

COUNCIL POLICY

Desalination Plant

Policy Number:	PO145		
Strategic Plan Objective:	2. Community Connected through Infrastructure		
Policy Owner:	Director Assets and Infrastructure	Record Number:	16/14841[v3]
Responsible Officer:	Manager Infrastructure	Minute Reference:	187/2023
Date Adopted:	09/08/2023	Next Review Date:	August 2028

1. POLICY OBJECTIVES

To facilitate the sustainable and compliant management of Council's seawater desalination plant whilst providing the Marion Bay community with high quality, affordable water.

2. SCOPE

This policy applies to the operation of Council's desalination plant and to all activities relating to the Yorke Peninsula Council's supply of desalinated water to the community.

3. DEFINITIONS

Refer to Attachment 1.

4. POLICY STATEMENT

4.1. Purpose and Use

Council owns and operates a seawater desalination plant at Marion Bay. Marion Bay is a remote area and is fifty (50) kilometres from the nearest SA Water service point.

The plant produces and provides a primary potable water supply to Council's public toilets, the Marion Bay Caravan Park, Marion Bay Tavern, Marion Bay Motel, Marion Bay Seaside Apartments and the Marion Bay General Store and Jetty Cafe. Meters have been installed to measure the amount of water used by the properties supplied, and Council invoice for the supply on a monthly basis. A secondary potable water supply is available to the Marion Bay community and visitors via a credit card dispenser system. The water is dispensed from an Abberfield water dispenser station located adjacent to the Marion Bay desalination plant.

Members of the community may cart their own water or, alternatively, engage a licensed water carrier. Any costs incurred by a member of the community in engaging a licensed water carrier are to be directly negotiated and met by that

person. Council does not provide a water carting service or engage contractors on behalf of the community.

A 15m beach well feeds a controlled supply of seawater to the plant. Information is transmitted to and from the plant/well via a communication cable. The well is situated on Crown Land and the State Government has delegated care and control of the land to Council via Government Gazette (State Government reference 5763 folio 735).

As a supplier of desalinated water, Council is considered a water industry entity under the Water Industry Act 2012.

Additional requests for primary supply will be assessed and considered by Council on a case-by-case basis, based on a full analysis of the infrastructure required, land and resource capability, and a risk assessment.

4.2. Environmental Management

Potential environmental impacts have been considered and appropriate mitigation strategies are in place. All Environment Protection Authority requirements at installation have been satisfied, and Council continues to monitor the environmental performance requirements relating to:

- the marine environment;
- waste management;
- flora and fauna;
- site contamination;
- noise levels;
- air quality; and
- sustainability.

The desalination plant will continue to be managed based on best practice environmental management principles.

4.3. Water Quality

Supplying safe drinking water is an absolute priority. The desalinated water provided to the community by Council complies with all health standards and meets Australian Drinking Water Guidelines. Council will continue to monitor and test the desalinated water against stringent water quality criteria.

4.4. Noise Control

Council's ability to control the amount of noise emitted from the desalination plant is a critical public health issue. Council will continue to regularly monitor and control noise levels to ensure compliance with all health and environmental standards.

Council, at any reasonable time, can enter any property necessary to test noise levels and/or take any action deemed necessary by Council to control noise pollution relating to the water supplied under this policy.

4.5. Power Supply

Desalination plant power is supplied by SA Power Networks. Electricity is charged at an agreed annual rate, with the exception of the beach well and its associated equipment, which has its own power supply and runs at an agreed cost per kilowatt (kW) basis.

In addition Council has installed a 10kW solar bank to help reduce electricity costs.

4.6. Maintenance

Council have a regular management/maintenance program in place to ensure that the desalination plant complies with all legislative requirements and meets all technical and safety standards. The Director Assets and Infrastructure Services is responsible for overseeing the program.

Suitably qualified contractors who specialise in such systems are engaged by Council to undertake comprehensive plant maintenance and service work on a regular basis. Council staff have also undertaken training to enable them to undertake regular day-to-day monitoring, maintenance and overall running of the plant.

Under the Water Industry Act 2012, Council, at any reasonable time, can enter any property necessary to construct, install, improve, add to, inspect, operate, maintain, test, repair, alter, remove, replace, or make safe desalination plant infrastructure, and/or equipment and/or perform any other work, as necessary, in connection with the desalination plant.

4.7. Chlorine Management

Chlorine is stored at the desalination plant for use during the water treatment process and is managed in accordance with Council's Hazardous Chemical Procedure (PR102) and Safe Operating Procedure (SOP121).

