Reagent System Commissioning Manager

The Project:

In 2011/2012 BMA Goonyella Riverside Mine undertook an upgrade of the Coal Preparation Plant dosing systems. Two new Reagent Dosing were designed, installed, and commissioned.

The upgrades involved the construction of two green field reagent storage and distribution systems, comprising two 55kL horizontal storage tanks (one for Diesel and one for MIBC) with new metering systems providing controlled flow of reagents to the existing dosing locations.

A key feature of the new reagents dosing system is fully automated control of dosing flow to an operator configurable set point, as opposed to manual adjustment of dosing flows as was the case.

Each dosing system comprises of four main systems:

- MIBC Unloading and Storage
- Diesel Unloading and Storage
- MIBC Dosing System
- Diesel Dosing System

Where MIBC (Methyl Isobutyl Carbinol) reagent is a frothing reagent used in the fine coal flotation process.

Inete was engaged directly by BMA as the Commissioning Manager for the project to work with them and the other contractors involved with the commissioning to ensure the best possible outcome for the installation and operation of the new systems.
Reagent Systems Commissioning Manager

Inete Case Study:

Commissioning Works:
As Commissioning Manager for the commissioning process of the CPP1 and CPP2 Reagent Systems Inete was responsible for:

- Commissioning Planning
- Commissioning Scheduling
- Commissioning Documentation
- Commissioning Issues Register
- Tracking of Commissioning Test Documentation & Schedule
- Supervision and Conducting of Commissioning Activities

The key systems commissioned for each site were:

- MIBC Unloading and Storage—To safely transfer MIBC from a delivery tanker at a rate of 3000l/min and store in a 55kL storage tank.
- Diesel Unloading and Storage—To safely transfer diesel from a delivery tanker at a rate of 3000l/min and store in a 55kL storage tank.
- MIBC Dosing System—To deliver MIBC from the storage tank to each of the dosing points in the CPP to within 5% of the flow set point determined by the operator.
- Diesel Dosing System—To deliver Diesel from the storage tank to each of the dosing points in the CPP to within 5% of the flow set point determined by the operator.

Project Completion:
The fully automated system was successfully commissioned allowing MIBC and Diesel to be provided to each of the 8 dosing points within the CPP via a dedicated dosing pump and supply line to the suction of the respective flotation supply pump.

As commissioning manager Inete took charge of the commissioning processes and followed up operational issues seeing the project through to a successful implementation.