

## **Process Wastewater and Storm Water**

### **WASTEWATER COMPLIANCE ASSESSMENT**

Conducted an evaluation of all wastewater discharged by an industrial wastewater discharger with alkaline cleaning and mechanical polishing wastewater. Pretreatment standards were reviewed and recommendations were made for keeping the facility in compliance. Although the facility discharged more than 25,000 gallons per day, Alpha Terra was able to convince the POTW that it was inappropriate to apply pretreatment standards or to classify the facility as a significant industrial user.

### **WASTEWATER TREATMENT STRATEGY**

A long-term strategy for an industrial company was devised to minimize the costs for wastewater treatment and disposal while providing for anticipated growth. Wastewater included non-contact cooling water, mechanical polishing rinse water, alkaline cleaners, alkaline rinse water, and electropolishing wastewater and rinse water. The strategy considered capital investment, operating costs, raw material purchases, anticipated regulatory changes, and off-site disposal costs.

### **STORM WATER POLLUTION PREVENTION PLAN DEVELOPMENT AND MONITORING**

Storm Water Pollution Prevention Plans were developed for identifying and documenting probable sources of storm water contact resulting from material transfer, storage, and processing. Pollution prevention planning included assessment of facility operations, defining and prioritizing sources of storm water pollution, and organizing and training pollution prevention teams. Best Management Practice (BMP) options stressing pollution prevention for the facility were evaluated in regard to existing plant procedures to integrate storm water pollution prevention into daily activities. Procedures were established for evaluating the effectiveness of Plans.

### **STORM WATER MANAGEMENT STRATEGY DEVELOPMENT FOR FOUNDRY OPERATIONS**

Storm Water Pollution Prevention Plans were developed for aluminum, gray iron, and ductile iron foundries. Pollution prevention planning included organizing and training pollution prevention teams that assisted in defining and prioritizing sources of storm water pollution. Probable sources of storm water pollution included contact at sand and resin transfer areas, raw material storage, and production activities including molding and casting. Other sources of possible storm water pollution were identified as sand and metal shavings tracked out of exits, outside processing and storage of oily parts and scrap, fuel storage, and drum handling. Best Management Practice (BMP) options for the facility were evaluated while considering existing plant procedures. The selected BMP options stressed source area controls and pollution prevention. Inspection and monitoring procedures were established to evaluate effectiveness of the Plan.

### **WASTEWATER TREATMENT STRATEGY**

Environmental issues and constraints associated with the planned addition of electropolishing operations at a manufacturing company were identified, and recommendations were made with regard to the type of wastewater treatment to be employed. The Baseline Monitoring Report was then updated, and a batch-type metals precipitation system with a filter press was installed and debugged through teaming relationships.

#### WASTEWATER COMPLIANCE ASSESSMENT

A manufacturing firm that discharges process wastewater to a municipal sewer was assisted in modifying their operating procedures to ensure compliance with system limits. Selected sampling and a review of the sewer ordinance requirements indicated that operational and chemical changes were needed to ensure compliance without large costs. Implementation of minor changes and intermittent sampling resulted in compliance and the documentation to demonstrate it.