

Self Monitoring

Trade Waste Guideline No. 36

INTRODUCTION

SA Water has established the Standards of Acceptance of Liquid Waste to Sewer, to ensure

- The safety of sewer maintenance personnel
- To safeguard the sewerage system against corrosion and damage
- The protection of the sewerage treatment system from inhibitory substances and
- The protection of the environment.

All waste water, discharged to the sewer, must comply with the [Standards of Acceptance of Liquid Waste to Sewer](#) or as specified in individual [Trade Waste Discharge Permits](#). Waste water compliance will be assessed from time to time as part of routine audits by SA Water. An ongoing self monitoring program is also specified as a condition in individual trade waste discharge permits;

- Where non-complying discharge quality/quantity from a site could pose a significant risk to SA Water, or
- Data relating to volume and load based charges or other purposes is required.

Results from electronic monitoring instruments, field tests, grab or 24-hour composite samples may be used (as appropriate) to assess compliance. Results from analysis of composite samples are routinely used for charging purposes.

In all instances, it is important that the standard of self monitoring is maintained at a high level, the protocols specified in individual trade waste discharge permits are followed and the monitoring data provides a good and fair representation of discharge performance. Companies may use their own staff or a third party to carry out self monitoring. SA Water reserves the right to check whether this is correctly carried out. Equally, a company may satisfy itself that SA Water is correctly carrying out this function, where the company has engaged SA Water to do this work on its behalf.

This guideline sets out the usual protocols that are required.

ELECTRONIC MONITORING

- Electronic monitoring may be used to assess parameters on an ongoing basis, such as flow, pH, temperature, conductivity and turbidity. These monitoring devices may also be coupled to equipment such as audible/visible alarms and shut off valves.
- Data must be accessible by SA Water at all times (including ad-hoc update requests) via SMS command or internet, and be viewable in the form of a trend chart, or downloadable for interpretation in CSV or similar generally useable format without the need for specific proprietary software.
- A variety of systems are capable of interacting with the flow meter to provide this capability. Recorded data is automatically downloaded to data storage and retained for a minimum of two years.
- Routine calibration of instruments, cleaning of sensors or other servicing work is required, to maintain monitoring integrity.

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Further information
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SAMPLING

Sampling protocols are based on the principles set out in AS/NZS 5667 Water Quality – Sampling Parts 1 and 10: 1998. In particular;

- The type and size of sample container(s) and sample preservation requirements should be confirmed with the laboratory prior to sampling.
- Adequate safety precautions should be taken when collecting and handling waste water samples.
- All waste water samples to be analysed will, unless otherwise indicated, be collected at the outlet of the waste water pre-treatment system prior to mixing with any “domestic” sewage.
- Waste water not affected by pre-treatment processes will be sampled at the source, to avoid dilution with other waste water.
- Sub-samples comprising the composite sample should be taken on a flow-proportional basis using a flow meter/sampling device. Where this is not possible, manual or automatic time-based sampling will be used.
- The location, the date and time of sampling are accurately recorded.
- Samples are effectively preserved during collection and while awaiting analysis, to maintain their integrity.
- Samples should be delivered to the laboratory as soon as practicable and must be within the designated maximum holding timeframes to ensure valid results.
- Discharge loadings used to determine [Trade Waste Charges](#) (where appropriate) will be calculated from composite samples representing the usual/ongoing discharge for the period. Sample frequency and duration is dependent on individual site conditions.

LABORATORY REQUIREMENTS

- Samples are to be analysed using methods described in “Standard Methods for the Examination of Water and Waste water” published by APHA, AWWA and WEF, or as specified or agreed to by SA Water.
- The laboratory undertaking the sample analyses must be NATA registered for each parameter being analysed.
- Records are to be kept for 2 years and are to be made available to SA Water on request.
- All analysis costs are to be borne by the Company.

COMPANY RESPONSIBILITIES

- The Company will forward all sample results to the Trade Waste Branch as soon as practicable. SA Water may request additional sampling and further investigation if the sample results show that the waste water discharge fails to comply with the [Standards of Acceptance of Liquid Waste to Sewer](#) or individual limits set in the Trade Waste Discharge Permit.
- If requested, a duplicate sample split shall be provided to the Corporation for independent analyses.
- SA Water may take samples and conduct analyses in parallel with regular self monitoring to verify results.

ADDITIONAL INFORMATION

[Trade Waste General Policy.](#)

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