

COMMITTED TO ENVIRONMENTAL

EXCELLENCE



**Monroe Energy**



# About Monroe Energy



**Monroe Energy, LLC** owns and operates a refinery located in Trainer, Delaware County, Pennsylvania. A wholly-owned subsidiary of Delta Air Lines, **Monroe** purchased the 185,000 barrel-per-day refinery in June 2012 which is optimized for jet fuel production but also manufactures products such as gasoline, diesel, and home heating oil. Every product and byproduct from our process is utilized and we look for sustainable alternatives for any waste created.

**Monroe's** operating philosophy is centered on integrity, mutual respect, and open communications. We care for our employees, contractors, communities and the environment all while staying focused on operating the refinery in compliance with the complex laws that regulate our industry. Because our commitment to the community extends far beyond our fence line, we continually make investments that advance our goal to maintain environmental excellence in our operations.

Based in Aston, Pennsylvania, Monroe Energy's subsidiary, **MIPC** owns and operates a storage and distribution network, which includes two tank farms, a truck terminal, and over 50 miles of pipeline in Pennsylvania and New Jersey.

*Cover photo: MIPC facility in  
Aston, Pennsylvania*

*This page: Wetlands area at the  
Trainer refinery*



# Monroe's Commitment to Our Environment:

Environmental excellence and stewardship are permanent and essential company values. Monroe's refinery is located south of Philadelphia along the Delaware River in a community with residents, businesses, and industries all sharing the same space. Therefore, we take special care in operating the refinery in a way that protects our environment and our fellow residents.

## Specifically, we are committed to:

- Complying with and in many cases going above and beyond all applicable environmental laws and regulations;
- Minimizing our impact by conducting operations in an environmentally sustainable manner;
- Driving continual improvement across our organization;
- Educating all Monroe employees and contractors on our environmental programs and empowering them to participate and make positive contributions; and
- Communicating our commitment, efforts, and progress to our team members, business partners, and community.

*We do what we know is right every day, without exception.*





# Air Program

*Over the past 20 years, the refinery has taken action to reduce total facility emissions from various refinery processes by approximately 70%.*

Our refinery uses a wet gas scrubber to remove harmful emissions from the air. The vapor you see is steam







**W**e work tirelessly to make sure that we remain in compliance with all state and federal air quality standards and regulations. Monroe's Air Program continues to utilize the latest technologies to control, reduce, and continuously monitor the facility's emissions. We are always getting better, exploring new ways to improve upon our programs to further reduce our impact.

#### Striving for Excellence in Air Quality:

- Under Monroe's ownership of the Trainer Refinery, we've spent \$35 million to install a state-of-the-art Flare Gas Recovery System (FGRS), a device that captures and recycles waste gases. We have also shut down two pre-existing flares previously used at the facility. As a result, emissions associated with the flares have decreased by approximately 80%.
- Installing advanced emissions controls, such as lower-emitting burners and a wet gas scrubber, has

been a major focus of our air program. Over the past 20 years, the refinery has taken action to reduce total facility emissions from various processes by approximately 70%. Monroe has installed a vent gas scrubber – an air emissions control device, which drastically reduced sulfur dioxide emissions at our facility. Through operation of this control, air emissions are reduced.

- The Leak Detection and Repair (LDAR) Program continues to improve our environmental excellence by:
  - Supporting and completing a refinery wide LDAR review and re-tagging project in 2016 for approximately 32,000 components.
  - Utilizing state-of-the-art monitoring equipment and software.
  - Converting to electronic reports and records.

- Establishing an Open Ended Line (OEL) Program and Refinery Guideline.

By placing a high priority on LDAR compliance, leaks are prevented, and repairs are made efficiently, effectively and on time, thereby ensuring that our products stay in the pipes where they belong.

- Ultra-Low Sulfur Gasoline Unit (ULSG): In 2017, Monroe completed construction of its nearly \$200 million ULSG unit in order to meet the new national EPA standards for gasoline. This new standard requires gasoline to contain 10 parts per million or less of sulfur. According to the EPA, implementation of its Tier III standards will result in billions of dollars in annual healthcare savings.



