Standard

Commercial Trade Wastewater Pre-Treatment Equipment Standard

Table of Contents

Revision details

Version No.	Clause	Description of revision
1	N/A	Original issue

Introduction

This standard outlines the minimum requirements for commercial trade wastewater pre-treatment equipment to be authorised by Sydney Water. Compliance with these standards does not preclude the use of innovative technologies or designs that exceed the specified requirements. This standard outlines the minimum requirements to be incorporated in a trade wastewater pre-treatment product to be used by commercial trade wastewater customers within Sydney Area of Operation. This standard is expected to be used by manufacturers and/or suppliers of the trade wastewater pre-treatment equipment. Manufacturing/importing a product adhering to this standard will lead to faster and cost-effective approval as a listed product.

Sydney Water makes no warranties, express or implied, that compliance with the contents of this standard shall be sufficient to ensure safe systems or work or operation.

It is the user's sole responsibility to ensure that the copy of the standard is the current version as in use by Sydney Water.

Sydney Water accepts no liability whatsoever in relation to the use of this standard by any party, and Sydney Water excludes any liability which arises in any manner using this specification.

For this standard, "Sydney Water" is a nominated person or organisation that has written authority to act on Sydney Water's behalf.

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Scope

This standard covers the trade waste pretreatment products to be used by customers in Sydney Water's area of operation. This procedure applies to the following trade waste pre-treatment products:

1. Grease arrestors 1000 L to 5000 L
2. Grease Removal devices
3. Oil Water separators < 5000 L
4. Dry arrestor pits
5. General Purpose Pits < 5000 L
6. Plaster arrestors
7. Lint arrestors
8. Solids settlement pits/Silt Arrestors
9. Averaging and cooling pits
10. Bucket traps – in sink and in floor.
11. Under Sink Pump Units

Custom designed products, products that exceed the capacity listed above, or products not in the list, are excluded from this standard, as such will not be included in the listed trade wastewater pre-treatment products published on Sydney Water website.

Copyright

Acronyms

Acronym	Definition
CPI	Coalescing Plate Interceptor
EPA	Environment Protection Authority
FFOG	Food, Fats, Oils and Grease
HSS	Hydro cyclone Separation System
VGS	Vertical Gravity Separator
WSAA	Water Services Association of Australia

General terms & definitions

Term	Definition
Competent Engineer	A suitably qualified and experienced engineer with the ability to apply knowledge and skills to achieve the intended design, construction, testing or monitoring task.
Design life	The period which the product or its component is to remain fit for its intended purpose with periodic routine maintenance and without major repairs. Trade wastewater pre-treatment products expected to last for minimum of 30 years
Sydney Water	A nominated person or organisation that has written authority to act on Sydney Water's behalf.
Supplier	A person or organisation responsible for the fabrication or manufacture and supply of products, materials, equipment and components described herein

1. Standards, Codes and Regulations

1.1 General

All equipment, materials and accessories used for the completion of the scope of work must be new. Their design and construction must be in accordance with all legal regulations and latest editions of relevant standards, codes and Sydney Water's specifications including, but not limited to those stated below.

Where no Australian Standard or Code exists, relevant International Standards, subject to Sydney Water acceptance, must apply.

Proof of compliance with a Standard or specified test may be required. Where requested, such proof must comprise a test certificate from an independent Testing Authority.

Where a standard or specification requires reference to another standard or specification and that document has been amended, replaced or superseded or withdrawn, the reference must be taken to apply to the replacement of that standard or specification. If necessary, the author of such document must be consulted for a determination of the appropriate replacement standard or specification.

1.2 Regulations

- Work Health and Safety Act
- Work Health and Safety Regulation
- Dangerous Goods Act and Regulations
- Environmental Planning and Assessment Act
- Protection of the Environment Operations Act

1.3 Standards

Stand	Document title
AS 1589	Copper and copper alloy waste fittings
AS 3500	National Plumbing & Drainage Code
AS 3996	Metal access covers, road grates and frames
AS/NZS 4494	Discharge of commercial and industrial liquid waste to sewer - General Performance requirements
AS 5200.000	Technical specifications for plumbing and drainage products – Procedures for certification of plumbing and drainage products
MP52 2005	Manual of authorisation procedures for plumbing and drainage products

1.4 Sydney Water Specifications

Sydney Water Trade Wastewater Acceptance Standard available at:
https://www.sydneywater.com.au/content/dam/sydneywater/documents/industrial-customers-acceptance-standards-and-charges.pdf

List of Analytical Methods for Trade Waste available at:
https://www.sydneywater.com.au/content/dam/sydneywater/documents/list-of-analytical-methods-for-trade-waste.pdf

1.5 Codes

WSA 201 Manual for Selection and Application of Protective Coatings Water Services Association of Australia

National Guidelines for Managing Food, Fats, Oils and Grease (FFOG) from Food Premises Water Services Association of Australia

Hazardous Manual Task Code of Practice, Safe Work Australia

2. General

2.1 Statutory regulations

All works must comply with the requirements of all federal and state laws and regulations in force in New South Wales (NSW). Where the works are subject to the control of statutory or regulatory authorities, the works must comply with the requirements of the authorities.

