

# 1 Background

South Gippsland Water (SGW) is a statutory Corporation with water supply and sewerage responsibilities conferred on it by the *Water Act 1989*. In addition to SGW's role of providing water supply, sewerage services, recycled water, and biosolids reuse, SGW also provides a trade waste service to its customers. SGW provides water and wastewater services in an area of 4,000 square kilometres that extends from Wonthaggi in the West, to Yarram in the East. SGW's service area incorporates parts of Bass Coast, South Gippsland, and Wellington Local Government Areas.

This procedure aims to promote the effective and efficient management of trade waste for the protection of the health and safety of SGW's staff and the public, the environment and SGW's infrastructure and treatment processes. This procedure plays a pivotal role in promoting the sustainable use of resources by minimising waste and facilitating the use of recycled water.

SGW seeks to establish a relationship of trust with trade waste customer's and encourage cleaner production, waste minimisation, fit for purpose use and water conservation using the philosophy of the Victorian EPA's Waste Hierarchy in order to progress towards sustainable development. This can only be achieved through the provision of a sound and affordable trade waste disposal service conveyed via a reliable sewer network and effective wastewater treatment plants.

SGW's objective is to encourage the establishment of appropriate sustainable businesses within commercial and industrial precincts.

This procedure will operate under the auspices of SGW's Trade Waste Management System ensuring the principles of Occupational Health & Safety, Quality and Environmental Management are applied to trade waste governance.

# 2 Purpose

This procedure has been implemented to outline the Corporation's responsibilities in providing a sustainable working relationship with trade waste customers, and to ensure compliance with relevant regulatory authorities.

This procedure outlines the terms and conditions, fees and charges under which the Corporation will accept trade waste.

#### 3 Definitions

For the purpose of this procedure only, the following shall mean:

**EPA:** Environment Protection Authority. **ESC:** Essential Services Commission.

SGW: South Gippsland Water.

Trade Waste: liquid waste generated from any industry, business, and trade or manufacturing

process but does not include domestic wastewater, stormwater or unpolluted water.

**WWTP:** Wastewater treatment plant.



#### 4 Procedure

#### 4.1 General

Trade Waste has been defined as the liquid waste generated from any industry, business, and trade or manufacturing process but does not include domestic wastewater, stormwater or unpolluted water, the *Water Act 1989* describes trade waste as:

- a) Any waterborne waste (other than sewage) which is suitable, according to the criteria of an Authority, for discharge into the Authority's sewerage system;
- b) Any other matter which is declared by a by-law made under this Act to be trade waste.

SGW has adopted the principals of ecologically sustainable development which can be very broadly defined as a development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs.

In particular, SGW is committed to improving the efficiency with which resources are used and to minimise the impact of trade waste on its system for the benefit of the community and the environment.

By comparison to domestic waste, trade waste exerts a greater demand on the sewerage system and provides a greater pollution load for the treatment plants to manage. Trade waste also presents risks to sewer maintenance personnel and if inappropriately managed can compromise SGW's regulatory compliance position.

SGW operates eleven sewerage systems, each having its own transfer and treatment system responsible for managing a varying hydraulic and pollution load profile. The dischargers in each of these catchments are predominantly residential and commercial with some industrial customers. SGW has established several beneficial reuse schemes, and is looking to further develop these.

SGW's Sewerage Systems were primarily designed to accept domestic sewage from residential and commercial properties which generate and discharge a predictable wastewater strength and quality.

This procedure provides industrial developments with the opportunity to augment existing SGW infrastructure at its cost and secure capacity for the processing of its waste. This would be subject to the wastewater being treated by conventional sewage treatment processes.

This procedure along with *PTW-001 Trade Waste Policy* has been adopted by SGW to achieve its objectives and to identify SGW's requirements for industry and the wider community in the acceptance and management of Trade Waste.

### 4.2 Objectives

SGW's primary objective is to operate and maintain a sewerage system to service residential, commercial and light industrial businesses. The sewerage system was designed many years ago to carry, predominantly, domestic waste water including sewage, which is of a predictable quality.

Where spare capacity exists beyond residential growth, or where capacity constraints are experienced and industrial developments are prepared to pay the cost of augmentation, SGW will offer a liquid trade waste disposal service.



