

SWIMMING POOL / SPA / HYDROTHERAPY

Background

As detailed in the Icon Water publication *STD-SPE-P-003 Trade Waste Approval and Compliance Requirements*, activities that generate liquid trade waste for discharge into Icon Water's Sewerage Network must comply with specific requirements.

Any capitalised terms used and not defined in this Guide Note have the same meaning as in Icon Water publication *STD-SPE-P-003 Trade Waste Approval and Compliance Requirements*.

Purpose

The purpose of this Guide Note is to provide detail on the specific requirements for liquid trade waste generated from non-residential swimming pools, spas and hydrotherapy facilities, so that compliant waste can be approved for ongoing acceptance into the Icon Water Sewerage Network.

Compliance

The Trade Waste Customer remains responsible and liable for ensuring compliance with this Guide Note even if the occupier of the premises is another party or entity.

In the event that the Trade Waste Customer or the occupier of the premises fails to comply with this guide note, Icon Water may take any and all corrective actions as specified in the Icon Water publication *STD-SPE-P-003 Trade Waste Approval and Compliance Requirements* and the Liquid Trade Waste Negotiated Contract.

Guidance

The following table details facilities and requirements for "Category A" discharges relevant to this Guide Note.

Table 1. Facility types and Category A requirements

Facility Type	Category A Requirements
Commercial/municipal facilities, including learn to swim schools	i. the discharge volume does not exceed 5 kL/day, and ii. the required pre-treatment equipment is installed in-conjunction with good housekeeping practices, as well as iii. excluded substances are not discharged iv. no more than four Category A discharges from a single premises or complex (excluding those listed and complying with the requirements in Table A.1 of <i>STD-SPE-P-003</i>).
Accommodation e.g. hotels, motels, caravan parks, resorts and clubs	
Clubs	
Nursing homes or medical facilities e.g. hydrotherapy units within hospitals	
Fitness facilities e.g. gyms	
Education facilities e.g. schools	
Animal facilities e.g. horse racing and training facilities	

All swimming pool and spa wastewater (e.g. filter backwash, draining for maintenance) from these facilities, that is to be discharged to the Sewerage Network, must have trade waste approval prior to commencing operation.

Pool emptying

Icon Water must be notified in advance, when the pool is to be emptied for cleaning or maintenance purposes (via email to: trade.waste@iconwater.com.au). The maximum flow rate must be no more than 1-1.5 L/s and should only be discharged between the hours of 7:00am to 9:30am and/or 4:30pm to 9:00pm. Customers may email us for a site-specific assessment, should there be a critical need for a higher flow rate. Pool emptying must not be undertaken during wet weather periods.

The Icon Water acceptance limit for chlorine and total dissolved solids (TDS) discharge is provided in *STD-SPE-P-003*. All wastewater discharged to the Sewerage Network must meet these requirements.

Excluded substances/equipment/processes

The following are prohibited from discharging to the Icon Water Sewerage Network:

- Strong detergents and acids
 - The wastewater arising from cleaning of pool surfaces by using strong detergents or acids is not permitted to be discharged to Icon Water's Sewerage Network, as it is unlikely to meet acceptance criteria (outlined in *STD-SPE-P-003*). The discharger must notify Icon Water in advance, the details of cleaning substances, if any, (including brand name, quantity, safety data sheet etc.) intended to be used for cleaning of pool surfaces and proposed disposal arrangements.
- Wastewater from float tanks refer to *STD-SPE-P-003* for details
- Wastewater containing chemicals or substances above our acceptance criteria (or not listed) in Icon Water's publication *STD-SPE-P-003 Trade Waste Approval and Compliance Requirements*.

Pre-treatment requirements

Small swimming pools less than or equal to 55,000 L (55kL) capacity do not require pre-treatment prior to discharge to Icon Water's Sewerage Network, however the discharge must not exceed a flow rate of 1 – 1.5 L/s.

For all other pools the following pre-treatment equipment is required to be installed where the wastewater is discharged to Icon Water's Sewerage Network:

Table 2. Pre-treatment devices

Pre-treatment Device	Details
Balancing pit/holding tank¹	Must be installed to receive all wastewater from filter backwash and drainage from pools/spas, where it is to discharge to Icon Water's Sewerage Network. It should have provision to allow the composition of the wastewater to be adjusted to below the acceptance criteria (e.g. pH, chemicals). Icon Water can further advise following assessment of the trade waste application. The pit/tank must be sized to accommodate the maximum flow from the process, have a flow retention of one hour, to allow solids to settle and allow discharge to Icon Water's Sewerage Network at a controlled rate, no more than 1 - 1.5 L/s.
Bunds	Must be installed around the pre-treatment area. A bund of at least 150 mm high or speed bump hump 75 mm high around the area is required if it is outside to prevent surface stormwater flow.

¹The discharger must provide supporting information in regard to sizing of equipment and the manufacturer's recommended maintenance schedule.

²All pre-treatment devices must be maintained and cleaned as per a set schedule.

