

## **CASE STUDY** P&ID Review for SIL Analysis

| OUR CLIENT:  | Methanex – Waitara Valley  |
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| INDUSTRY:    | Chemical   |
| VALUE:       | NZ\$200K   |
| OVERVIEW:    | The Methanex Waitara Valley site was restarted in 2013 after a shutdown period of 5 years.<br>In 2015 the plant was scheduled for a Safety Integration Level (SIL) review to determine the<br>work needed to maintain the safety ratings of the safety critical areas of the plant.<br>In order for the SIL review to proceed it was necessary to review the Piping and Instrumentation<br>Drawings (P&IDs) for the site to ensure they were drawn to the latest Methanex standards and<br>were correct for the current plant configurations.<br>There were over one thousand P&IDs to be reviewed in a timescale of four months.  |
| ENGINEERING: | A team of three ECL engineers were involved in the review of the P&IDs.<br>Each drawing was reviewed against the current Methanex standards and field checked to<br>ensure the drawings were correct to the current plant configuration. All changes were redlined to<br>show the modifications required to meet the standards or current configuration.<br>As the review for each drawing was completed it was sent to the drawing office to be updated.<br>When the drawing office had completed the update, the drawing was returned to a different<br>engineer to the one that did the original review to check the updates.<br>When the changes and checks were complete the drawings were signed off.<br>Each drawing was logged in a register indicating who was responsible for the review, where it<br>was currently located, the status of the review and if the review process was complete.<br>The successful completion of the P&ID review within the timescale would allow the SIL review to<br>begin. If the review was not complete the SIL review would have to be postponed, this could<br>have caused the plant to be shut down due to compliance issues. |

The P&ID review was completed on time and in budget.

The SIL review proceeded as scheduled.





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