AUTOMATED WEB-BASED INFRARED MONITORING SYSTEM FOR ISWPM-15 & QUARANTINE FUMIGATIONS

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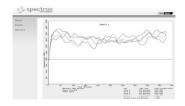






Figure 1 CH₃Br,SO₂F₂, CH₃Br

MONITOR, REPORT, TRANSMIT, NOTIFY

Abstract

This paper describes a new state-of-the-art infrared monitoring system for the collection of fumigation data at remote locations. The Spectros Instruments Fumigation Hub and Remote Monitoring Module collect and display fumigation data locally (pc, print, plot) while real-time reports and alerts are generated for display on the internet via any secure web browser. Monitor diagnosis and validation is possible with the Report Monitor Control and Reporting System. Additional features allow a fumigator to be contacted via text-message to cell phone/PDA. Real-time fumigation gas levels are displayed. Interface of the Spectros Instruments' Remote Monitoring Module to fumigant generation and fumigant recovery systems is discussed.

Data will be presented to compare the Spectros Instruments Remote Monitoring Module with existing hardware for determination of fumigation gas levels (200ppm to 10% sulfuryl fluoride, phosphine and methyl bromide). Special attention is paid to instrumentation response with changes in temperature; barometric pressure, relative humidity, interference gases and other challenges.