

# i-ALERT<sup>®</sup>

## Case Study

## i-ALERT Machine Health Solution Supports Safety & Environmental Goals

### Background

Several large pumps at a pumping station were recently equipped with the i-ALERT Machine Health Monitoring Solution. The pumps routinely handle large quantities of hazardous fluid at high pressures. During a routine machine health evaluation, the i-ALERT sensors on this pump/drive train showed excessively high vibration levels. Based on real-time data from the i-ALERT, the main pump was immediately shut down and the spare pump put in service for safety reasons.



### Solution

After evaluation of the main pump at the ITT PRO Shop, severe damage to the impeller and stress cracking were found and repaired. The quick detection of this safety issue by the i-ALERT system prevented the pump potentially coming apart and injuring nearby personnel. The notification and quick action by Goulds Pumps and customer engineers avoided a safety incident (along with the associated medical costs) and also preserved the site's safety record of doctors cases and safety recordables. Furthermore, a hazardous fluid release, and potential environmental incident, was averted. In addition to the safety and environmental benefits, the site lost no production time due to the recommended changeover from the i-ALERT data.



*Large piece of impeller found missing and went through pump*



*Severe wash out found at mechanical seal areas.*

Part of the ITT Family

