ENGINEERING APPLICATIONS – PROJECT DESCRIPTION

SEQ Water – Mt Crosby Flocculation Tank Refurbishment

Client: SEQ Water

Project: Mt Crosby Flocculation Tank Refurbishment

Duration: June 2015

Description of ENAP's Scope:

ENAP was awarded this refurbishment project for SEQ Water at Mt Crosby Eastbank Water Treatment Plant (WTP). This WTP has a set of eight sediment basins and each of these basins have two flocculation zones, separated by vertical wooden baffle walls supported by the basin slab and concrete columns. Each cell is equipped with horizontal wooden paddle type flocculation equipment with five wooden paddles connected to a pair of steel support arms.

The coating system on the flocculation paddles, located within Sedimentation Basins 3 and 4, had severely failed and as a result the entire paddles in operation needed to be overhauled and reinstalled and re-commissioned.

ENAP's scope included dismantling and removal of paddles to an offsite location where the refurbishment could occur. On this occasion, ENAP teamed up with IPCQ to abrasive blast and re-paint the paddle frames. On completion of the painting (to marine grade specifications), new Tallowwood specific timber was sought and then individually fabricated so that they could then be fitted to the frames of each paddle.

Upon completion of fitting timbers to the paddle steel frames, deliveries were sequenced back to the WTP so that re-installation could occur. ENAP's in-house trade labour was utilized for this specialist installation scope under the supervision and coordination of ENAP's Construction team.

Challenges for the project included the short window of opportunity to complete the refurbishments and re-installation so that downtime of the basins was not excessive. SEQ Water and ENAP communicated well throughout the course of this project so that normal operations of the WTP could be planned around the construction activity, and to keep disruptions to a minimum.