

ENVIRONMENTAL PROTECTION

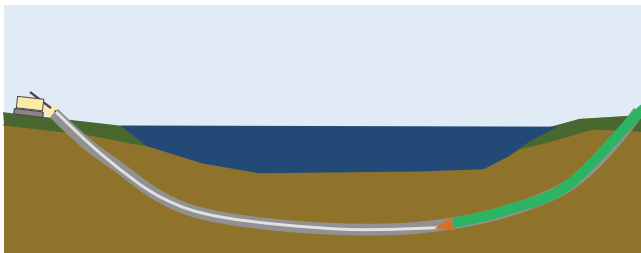


How is the environment protected from pipeline operations?

Pipeline operators minimize the environmental impact of their pipelines with route selection, construction and materials, proactive inspections and preventative maintenance, 24/7 leak detection systems and emergency response programs.

Route Selection to Minimize Impact

Pipeline operators design the route of their lines to avoid environmentally sensitive areas. One major project adjusted its originally proposed route over 140 times to avoid sensitive locations. Operators will also try to follow along utility corridors that already have an existing pipeline and thereby minimize new impacts.



New pipelines are drilled deep underneath major waterbodies to avoid contact with water resources.

Construction Materials & Techniques

Pipeline operators must use certified steel pipe that meets or exceeds federal quality regulations. After pipe segments are welded together end to end, the welds are x-rayed to ensure no defects are present. Horizontal Directional Drilling (HDD) tunnels pipe deep underneath major waterways to avoid coming close to water resources. New pipelines are allowed to begin service only after they pass pre-operation testing demonstrating they are problem free and ready for safe operations.

Proactive Inspections & Maintenance

Pipeline operators proactively inspect their pipelines on regular schedules to look for any potential issues and ensure the pipes remain safe. Operators will use high-tech diagnostic tools that travel inside pipelines scanning the walls with technology similar to an ultrasound or MRI at the doctor's office. Based on inspection results, operators will perform preventative maintenance to keep the pipeline operating safely.

Rapid Leak Detection & Shutdown

Pipeline operators monitor their systems from central control rooms 24 hours a day, 7 days a week looking for signs of trouble. Operators can quickly shut down a pipeline if monitoring technology indicates a potential leak. Pipeline operators can remotely stop pumps and close isolation valves to limit the volume of a spill.

Emergency Response Training & Drills

Pipeline operators have extensive emergency response plans to handle a pipeline incident if one were to occur. Pipeline operators regularly train their employees and practice their response plans to be ready for a pipeline incident. Pipeline operators work with local authorities, first responders, response contractors and other local stakeholders during drills conducted to practice emergency response.