Supply Header Project

PIPELINE CONSTRUCTION

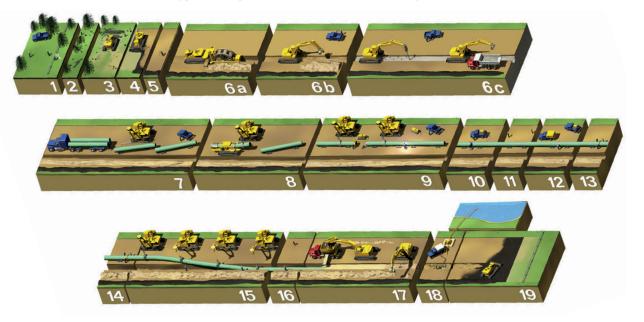


We are committed to building the Supply Header Project safely and responsibly, in a way that is protective of our environment with the strongest focus on quality and respect for the communities we serve.

The Supply Header Project will be built using best-in-class engineering and construction techniques. Industry leading scientists, engineers, builders, and designers are working to construct the pipeline while protecting and preserving the natural beauty of West Virginia and Pennsylvania.

The majority of the construction work will be completed in 2018 and 2019, with the pipeline in service late 2019 (see map on reverse). The pipeline is built in individual sections, or spreads, with multiple spreads under construction at the same time. Roughly 325 construction workers will be needed in 2018 and 300 in 2019 as the construction is at its peak. Approximately 50 percent of craft and trade workers will be hired through local unions for mainline and facilities construction.

All construction activities will be monitored and inspected by inspectors certified through the American Petroleum Institute Source Inspector Certification Programs. Inspectors (35 in W. Va. And 30 in Pa.) will be hired to ensure safety, quality, and compliance with all environmental regulations and conditions throughout the project.



Typical Pipeline Construction Sequence

Right-of-Way preparation (1–5) includes clearing, grading, top soil segregation and re-staking the centerline of the route.

Trenching (6a–c) could involve, based on terrain, a wheel trencher, backhoe or rock trencher.

Stringing pipe (7–8) involves moving pipe from the pipe yard to locations along the ROW according to the design plan. Once pipe is strung in each section, some of the pipe will need to be bent to conform to the topography or follow curves in the route.

Welding and coating (9–13) connects the sections of pipe together into one continuous length. Welds are inspected using X-ray technology, for quality assurance. Each weld is then coated to inhibit pipeline corrosion. At this stage the "as-built" footage is also captured, for permanent records. **Lowering pipe** (14–16) is handled by operators to lift the pipe and carefully lower the welded sections into the trench.

Backfilling (17) is returning soil to the trench in reverse order and the right-of-way is graded to final contour.

Hydrostatic testing (18) is one of the final construction quality assurance tests. It pressure tests the entire length, by sections, using water.

Right-of-Way restoration (19) is the final step in the process and includes replacing and stabilizing the topsoil, general cleanup and returning the land as closely as possible to its original condition.

