ISCO Technology Helps Paper Mill Crews Meet Maintenance Shut Down Schedule

The ISCO Industries Huntsville, Alabama plant provided materials, equipment and technology for a time critical installation of a process sewer outfall during a maintenance shut down at a large Northeastern paper mill.

With expert technology, the mill management team met the critical path requirements for installation of a 42-inch gate valve wye and stub out of high density polyethylene (HDPE) pipe. The fittings and stub, made out of high density polyethylene (HDPE), were installed to accommodate a three mile HDPE pipeline to the primary treatment plant to be connected later without interrupting production. ISCO provided design assistance, pipe, fusion equipment and certified technical assistance for both phases of the project.

An aged 42-inch fiberglass pipe was replaced with 42-inch and 16-inch HDPE pipe from the digester overflow sump to the primary treatment outfall. The 16 inch pipe, placed in the trench with the larger pipe, was a back-up for the boiler sewer and wash up drainage during maintenance shutdowns and for emergency repairs to the larger pipe.

On site technical assistance included butt fusion extrusion welding by certified technicians working under the supervision of a general in-house contractor. ISCO technicians are certified by the fusion equipment manufacturer. During the shutdown, the paper mill engineering staff called on ISCO technicians to repair and replace other piping. Problems were determined with television cameras used for inspection. Materials needed were shipped air freight.

During shutdown, a 40 foot section of the fiberglass pipe was removed (downstream from the digester sump) and replaced with HDPE single wall pipe.

The wye was installed with a gate valve on the existing fiberglass pipe side. The side that would eventually connect to the 15,000-foot HDPE line was blanked until construction was complete. The original flow to the fiberglass line was restored before mill start up.

During the summer ISCO technicians assisted in the installation of the parallel 42-inch and 16-inch HDPE pipelines.