4.8. Customer Responsibilities

Occupiers of properties receiving a primary supply of desalinated water are responsible for ensuring that any equipment located on the property relevant to the desalination plant complies with any relevant technical or safety requirements and is kept in good repair. All reasonable steps must be taken to prevent any water running to waste on the property.

A person must not, without Council consent, construct or place a building, wall, fence or other structure on or over any desalination plant infrastructure, or attach any equipment/thing, or interfere with the collection, storage, production, treatment, movement or supply of the desalinated water.

4.9. Fee for Use

Council's Fees and Charges Register (R011) sets out the fees/charges relating to the supply of desalinated water.

Council takes into account a range of different factors when setting the fees for providing desalinated water, including the cost to deliver and maintain the desalinated water service. Prices in South Australia are guided by the pricing principles outlined by the National Water Initiative, in line with the South Australian Government's commitment to state wide pricing. Council's pricing is also regulated by the Essential Services Commission of South Australia.

4.10. Water Supply

The quantity of water available from the desalination plant is a restricted supply. Council are unable to guarantee the amount of water supplied because of the potential for a reduction in the quantity of water available, or an increase in demand.

5. COMPLAINTS

Complaints relating to the desalination plant and/or the water supply can be made in writing to the Director Assets and Infrastructure Services.

6. REVIEW

This policy will be reviewed every five (5) years and as necessary in consideration of any changes to legislation and relevant standards, codes and guidelines.

7. TRAINING

Regular, scheduled training will continue for Council staff undertaking the maintenance program as required. Training needs will also be identified through the performance review and audit processes. Training will also occur in response to changes to legislation and relevant standards, codes and guidelines.

7.1. Water Industry Officers

Water Industry Officers have been appointed by Council as detailed in Council's Register of Delegations (R007).

8. RECORDS

Records shall be maintained as required by Council's Records Management Policy (PO063) and relevant legislation.

9. RELATED COUNCIL POLICIES/PROCEDURES AND DOCUMENTS

PO091 Risk Management Policy
PR016 Hazard Management Procedure
PR099 Confined Space Management Procedure
PR101 Remote or Isolated Work Procedure
PR102 Hazardous Chemical Procedure
PR104 Hazardous Manual Tasks Procedure
PO006 Contractor Management Policy
PR114 Contractor Management Procedure
R007 Delegation Register
R011 Fees and Charges Register

10. REFERENCES AND LEGISLATION

Dangerous Substances Act 1979 (SA) and associated Regulations 2008
Dangerous Substances (Dangerous Good Transport) Regulations 2008 (SA)
Environment Protection Act 1993 (SA)
Environment Protection (Water Quality) Policy 2015
Food Act 2001
Local Government Act 1999
South Australian Public Health Act 2011 and Regulations (Wastewater) 2013
Water Industry Act 2012 and Regulations 2012
Water Resources Act 2007
Work Health and Safety Act 2012 (SA) and Regulations 2012
National Water Initiative and the National Water Quality Management Strategy

Australian and New Zealand Guidelines for Fresh and Marine Water Quality

Australian Drinking Water Guidelines (2011)

Return to Work Act 2014

Landscape South Australia Act 2019

AS/NZS 9500: Plumbing and Drainage

AS/NZS 2031: Water quality – Sampling for microbiological analysis (ISO 19458:2006,MOD)

AS/NZS ISO 3100: Risk Management – Principal and Guidelines

The National Construction Code (NCC) Volume 3 Plumbing Code of Australia (PCA) including South Australia Variations

11. COUNCIL DELEGATION

Any applicable delegations are available on Councils website via the Delegations register via <https://yorke.sa.gov.au/about-us/forms-plans-and-publications/registers/>

12. VERSION HISTORY

Version No	Issue Date	Description of Change
1	10/10/2012	New Policy
2	13/06/2018	Minor Revision.
3	09/08/2023	Minor Revision.

ATTACHMENT 1: DEFINITIONS

Term/Reference	Definition
Desalination Plant	All equipment, infrastructure, products or materials including, but not limited to: pipes, conduits, associated fittings and apparatus, pumping stations, storage tanks, wells, drainage holes or other forms of works or earthworks, treatment facilities, testing/monitoring equipment, buildings/structures, pumps, telephone system, cables, modem, fences and swipe cards.
Occupier	A person who has, or is entitled to, lawful possession or control of land or a place.
Potable Water	Water intended for human consumption and domestic use.
Water Quality	The concentration of certain substances in water for specific uses, in accordance with water quality criteria set out in the Environment Protection (Water Quality) Policy and Australian Drinking Water Guidelines.