# Water Program



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Clean water and a healthy aquatic ecosystem are of paramount importance to Monroe. Our facility is bordered on three sides by water with Marcus Hook Creek to the west, Stoney Creek to the east, and the Delaware River to the south. Therefore, we spend a significant amount of time and effort focusing on the health of the water that surrounds us.

The purpose of the Water Program at Monroe is to protect our waterways, ensuring that the highest water quality is maintained and improved. We discharge storm water and water that has passed through our advanced wastewater treatment plant directly into the creeks, and we collect thousands of samples each month to ensure that the water we

*More than 3,400 samples are collected monthly to monitor water quality and ensure that the water we return to the river is cleaner than the water we withdraw.*

return to the river is cleaner than the water we withdraw. Approximately 80 water compliance samples are collected to monitor the influent and effluent wastewater quality, and more than 3,400 samples are collected to monitor the effectiveness of our advanced wastewater treatment process.

#### **Drastic Reduction of our Water Intake:**

Monroe has been transitioning away from the use of “once-through” cooling water to a system that uses cooling towers. Currently, some water is still drawn from the Delaware River to provide non-contact cooling in our units. “Non-contact” means that the water never comes into contact with petroleum products, but instead passes through separate pipes alongside the product pipes to provide cooling. This water is then discharged back into the Stoney and Marcus Hook Creeks, and ultimately into the Delaware River.

Ultimately, Monroe will construct three cooling water towers and accomplish the following goals:

- Reducing water intake flow and velocity, thus reducing the facility’s dependence on river water by approximately 95%;

- Minimize the interference with aquatic life;

The construction of the second of three cooling towers was completed in 2023, with construction of a third to follow for a total investment of more than \$60 million.

#### **Responsible Stormwater Management:**

During normal operations and construction projects, Monroe carefully manages stormwater runoff to ensure it does not carry soil to the creeks and river. Monroe conducts visual inspections of all construction projects at least weekly, and we install compost filter socks and sediment filters as part of our stormwater management program.

When new construction projects are complete, new runoff patterns are created. Therefore, Monroe maintains a robust plan that reduces the amount of stormwater that reaches the creeks. This plan includes installing, operating and maintaining a rain garden, rock filters, and sediment traps. These measures are all recognized as sustainable best management practices designed to keep our stormwater clean.







Waste Management



**M**onroe Energy is committed to reducing our waste impacts by focusing on recycling and beneficial reuse. Since reopening the Trainer Refinery, Monroe has developed a robust recycling program through which we recycle everything from single-stream office waste to asphalt, wood, and much more.

We are proud of our commitment to environmental excellence, and our continued focus on recycling is a company-wide effort. We challenge ourselves every day to find more ways to reduce our environmental footprint through recycling.

#### Recycling and Reuse Highlights:

- 79% of our waste shipments in 2019 were comprised of material sent for recycling - a total of 2,455,186 pounds.
- We partner with waste management companies to beneficially reuse eligible materials and minimize landfilling.
- Throughout the refinery, we adhere to a single-stream recycling program for paper, plastics, aluminum, cardboard, tin, steel, and glass.
- As we continually improve every aspect of the physical plant, we recycle blacktop, concrete and similar materials.
- We donate used computers and other electronics to a charitable organization that refurbishes them for reuse.

