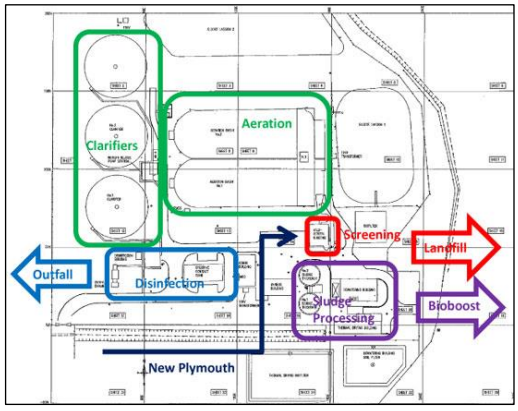
ECL
ENGINEERING CONTROL

CASE STUDY

Municipal Waste Water Treatment Plant Controls

OUR CLIENT:	**New Plymouth District Council**
INDUSTRY:	Waste Water Treatment
VALUE:	NZ$ 275,000
OVERVIEW:	The New Plymouth Wastewater Treatment Plant was built in 1984 and is located in the eastern area of New Plymouth. The controls and process were substantially upgraded in 2014. The plant takes raw sewage and trade wastes and uses a biological treatment process known as activated sludge aeration to produce a high quality effluent. The clean effluent is discharged to the Tasman Sea via a 480m ocean outfall. The quality of the water leaving the plant is one of the cleanest in New Zealand and well within the New Zealand standard for safe swimming and seafood gathering.
ENGINEERING:	ECL delivered the controls systems for the MWH designed plant upgrade. The programming, FAT, commissioning and extended plant optimization phases involved detailed brownfield/greenfield ControlLogix PACs and Wonderware HMI configuration. A working knowledge of RAS/WAS activated sludge handling, open ditch aeration, clarifiers and general WWT process was a key component to the project success.

- End project resulted in higher quality treated water to the outfall and increased capacity to deal with peak flood events.
- Complex brownfield integration with existing controls and SCADA to provide seamless interface between old and new systems.



NEW 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