Balancing Pit/Holding Tank

Installation requirements

Location: Installation of the pre-treatment device(s) must allow safe access for maintenance and inspection. They must be installed to meet Australian Standards with respect to, but not limited to, working at heights and confined spaces. The installed location must be accessible by maintenance vehicles to allow safe access to thoroughly clean their interior.

Sampling: An inspection point suitable for taking representative samples shall be provided immediately prior to the point where the liquid trade waste leaves the premises and enters the Sewerage Network and/or mixes with domestic sewage from the premises.

Balancing pit: Install an appropriately sized pit and ensure it is large enough to suit required working capacity. The inlet and outlet pipe should be 100 mm diameter. The design of the pit should be with the inlet and outlet at right angles to each other providing a swirling effect, in the flow of the wastewater. This will assist in the mixing of inflowing acidic or alkaline waste with the water held in the pit. The pit should be sized to accommodate the maximum flow from the process and have a flow retention of one hour. They must be constructed and installed to allow ease of inspection and cleaning. Lids should be easily removed and the pit wide enough so that any accumulated solids can be easily removed. The pit must be raised 75 mm above surrounding ground level or have gatic airtight covers. The internal coating of the pits should be acid resistant e.g. tar epoxy paint.

Pump: If required, use the correct pump to manage the wastewater generated. The pump shall be a non-emulsifying feed pump. It must have a manual start switch with a low-level stop switch and must have controls to allow a fixed flow rate of no more the 1-1.5L/s.

Vertical clearance: Ensure there is adequate vertical clearance above the pre-treatment system to allow safe inspection and cleaning.

Compliance plate: Check that there is a compliance plate with a compliance number clearly visible on the system. This ensures the equipment is authorised for the full range of conditions and wastewater on-site.

Roofing: The liquid trade waste generating process area and pre-treatment must be roofed to prevent ingress of rainwater. A ten degree (from the vertical) overhang is the minimum acceptable roof cover to ensure rainwater does not get in.

Backflow-prevention: A cold-water tap must be installed within 5 metres of the device(s). A backflow-prevention device must be installed on the inlet side of the tap. The backflow device(s) must be tested every 12 months by a licensed plumber who is accredited in backflow prevention to ensure it is operating correctly and to identify if the valve requires servicing/repair. After testing a valve, the Licensed plumber must lodge a test certificate with Access Canberra, the plumbing regulator.

Note: The pre-treatment installation's pipe work and the surrounding area must be arranged to ensure that any spillage or overflow of sludge, separated oil or untreated oily waste is prevented from bypassing the separator and entering the Sewerage Network.

Commissioning requirements

Each pre-treatment device/system shall be commissioned by a person or company accredited for this purpose by the manufacturer or supplier of the equipment. As part of the commissioning, the following documents shall be provided:

- a certificate of commissioning to be to be forwarded to Icon Water
- a copy of the work as executed sanitary drainage plan showing the completed installation of pre-treatment devices/system, and
- a schedule of recommended cleaning and maintenance to be given to the owner and kept at the premises for reference and available for inspection by Icon Water on request. The schedule shall provide:
 - a description of activities to be undertaken (e.g. for coalescing plate separators the removal and cleaning of plates, sludge withdrawal from hopper, etc.)
 - minimum frequencies for these activities, and

- any special observations to be made which would affect the frequency of this maintenance schedule or which may indicate conditions when qualified service personnel may need to be engaged.

Maintenance requirements

The pre-treatment device(s) must be maintained as per the schedules provided during the commissioning of the system. The maintenance regime must include all aspects as indicated above in *Commissioning requirements*.

Chemical handling and storage

Safety data sheets for any chemicals stored on site in bulk, and which may be present in the wastewater, must be provided to Icon Water as an attachment with the Icon Water liquid trade waste application form.

Chemicals should be stored in an area where any spillage cannot drain to Icon Water's Sewerage Network or stormwater system. Concentrated chemicals e.g. acids, caustic and other corrosive chemicals must not be discharged to Icon Water's Sewerage Network. Chemical solutions containing small quantities of these substances should be neutralised before discharging to Icon Water's Sewerage Network.

Compliance management

Record-keeping

Trade Waste Customers must:

- keep documentation relating to inspection and servicing of all pre-treatment systems at the premises for at least two (2) years and make this documentation available to Icon Water upon request
- maintain appropriate records to demonstrate compliance with the Liquid Trade Waste Negotiated Contract at all times.

Site inspection

Icon Water's personnel may attend the premises to conduct site inspections to verify compliance with the Liquid Trade Waste Negotiated Customer Contract. The indicative frequency of site inspections is detailed in Section 9.12 of Icon Water's publication *STD-SPE-P-003 Trade Waste Approval and Compliance Requirements*.

References

- *STD-SPE-P-003 Trade Waste Approval and Compliance Requirements*

Issue	Date	Reason for Revision	By
A	10/06/2025	Issue for public consultation	S. Chappell
B	31/10/2025	Issue for use	S. Chappell