## Recycling and Reuse By the Numbers:

From 2013 Through 2022, We Recycled or Donated:

Asphalt **2,689** tons recycled

Concrete **3,376** tons recycled

Single stream recycling **495** tons recycled

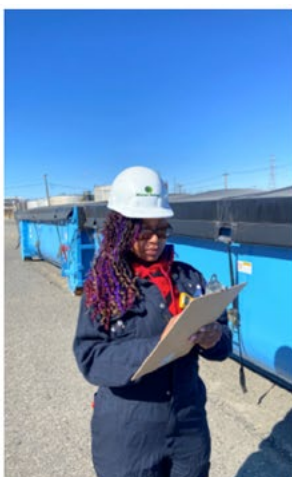
**26,010** tons of soil for re-use

**88** pallets of computers were

donated to a local non-profit organization that repurposes the computers to make sure local schools, children, and social service organizations have adequate use of technology

**338** tons of catalysts regenerated and **70** tons of catalysts sent for precious metal reclamation

*We are proud of our commitment to environmental excellence, and our continued focus on recycling is a company-wide effort.*





# Sustainability



**M**onroe Energy's sustainability initiative recognizes the environmental impacts of our business, and develops meaningful solutions to promote sustainable operations through consumption of minimal resources and reducing the impact to the environment and our communities.

## **We Have Committed to Continuously Improving our Sustainability in the Following Ways:**

- Our Sustainability Team focuses on four key areas to incorporate sustainability thinking and best practices into all of our work flows and processes.
- We implemented a sustainability scorecard that measures how the

refinery operates with respect to our environmental footprint, resources used, and community involvement.

- It was important for us to establish environmental benchmarks to measure our progress and to keep ourselves continuously striving for improvement in all areas.



# Our Sustainability Core Team Focuses On



## Energy/Air

Focus on Energy Efficiency

Minimize Air Emissions

The **Energy & Air** team focuses on increasing energy efficiency and minimizing air emissions.



## Water

Minimize Water Resources Use

Ensure Clean Water Discharge

The **Water** team supports efforts to minimize water resource use and ensuring clean water discharge from refinery operations.



## Waste

Minimize Waste Generation

Recycle/Reuse

The **Waste Streams** team leads the efforts to increase the recycling of a variety of materials that are used in daily refinery operations, as well as waste from construction projects, seeking to increase beneficial reuse whenever possible.



## Engagement

Employees

Community

The **Engagement** team collaborates with the DE&I team to increase awareness of Monroe's sustainability efforts in local high schools, colleges, and our local community.



## Producing the Greener Fuels of the Future

Fuels such as renewable diesel and Sustainable Aviation Fuel (SAF) cannot be made without refineries, and we have taken steps towards producing the greener fuels of the future. This was demonstrated in 2023 when we successfully produced our first ever batch of renewable diesel fuel - using soybean oil as a co-processing ingredient. This is just the first step in our evolution to produce the greener fuels our nation aspires to have. We are proud to be an important contributor

towards this transition, and an integral part of our nation's energy and national security.

But it's not only about the end product; it's also about how you produce it. Many of the investments and steps taken since reopening the Trainer Refinery in 2012 have helped us to make more with less, by reducing the carbon footprint of the facility.

- Installed Flare Gas Recovery System – CO<sub>2</sub> emissions reduction
- Decommissioned (2) Flares – CO<sub>2</sub> emissions reduction
- Installed efficient, lower carbon footprint boiler with a Selective Catalytic Reduction unit (SCR)
- Installed Ultra Low Sulfur Gasoline Unit – sulfur oxides reduction
- Installed Cooling Towers – less thermal load on creeks/river, water use
- Converted over 2,300 existing lighting fixture to LED – energy conservation

We are proud of our commitment to environmental excellence and continue to challenge ourselves every day to find more ways to lessen our environmental footprint.



# Land Management



During a routine Right-Of-Way patrol, MIPC, LLC (Monroe's pipeline subsidiary) observed an eroded streambank that had recently developed along the bank of Crum Creek in Nether Providence Township, near a very old dam.

