

MEDICAL CENTRE / DOCTOR SURGERY / PHYSIOTHERAPY (PLASTER CASTS, LAB/PATHOLOGY)

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 medical centres, doctor's surgeries or physiotherapists involved in the application of plaster-of-paris casts to patients and/or that may have an on-site pathology laboratory, 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
Medical centres/ Doctor's surgeries - Where plaster casts are prepared or removed - Pathology laboratory on-site*.	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>).
Physiotherapists Where plaster casts are prepared or removed.	

*On-site -

For requirements for facilities such as a hospital or teaching facility, refer to *TW-GN-204 – Education Facility ~ Tertiary Institution* and *TW-GN-206 – Hospital* respectively, as typically such discharges will be Category B discharges.

Excluded substances/equipment/processes

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

- Biohazardous, medical and/or infectious waste¹. Examples of wastes are listed below. These wastes must be disposed of in accordance with the Access Canberra (ACT Health) regulations.
 - Hypodermic needles
 - Syringes
 - Instruments
 - Utensils
 - Swabs, dressings and bandages
 - Paper and plastic of a disposable nature
 - Any noticeable portion of human or animal anatomy

¹ Liquid pathological, infectious and cytotoxic wastes are prohibited except as allowed for by AS 3816 Management of clinical and related wastes.

- Disposable products including wet wipes, cleaning wipes, colostomy bags, cat litter and other products that do not comply with AS/NZ 5328
- 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

Pre-treatment requirements are dependent upon which processes are undertaken. All pre-treatment devices must be maintained and cleaned as per a set schedule.

Table 2. Pre-treatment devices

Pre-treatment Device	Details
Plaster arrestor	<u>If plaster casts are prepared/removed</u> Plaster arrestors must be provided under all sinks liable to be used for the discharge of plaster-bearing waste and should be cleaned daily. Homemade settling bowls in sinks before plaster arrestors can be useful for retaining plaster but are not sufficient on their own
Balancing pit^{1, 2}	<u>If laboratory/pathology wastewater generated</u> It must be installed so as to reduce the composition of the wastewater to less than the acceptance criteria (e.g. pH, chemicals). Icon Water can further advise following assessment of the trade waste application. The pit must be sized to accommodate the maximum flow from the process and have a flow retention of one hour. Note: Any infectious wastes must be sterilised by autoclaving before discharge to the Sewerage Network.

¹A balancing pit is only required if a general-purpose pit is not installed for other waste streams. If a general-purpose pit is installed, the laboratory waste can go through this pit.

²The discharger must provide supporting information in regard to sizing of equipment and the manufacturer's recommended maintenance schedule.

Balancing pit

Installation requirements

Location: Installation of the system must allow safe access for maintenance and inspection. The system must be installed to meet Australian Standards with respect to, but not limited to, working at heights and confined spaces. It must also be installed in a location that is accessible by maintenance vehicles to allow safe access to thoroughly clean its 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. It 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 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.

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.

Backflow-prevention: A cold-water tap must be installed within 5 metres of the separator. 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 wastewater is prevented from bypassing the pre-treatment systems 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 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 system 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*.

Other waste management

In addition to the installation, operation and maintenance of pre-treatment devices, the following discharge requirements are also applicable:

- Infectious wastes must be sterilised before being discharged into Icon Water's Sewerage Network (if approved for discharge by Icon Water based on a risk assessment)
- Chemical solutions containing small quantities of prohibited substances (if approved for discharge by Icon Water based on a risk assessment) must be neutralised prior to discharge to the sewerage network.

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. The discharge of waste from laboratory sinks must be followed by flushing with liberal quantities of water.

Housekeeping

The following general housekeeping practices must be complied with:

- The discharge of waste from laboratory sinks must be followed by flushing with liberal quantities of water
- Spills and leaks must be cleaned up using dry cleaning methods.

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

References

- *STD-SPE-P-003 Trade Waste Approval and Compliance Requirements*
- *TW-GN-204 Trade Waste Guide Note – Education Facility ~ Tertiary Institution*
- *TW-GN-206 Trade Waste Guide Note – Hospital*

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