Technical requirements specified herein, must not be used to reduce nor remove any obligations the contractor has for health and safety of all personnel as required by the appropriate regulations.

2.2 Standards and codes

Sydney Water's Commercial Trade Wastewater Products Standard is considered the governing (ie "over-arching") standard which specifies the minimum requirements for the materials, design, fabrication, testing, and performance requirements for Trade Wastewater Pretreatment Products. All works must comply with this specification, the Water Services Association of Australia (WSAA) codes (Sydney Water editions where available) and Australian standards and codes as stated in this standard or elsewhere. If no such standard or code is nominated, the works must comply with the most relevant Australian standards and codes.

If an international or overseas standard or code is proposed in lieu of an Australian standard; a detailed assessment showing that the proposed standard or code is equivalent or superior to the relevant Australian standard or code, must be submitted to Sydney Water for acceptance.

If there is no Australian standard or code covering the subject, an international or overseas standard or code may be used, upon acceptance by Sydney Water.

As a minimum, all trade wastewater pretreatment products must comply with the following standards and codes/guidelines:

- WSAA National Guidelines for Managing Food, Fats, Oils and Grease (FFOG) from Food Premises
- AS 5200.000 - Technical specifications for plumbing and drainage products – Procedures for certification of plumbing and drainage products.
- AS3500 National Plumbing and Drainage Code
- AS/NZ 4494 Discharge of commercial and industrial liquid waste to sewer – General performance requirements.
- AS 3996 Access covers and grates
- WaterMark Level 2. This certification requires that products comply with MP52 or the Australian Plumbing Code and are certified under a program in accordance with the principles of ISO/IEC Guide 67.2004, System 1b. Certification System 1b includes testing that products samples are assessed for conformity before a certificate of conformity is issued.

3. Minimum requirements for a trade wastewater pretreatment product

A product manual is required for each pre-treatment equipment or system seeking authorisation. Multiple related equipment can be combined into a single manual, such as grease traps of identical design and construction with varying capacities. However, separate manuals are necessary if products share the same design but differ in materials, pump types, or installation (in-ground or above-ground). The product manual submitted for evaluation must be identical to the manual to be supplied with the product at the point of sale.

All Manuals must include the following information relevant to pre-treatment product seeking authorisation. Details in the manual should be in the manner and sequence as set out hereunder. If a product manual is not set out in the manner and sequence as set out hereunder, a cover page detailing the page numbers in manual where each of the assessment criteria can be found must be submitted with the manual.

A product manual is preferably to be presented as three separate volumes as follows:

- Product details and technical information
- Installation instruction
- Maintenance manual

3.1 Introduction to Product/s

3.1.1. Overview

Product manual must have overview of the product with the following details:

- product name
- model number
- size/capacity/performance rating (in kL or L/s)
- material of construction
- Installation suitability; in ground or above ground applications (or both)
- colour of all parts of the unit if polyethylene or similar (ie body, lids, filter)

3.1.2. Purpose/ application use of the Product

Product manual must clearly describe improvements, features, and benefits the product will deliver in relation to the trade wastewater pre-treatment. Such claims must be substantiated by evidence such as test results, third party verification certificate, approval by other water utilities, etc.

3.1.3. Applicability

Product manual must clearly describe the type of trade wastewater it would be able to treat or the pollutant(s) the equipment primarily can reduce from the trade wastewater. It also must clearly state the performance rating in L/s and/or the capacity in L or kL.

3.2 Supporting documents

Supporting documents must be included in the product manual for assessment of its suitability, and to facilitate the user to safely install the product and maintain and operate the product so that the intended benefits of the product can be fully achieved.

3.2.1 Specification Drawings

Detailed drawings of every component of the unit drawn to the scale must be available for review. All the dimensions in the drawings must be in millimetres. All dimensions of tanks, water levels, fittings and its position, vents and its position, etc. must me included so that the product can be correctly installed to perform as per the intended design. Sufficient details must be shown to permit accurate determination of all relevant volumes, internal and external diameters of pipes and air spaces. All components are to be drawn with thicknesses shown to scale, and indicated in text, i.e. wall 5 mm thick must not be drawn as a single dimensionless line.

