



Ballance Agri-Nutrients Acid Plant Deconstruction

Whangarei

Beca for Ballance Agri-Nutrients

Chemical, Process, and Health & Safety



When Ballance Agri Nutrients turned off their sulphuric acid production plant in Whangarei in mid-2013, they intended to restart it within a few months. However, a subsequent assessment found the 50 year old plant required so many repairs and upgrades that restarting it was not economical. 98% pure sulphuric acid does not corrode steel, but diluted with water it becomes highly corrosive. It is also highly corrosive to skin, regardless of its concentration. The production plant lines were still full of acid, and many parts had accumulated sulphur dust that would turn to acid if mixed with water. It was clear that the deconstruction would need to be exceptionally well planned, so Ballance engaged Beca to manage the project.

Ballance created an internal team to sensitively manage its workforce transition. Beca initiated a risk review process involving the plant owner, operations and maintenance staff, to determine potential risks to the deconstruction team and the actions needed to minimise them.

Culham Engineering Company's (CEC) tender for the deconstruction was successful, because their submission explained in detail how they would manage the key risks. While their submitted price was not the lowest, Ballance could offset the extra cost, as less input would be required from their own team and Beca.

This project successfully delivered smooth workforce transition and no lost time injuries in 12,000 hours work. Ballance, CEC and Beca worked together to achieve this outcome through close collaboration, including open and constructive reviews of all opportunities and incidents.

Judging & Copyright Statement

This project is a Finalist entry in the 2015 INNOVATE NZ Awards of Excellence competition. The winners will be announced on Saturday 1 August, 2015.

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