### SGW's Trade Waste objectives are:

- 1) To protect the safety of its personnel and the general public.
- 2) To ensure that waste permitted into the sewer can be treated by its treatment processes and subsequently comply with any Environment Protection Authority (EPA) licence conditions, before discharge to the environment.
- 3) To protect SGW's assets from unsafe or unsuitable substances.
- 4) To encourage waste minimisation amongst its trade waste dischargers.
- 5) To operate the trade waste business in a cost effective manner and recover the true cost of accepting, treating and disposing of Trade Waste discharged to the sewerage system, as well as providing financial incentives for waste minimisation.
- 6) To ensure that the waste accepted to the sewerage system does not limit the ability of SGW to reuse biosolids or treated wastewater.

### 4.3 Legislation and guidelines

### 4.3.1 State Legislation

Victorian Regional Water Corporations are responsible for the management of trade waste under the Water Act and associated By-laws. The *Water Act 1989* prohibits the unauthorised discharge of trade wastes, other than domestic sewage, into the sewerage system. This *Act* ensures that producers of trade waste in Victoria obtain approval from their Local Water Corporations to discharge their trade waste to the sewerage system.

The Water Act 1989 along with SGW's Trade Waste By-Law provides SGW with the legal power to manage trade waste discharges so that they can then effectively ensure compliance with all requirements under the EPA Licence. The Act empowers SGW to make by-laws to regulate or prohibit the discharge of trade waste. Included in the list of matters that may be covered by the by-laws is a range of matters including agreements, permitted methods of charging, provision of penalties and enforcement procedures for non-compliance.

A copy of the Trade Waste By-law can be located on SGW's intranet. The Trade Waste By-Law defines material deemed to be included in the definition of Trade Waste, sets out a number of terms and conditions which, pursuant to the by-law are included in all agreements and provides for various charges for which the occupier of a premises from which trade waste is discharged into SGW's sewerage System and transporters of septic waste are liable.

In doing so, the Trade Waste By-law incorporates various matters which are set out in this procedure. That is, there are certain matters which are set out in this document which are incorporated into the by-law and which, because of that, assume the status of delegated legislation.

Those matters are the acceptance standards (with which trade waste discharged to SGW's sewerage system must comply), obligations of monitoring of trade waste and septic waste and the charges which SGW may charge for various matters including the acceptance and processing of an application for an agreement.

The Essential Services Commission has jurisdiction for approving certain price regimes under the *Essential Services Commission Act 2001* and the *Water Industry Regulatory Order 2003* made by the Governor in Council. The ESC released a Trade Waste Customer Service Code to provide water corporations with a consistent, transparent and timely decision making approach to trade waste management throughout Victoria. The Corporation has developed a Trade Waste Customer Charter as required by the Code. The Trade Waste Customer Charter informs customers about the



trade waste services performed by the Corporation, along with the respective rights and responsibilities of both the Corporation and its trade waste customers.

#### 4.3.2 Environment Protection Authority

The Environment Protection Authority (EPA) issues Waste Discharge Licences with respect to the discharge of treated effluent to either a receiving water body (i.e. Creek) or land by way of an irrigation scheme. The licences also stipulate requirements for the safe disposal of sewage sludge.

The EPA has a number of acts and legislations which will also influence the extent to which SGW may receive trade waste in order not to compromise its EPA compliance.

In addition, under the EPA's Prescribed Waste Policy / Guidelines, SGW is required to encourage and promote cleaner production to its Industrial Waste customers and subsequently require them to prepare a Waste Management Plan as part of its Trade Waste Agreement conditions.

# 5 Acceptance Criteria

The nature and levels of the components and characteristics of any trade waste discharged to sewer must comply at all times with the standards outlined in *NTW-001 Trade Waste Statement of Approved Acceptance Criteria*.

The Corporation may require a trade waste customer to comply with customer-specific acceptance criteria in addition to, or instead of, some or all of the statement of approved acceptance criteria, in order to satisfy specific requirements of the trade waste customer and the sewerage systems.

Subject to the receipt of an application, the Corporation will consider an application for customer specific acceptance criteria.

### 5.1 Agreement Procedures

The discharge of trade waste into the sewerage system is permitted only when the discharger has made an application and entered into a formal approval with SGW to accept the proposed trade waste discharge.

SGW will at its discretion approve applications for a Trade Waste Agreement to discharge trade waste to sewer only where hydraulic and treatment capacity is available which will not hinder the future growth capacity which has been allocated for domestic and commercial growth, subject to the requirements of *PTW-001 Trade Waste Policy*, legislation, and Trade Waste Agreement conditions.

There is an opportunity for industry to negotiate the augmentation of the sewerage system in order to secure existing and future capacity. However any augmentation works will be at the expense of the customer.

Where circumstances are warranted, special disposal arrangements may be approved by SGW only if safe to do so. These circumstances will only be considered for the following conditions:

- Road tankers by approved private sector transporters and discharge of difficult waste or high strength organic wastes direct to SGW's wastewater treatment process;
- Control discharge from industrial premises of assessed one-off waste batches.



