

Marcus Hook Terminal



The impact of increased production of natural gas in Pennsylvania can be seen in the changing skyline of Marcus Hook. Thousands of workers have worked to reshape the former Sunoco oil refinery on the banks of the Delaware River. At Energy Transfer, we believe the Marcus Hook Terminal can become the premier hub for natural gas liquids on the East Coast, made possible by the Mariner East Pipeline System safely delivering the resources that drive our nation and fuel our everyday lives.

Ongoing Developments

As part of the Mariner East project, the Marcus Hook Terminal has revitalized the former refinery into a world-class natural gas liquids (NGL) hub. To achieve this, our facility has built new processing units for the safe processing of ethane and propane, as well as ethane and propane chilling and refrigerated storage. This includes a propane chilling expansion project in 2020. Going back to 2013, we have built six tanks storing approximately 3 million barrels of propane, ethane and butane to support our Mariner East Pipeline System, in addition to existing storage capacity of 2 million barrels in underground caverns. Energy Transfer has also built a fractionator at MHT to process natural gas liquids that it will transport along the Mariner East Pipeline System from western Pennsylvania.

Improvements at the facility have required nearly 9 million man hours, involving more than 5,000 individual workers. Energy Transfer is proud to have received the Zero Injury Safety Award in conjunction with Nooter Construction for construction and operations at MHT.

To complete these developments, Energy Transfer entered into a Project Labor Agreement (PLA) in April 2019 with the Philadelphia Building Trades, an association of some 50 local unions, for work at MHT. The two-year, \$200 million agreement was estimated to create about 1,200 jobs.

The facility began receiving propane in January 2015. Today, we ship more than 300,000 barrels a day of propane, ethane and butane for distribution to local, regional and international markets.

Seasonally dependent, approximately 200 trucks per day pick up propane and butane for delivery to markets in and around Pennsylvania. In addition, the facility commissioned a first-of-its-kind ethane truck-loading rack, which supplies ethane for local and regional delivery, to complement its existing propane terminal.

The increased operations at MHT with the completion of the Mariner East Pipeline System will pay the state \$1.2 million to \$1.4 million in taxes each year and generate additional economic activity throughout the commonwealth. There are other industries benefiting from the revitalization at

MHT, including maritime-related jobs such as ship agents, cargo surveyors, tug assists, ship chandlers and launch companies.

Natural Gas Liquids Hub in Eastern Pennsylvania

We believe the Marcus Hook Terminal can become the hub for natural gas liquids on the East Coast. With the arrival of propane, ethane and butane via our pipelines, it opens Marcus Hook for a number of industrial processing facilities. We have potential customers nearby and are actively exploring a number of these possibilities. We have seen interest in these opportunities expand with the advance of our pipeline projects.

History of Marcus Hook

The Marcus Hook facility, formerly the Marcus Hook Refinery, was built in 1902 on an 82-acre plot purchased by Joseph Newton Pew's Sun Oil Co.

Initially dedicated exclusively to the processing of light sweet crude oil found in Texas, it became highly advanced in the field of petroleum production. In 1937 the first catalytic cracker went into operation, enabling the facility to process 15,000 barrels of petroleum daily. The process of catalytic cracking allowed for the conversion of petroleum crude oils to gasoline and other products by breaking molecules of hydrocarbon liquids at high and moderate temperatures.

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During World War II, Sun Oil Co. employees at Marcus Hook processed more jet fuel for the Allies than any other refinery. Nine times during 1942 and 1943, tankers of the Sun Oil fleet were struck by U-boat attacks, and four were sunk. Those encounters cost the lives of 141 Sun seamen, and in 1949 a statue was erected to honor those lives. It still stands today at the entrance of our facility. The attacks, while devastating, did not prevent the Sun fleet from shipping more than 41 million barrels of petroleum over 2.3 million miles of ocean during the war.

As an operating refinery at its height under Sunoco Inc., the refinery processed 175,000 barrels of crude oil per day. In perspective, that is equivalent to filling 252,000 cars with gasoline, 1,500 flights from Philadelphia International Airport with jet fuel or 300,000 homes with heating oil.

In 2004, the plant began producing the official fuel for NASCAR. The facility has a processing unit solely dedicated to manufacturing the Sunoco Green E15 fuel used by the NASCAR vehicles. Today, Sunoco manufactures and blends 23 unique fuels and is the official fuel not just for NASCAR, but for the National Hot Rod Association and more than 50 other racing sanctions. It remains in Marcus Hook as a tenant to Energy Transfer Marketing and Terminals (ETMT), an Energy Transfer subsidiary, which now owns the facility.

The complex's location on the Delaware River provided Sunoco with port access, and tankers delivered 1 million barrels of light sweet crude oil from Newfoundland, the North Sea, West Africa, and South and Central America. The product was then transported through aboveground pipes to the various tanks for storage. From storage, it was boiled for separation into propane, jet fuel, kerosene and gasoline, plus distillates such as home heating oil, diesel and heavy oil such as ship bunker fuel.

The refinery was idled in 2011 and was acquired in 2012 by Sunoco Logistics, which recognized its value in the shale gas era. Sunoco Logistics merged with Energy Transfer in April 2017, and the site is owned by ETMT.

