86b Combining Environmental Systems with Automated Process Controls at the Plant Level
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This presentation will focus on an approach for combining environmental compliance objectives with process historians and other automated systems in manufacturing plants. Bayer Material Science (Baytown, TX), Eastman Chemicals (Longview, TX) and PDC Corp will present an overview of this approach using information from both Bayer and Eastman's facilities to illustrate key points. Eastman's combined system, for example, relies on three primary "pillars" to assure compliance across a major manufacturing complex: [1] PI, from OSIsoft (Process Historian); [2] Oracle; and [3] the COMPASS (Compliance Assurance System) from PDC Corp.

Through this integrated approach, Eastman captures timely updates to compliance-driven activities more than 8,000 times each day, ranging from production rates entered through hand-held computers, to firebox temperatures, flow rates, and other data recorded in PI tags. Each of these data points is tied into a hierarchy of secondary compliance tasks with embedded links to regulations and permit requirements that expands to nearly 50,000 discrete compliance demonstrations. The entire network of compliance activities is monitored closely and actively to ensure consistency with the agency's most recently published regulations and environmental permits.

In addition to the technology employed at Bayer and Eastman, this presentation will review business drivers behind implementing a Title V compliant architecture, and address the challenges companies face in trying to meet stringent compliance imperatives with optimal operational performance. The importance of integrating operator routine duties to ensure cost-effectiveness in the compliance program will also be discussed.