This upstream dam was in a state of disrepair, causing water to circumvent

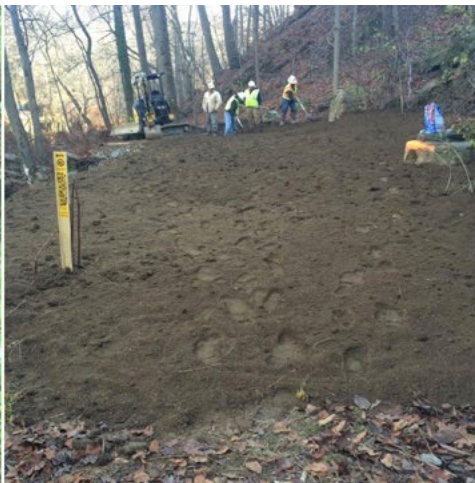
the dam, leading to a washout downstream in the vicinity of our pipeline right-of-way. To ensure the integrity of our pipeline, and the health of the downstream environment, we took a leading role in providing a solution.

Working with the Pennsylvania Department of Environmental Protection, MIPC utilized an

environmentally friendly strategy to rebuild the affected area and beyond. The streambank was restored from the dam all the way downstream past the point where the washout happened in order to prevent future occurrences. The area was refilled with new soil and plants to help the creek bank thrive for years to come. This ensures the safety of the public by protecting the pipeline and restoring the nearby walking path.



*Before Restoration*



*During Restoration*



*After Restoration*



## Partners in our Environment, Investors in Our Future

**M**onroe's commitment to the health and safety of our environment extends far beyond our fence line. We believe in taking a proactive approach to minimizing our environmental impact.

Working alongside organizations and community partners is essential, and we're proud of these relationships.

- **Delaware Bay and River Cooperative (DBRC)** – As a key member, Monroe's support helps the DBRC to purchase and maintain state-of-the-art equipment. This ensures their 24/7/365 response capabilities to further protect more than 100-mile stretch of the Delaware River and Bay.
- **Partnership for the Delaware Estuary, Inc.** – Monroe is an investing partner and active participant in environmental and habitat conservation efforts along the banks of the Delaware River.
- **Tri-State Bird Rescue** – Monroe is a proud corporate partner with Tri-State, supporting their world-class facility and their efforts to rescue and rehabilitate injured or orphaned birds.
- **Pennsylvania Resources Council (PRC)** – Monroe proudly supports Pennsylvania's oldest grassroots environmental organization in their efforts to promote recycling, waste diversion, and anti-littering campaigns.
- **Chester Environmental Partnership (CEP)** – Monroe regularly attends and periodically hosts the CEP's quarterly meetings and engages in environmental discussions and collaborates to ensure that our industry and the community learn from one another.
- **Environmental Advisory Council (EAC)** – Monroe actively participates in the monthly meetings and activities associated with this 30-year old environmental organization serving lower Delaware County.
- **Chester Ridley Crum Watersheds Association (CRC)** - Monroe happily supports and participates alongside CRC in their stewardship of the waterways in our community.





# Awards & Honors - Monroe Energy

## Refinery Industry Awards

### American Fuel & Petrochemical Manufacturers (AFPM)

2012 Meritorious Safety Performance  
2015 Meritorious Safety Performance  
2016 Safety Achievement Award  
2017 Safety Achievement Award  
2020 Safety Achievement Award  
2021 Distinguished Safety Award

## Commonwealth of Pennsylvania

2021 Governor's Award for Safety Excellence

## Community & Association Awards

Delaware County Chamber of Commerce Economic Impact Award 2012  
Delaware County Chamber of Commerce Company of the Year Award 2017  
Chester Environmental Partnership John Waffenschmidt Business and Industry Award 2021  
Traffic Club of Philadelphia Company of the Year Award 2017  
Chester Upland School District 2023 Community Partnership Award  
Seven Seals Award – Pennsylvania Employer Support of the Guard and Reserve, 2022 & 2023

# Awards & Honors - MIPC

## International Liquid Terminals Association (ILTA)

2016, 2018, 2019, 2020 Platinum Safety Award  
2016 Pipeline Occupational Safety Award  
2016 Pipeline Environmental Performance Award  
2017, 2019, and 2022 Safety Excellence Award  
2020 Safety Milestone Award  
2021 5-year Safety Milestone

## American Petroleum Institute (API)

2023 Distinguished Pipeline Safety Award









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