

Approval of Basic Pre-treatment Products

Trade Waste Guideline

Reviewed: 2/06/2016

Introduction

Most trade waste discharges from non-complex activities (such as retail food services and motor vehicle maintenance providers) can be effectively pre-treated by basic devices of the appropriate size and type. Unsuitable or ineffective products increase the risk to SA Water's sewerage systems and can result in expensive remedial works for our customers.

SA Water requires the use of approved products, where basic pre-treatment is required as a condition of approval to discharge trade waste.

In SA Water's experience, the use of biological additives is not an alternative to servicing grease arrestors (pumping out of accumulated contaminants), but may in some instances compliment their operation. However, their indiscriminate or improper use can produce wastewaters of unacceptable quality.

This guideline sets out the process by which manufacturers or vendors of this equipment can obtain approval for their product(s). It also covers the approval process for additives, which are sometimes used in association with basic pre-treatment devices.

This guideline does not apply to the more sophisticated pre-treatment systems as used in larger, industrial operations, which are often customised to meet the individual customer's needs.

Our *Approved Basic Pre-treatment Products* Fact Sheet and *Biological Additive Products* Factsheet are both available on SA Water's website www.sawater.com.au or by phoning the Trade Waste Branch on (08) 7424 1336.

Definitions

Basic pre-treatment device is a flow-through device which traps contaminants by simple physical separation method(s), such as screening, settling or floatation. Examples are silt traps, grease arrestors, settling pits and coalescing plate separators.





Additives – organisms or products of organisms (such as enzymes, natural or mutant bacteria), or odour control compounds designed to be added to a basic pre-treatment device, to enhance its performance.

Evaluation procedure

The applicant provides SA Water with details of the basic pre-treatment product(s) to be evaluated, either by email to tradewastebranch@sawater.com.au or by post to

SA Water Corporation GPO Box 1702 ADELAIDE SA 5001

Attention: Trade Waste Branch

An application form is available online: Basic Pre-Treatment Application form

Any existing approvals or certifications can be communicated to SA Water including any supporting documentation or data.

SA Water may also require performance testing at one or more suitable customer sites in SA Water's areas of operation, to verify claimed performance if we believe that this has not been adequately demonstrated within the application. This testing will form part of the evaluation process and will directly affect its outcome.

Sites for these trials, covering a range of customer activities for which the pre-treatment device or additive is suitable, are agreed between the applicant and SA Water. For additive trials, the selected pre-treatment devices must have a minimum capacity of 1,000 litres, a history of routine maintenance and be operating within their design capacity.

We will negotiate the sampling/observation program with the applicant, based on individual site conditions.

SA Water will carry out the sampling and analysis. Evaluation of the product effectiveness will be based on the laboratory results and observed performance. Sample results must support observational results and vice versa. Additional testing might be necessary to adequately validate product effectiveness.

For all applications, we will also apply our own evaluation criteria, which include:

- The product must not adversely impact our sewerage systems, treatment processes, our ability to meet our treatment end product specifications, or the health and safety of our workers.
- The level of initial customer support and ongoing technical support for the product must be adequate across SA Water's areas of operation.
- The use of an additive must not significantly increase the level of one or more contaminants in the trade waste discharge, while targeting another.

Approval

SA Water will discuss the evaluation findings with the applicant and give an opportunity for making any alterations, or providing further data, before reaching its decision. Formal notification in writing to the applicant of its decision will advise whether the application is approved and whether any limitations or conditions apply, or if it has been rejected. Where the approval is limited or conditional, or has been rejected, SA Water will give its reasons for these outcomes.





SA Water's approval is for the specific product that has been evaluated. It does not extend to similar products, or a product that has been altered in any significant way that might affect its performance.

SA Water's approval for the use of a particular biological additive will be on the following conditions:

- Approval is limited to the specific product found to be successful. The additive
 concentration, dosing program and equipment must be exactly the same as was used in the
 successful trial.
- During the interim twelve month approval period, the biological additive supplier/agent will
 provide SA Water with names and addresses of all new sites within seven days of customers
 agreeing to its use.
- SA Water will advise each customer of a reasonable servicing interval for their pre-treatment device, based on experience gained during the trial. The suitability of the servicing interval will be assessed as part of SA Water's usual site audit function.
- SA Water may randomly audit and sample the discharges from any number of customer sites using the product, to assess ongoing compliance.
- Providing all requirements have been met during the interim twelve month approval period, SA Water will negotiate conditions for a full approval with the additive supplier/agent.

SA Water reviews basic pre-treatment product approvals every five years, to ensure that they continue to provide acceptable performance across the intended range of applications. However, in exceptional circumstances where SA Water reasonably believes that a basic pre-treatment product has significantly failed to perform acceptably, or due to circumstances beyond SA Water's control, it may suspend or revoke the approval.

Associated costs

The applicant bears the cost of evaluation by SA Water's on-site trials. These can include, but may not be limited to sample analysis costs and labour costs for onsite visits.

SA Water will provide an estimate of its costs as part of initial negotiations. However, the final cost may vary according to the degree of success and the extent to which the trial may be extended or sampling varied.

Should the accounts for services rendered by SA Water to the applicant fall into arrears at any time, SA Water may immediately suspend the trial process upon giving written notice to all involved parties.

The cost of servicing pre-treatment units lies with either the trade waste discharger or the applicant. An arrangement between these two parties must be established prior to commencement of the trial.

Additional information

- Restricted Wastewater Acceptance Framework
- Approved Basic Trade Waste Pre-Treatment Products factsheet
- Approved Biological Additives factsheet



