

Vehicle Washing

Trade Waste Guideline No. 18

INTRODUCTION

Trade waste discharges from vehicle washing business have the potential to adversely affect the sewerage system. Appropriate management practices at each site are therefore necessary. This Guideline outlines the areas of concern and available technologies for the control of trade wastes. For the purpose of this Guideline 'vehicle washing' refers to the cleaning of any vehicle with water.

KEY TRADE WASTE QUALITY REQUIREMENTS

PARAMETER	GENERALLY ACCEPTED LEVEL
Oil/Grease	<100mg/L
Suspended Solids	<500 mg/L average
Total Dissolved Solids	<1500mg/L
pH	Between 6-10 units
Flow rate to sewer	Dependant on capacity of receiving sewers

Note: Discharge limits may be varied under certain circumstances for individual dischargers.

BEST PRACTICE MANAGEMENT ASPECTS

- Only quick breaking detergents/degreasers are used in conjunction with vehicle washing activities
- Waste waters and chemical solutions that are not permitted to be discharged to the sewer are contained in an approved blind tank and disposed of by a licensed liquid waste contractor in accordance with [Trade Waste Blind Tank Guideline No.3](#).

TYPICAL PRETREATMENT

- Waste waters from vehicle washing drain to a graded channel fitted with weir(s) which retain rapidly settling solids and/or perforated screen(s) for retention of gross solids. See Figure 1.
- Where oil/grease exceeds [Standards of Acceptance of Liquid Waste to Sewer](#), (e.g. when cleaning chassis or engine bays) the channel drains to a pump sump. Waste waters are then pumped by a positive displacement pump to an approved aboveground coalescing plate separator, before discharge to sewer. See Figure 2.
- Where oil/grease is within [Standards of Acceptance of Liquid Waste to Sewer](#), (e.g. cleaning of road grime from body exterior) the channel drains to an approved suspended solids settling chamber, before discharge to sewer.
- Where the pH of waste water is likely to be outside [Standards of Acceptance of Liquid Waste to Sewer](#), an automatic pH correction system and safety shut off valve is installed. See Figure 3.
- All pre-treatment equipment, including coalescing plate separators and pH correction equipment is located within a roofed wash bay bund, or separate approved roofed and bunded area which drains to the pump sump or settling chamber. A **minimum** overhang of 1 metre but at least one third of roof height is provided, to prevent the intrusion of wind driven rainfall. Where such an overhang is impractical, walls are used.

Reviewed January 2011

Further information
 (08) 7424 1336
www.sawater.com.au
tradewastebbranch@sawater.com.au

