

Vale, Oregon

Weholite for WWTP Chlorine Contact Piping



The City of Vale, Oregon is located about 80 miles northwest of Boise, ID. Presently, wastewater is treated in a settling lagoon situated close to the Malheur River. The existing lagoon is full of sludge and scheduled to be emptied and the sludge spread on the land as fertilizer. The City is constructing two additional lagoons, one, primary settling and the second, a finishing lagoon. The effluent from the finishing lagoon will be chlorinated and pumped to a large alfalfa field for irrigation purposes. As now, no effluent will enter the Malheur River.

The chlorine contact piping consists of two parallel runs of 60" diameter Weholite piping, each 250 feet long. The runs are piped together at one end using 12-inch diameter flanged fittings, thus creating a "U" shaped contact system 500 feet long. The effluent from the finishing lagoon flows into the end of one of the 250-foot sections by gravity. Pressurized chlorine gas is injected into the flow as it enters the contact pipe. The chlorinated flow passes through both runs before entering the pumphouse, thus providing adequate residence time for chlorine contact with the wastewater. Each 250-foot run is equipped with three 36" diameter manholes. The manholes are required to allow cleanout of the contact pipes, which are expected to collect algae and other debris from the lagoon.



Inlet/Outlet Valve Train for Chlorine Contact Pipe.

Project:
Wastewater Treatment Plant Expansion

Owner:
City of Vale, Oregon

Application:
Chlorine Contact Piping

Consultant:
Anderson – Perry & Associates, Inc.

Contractor:
James Dean Construction, Inc.