



## Role Description

<b>Title</b>	Base Engineer (Water)	<b>Incumbent</b>	
<b>Manager's Title</b>	Engineering Supervisor	<b>Date of Last Review</b>	February 2026
<b>Team</b>	Engineering	<b>Location</b>	Scott Base
<b>Work Environment</b>	This role will require the incumbent to travel to Antarctica for an extended period which requires a medical clearance.		

### Organisational Context

Antarctica New Zealand is a Crown Entity established on 1 July 1996 under the New Zealand Antarctic Institute Act to develop, manage and execute New Zealand's activities in respect of Antarctica and the Southern Ocean.

Our key activities include facilitating scientific research in Antarctica, protection of the environment and raising public awareness of the global significance of the continent and surrounding Southern Ocean.

Antarctica New Zealand operates in a hazardous environment. The management of safety and risk are critical to achieving the New Zealand Antarctic programme objectives. The highest standards of environmental care and responsibility are required in all tasks.

The Engineering team are responsible for ensuring that Scott Base and its assets are well maintained and operated to support New Zealand's ongoing activities in Antarctica.

### Our Goal for New Zealanders

New Zealand continues to play an influential role in the kaitiakitanga (guardianship) of Antarctica and the Southern Ocean as a natural reserve devoted to peace and science.

### Role Purpose

To safely operate and maintain the facilities and engineering equipment at Scott Base, with a focus on water production, water reticulation and wastewater treatment.

### Work of Role

- Perform daily operational tasks and data collection for the water production (reverse osmosis plant) and wastewater treatment plant facilities, including documentation of readings and observations.
- Undertake preventative and corrective maintenance of water and waste water assets.
- Observe all necessary hygiene procedures when working with wastewater treatment or reticulation equipment and maintain a clean and safe work environment
- Protect the potable water supply from contamination by using correct hygiene and disinfection processes, regularly inspecting water production assets, and participating in risk identification and mitigation tasks.
- Conduct routine health and environmental testing of water and wastewater at Scott Base and report on test results.



- Routine servicing of water and wastewater pumps and tanks and kitchen equipment.
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- Act as Duty Engineer on a rostered basis (one week in three).
- Use our asset management software to plan, execute and record all routine and non-routine maintenance or improvement work undertaken.
- Update and maintain records of spares and materials used/held and assist with procurement of replacement items.
- Assists other team members and contributes to the overall base community.
- Support visiting contractors with asset maintenance and servicing work.
- Assist visiting personnel with equipment set up, operation, diagnostics and repair.
- Fulfil accountabilities as documented in the Health, Safety and Environmental Management Systems including proactive management of risks and resources to prevent harm.
- Fulfil accountabilities as described in the Information and Records Management Policy for creating and centrally storing accurate and complete records.
- Rostered duties on the Scott Base Fire Crew and other base tasks as required.
- Any other tasks assigned by the Engineering Supervisor or the Scott Base Leadership Team.

### Key Challenges

- Continually maintaining hygiene standards around water production and wastewater treatment to ensure personal safety and the safety of the community.
- Maintenance of engineering facilities which operate in a harsh environment.
- Working in challenging climatic conditions while continually considering environmental impacts.
- Participation in an on-call Duty Engineer roster and being able to respond to plant alarms/emerging issues at any time.
- Ability to maintain a positive outlook while under pressure and responding to rapidly changing priorities.
- Maintaining motivation and work quality (including repetitive tasks) 6 days a week for up to 13 months.
- Resilient to living in a small communal environment for up to 13 months (e.g. shared rooms, communal bathrooms etc).
- The location and role may place pressure on the physical and mental well-being of the incumbent (e.g. at times long work hours, 24-hour daylight/darkness); the incumbent's family and other close relationships.

### Key Functional Relationships

<b>Internal</b>	<ul style="list-style-type: none"> <li>• Engineering Supervisor</li> <li>• Scott Base Leadership Team</li> <li>• Electrical and Water Systems Engineer Engineering Facilities Planner</li> <li>• Asset Management Engineers</li> <li>• Operations Solutions Manager</li> <li>• Operations Delivery Manager</li> <li>• Scott Base staff</li> </ul>
<b>External</b>	<ul style="list-style-type: none"> <li>• Event personnel visiting Scott Base</li> <li>• United States Antarctic Programme personnel</li> </ul>



## Minimum Capability Necessary to Work to Role

Capability Area	Description
<b>Qualifications, Certificates and Memberships</b>	<ul style="list-style-type: none"><li>• A New Zealand Trade Certificate (or recognised equivalent) in a relevant engineering discipline.</li><li>• Hold a current First Aid qualification (Unit Standard 6401, 6402).</li><li>• Hold a current Working at Heights qualification (Unit Standards 17600, 15757, 23229).</li><li>• Hold a current confined space and gas detection qualification (Unit Standards 17599, 18426).</li><li>• Be certified as 'medically fit' by Antarctica New Zealand's Medical Assessor.</li><li>• Hold a current Full New Zealand Driver's Licence (Class 1) and be experienced in operation of vehicles with manual gearbox.</li></ul> <p>Preferable (but not essential) to hold:</p> <ul style="list-style-type: none"><li>• A current Forklift Operator's certificate (Unit Standard 10851).</li><li>• Water treatment/wastewater treatment qualifications.</li></ul>
<b>Knowledge, Skills and Experience</b>	<ul style="list-style-type: none"><li>• At least 5 years post-qualification experience</li><li>• General engineering maintenance and fabrication</li><li>• Proficiency in computer use, particularly for record keeping.</li><li>• Understanding of and commitment to tikanga and Te Tiriti o Waitangi (Treaty of Waitangi) principles.</li><li>• Preferably some experience in:<ul style="list-style-type: none"><li>• Water reticulation systems and plumbing</li><li>• Wastewater treatment</li><li>• Water treatment</li><li>• Building Management and Human Machine Interface (HMI) Systems</li><li>• Pump maintenance</li></ul></li></ul>
<b>Judgement, Temperament and Influence</b>	<ul style="list-style-type: none"><li>• Demonstrates the personal qualities required to fit in socially and professionally with a diverse range of people in a potentially stressful environment.</li><li>• Able to work without direct supervision</li><li>• Excellent communication skills</li><li>• Ability to accept/provide feedback</li></ul>



## Antarctica New Zealand Values

To honour our obligation to Antarctica:

- **We are proactive and passionate about what we do**  
E ngākau whiwhita ana, e ngākaunui ana hoki tātou ki ā tātou mahi katoa
- **We take responsibility for each other and the environment**  
Nō tatou te haepapa kite tiakii a tatou anōme te taiaohoki
- **We work together to achieve success**  
Ka mahi tahi tātou kia angitu ai
- **We always act with integrity**  
He ngākau pono ō tātou ahakoa te aha
- **We pursue excellence in everything we do**  
Ka whāia e tātou te iti kahurangi i ā tātou mahi katoa

## Role Authorisations

I confirm that this Role Description accurately describes the work of the Base Engineer (Water):

\_\_\_\_\_  
Operations Delivery Manager

\_\_\_\_\_  
Date

I accept this Role Description accurately describes the work of the role for which I am accountable:

\_\_\_\_\_  
Base Engineer (Water)

\_\_\_\_\_  
Date