

LogMateAMS™ - Success Story

Sacramento Regional County Sanitation



SRCS D Uses LogMateAMS to Find the Real Sources of Alarm Overload

The SRCS D, Sacramento Regional County Sanitation District, operates a large wastewater treatment facility, processing 165mgd, million gallons per day, with a peak capacity of 400mgd. Following the commissioning of a new DCS, operators found themselves facing a barrage of alarms, some familiar, some completely new.

Successes

- Quickly found and resolved the operator loading issue
- Established a site-wide archive of alarms and events
- Provided open access to alarm assessment tools
- Established a continuous program of alarm optimization



A single analysis found over 40% of alarm activity coming from two instruments

Initially, the DCS project team attempted to identify the problem alarms by tabulating screenshots taken during peak activity. Changes made in response to these evaluations had a negligible effect on alarm activity. Eventually, the team realized that a software tool would be required to properly diagnose the problem and identified two criteria for their software search:

1. Captures and analyzes Alarm Activations, Operator Actions, Acknowledgements, and Status Messages
2. Time-stamps all messages

LogMateAMS was selected because it met SRCS D's basic requirements and provided a continuous archive with thin-client access. This provided the entire project team access to meaningful real-time data and useful evaluation tools.

Only one analysis was required to find the source of over 40% of alarm activity. Two instruments, a temperature sensor and a hydrocarbon analyzer, needed minor adjustments to clear almost half of the displayed alarms.

LogMateAMS has been incorporated into the operations strategy at SRCS D to assist the ongoing effort to further tune and optimize alarm settings.

About Process Alarm Management:

The purpose of an alarm is to inform operations of an abnormal condition and assist in its resolution. Alarms are a critical part of automation; a direct communication of plant condition. Unfortunately, the lack of management of the alarm system has led to an overabundance of alarms that are vague, activate inappropriately, and in many cases are simply ignored - assumed to be irrelevant.

An alarm management "problem" manifests itself over time. It is not created intentionally and it can be corrected by applying sound engineering practices.

About SRCSD:

SRCSD provides wastewater treatment services for unincorporated areas of Sacramento County, parts of the cities of Sacramento and Folsom, and the cities of Citrus Heights and Elk Grove. The treatment facility, located in Elk Grove, processes an average of 165mgd, using an accelerated natural process.

About TiPS:

TiPS Incorporated is The Alarm Management Company™. Since introducing our alarm management software package - LogMate™ - in 1990, TiPS has continued to deliver process alarm management products, services, and knowledge to manufacturers worldwide. Our goal is to educate the market about the value of alarm management, and how an optimized alarm system improves operations, including reduced downtime, fewer and more subdued upsets, increased safety, and higher quality output.

About LogMateAMS:

LogMateAMS is a complete solution for alarm management, including site-wide archival, viewing, activity analysis, configuration optimization, alarm rationalization, and change management. LogMateAMS is compatible with a wide range of control systems and is a true thin-client application. A standard Internet Explorer web browser provides access to every LogMateAMS client tool.

LogMateAMS improves a manufacturer's profitability by leveraging the value of alarms and events. LogMateAMS evaluates data to pinpoint areas where applying basic engineering practices will increase safety, asset life, product quality, and productivity.

LogMateAMS Benefits:

- Establish a continuous, site-wide event archive
- Monitor and evaluate alarm activity
- Prune alarms for better operator presentation
- Ensure alarm settings match intended design
- Reduce the difficulty of incident and batch review
- Eliminate the waste and noise of logging printers