

FIELD REPORT

SERVICE AND KNOWLEDGE SET ISCO APART ON MAJOR PIPELINE



ISCO and HDPE help supply potable water to desperate communities.

The Problem

At its most basic level, water is the lifeblood of a community. Nothing happens without access to water including economic and population growth. Duchesne County, Utah was facing a critical shortage of potable water. With the energy production industry making up a massive percentage of business in the region, a reliable water source was crucial.

A Plan for Victory

The Victory Pipeline was an important piece of infrastructure that would supply seven water districts with much needed potable water. The \$30 million, 27.5 mile, gravity-fed pipeline would pull water from the Starvation Treatment Plant to serve about 85% of the county. The project was split into two phases and faced several obstacles along the way. The line would need to traverse extremely rugged terrain, corrosive soils, cross highways, and bore under a river. It also required obtaining easements from more than 50 property owners as well as easements for state land, federal land, and the Bureau of Indian Affairs.

The pipeline runs to Roosevelt

City and serves to provide increased capacity for Duchesne City, Roosevelt City, Myton City, Johnson Water District, East Duchesne Water District, Neola, and other areas of Duchesne County.

Why HDPE?

Ted Mickelson with Jones & DeMille Engineering served as the project manager for the Victory Pipeline. One of the initial hurdles of the project was selecting the right material for the pipeline. Engineers looked at four different materials and did analysis on steel, PVC, ductile iron, and high-density polyethylene pipe. "Part of the challenge of the project was keeping it financially viable for the customers," Mickleson explained. "Analysis of the soil along the alignment of the pipeline showed anywhere from mildly to highly corrosive soils from the beginning of the line to the end. If we installed metal pipe, we would have had to put a lot of protection systems in place which adds cost and

PROJECT
Victory Pipeline

LOCATION
Duchesne County, Utah

THE NEED
A 27.5 mile, gravity fed pipeline to provide potable water to seven water districts.

SOLUTION
148,000 feet of HDPE, fusion equipment, and highly-skilled fusion technicians.





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ongoing maintenance expenses.” The corrosive soil and high ground water levels eliminated metallic materials. Ultimately, the fusibility and flexibility of HDPE PE4710 made it the best, most cost effective choice for Victory.

W.W. Clyde was selected to install the pipeline and chose WL Plastics and ISCO Industries to provide the HDPE pipe and perform the fusion work. “Using HDPE will provide the county with a system that will last for decades to come,” explained ISCO sales rep Bob Kilpack. “It won’t be compromised by highly corrosive soils. Because HDPE is joined via fusion, the system is leak-free, delivering 30% more water by eliminating loss to evaporation or leakage.”

The ISCO Advantage

It was ISCO’s reputation and responsiveness that made the company a good fit for the job. “ISCO helped out very early on in the design process,” Mickelson said. “They kept estimates ongoing and updated. Honestly, ISCO was the most responsive and had the most knowledge available right when we needed it.” The pipeline was installed by open trench with horizontal direction drilling necessary at

river crossings. ISCO supplied experienced field technicians to stay on the job through both phases of the project. “With the flexibility of HDPE, the pipe could be fused together in long strings and moved into place,” explained ISCO sales rep Rydell Johnson.

In all, the project required 148,000 linear feet of pipe ranging in size from 6 to 48-inches, DR’s ranging from DR7 to DR32.5, 31 valve vaults, and 65 three-to-eight inch diameter air or vacuum valves. Two to three fusion crews installed 1,000 to 2,000 feet per day using McElroy equipment. In the end, Duchesne County will have a leak-free, no maintenance pipeline that will last for decades to come.

See what ISCO can do for you at: www.isco-pipe.com