3.2.2 Material Specification

Details of all materials used in construction of product must be clearly described with reference to applicable standards and any relevant patents. If the product is manufactured using concrete or concrete fibre, all interior surfaces must be coated so that the pre-treatment product structure is protected from corrosion/erosion by the trade wastewater contents and from mechanical damage during cleaning operations. If raisers are to be used as part of the product installation, they also must be coated. The protection coating must last for the anticipated life of the product in use. If the coating will not last for the life of the product in use, product manual must have details of how often the recoating is required and any relevant details for recoating application. The interior coat must last minimum of five years or equal to the period of warranty if the warranty is greater than five years

3.2.3 Engineers Certifications

All certifications must be issued by independent competent engineers. A written confirmation from a qualified electrical engineer that apparatus treating potentially flammable materials (e.g. oil/water/solids separators) are intrinsically safe must be included in the product manual. A written confirmation from a qualified structural engineer also must be included to confirm that product has been designed to withstand:

- Loads that will be imposed during installation.
- Loads that will be imposed on in-ground pits by the soil.
- Loads that will be imposed on in-ground pits by hydrostatic pressure in water charged ground when empty. This refers to resistance to deformation by side forces and resistance to being forced upwards due to buoyancy.
- Loads imposed on in ground pits by the lids and loads imposed by traffic, both pedestrian and vehicular.

- Loads imposed on above ground tanks when full.
- Loads imposed during cleaning and/or maintenance.

Where relevant, limitations to be applied or precautions to be taken during repair works should also be included in the Structural Engineer's certificate.

3.2.4 Access Covers/Lids

Full specifications for access covers to be used must be included in the product manual.

a) Minimum specifications for access covers and openings must be included are:
   - material of construction
   - dimension
   - weight
   - strength (with reference to any applicable Australian Standard)

b) Covers must comply with AS 3996 in relation to strength and edge support. Specifically, all access covers subject to pedestrian traffic must comply with the design load for Class A Covers as set out in Table 3.1, Section 3.1 of AS 3996.

c) The design of lids must be in accordance with the current Hazardous Manual Task Code of Practice, published by Safe Work Australia.

d) In-ground access covers must include installation instructions in the manual supplied to installer/purchaser. Above-ground access covers must include details of hinging and retaining in the open position for servicing.

e) Lids should not buckle under foot or vehicle traffic or be difficult or dangerous to handle.

f) Lids must not facilitate the ingress of storm water into the pit or escape of trade wastewater to the environment.

   Each lid or access cover must have the weight of the lid displayed. It must be permanently attached such that each number is no smaller than 100mm in height. Chequer plate lids to be used when pit installed in garden areas or above ground only - not in trafficable areas.

3.2.5 Venting

Any pre-treatment equipment chamber needs venting for its intended performance or have an airtight lid must have 100 mm venting provision on its body.

3.2.6 Warranties

All Trade wastewater pretreatment products must carry a minimum of 5 years of warranty on any apparatus including items used with the principal product (e.g. filters) except the mechanical and electrical components (e.g. pump for oil water separator). All mechanical and electrical components must carry minimum of 12 months warranty. The product manual must have sufficient clear details of applicable warranties. It also must

contain details of consumable or breakable items availability as per MP52 (Manual of authorisation procedures for plumbing and drainage products)

3.2.7 Compliance Plates

Robust and durable compliance plates must be fitted to each unit produced, in a location where they will remain visible after installation and legible for the life of the apparatus. Compliance plates must show:

- brand
- contact phone number of manufacturer or Australian authorised supplier
- generic title (eg. grease trap)
- model number
- volume in litres
- rating in litres/second
- serial number
- Sydney Water product authorisation number

weight of lid (if the lid is replaced, a new compliance plate is to be fitted with the weight of the new lid.)

- pump type (if applicable)
- pump serial number (if pump fitted)

In the case of the product is not big enough to attach a compliance plate (e.g. in-sink basket arrestor), manufacturer's name and the unique product ID must be imprinted on the product on a place easily visible after installation and all the above information with the title compliance plate must be published on the manufacturer's website.

Following details of the compliance plate must be included in the product manual:

- material of construction
- location where the compliance plate is installed on the pretreatment product
- size of the compliance plate
- method of attachment
- detailed example/image of the compliance plate as per MP52 (Manual of authorisation procedures for plumbing and drainage products)

3.2.8 Installation Instructions

These instructions must be detailed in a manner that would suit a first-time installer of the equipment. They are to be detailed in step-by-step format with appropriate drawings. These instructions to the exact details must be provided with the product at the point of sale. Detailed installation instructions to be included in the product manual must:

- be sufficient to explain correct installation of all applications, e.g. above ground, in ground, internal above floor, internal in floor, pumped in, pumped out.

be sufficient to explain correct installation of all connections to sewer and if required include the invert levels for connections that required to achieve the claimed working volumes/capacity of the product, ventilation, etc.

