Wastewater Capability Network





Purpose of the Network



To make overseas expertise and specialist knowledge available to all

New Zealand WwTP users and specifiers

How do we do this – the JIPL difference?

- Utilise local and international WwTP plant design engineers who have technical excellence, proven experience and world-wide references
- Provide quality, energy efficient, proven plant and equipment
- Engage local contractors to install, commission and for on-going support

The Result— JIPL's extensive specialist Network deliver WwTP projects that:

- Utilise influent data
- Incorporate full evaluation of all process options
- Function to agreed performance criteria
- Provide maximum value with minimum risk
- Deliver and commission within agreed time frames and with the option of ongoing servicing programs



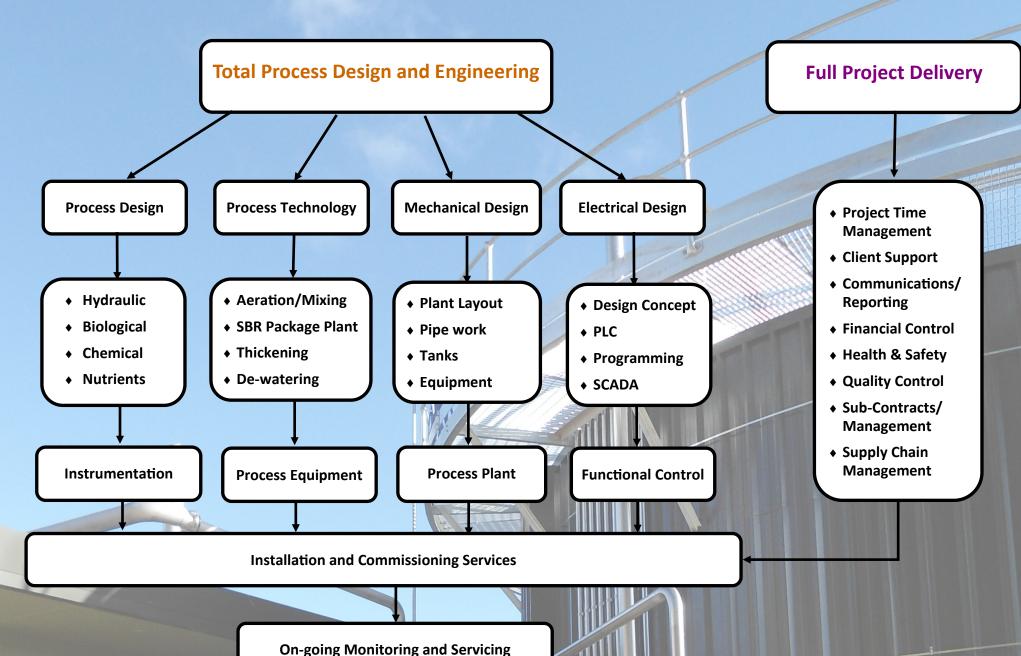


All supported with close and on-going client relationships, clear communications, flexible contract terms and long term plant development strategy



Resource Capabilities







Network Partners—Proven International Technology



Aeration Blowers

- PD Blowers
- **♦ Hybrid PD Blowers**
- **♦** High Speed Turbo Blowers
- **♦** Blower Control Systems
- Distribution Ducting
- ♦ Flow Control Valves

High Efficiency Mixers

- **♦** Hyperbolic Mixers
- ♦ Mixer/Aerators
- Horizontal Mixers
- Submersible Mixers
- ♦ Digester Gas Mixing
- ♦ Hyperclassic® Mixers

SBR Process Systems

- ♦ SBR / MBR Design
- ♦ MBBR Design
- Sludge Conditioning
- Nutrient Removal
- ◆ Turnkey Package Systems
- ♦ Integrated Control

Thickening Systems

- ♦ Grit & Rag Separation
- ♦ Clarifiers
- ♦ Rotary Drum Thickeners
- Gravity Belt Thickeners
- Polydosing Plants
- Polyclays



