

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

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





N EW ZEALAND P: +64 6 757 5562 | E: manager@ecl.co.nz 166 Powderham Street | P.O. Box 247 | New Plymouth 4340 New Zealand

WWW.ECL.CO.NZ