- have required information of pipework classification, sizing, lengths, clearances, supports and load bearing capacities of any structure required for proper installation. This includes additional fittings and arrangements necessary for asset installation.
- required performance ratings and connection specifications for any service connection provisions by third parties.
- indicate minimum clearance required from top of the device to height of ceiling/structure to facilitate safe servicing and maintenance of the pretreatment product (e.g. minimum clearance is more than or equal to the depth of the grease trap)
- indicate the installation/provision of an accessible cold water tap with backflow prevention device fitted, for cleaning and maintenance purposes.

3.2.9 Maintenance Instructions

Maintenance manual must have following minimum maintenance instructions for all pretreatment products:

- How to determine when maintenance is required and its frequency.
- Any mandatory replacement requirements and its frequency or instruction on how to determine such requirement.
- What routine maintenance will be carried out and how often (e.g. daily, weekly, monthly, etc.).
- What servicing, waste removal, etc. will be done.
- How the routine maintenance and servicing will be carried out.
- Details provided by listing each step, in sequence.
- Details on how the frequency for waste removal is determined.

4. Specific requirements for the individual pretreatment products

4.1 Grease arrestors

A grease arrestor system is a holding tank with flow regulating devices designed to intercept and retain most greases and solids by gravity from wastewater generated by commercial food outlets before they are discharged to a sewer network. As grease arrestors rely more on retention time and gravity to separate FOG, larger tank sizes, internal baffling, and flow routing by appropriate piping arrangement increase its performance.

Design Requirements

The technical specifications described in this section are specific requirements for passive grease arrestors which must be met in addition to the common requirements listed in Section 3.

a) Able to separate and retain Fat, Oil & Grease (FOG) and solids from wastewater by buoyancy and gravity settling without any mechanical or biological means.
b) A stilling zone before or after the inlet, or some other means of preventing turbulence in the tank to allow the separation and retention of fat, oil & grease and settleable solids.
c) Separator systems are required to have adequate cross flow ventilation to facilitate the cooling of the content in the tank and prevent the buildup of gasses.
d) Vent opening must be no less than 100 mm in diameter and able to be connected to the extended vent pipe works with the standard plumbing products locally available.
e) Must have at least 10% (of operational volume) clear volume of air space above the operational water level.
f) The tanks must be sized adequately so that the liquid depth in the tank is no less than 90 cm all the time.
g) The device must have adequate opening (minimum of 450 mm diameter) so that the device can be safely and effectively cleaned during the regular servicing and maintenance.
h) The device must have 15% of its operating volume for separated oil and grease storage and another 15% of the operating volume for settled solids storage
i) Interior surfaces of concrete and concrete fibre grease arrestor systems are to be coated so that the separator system is protected from corrosion/erosion by the waste contents and mechanical damage during cleaning. The coating must have a minimum five-year warranty.

4.2 Oil Water Separators

Oil water separator system is an enhanced gravity separator capable of removing oils & solids from wastewater. It utilises the difference in specific gravity of the components in the wastewater for separation. It facilitates the heavy solids settle out and the oil (light liquid) rise to the surface for removal. Design Requirements

Design Requirements

The technical specifications described in this section are specific requirements for oil water separators which must be met in addition to the common requirements listed in Section 3:

a. As a minimum the separator system must consist of a vented pit that has a minimum working volume (volume between high level and low level) of 500 L and a separation device (such as a Coalescing Plate Interceptor (CPI), Hydro cyclone Separation System (HSS) or Vertical Gravity Separator (VGS)), a separated waste collection tank and a non-emulsifying pump that has been specified as part of the system. Alternative separator technology may be considered.
b. Separator systems are required to have adequate cross flow ventilation to prevent the growth of mould and fungus and to prevent the build-up of gases.
c. A stilling zone before or after the inlet, or some other means of preventing turbulence in the tank containing the media.
d. flow must be prevented from channelling around, over or under the contact media (plate pack, tube pack etc) (i.e. the maximum space/gap about/around the media/plate pack must be no more than 50 % of the spacing in/through the media/plate pack)
e. the hopper sludge valve and the handle of the separator system are to be made of metal.
f. Concrete separator systems must comply with AS3735:2001 Concrete structures for retaining liquids. Written confirmation from a suitably qualified engineer must accompany the application.
g. Separator systems design of other materials of manufacture must be certified in writing by a suitably qualified structural engineer.
h. Detailed drawings must be supplied with the application.
i. Interior surfaces of concrete and concrete fibre oil water separator systems are to be coated so that the separator system is protected from corrosion/erosion by the waste contents and mechanical damage during cleaning. The coating must have a minimum five year warranty.

