

R.T. Patterson Company, Inc.

Engineers and Consultants

CLIENT

Arconic Corporation
Bettendorf, Iowa

PROJECT

Storm Water Outfall Monitoring

PROJECT SCOPE

While the plant develops a 10-year plan to ensure that they create a closed loop water system even during heavy rain a system has been installed to monitor the amount of water released through river outfalls.

RTP SCOPE OF WORK

RTP accomplished the following:

The plant has a system to separate storm water and treated closed loop water. During periods of very heavy rainfall, the plant is permitted to discharge mixed water through their series of outfalls. The plant recently received a revised permit allowing this practice to continue for limited time period. A condition of the permit is that the plant must monitor the flow rate and the PH level of discharged water. The normal outfall of storm water and the emergency discharge of treated water interacts with a series of dams keeping river water from flooding the plant at high river water levels.

R. T. Patterson Co., Inc. (RTP) specified a series of sensors and measuring devices to monitor water outfall. Several types of sensors, flow meters, weirs, etc. were required to accommodate the



RTP SCOPE OF WORK - Continued

sources of water into the outfalls. Some sensors are designed to monitor flow while submerged and other from above the water line. Other sensors required to be used in conjunction with weir dams. Sensors were mounted in manholes, discharge piping, etc. flow meters were specified to measure water being discharged from emergency pumps. RTP provided drawings and specifications for the procurement and installation equipment and services such as piping, electrical, civil, structural, etc.

