Protecting the Environment



For the Mariner East 2 project, also known as the Pennsylvania Pipeline Project, Sunoco Pipeline has planned, sited and routed the pipeline to avoid or reduce environmental and community impacts.

The 300-plus-mile pipeline route uses over 80% existing right-of-way or other utility corridors, minimizing environmental impact. When necessary and possible, we diverted the existing corridor to avoid wetlands and waterways, sensitive species and habitats, and cultural resources. Our construction processes will allow us to avoid sensitive areas and minimize impact and replace or restore habitat where affected.

We will have environmental inspectors at construction sites who are responsible to hold our construction methods and erosion-control devices to the specific requirements of our water-crossing and earth disturbance permits on each of the six construction spreads. The comprehensive, 2.5-year-long environmental permitting process has included local, state and federal agencies along with full public participation.

See details of our comprehensive approach below.

Wetlands/Waterways and Densely Populated Areas

- Total wetland area of 118 acres reduced to 36 acres of impact by using approximately 800 drills/bores well below the surface, construction right-of-way narrowing or re-routing.
- The horizontal directional drilling (HDD) or boring technique allows us to install the pipe deep below (20-180 feet) the surface and avoid disturbing wetlands and wildlife habitat.
- Less than half an acre of wetlands, or the approximate size of an NHL hockey rink, will be permanently converted from its original state. This total is divided among 19 separate wetlands over 12 counties.
- · Affected wetland will be replaced and upgraded at a ratio of more than 5:1.
- Restoration includes native plants conducive to pollinator insects, such as bumblebees.
- We have demonstrated total commitment to protection of public and private water supplies around the project with detailed plans.

Sensitive Species

- Exhaustive research into presence of threatened or endangered species.
- Fully approved conservation plans from all appropriate federal and state agencies. All threatened and endangered species coordination completed with a no-impact determination.
- Bog turtle-inhabited areas will be protected through the use of HDD that involves groundwater and vibration monitoring, as well as an independent herpetologist who will monitor daily construction.
- A timber rattlesnake expert, also on staff, will clear construction areas each morning and relocate snakes as necessary. We will build additional rattlesnake habitat, as well as wood rat habitat.

Cultural Resources

- Exceeded requirements by conducting cultural surveys along the entire project corridor.
- Worked closely with the Pennsylvania Historical and Museum Commission (PHMC) to ensure discovered sensitive areas are protected.
- This includes the area near the Battle of the Clouds in Chester County. A team of professional archeologists surveyed the Mariner East corridor in this area at the request of the State Historic Preservation Office and elected officials and determined there was no evidence of culturally significant artifacts. The PHMC concurred.

Construction Methods

- Sunoco Pipeline is committed to using HDD and boring, where practical, to avoid environmental impact.
- Plans submitted to the Pennsylvania Department of Environmental Protection (DEP) to avoid or quickly rectify any inadvertent returns from HDD.

- Comprehensive post-construction restoration to original quality; DEP must approve.
- Special attention to agricultural land impacts, including preservation of topsoil.
- Detailed, specific protection plans for trenching through streams and wetlands.
- Best available technology for restoring stream banks, preventing erosion and re-establishing native vegetation.
- Use of timber mats to avoid equipment impacts in sensitive areas.

Public Participation

Since February 2013, Sunoco Pipeline has conducted approximately 200 informational sessions with township, county and local officials through the 17 counties and 99 municipalities crossed by the Pennsylvania Pipeline Project.

We have held 20 countywide open houses and community briefings in Pennsylvania, attended by more than 1,000 people:

- Answering community questions.
- Using information gathered at times to make revisions property-specific.
- Explaining the project's benefits.
- Detailing measures to ensure safety and protect the environment.
- Specially dedicated Mariner East Community Affairs team is in regular contact with local, state and federal elected representatives to respond to constituent inquiries.
- Sunoco Pipeline maintains an informational website, social media presence and toll-free number.
- 60-day PA DEP public comment period included five public meetings held in August 2016.

Continues on back







Protecting the Environment (continued)



Thorough Permitting Process

The Pennsylvania Department of Environmental Protection has thoroughly vetted water-crossing and land disturbance permits over the course of two years.

- Fall 2014: Original pre-application discussions began.
- Spring 2015: Pre-application discussions continued.
- June August 2015: Applications were submitted.
- June 2016: PA DEP determined the applications to be "administratively complete."
- August 2016: Five public comment meetings were held.
- September 2016: PA DEP issued letters of technical deficiencies.
- October 2016: Sunoco Pipeline requested an extension until Dec. 7, 2016, to ensure a thorough response – engaging additional experts to assist.
- Dec. 5, 2016: Sunoco Pipeline addressed the questions presented by PA DEP and submitted the necessary revisions.
- February 2017: PA DEP approved Sunoco Pipeline's Chapter 102 and 105 permits.

Information & Inquiries

For more information, contact us at:

Project Hotline – 855-430-4491 www.marinerpipelinefacts.com

Energy Transfer Mariner East Pipeline Project 3807 West Chester Pike Newtown Square, PA 19073