4.3 Dry basket arrestor (in-sink and in-floor)

A dry basket arrestor/trap is installed as either an in-sink fitting, or in-floor fitting and will ultimately be connected to standard sized drainage that must comply with AS/NZ3500. It is to capture solids and fibrous material from the wastewater that has drained from the sink. Screened wastewater may then pass through to further pre-treatment equipment such as a grease trap prior to discharge to the sewer.

The technical specifications described in this section are specific requirements for dry basket arrestors which must be met in addition to the common requirements listed in Section 3:

a. A fixed screen must be in place or fail-safe cut off mechanism must be used. The fixed screen and the fail-safe cut off mechanism must be robust to prevent its removal, intentional damage, or bypass.
b. A removable basket must be supplied for use in conjunction with the fixed screen or fail safe cut off mechanism.
c. The removable basket should have a handle or other grip to allow easy removal from the equipment.
d. The size and shape of the basket must allow easy and safe removal of trapped solids by either gloved hand or by bottle brush.
e. The design of the top of the basket and apparatus should be such that the wastewater flow will be into the basket rather than down the side of the basket.
f. The hole size for both the removable basket and fixed screen must not be greater than 4 mm (maximum aperture size).
g. The size of the basket must be significantly greater than a standard sink strainer and be suitable to capture food solids generated in commercial kitchens. The basket should hold at least 0.2 L of strained material.
h. Removable basket has sufficient capacity and openings to allow the wastewater flow to the drain as the strained material accumulate within the basket.
i. The mode of operation of the in sink dry basket arrestor shall be such that it can be easily mastered by kitchen hands.
j. The flow rate through the removable basket in-situ with the fixed screen must comply with AS 1589-2001 minimum waterway area (mm^2). The minimum waterway shall be:
   a.1. not less than the area specified in Table 1; or
   a.2. where the grating has a waterway less than the identified in Table 1 the flow rate is to be greater than the maximum flow rate from a tap outlet, as specified in AS/NZS 3500 Set (Parts 0-4):2021

Table 1

Nominal Size (DN)	Minimum waterway area (mm^2)
32	250
40	450
50	800
65	800
80	800
90	1000
100	1200
150	2000

4.4 Under Sink Pump unit

The technical specifications described in this section are specific requirements for under sink pump unit which must be met in addition to the common requirements listed in Section 3:

a) The operational capacity of the equipment must not exceed 40L
b) The holding tank must have a 50 mm or larger vent connection provision

4.5 General purpose pit

The technical specifications described in this section are specific requirements for general purpose pit which must be met in addition to the common requirements listed in Section 3:

c) Must be designed to allow passive separation of settleable solids and small amount of light liquids.
d) Must have inspectable surge baffle to provide stilling zone at the inlet to prevent turbulence in the tank.
e) Must have inspectable double baffle to trap contaminants by gravity separation based on their densities.
f) Must have adequate opening so that the device can be safely and effectively cleaned during the regular maintenance.
g) Interior surfaces of concrete and concrete fibre general purpose pits are to be coated so that the pit is protected from corrosion/erosion by the waste contents and mechanical damage during cleaning. The coating must have a minimum 5 year warranty

4.6 Plaster arrestors

The technical specifications described in this section are specific requirements for plaster arrestors which must be met in addition to the common requirements listed in Section 3:

a. The plaster arrestors must have minimum of 72 L which is adequate to serve a single sink

4.7 Lint arrestors

The technical specifications described in this section are specific requirements for lint arrestors which must be met in addition to the common requirements listed in Section 3:

a. A fixed screen must be in place or fail-safe cut off mechanism must be used. The fixed screen and the fail-safe cut off mechanism must be robust to prevent its removal, intentional damage, or bypass.
b. A removable basket must be supplied for use in conjunction with the fixed screen or fail safe cut off mechanism.
c. The removable basket should have a handle or other grip to allow easy removal from the equipment.
d. The aperture size for both the removable basket and fixed screen must not be greater than 4 mm.
e. Removable basket and fixed screen must be constructed with a material that will withstand high temperature and extreme ranges of pH.

4.8 Solids settlement pits/Silt Arrestors

The technical specifications described in this section are specific requirements for solid settlement pits and silt arrestors which must be met in addition to the common requirements listed in Section 3:

a. Must be designed to allow passive separation of settleable solids and small amount of light liquids.
b. Must have inspectable surge baffle to provide stilling zone at the inlet to prevent turbulence in the tank.
c. Must have inspectable double baffle to trap contaminants by gravity separation based on their densities.
d. Must have adequate opening so that the device can be safely and adequately cleaned during the regular maintenance.
e. Must have adequate opening so that the device can be safely and adequately cleaned during the regular maintenance.

