

On-line Water Quality Monitoring as a Security Program

Poster Presentation

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ABSTRACT

Constant water quality monitoring is a necessary protocol in order to provide early detection of problems that may arise. Time is a factor when considering a public water supply and awareness of any contamination is crucial to prevent illness. By connecting flowing taps from various process streams to Man-Tech's TitraSip SA for water analysis, samples can be drawn and analysed in a plant or laboratory using EPA-Approved methods for parameters such as pH, alkalinity, conductivity, turbidity, and many others. Calibrations, quality control checks and sampling can occur at user-specified time intervals and can run unattended, with data automatically exported and monitored for compliance. An autosampler can also be used for analysis of field samples.

In the case of a contamination, an alarm can be triggered to warn of a potential hazard and the system can automatically grab aliquots of these samples and dispense them into separate containers for further analyses. Following the EPA Sampling Guidance for Unknown Contaminants in Drinking Water, this capability can warn of potential public health security or bioterrorism quickly so that appropriate action can be taken.

Detail on the methodology used to monitor a process stream and handle contaminations will be discussed. Data obtained for various EPA-Approved methods will also be presented.