

Private Pumping Installation Application

Authorisation for private pumping systems for domestic, industrial and commercial premises, discharging in the sewerage system.

As required by the Water Industry Act 2012, Section 50.

This document covers

1. Authorisation by SA Water to install private pumping systems to convey sewage, trade wastes, sullage and seepage water from private properties (domestic, commercial or industrial).
2. Acceptance of discharges from these pumping systems into the sewerage system.

SA Water is not responsible for the design, operation, maintenance and suitability of these private pumping systems and therefore these aspects are not covered in this documentation.

SA Water will consider accepting flows from private pumping installations into the sewerage system providing the following discharge rates and discharge conditions are met, irrespective of whether a trade waste discharge licence is required to discharge waste.

Discharge flow rate

All pumped discharges into the sewerage system must be approved in writing by SA Water as detailed below and must also be in accordance with the following criteria:

1. Pumped flows up to and including 3.0 litre/second can be discharged to the sewerage system on written approval from the Customer Technical Services Branch.
Note: Discharges from sullage tanks receiving single or double bowl domestic kitchen sinks are exempt.
2. Flow rates above 3.0 litre/second can only be discharged to the SA Water sewerage system with the written approval of the Manager Systems Planning (via the Customer Technical Services Branch). The Manager Systems Planning has the responsibility for assessing capacity issues within the SA Water sewerage system.
3. For flows exceeding 3.0 litres/second, day time discharges may be precluded by SA Water, or special discharge conditions will apply, possibly including on-site storage for disposal during specified off-peak times.
All approvals under clause 3 must be approved by the Manager Systems Planning (via the Customer Technical Services Branch).

Supporting information:

- To ensure a pumped discharge application is processed without delay, the attached pro forma must be completed and submitted to SA Water at least 14 days prior to commencement of works.
- Applicants are advised to contact the Customer Technical Services Investigations Manager on 1300 650 950 for advice on any matter contained in this application.
- All plumbing work on the pumping system and its connection into the sewerage system must be carried out by a licensed plumbing contractor and must be inspected/audited by the Office of the Technical Regulator (OTR).

- Bookings for inspections can be made by calling OTR on 1300 884 055 or via the internet at www.sa.gov.au./otrplumbing and follow the links
- A Certificate of Completion for the pumping installation is to be submitted to OTR within 7 days after completion Trade waste, toxicity/chemical composition discharges must comply with the Water Industry Act 2012, Section 56

This form applies for authorisation by SA Water for:

- Use of private pumping systems to convey sewage, trade wastes, sullage and seepage water from private properties (domestic, commercial or industrial)
- Acceptance of discharges from those pumping systems into the sewerage system

It must be completed in full prior to assessment of the application.

Owner/business name _____	
Property address: _____	Suburb/Town: _____ Postcode: _____
Postal address: _____	Suburb/Town: _____ Postcode: _____
Telephone: _____	Mobile: _____
	Email: _____
Consultant/designer	
Contact Person: _____	Telephone: _____
Postal address: _____	Mobile: _____
Suburb/Town: _____ Postcode: _____	Email: _____
Wastewater flow details	
Type of waste pumped: _____	Duration of the discharge/s (eg 5 mins each cycle): _____
Maximum rate of discharge: _____ L/sec	Maximum daily discharge to sewer: _____ kL/day
Discharge time/s during day/night: _____	Flow velocity in pumping mains: _____ m/sec