4.9 Averaging and cooling pits

The technical specifications described in this section are specific requirements for averaging and cooling pit which must be met in addition to the common requirements listed in Section 3:

a. Must be designed to promote mixing of wastewater without any bypass before discharge (e.g. inlet and outlet design) and an explanation of how the mixing effect will be achieved must be included in the product manual.
b. Must have inspectable surge baffle to provide stilling zone at the inlet to prevent turbulence in the tank.

c. Must have inspectable double baffle to trap contaminants by gravity separation based on their densities.
d. Must have adequate opening so that the device can be safely and effectively cleaned during the regular maintenance.
e. Cooling pits intended to be used for the for purpose of cooling the boiler blowdown made out of concrete must not have steel reinforcement/components to prevent corrosion and the loss of structural integrity in its lifetime
f. Interior surfaces of concrete cooling pits are to be coated with high temperature resistant coatings to withstand corrosive environments in high temperature so that the pit is protected from corrosion/erosion by the waste contents and mechanical damage during cleaning. The coating must have a minimum 5 year warranty
g. Must have DN100 mm vent pipe provision to assist with the cooling of the water within the pit.

Ownership

Ownership

Role	Title
Group	Engineering & Technical Support
Owner	Norbert Schaeper, Engineering Manager, Engineering and Tech support
Author	Para Parameshwaran, Process Engineer
BMIS Number	D0002537

Change history

Version No.	Prepared by	Date	Approved by	Issue date
Final Draft			-	
1.0	Para Parameshwaran	15 October 2025		

Appendices

Appendix	Title
A	Trade Waste Application Form
B	Trade Waste Approval Certificate Template and Terms and Conditions
C	Trade Waste Product Review Checklist

Appendix A

Online Application Apply to list pre-treatment equipment

Appendix B – Approval Certificate

Product Type: Grease Arrestor		
Applicant:	**Attention:**	
Postal address:	**Web:**	
Business Phone	**Email:**	
Manufacturer:	**Product Model No:**	
Address:	**Design Capacity:**	
Date of Approval	**Validity Period**	Five (5) years from the Date of Approval

Approved Documents:

1.

2.

Delete section below depending on type of product

(If standard passive grease arrestor):

These products are approved for use in the separation of fat, oil and grease (FOG) generated by trade waste generating industries.

(If under sink grease interceptor):

These products are NOT approved for sole use in the separation of fat, oil and grease (FOG) generated by commercial trade waste generating industries.

These products are optional pre-treatment devices which are only permitted for use upstream of dedicated grease arrestors approved by Sydney Water.

Use of this device does not allow for reduction in sizing of downstream grease arrestors.

The approval certificate applies to pre-treatment products of the following sizes:

Approval Number	Make	Model	Material			Max Capacity	Pump Type
			Tank	Lid	Tubes		

Product description

INSERT DESCRIPTION FROM SUPPLIERS DOCUMENTATION – SAMPLE BELOW

XYZ Product is a Pro-Active Mechanical Grease Trap operating in real time, taking advantage of waste thermal energy present in effluent being discharged from commercial kitchens to remove emulsified FOGs, particularly saturated animal fats before they solidify. XYZ Product removes and dewaters organic solid matter

XYZ Product incorporates the following extraction principles:

- recirculates grey effluent internally pulsing 5 Min on 5 min off, to promote FOG removal and to assist in removing “floaty” dairy products. This process avoids the usage of potable water
- a vortex flow controller to regulate flow without causing an impediment to entrained wastes.
- touchless sensing methods (n the process of patents being applied for), to detect FOGs by innovative means and in conjunction with a PLC controller transfers the FOGs to the main XYZ Product unit for safe removal. Grease is prevented from solidifying before safe removal.
- All XYZ Product units incorporate zero maintenance FOG removal means to provide maximum contact with effluent internally. The Removal Means is pulsed 5 Min on 5 min off, to promote greater efficiency of FOG removal.

Conditions of approval

1. The product shall be supplied with manufacturer’s installation instructions and recommended procedures for operation and maintenance.
2. The product shall be installed by a suitably qualified plumber and strictly in accordance with the manufacturer’s written instructions and the Plumbing Standards, with particular emphasis on the following:
   a) Ventilation pipework must not clash with any moving parts of the grease arrestor including risers. In addition to all relevant plumbing standards, ventilation pipework must include inspection openings or similar to allow cleaning during maintenance.
   b) A Trade Waste Sampling Point (TWSP) must be installed according to the Sydney Water requirements.
   c) The outlet pipe must be plumbed via a tundish that is separate and upstream to the TWSP.
3. This approval certificate is not a stand-alone document. The following requirements also apply, and must be read in conjunction with relevant standards.
   a) All special requirements from all other water utilities referred to in the Approved Documents.
4. A maintenance contract is to be in place to ensure the ongoing reliability of the product.
5. Sydney Water must be notified within fourteen (14) days upon installation of the product