Aeration Diffusers

- Fine Bubble Diffusers
- ♦ Medium Bubble Diffusers
- ♦ Coarse Bubble Diffuser
- ♦ Membrane iDisc Diffusers
- Flotation Diffusers
- Aerator/Mixers
- Off-Gas Aeration Control



Fluid Movement

- ♦ Horizontal Flow Mixers
- **♦** High Speed Mixers
- Vertical Mixers
- SBR Decanters
- **♦** High Flow Decanters
- Flow Accelerators

Sludge Conditioning

- ♦ In-house Test Laboratory
- **♦** Test Filter Press Hire
- Sludge Analysis
- ♦ Heavy Metals Removal
- Conditioning Dependent on Dewatering Method



De-watering Systems

- DAF Technologies
- Filter Belt Presses
- **♦** Centrifuges
- Plate & Membrane Squeeze
 Filter Presses
- ♦ Moving Plate Screw Presses
- ♦ Sand Filters





Invent Pacific (Australia)
Invent Ag (Germany)
ATEK (Sweden)
ATC (Spain)
Aerzen (Germany)

CDEnviro (UK) KWI (Austria/UK)
Intereco (Italy) Pieralisi (Italy)
Amcon (Japan) C-Tech (UK)

Latham International (UK)







Wastewater Track Record











Dunedin City Council - Wastewater Aeration Plant

JIPL supplied and managed the installation of an aeration system for the Tahuna WwTP. JIPL supplied an integrated package of high speed blowers, Invent diffusers, and grit arrestors for each of the three inlet tanks. The five high speed turbo blowers were the first of this type of technology used in New Zealand.

Temperzone NZ Ltd Powder Coating Plant and Wastewater Treatment Plant

JIPL recently designed, installed and commissioned a fully automated powder coating plant for Temperzone Ltd.

This project included a wastewater treatment plant to treat the pretreatment chemical rinses prior to control discharge.

Taupo Wastewater Treatment Plant - Digester Gas Mixing System

JIPL supplied and installed the first ever sequential gas mixing system in Australasia in the new digester at the Taupo Wastewater Treatment Plant.

The UK based technology has a track record of over 300 mixing applications, successfully carried out over the last 15 years.

Chempro Logistics Ltd - Battery Acid Wastewater Treatment Plant

Chempro Logistics (Petone) engaged JIPL to design a treatment system for the wastewater produced from the acid battery recycling process.

JIPL supplied a complete turnkey system including the mechanical and control / SCADA system. This comprehensive process management system provides real time data and trends for the plant.



Exide Technologies - Petone

Fully automated filter press

JIPL installed a fully automated filter press at Exide Technologies' battery recycling plant resulting in a cleaner factory environment, and reduced furnace operation costs .

Lead recovery has been maximized.

JIPL Test Press

JIPL has an in-house testing laboratory and many years of local experience and provides a comprehensive service to industrial and municipal clients.

JIPL have undertaken 'laboratory-type' test work on over a hundred different effluents, to determine the technical parameters necessary to condition the sludge for effective de-watering.



JIPL Capability Network

Aims:

To enable every client to have confidence in the delivery of WwTP's projects that work, based on:

- Competency experienced international and local WwTP plant design engineers
- Quality provision of proven, quality, energy efficient plant and equipment
- ♦ Local NZ contractors to install, commission and provide backup services

Methodology:

- Evaluation of Process Options
- Detailed Plant and Process Design
- Installation and Commissioning Programme
- Servicing Programme (Options)

Delivery:

- ♦ Close and on-going relationship with clients
- Options for "open book" project delivery
- ♦ Track record and references
- ◆ Technical excellence

85 Oteha Valley Road, Albany, Auckland

Tel: +64 9 479 3952 E-Mail: info@jipl.co.nz



Summary:

- Design Experience and Expertise
- Quality Plant and Equipment
- Local Project Delivery
- Maximum Value / Minimum Risk



Project and Design Engineers
Design, Research & Development

www.jipl.co.nz