

Trade Waste Requirements

Installation of Electromagnetic Flow Meters

1. When Electromagnetic Flow Meters are to be installed.

Customers that discharge in excess of 1000 kL/annum (4 kL/day)

- All Trade Waste customers that discharge (on average) greater than 1000 kL per annum (4kL per operational day) or have highly variable waste characteristics or concentrated waste streams¹ or seasonal variance etc are required to install an electromagnetic flow meter on the outlet side of the trade waste treatment apparatus.

This applies to both new customers and existing customers, where a revision of the Trade Waste Agreement has identified this additional requirement.

Customers with Alternative Water Supplies or Imported Liquids

- All Trade Waste customers that have an alternative supply (bore water, rain water, ground water, surface water etc) are required to install an electromagnetic flow meter on the outlet side of the trade waste treatment apparatus.
- All Trade Waste customers that import liquid (dairy whey, animal excrement, effluent, re-use water, brine, water in raw materials etc) are required to install an electromagnetic flow meter on the outlet side of the trade waste treatment apparatus.

Exemption

A formal request for exemption from installation of an electromagnetic flow meter MUST be approved, at the discretion of the Manager – Trade Waste, South East Water Corporation.

2. How Electromagnetic Flow Meters are to be installed.

- Minimum requirement for measurement of Trade Waste discharge is an Electromagnetic Flow Meter ('magflow').
- No ultrasonic, paddlewheel, displacement, bubbler, weir or associated meters that include internal mechanisms as a means of measurement will be accepted for measurement of Trade Waste discharges.
- These are minimum installation requirements and the nominated installer shall exercise due care and consideration of the manufacturer's installation requirements.
- The flow meter must have a 4-20Ma output.
NB: It is likely that multiple electrical devices including data loggers, telemetry instrumentation and auto sampling units will be connected to the flow meter concurrently on either a permanent or temporary (ad hoc) basis. Hence, multiple connection points should be available.
- The totaliser read-out shall be configured to display 'kilolitres' (1kL = 1000L) and be located in such a manner to enable unrestricted meter reading ability.
- Access to/around the flow meter is required for removal / maintenance / replacement.
- The flow meter shall have a non-resettable totaliser.
- A 'tamper proof' electrical connection is required to ensure the flow meter remains 'on' at all times.

¹Refer to following SEW Documentation:

SEWater : Trade Waste Charges Brochure

http://www.southeastwater.com.au/SiteCollectionDocuments/Business/Trade-Waste/Trade_Waste_Charges.pdf

SEWater : Statement of Approved Acceptance Criteria

<http://www.southeastwater.com.au/Business/TradeWaste/Pages/TWAcceptanceCriteria.aspx>

- 2.9 The 'bore' of the flow meter is to be immersed in liquid at all times. This shall be achieved by recessing the flow meter within the drain as indicated in figure 1.
- 2.10 To minimise turbulence through the flow meter bore for accurate reading, a clearance of 5x the pipe diameter both upstream and downstream of the unit is required as indicated in figure 1, ie. 100mm pipe diameter = 500mm 'straight' run on either side of the flow meter before the installation of any bends / valves / sample ports etc.
- 2.11 Appropriate venting of the piping assembly is required to prevent siphoning as indicated in figure 1.
- 2.12 The flow meter shall be adequately braced to prevent vibration to reduce the risk of measurement and recording errors.
- 2.13 The flow meter should be calibrated from the factory, however a 'Verification Certification' is required to be undertaken by a suitably qualified technician every twelve months. The Verification Certificate must be forwarded to South East Water, no later than 14 days thereafter.

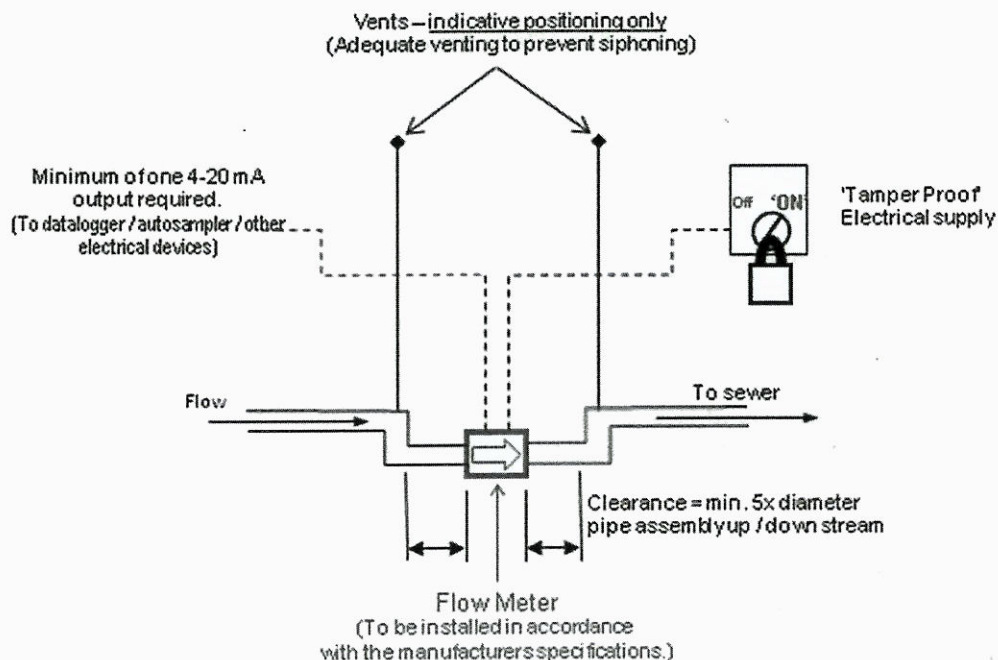


Figure 1.

For further information please contact South East Water, Trade Waste on telephone 9552 3662, facsimile 9552 3673, or email tradewaste@sew.com.au