6. The use of emulsifying agents upstream of the product must not occur. Such instructions must be noted on operating documentation.
7. The product chosen must be suitably sized to avoid surge conditions.
8. Clear access for the purposes of maintenance or servicing of the pre-treatment product must always be maintained.
9. This approval certificate is not an endorsement of the product by Sydney Water, and no claim shall be made in advertising, promotion, or other manner to the effect.
10. Sydney Water accepts no responsibility for the effective operation, performance, or efficiency of the product. This approval is not an engineering approval or structural endorsement.
11. The proponent of the approved product must formally seek a request for re-approval of the product no later than three (3) months before the assigned Validity Period has expired from the Date Issued of this approval certificate.
12. Sydney Water reserves the right to vary any requirements at any time. Any application of this condition normally occurs after consultation with the manufacturer, supplier and end business user connected to Sydney Water's sewer.
13. Sydney Water shall be notified in writing if the product is withdrawn from sale.
14. The proponent of the approved product accepts that the information provided in this document shall be made available to public.
15. Product approval shall be suspended by formal notice from Sydney Water to the applicant where any of the following conditions (a)-(h) are not met (following suspension, the product listing will then be immediately removed from the Sydney Water website):
    - **a)** Any change, or failing to notify Sydney Water of any change, to the product design or details as contained in the Approval Documents listed below.
    - **b)** If there is a breach of the Special Conditions.
    - **c)** The assigned Validity Period has expired from the Date Issued of this approval certificate.
    - **d)** The product shall be manufactured in accordance with Sydney Water's requirements at the time of approval.
    - **e)** The product shall be manufactured to comply according to the details noted in the referenced drawings below, in addition to any further details provided by the proponent when seeking this approval.
    - **f)** The product supplied for use in Sydney Water's area of operations shall comply with the requirements shown on this approval certificate. Sizes, classes, lengths or other product variables which are available with the product, but which are not approved as listed on this approval certificate shall not be offered by the supplier for use in Sydney Water's area of operations.
    - **g)** All discharges to sewer associated with this product must not exceed Sydney Water's Trade Waste Acceptance Criteria.
    - **h)** If this certificate has been issued to the manufacturer of this product then it is the responsibility of the manufacturer to ensure all current and future suppliers / vendors of this product are provided a copy of this approval certificate.
    - **i)** Notification to Sydney Water within 14 days by Applicant (of the product where any of the following conditions occur:
        i. The product is manufactured with either different materials, methods of manufacture, location of manufacture, source of raw materials, component subcontractors or models to that at the time of approval.
        ii. The ownership of the primary manufacturer or any subcontractors is varied from that at time of approval.
        iii. The standards and/or specifications to which the product was required to comply with at the time of approval have been amended or revised.

iv. The product has been found to sustain damage or provide unsatisfactory performance on occasions of number considered excessive by Sydney Water, when handled, stored, assembled, or installed in accordance with the supplier's or manufacturer's written instructions.

Authorising person:

Date issued:

Authorising person	Position, division	Date

Appendix C – Approval Checklist

Minimum requirements for Trade Waste Product Manual

This checklist is designed for E&TS team members to assess documentation and drawings provided by bucket trap pre-treatment suppliers.

With regards to any product manuals, please note:

- Several related apparatuses may be included within a single manual (i.e., bucket traps of the same design and construction).
- Different volumes of the same bucket trap may be included in a single manual.
- A separate manual is required if the same design is constructed with different materials.

Bucket Trap Definition:

A dry basket arrestor/trap is installed as either an in-sink fitting or in-floor fitting and will ultimately be connected to standard sized drainage that must comply with AS/NZ3500. The dry basket arrestor/trap will have a fixed screen or safe shut off mechanism used in conjunction with a removable basket. It is to capture solids and fibrous material from the wastewater that has drained from the sink. Screened wastewater may then pass through to further pre-treatment equipment such as a grease trap prior to discharge to the sewer.

Introduction to Product/s

Requirements for Product Manual	Sufficient Information Provided?(Y/N)
Product name	
Model number	
Size/s	
Material of construction.	
Applications for which it is intended.	
Improvements, features and benefits claimed to be delivered by the product.	

Application of Product

Requirements for Product Application	Sufficient Information Provided?(Y/N)
Describes satisfactorily the purpose and location/use of apparatus	
Performance rating for each product in litres per second.	

