A pipeline of information to keep you updated on developments across the project footprint • Special Edition

## This special edition of our newsletter provides new details on construction and important facts about the safety of our horizontal drilling operations.

Construction of the multibillion-dollar Mariner East infrastructure project is nearing completion, with pipeline construction approximately 91 percent complete and horizontal directional drills (HDDs) more than 62 percent complete. As construction is completed, crews will begin permanent restoration efforts. We are committed to restoring the right-of-way to its original state or better, including replanting trees and shrubs where appropriate.

Specific construction updates by region are as follows:

- Harrison, Jefferson (OH) and Brooke (WV) counties: All major construction activities, restoration work and hydrostatic testing are complete.
- Washington, Allegheny and Westmoreland counties: Construction is 84 percent complete, and 19 of 27 HDDs are finished.
- Indiana and Cambria counties: Construction is 83 percent complete and 12 of 17 HDDs are finished.
- Blair, Huntingdon, Juniata and Perry counties: Construction is 79 percent complete, and eight of 17 HDDs are finished for the 20-inch pipeline.

- Of 31 road bores, 26 have been completed on the 20-inch pipeline.
- Cumberland, York and Dauphin counties:
   Construction is 79 percent complete, and 11 of 26 HDDs are completed for the 20-inch pipeline.
   Restoration has started at the western end of Cumberland County and will continue moving eastward, as construction is completed.
- Lebanon, Lancaster and Berks counties:
   Construction is more than 84 percent complete, and seven of 11 horizontal directional drills are finished.
- Construction is complete in Lancaster and Lebanon counties, and more than 90 percent of the 20-inch pipeline is lowered in and backfilled in Berks County.
- Chester and Delaware counties: 83 percent of construction is completed, and nine drill segments have been completed. Chester County, including Elverson Borough, West Nantmeal, East Nantmeal and Wallace townships, are continuing through the restoration process.

See the below pictures of restoration recently completed in eastern Ohio and Chester County, PA.







## **Horizontal Directional Drilling**

Horizontal directional drilling (HDD) is a steerable, trenchless construction method of installing underground pipe in an arc along a prescribed bore path. This method is used to install pipelines underneath waterways, wetlands, culturally sensitive areas, congested neighborhoods and roads.

## **Bentonite Clay in Everyday Life**

A key component of the horizontal directional drilling process is the use of a drilling mud that consists of water and naturally occurring bentonite clay. Drilling mud is used to lubricate the drill and prevent damage to the drill head. Bentonite clay is a common ingredient in many applications in our everyday lives.

- Bentonite is a valued ingredient in a wide variety of skin care products for its ability to retain moisture.
- The Environmental Working Group ("EWG"), an activist nonprofit watchdog
  group whose mission is to protect human health and the environment from
  consumer products, lists 163 skin-care product uses for bentonite. They include
  cleansing masks, acne treatment, sunscreen (including baby sunscreen), bar
  soap, eyeliner, diaper cream, bubble bath and hairstyling products..
- The status of bentonite clay, as classified by the U.S. Food and Drug Administration (FDA), is "Generally Recognized As Safe" (GRAS) for food preparation and packaging.
- Bentonite is in fabric softener.

- For centuries, bentonite had been used to dress wounds on the battlefield. A 2014 study, available on the National Institute of Health (NIH) website, concludes that infusing gauze with bentonite has a significant advantage over the control group in coagulating wounds. Source: NIH
- Bentonite is a natural treatment for insect bites. Source: Nature's Way Resources
- It is also a clarifier in wine, liquor, beer and vinegar. It is sold commercially for that purpose, and touted as such by the Wine Maker's Academy. <u>Source: Wine Maker's Academy</u>
- Organic farmers recommend the use of bentonite as a complete fertilizer both for its trace amounts of beneficial naturally occurring minerals and for its alkalinity.
   Source: Nature's Way Resources
- Proponents of natural healing recommend bentonite for treatment of diarrhea, suggesting drinking two tablespoons of bentonite in water three times a day.
   Source: Wellness Mama
- It is in cat litter. Source: Nature's Way Resources