### 5.1.1 Form of Agreement

There are two types of Trade Waste Agreements, and they can broadly be categorised as one for minor trade waste called a Trade Waste Consent, and one for major trade waste called a Trade Waste Agreement.

The Trade Waste Consent is a document that has a specifically defined set of acceptance criteria that has been designed for Category 1 businesses; it does not require a signature from the trade waste discharger to come into effect. The Trade Waste Agreement covers all sorts of trade waste discharges and can be amended to suit specific trade waste discharges. A signature is required from both parties in order for the Trade Waste Agreement to come into effect.

A Trade Waste Consent is suitable for commercial businesses who discharge low volumes of trade waste and operate a food business where the main activities carried out on site that generate trade waste is food preparation, small container, pot and utensil washing, floor area washing and dishwashing. The Trade Waste Consent is relevant to the small businesses such as restaurants, take away food outlets, supermarkets, reception centres and aged care facilities that discharge less than 5 kilolitres per day.

A Trade Waste Agreement is provided to Category 2 and 3 customers who have a trade waste discharge to sewer. Both SGW and the trade waste customer are required to execute the Trade Waste Agreement for the agreement to take effect. Refer to section 4.7 for category descriptions.

South Gippsland Water also has a number of non-residential customers who discharge low volumes that would come under the definition of "trade waste" that are classified as "Deemed" trade waste customers. Refer to section 4.7.4 for more information regarding "Deemed" customers.

#### 5.1.2 Application Procedures

All customers are required to apply for a Trade Waste Agreement by lodging a Trade Waste Application (*FTW-006 Application for Trade Waste Agreement Form*) in writing. The Corporation will assess the application to determine whether the customer will require a consent or agreement.

The applicant needs to provide the following relevant information in their submission:

- The rate of discharge including the average per day, maximum per day and per hour;
- Hours of the day during which discharge takes place;
- Characteristic of waste including nature of source, expected maximum and average concentration of pollutants;
- Details of any proposed treatment facility, location and site plan. These should include internal wastewater drainage;
- Treatment process details and pump sizes, operational characteristics and operational procedures;
- Flow diagram and hydraulic profile of proposed treatment facilities;
- The method of disposal for other wastes that are not to be discharged to sewer.

In addition, the applicant may be required to provide additional information and this must be provided to SGW before the application can be considered. Information to assist in completing the application form can be found in *STW-006a Trade Waste Application Procedure*.



The SGW decision to accept trade waste into the sewer system will be based on the discharge meeting SGW's requirements.

In determining an application to discharge trade waste in the sewer, SGW will consider:

- The protection of public health and its employees;
- The protection of the environment;
- The protection of SGW's assets;
- The impact the trade waste will have on the ability of the sewage treatment system to meet EPA requirements;
- Waste minimisation;
- Intended reuse of treated effluent and/or biosolids;
- Costs associated with accepting such a discharge.

The Corporation will provide a response to an application for a Trade Waste Agreement within 10 business days of receiving the application advising:

- Whether the application has been accepted or rejected, or accepted with amendments; or
- Where a longer period of required to assess the application, when a decision will be made and an explanation for the longer period; or
- Where further information is required to enable a full assessment, what further information must be provided by the applicant.

If the application is approved, SGW will then prepare a formal service Agreement or Consent with terms and conditions for the discharge of the trade waste to sewer. No discharge of trade waste to sewer will occur until an Agreement has been executed and the conditions accepted by the applicant. This includes the installation of any pre-treatment and monitoring equipment to ensure compliance with discharge standards.

A copy of the Corporation's Trade Waste Customer Charter will be provided to all trade waste customers within one month of entering into a consent or agreement.

If the application is refused by SGW, the applicant will be notified as to the grounds for refusal.

#### 5.2 Classification of Trade Waste Customers

South Gippsland Water will categorise trade waste customers into category 1, 2 or 3 with consideration to the type of business, industry or activity carried out by the customer. The Corporation will also consider the risk associated with the acceptance of a customer's trade waste by taking into account:

- Customer location relative to treatment plant;
- Volume of trade waste discharged;
- The nature of the customer's business activity;
- The nature and quality of the customer's trade waste;
- Compliance performance history for a customer, where available;
- Any risk to personal health and safety;
- Any risk to the sewerage system (transport or treatment);
- Any risk to the quality of recycled water or biosolids from the sewerage system;
- Any risk to the environment.