Product Specifications

Requirements for Specifications	Sufficient Information Provided?(Y/N)
Detailed installation requirements for product including structural, pumping and any other plumbing arrangements.	
Requirements all installation of fittings and arrangements to be undertaken by a suitably qualified plumber.	

All dimensions for each product	
Operation and maintenance requirements (daily, weekly, monthly and yearly) as well as any mandatory replacement requirements (maintenance details may be supplied in a separate manual).	
Supplier notified of compliance requirements with relevant WSAA/Australian Standards including compliance with: • AS 1589-2001 - Copper and copper alloy waste fittings • AS 5200.000-2006 - Technical specification for plumbing and drainage products • AS 3996:2019 - Access covers and grates • AS/NZS 3500 Set (Parts 0-4):2021 - Plumbing and drainage Set • AS/NZS 4494-1998 - Discharge of commercial and industrial liquid waste to sewer - General performance requirements • MP 52-2005 AMDT 1:2005 - Manual of authorization procedures for plumbing and drainage products • Australian Building Codes Board WMTS-040:2021 - Waste pipe connection outlets and gratings, separate or integral	

Design Requirements

Requirements for Design	Sufficient Information Provided?(Y/N)
A fixed screen must be in place or fail-safe cut off mechanism used. The fixed screen and the fail-safe cut off mechanism must be robust to prevent its removal, intentional damage or bypass.	
A removable basket must be supplied for use in conjunction with the fixed screen or fail safe cut off mechanism	
The basket should have a handle or other grip to allow easy removal from the apparatus.	
The design of the top of the basket and apparatus should be such that the wastewater flow will be into the basket rather than down the side of the basket.	
The flow rate through the removable basket in-situ with the fixed screen must comply with AS/NZS3500 Table 1 Minimum waterway area (mm2)	
The hole size for both the basket and fixed screen must not be greater than 4 mm.	
The size of the basket must be significantly greater than a standard sink strainer and be suitable to capture food solids generated in commercial kitchens. The basket should hold at least 0.2 L of strained material.	
The size and shape of the basket must allow easy and safe removal of trapped solids by either gloved hand or by bottle brush.	
In sink basket traps do not require an engineering certificate.	
The number and size/dimension of the holes is required for both the fixed screen and the removable basket (4mm maximum hole opening)	

Additional Product Information

Requirements for Product Information	Sufficient Information Provided?(Y/N)
Approval from other water utilities – Supplier has provided approval documentation from other water utilities (optional)	
Access to a website link - Supplier has provided a link to relevant documentation available for each asset on their company website? (optional)	

Product Performance Requirements

Requirements for Performance	Sufficient Information Provided?(Y/N)
Does the manual provide for a removable basket?	
Does the manual provide details on how the basket is removed (twist, lift out, etc)?	
Does the manual provide details/drawings of a fixed screen below the removable basket?	
Are there sufficient clear details of maintenance and cleaning instructions?	
Does the manual provide for the floor grate to be easily removed for maintenance	
Does the maintenance of the removable basket provide for OH&S guidelines (i.e. do not leave the floor grate in the unlocked/open position at any time)	
Are all other details addressed applicability, specification drawings, materials of construction, warranties, relevant standards, ~~backflow~~, etc	

Specification Drawings

Requirements for Drawings	Sufficient Information Provided?(Y/N)
Detailed drawings of every component of the unit.	
All drawings to scale.	
All dimensions in millimetres.	

Material Specifications

Requirements for Material Specification	Sufficient Information Provided?(Y/N)
Details of all materials used in construction of apparatus.	
Reference to any applicable standards.	
Reference to any relevant patents.	

Compliance Plates

Requirements for Compliance Plates	Sufficient Information Provided?(Y/N)
Sample image of compliance plate provided with all relevant details?	
Robust and durable compliance plates must be placed on each unit produced, in a location where they will remain visible after installation and legible for the life of the apparatus.	
The identification of the manufacturer must be stickered/etched/stamped on both the removable basket and the lid or grate of the dry basket trap. (This could be in the form of a company stamp or logo. However it must be mentioned in the manual so SWC can easily identify the product after installation).	
Compliance plates must show; • brand (e.g. Mascot) • contact phone number of manufacturer • generic title (e.g. DBA) • model number • serial number • SWC product authorisation number	

Installation, Maintenance and OH&S

Requirements for Installation, Maintenance and OH&S	Sufficient Information Provided?(Y/N)
Installation Detailed installation instructions sufficient to explain correct installation of • all applications, e.g. in-sink, in-floor	
Maintenance How to determine when maintenance is required. • What routine maintenance will be carried out. • What servicing, waste removal, etc. will be done.	

Related Documents

Parent document number	Parent document title
D0002137	Trade Waste Supplier Approval Standard Operating Procedure