



BENZENE EMISSIONS

ERCB Requirements

The Maxxam Advantage

Directive 039 - Dehydrator Engineering and Operations Sheet (DEOS)

In 2006, the Energy Resources Conservation Board - ERCB issued Directive 039. This is a revised program to reduce benzene emissions from glycol dehydrators effective since January 1, 2007. Directive 039 has "established mandatory requirements to ensure continued reductions of benzene emissions to reduce potential impact on the public".

To allow our clients to comply with the Directive 039, Maxxam offers DEOS graph creation as part of our full service commitment to our clients to meet the requirements of the directive. Analysis is required and available for both operating and non-operating dehyds. Maxxam has introduced a web-enabled interface which allows our customers to submit information on-line. This controlled environment ensures accuracy, legibility and data quality through validations built into the forms, thus reducing errors and omissions to the lowest possible level.

ERCB Requirements

Alberta's ERCB requires that licensees complete a Dehydrator Engineering and Operations Sheet (DEOS) for each dehydrator. The DEOS must be posted at each dehydrator for use by operators and for inspection by the ERCB.

Licensees must complete and submit to the ERCB an "Annual Dehydrator Benzene Inventory" of all of the licensees' dehydrators including: Operating, Shut-in, Operating as a Separator, etc. The DEOS summarizes the optimum conditions for reducing benzene emissions.

It is important to note that the DEOS must be revised annually, or upon relocation or after any other change in status for the dehydrator.

BENZENE EMISSIONS



The Maxxam Advantage

| Key Features | Benefits for our Customers |
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| Electronic entry forms including web-enabled information forms and reporting | Ensures accurate data capture and delivery |
| <p>Built in data validation that includes but is not limited to:</p> <ul style="list-style-type: none"> • Smart list for pump specifics - our electronic entry system maintains an up-to-date Smart list of all of the most common pumps used in the industry • Electronic Data inter-relationship checks and warnings • Standardized reporting practices - the Maxxam report presentation is standardized such that all graphs are modeled according to the requirements of the directive | <p>Ensures the most accurate pump information possible is recorded</p> <p>Our data entry validations have checks built into the exit routines that prohibit most data entry errors or warn the user against possible errors</p> <p>Ensures a consistent reporting format and usability from one year to the next</p> |
| <p>A data-based application:</p> <ul style="list-style-type: none"> • Data recall making reporting of non-operating DEHYs a snap once the initial data collection has occurred • The ability to produce a graph that is 100% compliant with the ERCB Directive including content, presentation and modeling | <p>Ability to report back to the customer that info supplied the previous year reducing the seasonal burden of data collection</p> <p>Confidence that your graph and data is compliant with ERCB</p> |
| Experienced staff available for End-to-End customer service including Data collection, Sample Collection, Emissions Modeling, Graph Production and Annual DEHYdrator Inventory List | Full service in-house eliminates the need for costly third-party data handling |

Maxxam is the Canadian market leader in analytical services and solutions to the energy, environmental, food and DNA industries and a member of the Bureau Veritas Group of companies – a world leader in testing, inspection and certification services. We support critical decisions made by our customers through the application of rigorous science and the knowledge and expertise of our over 2500 employees.

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DEOS Graph Example