The Corporation has the right to change any trade waste customer's classification due to the customer's changed circumstances or new information coming to the attention of SGW.

#### 5.2.1 Risk Ranking

The Corporation assesses the risk of a trade waste customer by using a risk ranking process that uses a formula to calculate the risk a trade waste discharge may represent by establishing a 'Risk Rank' for the particular discharge. The Risk Rank is then used to determine which category the customer will be classified in, and the extent to which the Corporation is required to mitigate against the risks through prescriptive management tools such as sampling, monitoring, charging and analysis.

### 5.3 Fees and Charges

South Gippsland Water will only impose fees and charges in connection with trade waste in accordance with the prices and pricing principles set out in the price determination made by the Essential Services Commission for the Corporation.

Trade waste charges should ensure equity in sewerage services charging when compared with domestic rates. Trade waste charges should not be subsidised by other contributions to the wastewater system and the charge should reflect a user pays principle. Additionally, trade waste charges are used as an incentive to customers to firstly reduce the amount of trade waste discharged to the sewerage system and secondly improve the quality of the trade waste, thereby reducing the potential impact to the sewerage network and the environment.

Charges shall be assessed by reference to waste categories. The categories are based on waste quantity and quality. Determination of an applicable discharge category may be made by negotiated agreement or by measurement of the discharge quantity and quality. It may also be based on whether or not the discharge source is considered a high polluting industry. Reassessment of categories at the customer's request will only be undertaken on an annual basis unless otherwise specified in the Trade Waste Agreement.

Trade waste tariffs and charges are applied to all trade waste customers to cover the costs of processing trade waste applications and to cover the costs associated with the ongoing management of trade waste. These charges are applied in accordance with the prices and pricing principles set out in the current ESC pricing determination.

The charges for providing a sewerage service for the disposal of trade waste may include any or all of the following elements:

- Trade Waste Agreement Application Fee;
- An annual operating charge or "Management Fee" related to the operating costs
  associated with the transfer, treatment and disposal of the volume and mass of pollutants
  in the discharge;
- The cost for flow monitoring, sampling and testing of the trade waste.

The application fee is for the administration and technical services provided by SGW in considering the application and the administration and inspection costs associated with providing the initial service including preparation of the Trade Waste Agreement. The discharger will be required to pay for any work associated with the actual connection of trade waste to the sewer.

In addition to the above elements, additional charges may be applied for the discharge of nonconforming effluent incorporating the following elements:



 A non-compliance operating charge applied when the discharge does not conform to the agreed conditions.

Septic Tank and other tankered liquid waste fees shall be charged on a calculated volume basis (\$/kL) which takes into account both the volume and quality of the waste. Licensed waste transporters and other persons disposing of septic tank, portable toilet or other approved liquid waste to the sewer or wastewater treatment plant under approved conditions shall be charged for this service.

Charges are determined annually and will be based on the following discharge categories.

#### 5.3.1 Category 1

This category takes into account domestic type waste but with low volume and low strength Trade Waste as follows:

- Volume less than 5 kL/day;
- Quality to comply with NTW-001 Trade Waste Statement of Approved Acceptance Criteria.

The typical maximum volume for low risk or commercial trade waste discharges is 5 kilolitres per day. The quality concentrations listed in the acceptance criteria are representative of the maximum domestic concentrations that can safely be transported and treated at a biological waste water treatment plant before overloading capacity and or blocking systems.

The Trade Waste dischargers likely to be classified into this category may include but are not limited to:

- Take away shops;
- Small restaurants;
- Butchers;
- Bakeries;
- Small hotels/motels;
- Swimming Pools;
- Small Cooling Towers;
- Medical centres.

#### **5.3.2 Category 2**

This is domestic type waste but with greater volume and higher mass loads.

- Volume 5 10 kL/day;
- Quality to comply with NTW-001 Trade Waste Statement of Approved Acceptance Criteria.

The Trade Waste customers which may fall into this category include but are not limited to:

- Shopping complexes;
- Hospitality industry;
- Commercial industry;
- Mechanical workshops.



### **5.3.3 Category 3**

This category is for industrial dischargers that have waste quality and quantity that is significantly greater than domestic waste but can be treated at a SGW wastewater treatment facility. Additionally they can contain pollutants that may affect the operation of SGW's sewerage system. These parameters are broadly categorised below:

- Heavy metals;
- Phenol;
- Cyanide;
- Sulphur compounds;
- Fluoride;
- Total Dissolved Solids;
- Phosphorus;
- Nitrogen;
- Sodium;
- pH;
- Ammonia;
- Oil & Grease.

