, DEP issued Plan Approval No. 23-0119E to Sunoco Partners Marketing & Terminals, L.P. (SPMT)¹ for the following:

• The redesign/modification and use of three existing fractionation towers at the facility to operate as two depropanizers and a debutanizer.

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¹ On March 1, 2022, SPMT changed its name to ETMT.

- The installation of the following equipment:
 - Meter provers.
 - Additional piping and components, including a flare header, from the fractionation towers and meter provers to an existing elevated flare at the facility.
- The associated use of existing refrigerated storage tanks, internal floating roof storage tanks, and caverns at the facility.
- The associated use of utilities (i.e., steam and cooling water) from existing auxiliary boilers and a cooling tower, respectively, at the facility.
- The routing of flows from the fractionation towers, meter provers, and caverns to the aforementioned elevated flare.

On April 29, 2016, Clean Air Council (CAC) appealed Plan Approval No. 23-0119E to the Environmental Hearing Board (EHB), arguing, among other things, that DEP erred in considering the sources and equipment permitted under Plan Approval No. 23-0119E as a stand-alone project (i.e., versus as a larger project with the other sources and equipment related to NGLs processing, storage, and distribution at the facility that were previously permitted or authorized under other Plan Approvals or Requests for Determination of Changes of Minor Significance and Exemption from Plan Approval/Operating Permit [RFDs]).

On March 28, 2017, DEP modified Plan Approval No. 23-0119E to memorialize SPMT obtaining and surrendering nitrogen oxides (NO_x) and volatile organic compound (VOC) emission reduction credits (ERCs) to offset the NO_x and VOC emission increases for the sources in the Plan Approval.

On October 6, 2017, DEP extended Plan Approval No. 23-0119E to accommodate the following:

- The commencement of operation and continued temporary operation of **two** of the three existing fractionation towers (i.e., 15-2B T-4, Source ID 091; and 15-2B T-2, Source ID 092) at the facility to operate as a depropanizer and debutanizer, respectively.
- The shakedown of affected support sources.

On March 23, 2018, DEP extended Plan Approval No. 23-0119E (for a period of 18 months) to accommodate the following:

- The redesign/modification of the remaining existing fractionation tower (i.e., 15-2S T-4, Source ID 090) at the facility, which was delayed due to market conditions.
- The commencement of operation and continued temporary operation of the depropanizer (15-2B T-4) and debutanizer (the former had not occurred since the previous Plan Approval extension request).

On January 9, 2019, Judge Bernard A. Labuskes, Jr., of the EHB, remanded Plan Approval No. 23-0119E to DEP for the reevaluation of all sources and equipment related to NGLs processing, storage, and distribution at the facility, as permitted or authorized under all prior and future Plan Approvals and RFDs, as a single aggregated project for Prevention of Significant Deterioration of Air Quality (PSD) and New Source Review (NSR) purposes (see DEP's technical review memo for Plan Approval No. 23-0119E [revised], dated February 5, 2021, for further discussion).

On September 25, 2019, DEP extended (the original) Plan Approval No. 23-0119E (for a period of 18 months) to accommodate the following:

• The resumption and completion of the redesign/modification of existing fractionation tower 15-2S T-4 to operate as a depropanizer, which was delayed due to market conditions.

• The continued temporary operation of the depropanizer (15-2B T-4) and debutanizer pending final resolution of the remand of Plan Approval No. 23-0119E.

On February 12, 2021, DEP issued Plan Approval No. 23-0119E [revised] to SPMT. In addition to the sources and equipment permitted under the original Plan Approval No. 23-0119E, the revised version included all sources and equipment related to NGLs processing, storage, and distribution at the facility that were previously permitted under other Plan Approvals (i.e., three auxiliary boilers, eight refrigerated storage tanks, piping and components, marine vessel loading equipment, four caverns, an additional fractionation tower, a natural gasoline loading rack, three cooling towers, eight internal floating roof storage tanks, and two elevated cold flares). Moreover, Plan Approval No. 23-0119E [revised] required the installation of the following additional control devices:

- A secondary seal on one of the internal floating roof storage tanks (i.e., Tank 609, Source ID 190).
- High-efficiency drift eliminators on one of the cooling towers (i.e., 15-2B, Source ID 139).

On August 18, 2021, DEP extended Plan Approval No. 23-0119E [revised] (for a period of 18 months) to accommodate the completion of installation of the additional control devices for Tank 609 and the 15-2B cooling tower.²

On September 8, 2022, DEP received an electronic Plan Approval extension package for Plan Approval No. 23-0119E [revised] from ETMT. The Plan Approval extension package included the Plan Approval extension form, the compliance review form [25 Pa. Code §§ 127.12(a)(11) and 127.12a(b)–(c)], and monies for the application fee of \$750 [25 Pa. Code § 127.702(i)(2)(ii)].

III. Justification for Plan Approval Extension

ETMT has submitted a Plan Approval extension to accommodate the following:

- The redesign/modification of existing fractionation tower 15-2S T-4 to operate as a depropanizer, which "has been delayed due to various challenges and complications related to COVID-19 and market conditions," in accordance with specifications in the application for the original Plan Approval No. 23-0119E and the conditions in Plan Approval No. 23-0119E [revised].
- The continued temporary operation of all sources and equipment related to NGLs processing, storage, and distribution at the facility that were included in Plan Approval No. 23-0119E [revised].

Based on the following projected schedule for completing the design work, equipment purchasing, construction, and commissioning required for the redesign/modification of existing fractionation tower 15-2S T-4, ETMT has requested an 18-month extension of Plan Approval No. 23-0119E [revised]:

- February 2023: Restart the process for detailed engineering design.
- May 2023: Begin the bidding process and place purchase orders for critical equipment (e.g., tower internals, exchangers, pumps, etc.).
- July 2023: Complete detailed civil, structural, and mechanical engineering design and begin the bidding process.
- October 2023: Complete piping design and begin the bidding process.
- November 2023: Complete electrical and instrumentation design and begin the bidding process.

² ETMT completed installation of the additional control devices required under Plan Approval No. 23-0119E [revised] in June 2022.

- December 2023: Begin civil and structural construction.
- February 2024: Begin mechanical and piping construction.
- April 2024: Begin electrical and instrumentation construction.
- August 2024: Complete all construction activities and begin system commissioning and startup.

Based on the occurrence of other construction and shakedown activities over the entire term of (the original and revised) Plan Approval No. 23-0119E, the need for continued temporary operation of the depropanizer (15-2B T-4) and debutanizer pending final resolution of the remand of (the original) Plan Approval No. 23-0119E, and complications with construction on existing fractionation tower 15-2S T-4 related to the COVID-19 pandemic, DEP consents to extending the 18-month period for the redesign/modification of fractionation tower 15-2S T-4 to operate as a depropanizer in accordance with 25 Pa. Code § 127.13(b).

IV. Recommendation

Based on a review of all versions of the original and revised Plan Approval No. 23-0119E, the associated extension requests (including the present submittal), and the application for Plan Approval No. 23-0119E [revised], I recommend that DEP extend Plan Approval No. 23-0119E [revised] for a period of 18 months.