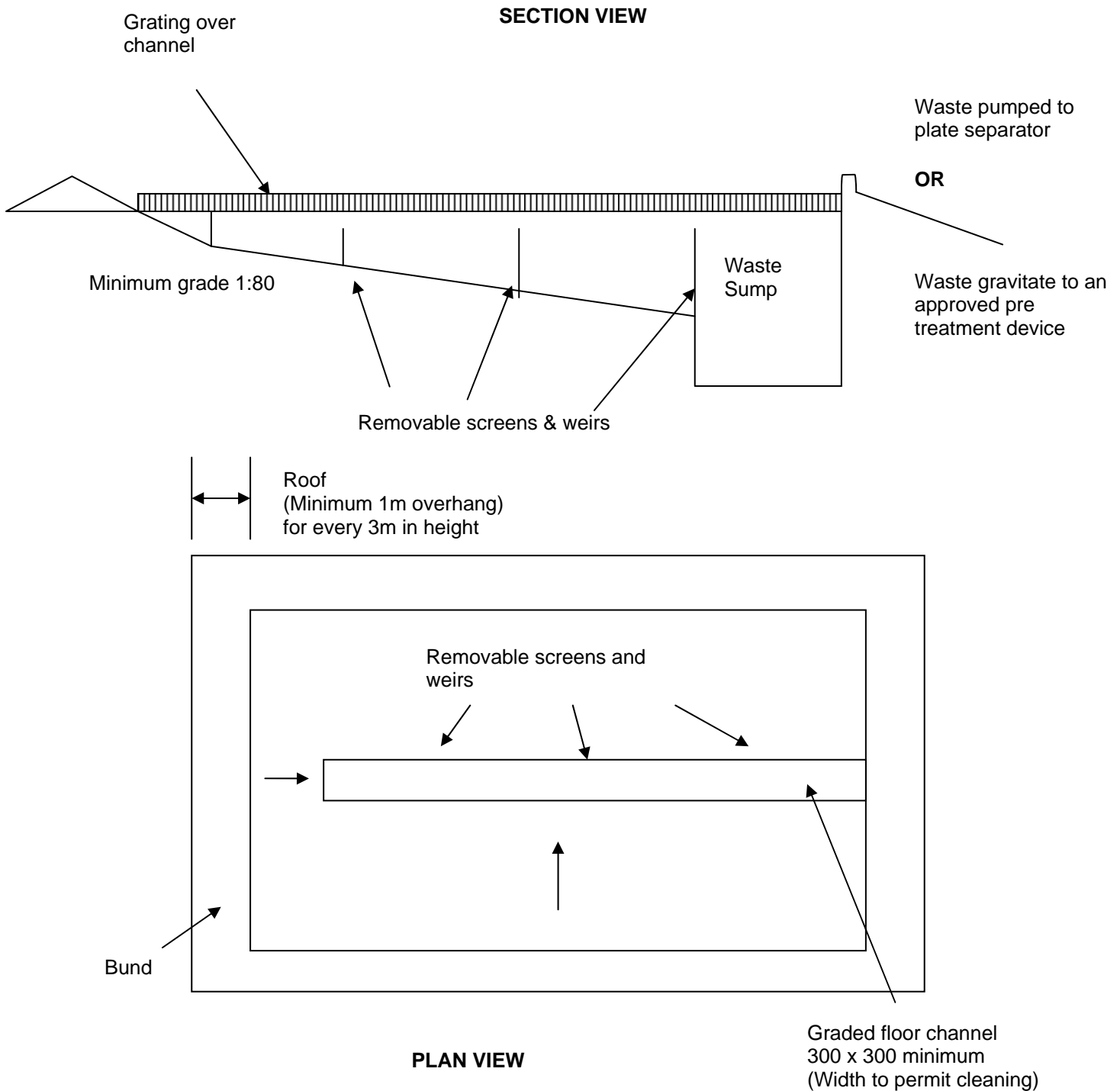
MAINTENANCE

- It is the responsibility of site management to ensure the effective operation of all pre-treatment equipment. E.g. ongoing servicing/cleaning of Silt Traps, pH correction system, Arresters, and/or Coalescing Plate Separators.

ADDITIONAL INFORMATION

Mains Water Protection (AS/NZS3500-2003 Part 1), [Trade Waste Bunding Guideline No.4](#), [Trade Waste General Policy](#)