The parameters listed above can fall outside the capacity of WWTP's to effectively treat, and as such they require additional risk management measures by SGW to ensure their own compliance with licence conditions for discharge to the environment.

The following criteria will be used for determining when a discharger is classified as Category 3:

- Volume greater than 10 kL/day;
- Quality to comply with NTW-001 Trade Waste Statement of Approved Acceptance Criteria.

Where a trade waste discharger exceeds the volume or quality limits as stated above, they may be charged according to the trade waste volume and quality discharged, and in accordance with the prices and pricing principles set out in the current ESC pricing determination. Subject to the receipt of an application fee, the Corporation will consider an application for customer specific acceptance criteria.

Typical Trade Waste customers who may fall into this category include but are not limited to:

- Abattoirs;
- Dairies:
- · Cheese manufacturers;
- Large food preparation facilities;
- Textile Dying:
- Metal finishing plants;
- Tanneries Chrome:
- Soft drink manufacturers;
- Chemical plants.

Trade Waste generators with food disposal units (garbage grinders, fruit and vegetable peelers) shall be charged under this category as they contribute a higher load and concentration of biochemical oxygen demand and suspended solids per kilolitre of trade waste.



Customers who fall into this Category may require specific individual assessment and independent Trade Waste Agreements to establish negotiated terms, conditions and charges appropriate to the local circumstances.

#### 5.3.4 "Deemed" Trade Waste Customers

South Gippsland Water has a number of non-residential customers who discharge to the sewerage system and would come under the definition of "Trade Waste" but are considered too small for South Gippsland Water to require a Trade Waste Agreement, and do not warrant the additional level of administration and monitoring that comes with this. Clause 4.4 of the ESC Trade Waste Code makes provision for dischargers of trade waste of a nature similar to domestic sewage, at South Gippsland Water's discretion, to have their agreement arise automatically through customer conduct, these types of customers are classified as "Deemed" Trade Waste customers.

This category takes into account customers that discharge low volumes of trade waste which is of a similar nature to domestic sewage, as follows:

- Volume less than 1 kL/day;
- Quality to comply with NTW-001 Trade Waste Statement of Approved Acceptance Criteria.

The trade waste dischargers that may be considered a "deemed" trade waste customer may include, but are not limited to:

- Small food businesses:
- Sporting clubs (without catering facilities);
- Doctors surgery/clinic;
- Opticians;
- Florists:
- Funeral parlour;
- Tattoo/piercing establishments:
- Beauticians.

#### Note:

The volume limit and or ranges for each category is based on the average volume discharged from trade waste customers in the industry groups listed, and the volumetric impacts at WWTP's for accepting these volumes. Consideration has also been given to the potential for various rates of discharge to impact on the sewer and the WWTP.

The trade waste categories listed above are for the categorisation of trade waste customers for the purposes of charging and risk management practices and should be applied in addition to the risk determining procedures used to establish a Trade Waste Agreement.

For all Trade Waste Parameter Standards, reference should be made to South Gippsland Water's NTW-001 Trade Waste Statement of Approved Acceptance Criteria, and South Gippsland Water's Quality Procedures.



# 5.4 Dispute Resolution

The Corporation will comply with PCS-002 ESC Complaints and Dispute Handling Policy and the terms of the trade waste agreement in dealing with any complaints made by the customer, or any dispute arising from the trade waste agreement.

Where a complaint escalates beyond the Complaints and Dispute Handling Policy and relates to technical or economic aspects of trade waste management, the Corporation will:

- With consent from the customer, engage the services of an independent expert or mediator to help resolve the complaint;
- Advise the customer that they may request that the Essential Services Commission consider whether the water business has complied with the ESC Trade Waste Code, the Customer Service Code, or the Corporations price determination.

# 6 Responsibilities

**Environment Coordinator:** is responsible for ensuring trade waste system compliance in order to meet relevant regulatory requirements.

**Wastewater / Trade Waste Coordinator and Officer:** are responsible for the implementation of this procedure.

### 7 References

PTW-001 Trade Waste Policy STW-006a Trade Waste Application Procedure NTW-001 Trade Waste Statement of Approved Acceptance Criteria Information FTW-006 Application for Trade Waste Agreement Form FTW-008 Trade Waste Consent Form FTW-008a Trade Waste Agreement Form WF2009/2376 Trade Waste By-Law No.5

This document is to be reviewed in *August 2014* or earlier as required.

This document must not be released to external parties without approval by the Managing Director.

DOCUMENT APPROVAL		
Senior Manager Approval:	Ravi Raveendran	Date: 15/08/2012
Managing Director Signature:	DON	
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