# Case Study

## Natural Gas Flow Report Generation

### Company Profile

This organization is a division of a local county public works which provides the design specifications, construction, repair, maintenance, and security services for all buildings and grounds.

### Challenge

NJDEP requires industrial and commercial sites with boilers over 5 million BTU per hour to individually meter, collect, and report to the state the total gas or oil usage for each boiler at the end of each year. The traditional approach is to install mechanical in-line gas meters and take monthly totals on a log sheet, which will then be entered into an Excel spreadsheet. This is very time consuming and labor intensive.

### Solution

Rawson/Industrial Controls provided thermal dispersion gas meters which were wired to Honeywell paperless recorders that automatically generate and email a monthly gas usage report. The meters calculate gas flow while compensating for temperature and pressure changes without the requirement of additional temperature and pressure sensors. Honeywell paperless recorders were installed in each building and wired with 4-20 ma inputs from each of the gas meters (Modbus could also have been used). The recorders display historical trends, real-time flow rates, and a running gas usage total for each meter. They also generate a report at the end of each month showing these totals. The report is then automatically emailed to the site director.

### Results

The total investment in this project was $100,000. The cost savings on the decrease in required labor and increase in efficiency was $37,000, creating a 2.7 year ROI. The project also increased efficiency and removed the possibility of human error.