

Water Management Procedure

Section 1 - Purpose

(1) To detail the operating, maintenance and management of water infrastructure at Macquarie University.

Scope

(2) This Procedure requires actions by the following:

- a. Contractor;
- b. Customer Service Officer, Macquarie University Property;
- c. Executive Director, Property Services;
- d. Director, Sustainability;
- e. Executive Dean;
- f. Head of Department;
- g. Manager;
- h. Manager, Operational Sustainability;
- i. Manager, Project Services, Macquarie University Property;
- j. Manager, Technical Services, Macquarie University Property;
- k. Project Manager, Property;
- l. Security Services Staff;
- m. Space Planning Manager, Macquarie University Property;
- n. Staff; and
- o. Student.

Section 2 - Policy

(3) Nil.

Section 3 - Procedures

Responsibilities and Required Actions

(4) This Procedure provides information on the following topics:

- a. water use / incidents;
- b. trade waste;
- c. purchases;
- d. plumbing;
- e. water practices;

- f. management;
- g. replacements;
- h. maintenance program;
- i. cooling towers;
- j. water monitoring; and
- k. sub-meter testing.

Staff and Students

Water Use / Incidents

(5) Ensure water is used efficiently in all daily practices by:

- a. filling dishwashers to capacity before using and only using the economy mode;
- b. turning off taps completely;
- c. using half flush in toilets where available and appropriate;
- d. immediately reporting leaks, incidents and maintenance issues to Macquarie University Property through the [Property Service Request Form](#); and
- e. if a water incident occurs after hours, such as a burst pipe, report the incident directly to Security Services on 02 9850 7112 or go to the Control Centre located at 4 Link Road on the North Ryde campus to report the incident in person.

(6) Contact the [Sustainability](#) team or the Manager, Operational Sustainability, Macquarie University Property, if you require further information on any water related issues.

Customer Service Officer, Property / Security Services Staff

Trade Waste

(7) Inform the Manager, Technical Services, Macquarie University Property when a major trade waste related incident report is confirmed using emergency or standard service and work order procedures.

(8) In the case of an after hours incident ensure the delegated on-call technical service staff is also informed.

(9) Address leak and maintenance concerns regarding water management to the Manager, Technical Services, Macquarie University Property using standard work order procedures.

Executive Deans, Directors, Managers, Heads of Department, Contractors and Sub-contractors

Purchases

(10) Ensure that any equipment or services purchased for and on behalf of the University adheres to the [Procurement Policy](#), which specify water efficiency as a priority.

Plumbing

(11) Gain approval for any plumbing work connecting to the main water or sewage system from the Manager, Technical Services, Macquarie University Property by completing an online [Property Service Request Form](#).

Trade Waste

(12) When relevant, ensure new employees and Higher Degree Research students are provided with induction training concerning trade waste requirements (e.g. laboratory work).

Water Practices

(13) Ensure staff are kept informed of efficient water practices and contact [Sustainability](#) if education is required.

(14) Where a water incident (such as leaks) is reported to you, ensure the incident is responded to appropriately by informing Macquarie University Property through the [Property Service Request Form](#).

Executive Director, Property Services

Management

(15) Ensure all new plumbing and water fixture work undertaken through refurbishments, or installed as part of new builds, conforms to best practice water efficiency as defined by [Sydney Water](#). At the time of writing this was measured as three (3) star WELS, per [Water Rating](#), or better.

(16) Ensure that contractors and sub-contractors are provided with the appropriate information and / or training to meet University requirements for water efficiency prioritise the installment of automated control systems and appropriate sub-metering during any new builds or refurbishments undertaken.

(17) Remain informed of any changes to the Trade Waste Agreement and sign off on changes when required.

(18) Provide an appropriate budget to replace non-conforming plumbing and water fixtures and to ensure that water savings projects can be undertaken on a continual basis.

(19) Communicate and work with team members to ensure they are aware of the water efficiency requirements of the University.