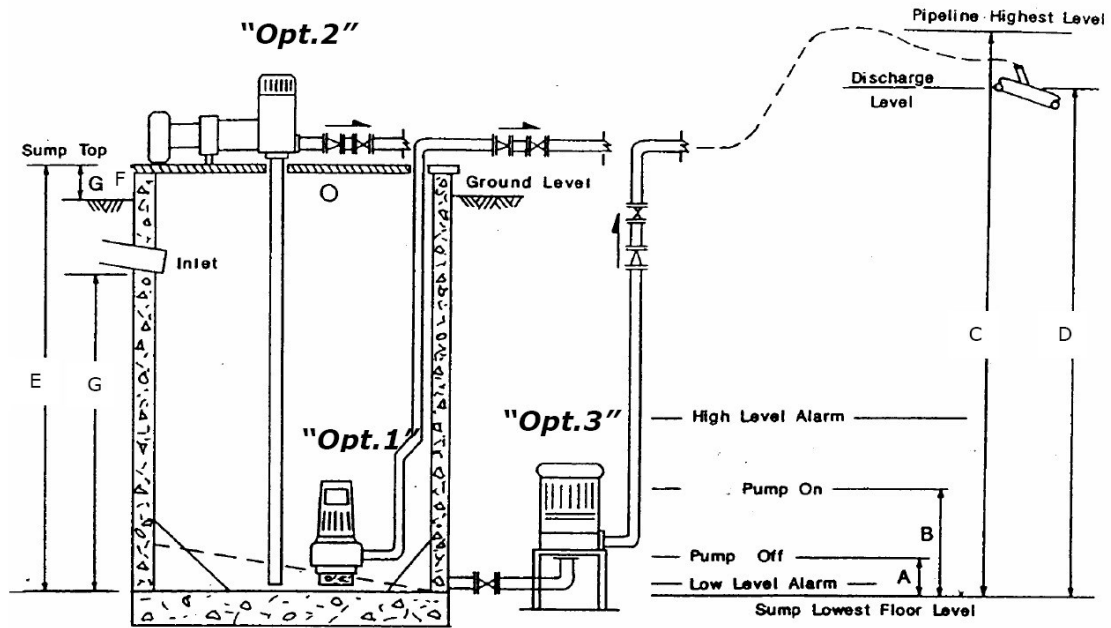
Pumping unit details	
(a) Manufacturer's pump performance curves must be submitted with this application.	
(b) Pumping unit:	Make: _____ Speed: _____ Type: _____ Max sphere: _____ Model: _____ Curve no: _____ Duty: Flow (L/sec): _____ Head (m): _____ Motor (kw): _____
(c) Distributor:	Name: _____ Address: _____
Pumping system details (refer to Figure 1)	
(a) Pipe material: _____	
(b) Pipe outer diameter (OD) : _____ Class _____	
(c) Internal diameter/mean bore size of drain at the discharge connection point (ID): _____ mm	
(d) Pipeline length (sump to discharge connection point: L _____ m	
(e) Static head: H _s : _____ m	
Plans - please provide two copies of the plans including the following details	
(a) Details and locations of holding tanks, wet wells, associated with the pumping installation.	
(b) Site plan and elevation sections detailing, levels and location of pipe work used in the pumpingsystem.	
Pipeline details (Refer table 1)	
Pipe internal diameter (ID/mean bore size): _____ mm	

Fitting type	No. of fittings	Factor (table 1)	Equivalent lengths (m)
Bends			m
Gate valves			m
Reflux (non-return valve)			m
Others			m
Total length: (LT)			m
Total equivalent pipeline length: (Le = L + LT)			m

Table 1: Equivalent pipe length for pipe fittings

Fitting type	Equivalent pipe length (m)					
	Fitting nominal ID (mm)					
	40	50	65	80	90	100
45° → 90° standard bend	1.7	2.1	2.5	2.9	3.3	3.6
45° → 90° long radius bend	0.7	0.9	1.0	1.2	1.4	1.5
Gate valve	0.3	0.3	0.4	0.5	0.5	0.6
Reflux valve	2.1	2.6	3.1	3.6	4.1	4.5

Pumping system layout Figure 1: Typical pumping system – examples of options 1, 2 and 3



Typical pump system installation
(not to scale)

All dimensions are relative to sump floor lowest level.

A: _____ E: _____

B: _____ F: _____

C: _____ G: _____

D: _____

Pump's maximum operating static head H_s : (C-A) : _____ m Ref Fig. 1

SA Water has no responsibility for the design, operation, maintenance and suitability of private pumping systems.