

Lockerbie Greensand Filtration Plant

Waikato, New Zealand

FILTEC

Making Water Safer

Project Snapshot



Client: Matamata-Piako District Council



Capacity: 4 MLD (expandable to 5 MLD)



Technology: Greensand Pressure Filtration, UV Disinfection, Sodium Hypochlorite Dosing



Source Water: Bore Water



Completion: 2024

Project Outcomes

- ✓ Iron and manganese removal from bore water
- ✓ 4-log protozoal reduction via UV disinfection
- ✓ Staged temporary-to-permanent delivery
- ✓ Integrated civil, mechanical and electrical works
- ✓ Expansion capacity to 5 MLD

Supporting Growth Through Staged Water Treatment Delivery

The Lockerbie Water Treatment Plant was developed to support growth within a new residential subdivision in Morrinsville. Elevated iron and manganese in the bore supply required treatment to prevent discolouration and achieve compliance under the Drinking Water Standards for New Zealand (DWSNZ).

FILTEC delivered a staged Design & Construct solution comprising a 1 MLD containerised treatment plant followed by a permanent 4 MLD greensand pressure filtration facility, expandable to 5 MLD.

The permanent plant incorporates Glacier horizontal filtration vessels, UV disinfection achieving 4-log protozoal reduction at 40 mJ/cm², and sodium hypochlorite dosing for residual protection. Scope included civil and structural works, mechanical and process installation, electrical and automation integration, geotechnical investigations, building consenting and full commissioning.

Located within a residential subdivision, the facility was designed with acoustic modelling and architectural treatment to meet boundary noise requirements. Operator training and documentation were provided to support ongoing operation.