Manager, Technical Services, Macquarie University Property

Replacements

(20) Ensure that all water fixtures not conforming to best practice (3 star WELS or better, per [Water Rating](#)) are replaced as funds become available.

(21) Prioritise replacement of water fixtures in utilities with high usage.

Maintenance Program

(22) Ensure a robust maintenance program is in place by:

- a. checking all plant rooms and large water using sites manually for visible leaks. All such equipment on campus should be checked at minimum once every two weeks; and
- b. identifying all leaks and maintenance requests reported through the [Property Service Request Form](#) and responding appropriately. All leaks and maintenance requests will be inspected and action plans identified within a two (2) week period. Actions on mains water and other high pressure leaks are considered urgent and must be dealt with immediately, isolated and repaired as soon as physically possible.

Cooling Towers

(23) Operate cooling towers as follows:

- a. operate cooling towers in accordance with the [Water Conservation - Best Practice Guidelines for Cooling Towers in Commercial Buildings](#) or manufacturer's specifications;
- b. proactively seek opportunities to assist [Sydney Water](#) in the further development of best practice guidelines to reduce water and electricity use associated with operation of cooling towers (to be done within the context of

the mechanical specification of the product); and

- c. undertake an audit based on the [Water Conservation - Best Practice Guidelines for Cooling Towers in Commercial Buildings](#) (for example, refer to page 12) annually, ensuring appropriate follow up action is taken.

Water Monitoring

(24) Monitor water use as follows:

- a. monitor water use, where possible, using online live tools;
- b. check water logs weekly;
- c. utilise the Macquarie University Property service request system for any work identified through monitoring;
- d. identify faults using loggers and sub-meters; and
- e. ensure faults are be dealt with using the standard work order system.

Sub-Meter Testing

(25) Test sub-meters as follows:

- a. sub-meters will generally last for at least ten (10) years, therefore it is necessary to record the date of installation;
- b. continually monitor meter readings and respond to any abnormalities as a possible fault with meters;
- c. if necessary, open the meter and clean out to see if this alleviates issues;
- d. include the testing of sub-meters at the ten (10) year mark into maintenance schedules; and
- e. if necessary, arrange for the replacement of the sub-meter.

(26) Undertake any immediate and / or further action required as a result of any incident report. It may be necessary to liaise with [Sydney Water](#) regarding further action.

Project Manager, Property / Space Planning Manager, Macquarie University Property

(27) Report all building works which have trade waste implications (for instance, changes to use of space, changes to grease traps, or chemical waste treatment and disposal that pertains to the sewerage system) to the Manager, Project Services, Macquarie University Property.

(28) Communicate and work with team members to ensure they are aware of the water efficiency requirements of projects and space use.

Manager, Project Services, Macquarie University Property

(29) Contact [Sydney Water](#) when potential impacts on the Trade Waste Agreement are identified. [Sydney Water](#) will provide advice as to whether or not the Trade Waste Agreement requires amendment, and request any further information if needed. [Sydney Water](#) will amend the Trade Waste Agreement if required.

Manager, Operational Sustainability

(30) Manage and coordinate the Water Action Group and water initiatives associated with the sustainability program.

(31) Work with and support the Manager, Technical Services, Macquarie University Property to ensure the responsibilities of this position are undertaken.

(32) Implement and / or support water reduction and supply projects.

Director, Sustainability

(33) Provide staff and students with the appropriate information and education to ensure that water efficient practices are undertaken.

(34) Provide an appropriate budget to ensure that water savings education and awareness can be undertaken on a continual basis.

Section 4 - Guidelines

(35) Nil.

Section 5 - Definitions

(36) Nil.

Status and Details

Status	Current
Effective Date	22nd February 2021
Review Date	1st April 2023
Approval Authority	Vice-President, Finance and Resources
Approval Date	15th December 2009
Expiry Date	Not Applicable
Responsible Executive	Robin Payne Vice-President, Finance and Resources
Responsible Officer	Juliette Churchill Executive Director, Property Services
Enquiries Contact	Andrew Cattanach Head of Design and Sustainability +61 2 9850 7159