Upgrade keeps kitchen in the gravy

Significant production growth meant All Natural Kitchen's wastewater treatment facilities required an urgent upgrade. Kim Berry reports on how they reached a solution with Aerofloat.

ALL Natural Kitchen produces food products for aged care facilities, hospitals, clubs, hotels and other food service outlets. Recent fast growth in its business meant it also had to upgrade its wastewater treatment facilities, and quickly.

General manager Colin Hart says: "Aerofloat was the only company that completed a full site visit to inform a quote and then take the time to sit down with me to explain everything." They were "refreshingly on the ball."

Hart says: "We make up to six tonnes of potato mash each week on site, as well as a lot of gravy, soups,

sauces and mayonnaise. The subsequent differences in wastewater had to be addressed by the new system."

The company had a tight turnaround time for the upgrade and stipulated any existing system components that could be used were incorporated into the design process. "It had to be cost effective and sustainable for us," Hart says.

He worked closely with Aerofloat's operations manager, Michael Anderson. Anderson's advice was "invaluable", Hart says, with a fully functioning, upgraded wastewater treatment plant up and running within a month of the initial quote.

Aerofloat removed the existing grease trap and installed its patented AeroDAF 100. Pit pumps from the pre-existing

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> waste collection pit were integrated into the new design.

Anderson explains: "We were able to incorporate the flow rates of those pumps into the design, which is around 15,000 litres a day. The pumps now send wastewater into the Aerofloat balance tank, which corrects the pH and then feeds on to the AeroDAF 100. Any sludge is pushed off into the slimline sludge tank and the treated effluent can be

discharged to sewer."

It also installed a human machine interface (HMI) and remote monitoring capabilities at the site. The HMI screen gives Aerofloat's engineers remote visibility and control over the plant.

"The suspended solids levels in the wastewater coming into the tanks changes throughout the day depending on what is being produced at the site," Anderson says. "Even changes in vegetable types from mashed potatoes to sweet potatoes or carrots means differences in the wastewater.

"The system adapts to these variations and ensures outgoing wastewater is on spec each time there's a change to incoming wastewater."

For Hart, the company's main goal was to ensure ongoing compliance with Sydney Water. "Independent testing on site already promises to give great wastewater results at Sydney Water testing time with our suspended solids and fats, oils and grease well below the required limits," he says. The company has also dramatically increase efficiencies throughout the business off the back of the new system. 🕄