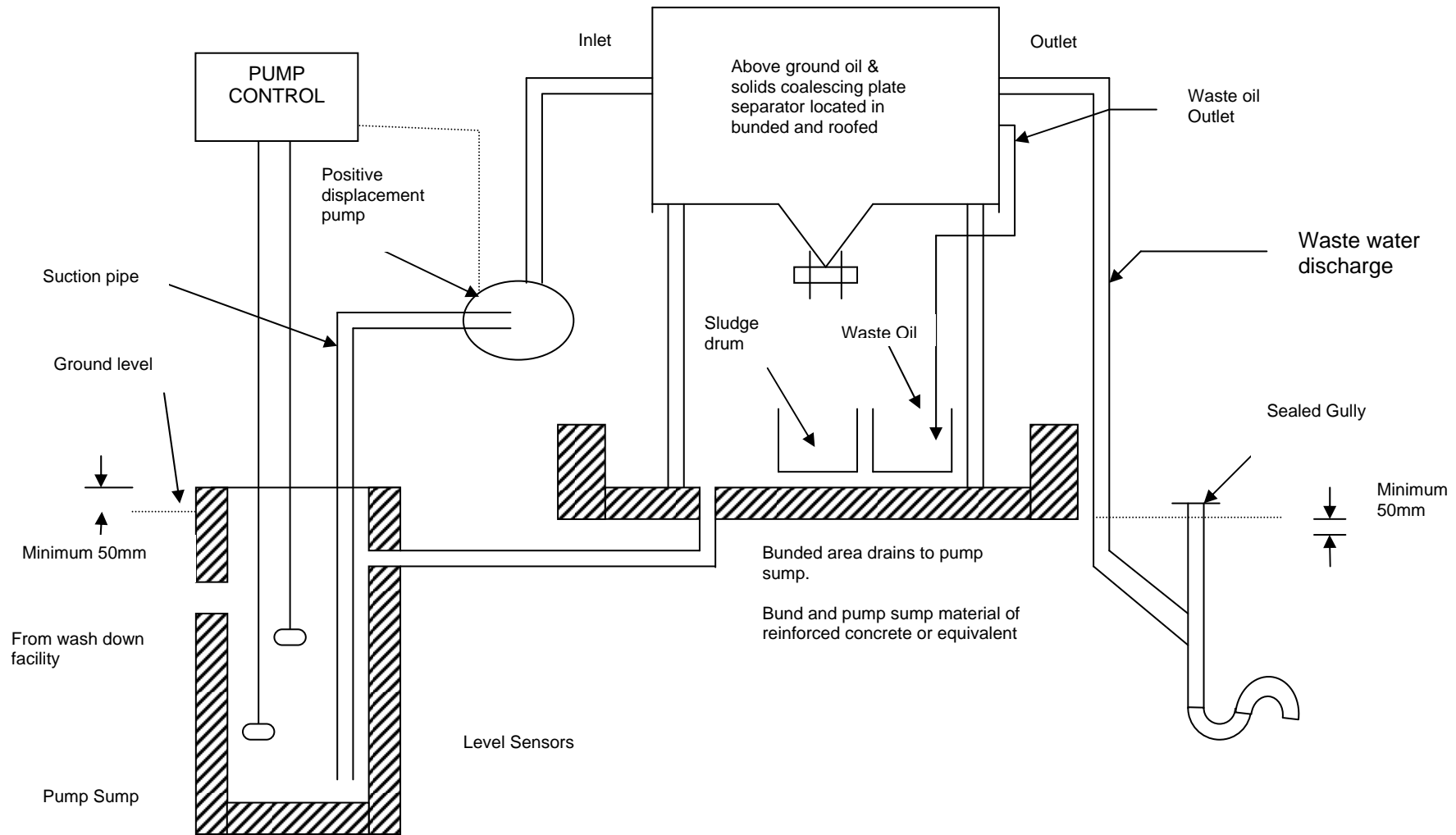
Figure 1: WASHDOWN AREA



Reviewed January 2011

Further information
(08) 7424 1336
www.sawater.com.au
tradewastebbranch@sawater.com.au

Figure 2: PUMP SUMP & COALESCING PLATE SEPARATOR



Reviewed January 2011

Further information
 (08) 7424 1336
www.sawater.com.au
tradewastebranch@sawater.com.au



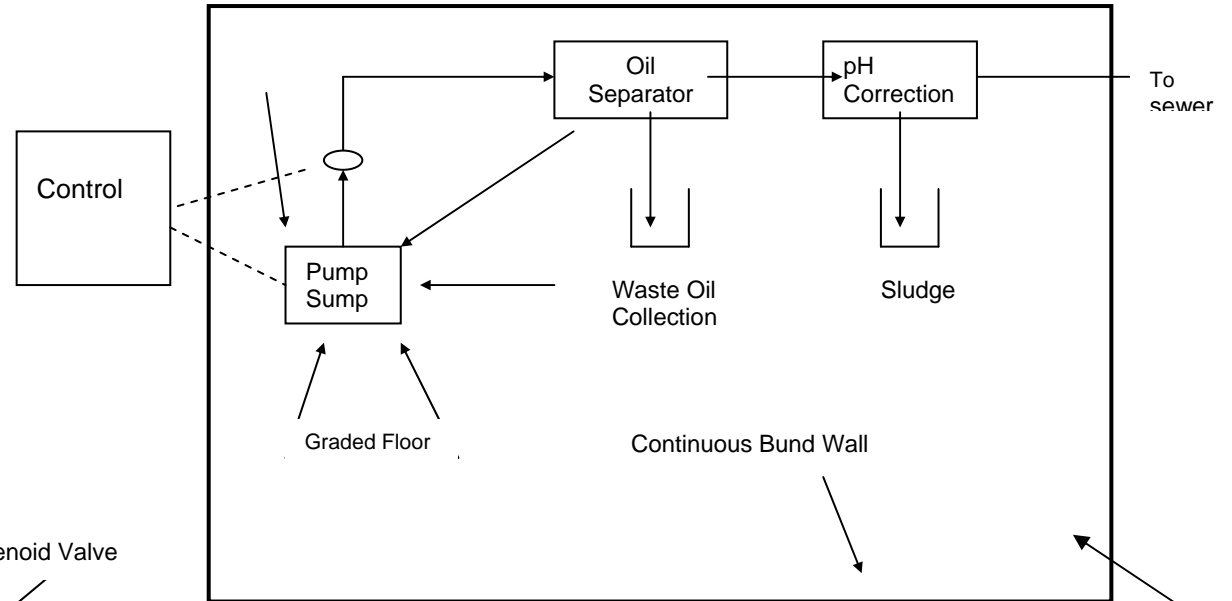
Figure 3: ABOVE GROUND OIL/SOLIDS SEPARATOR WITH pH ADJUSTMENT

Pre-treatment devices are to be installed on graded area (minimum grade 1:80)

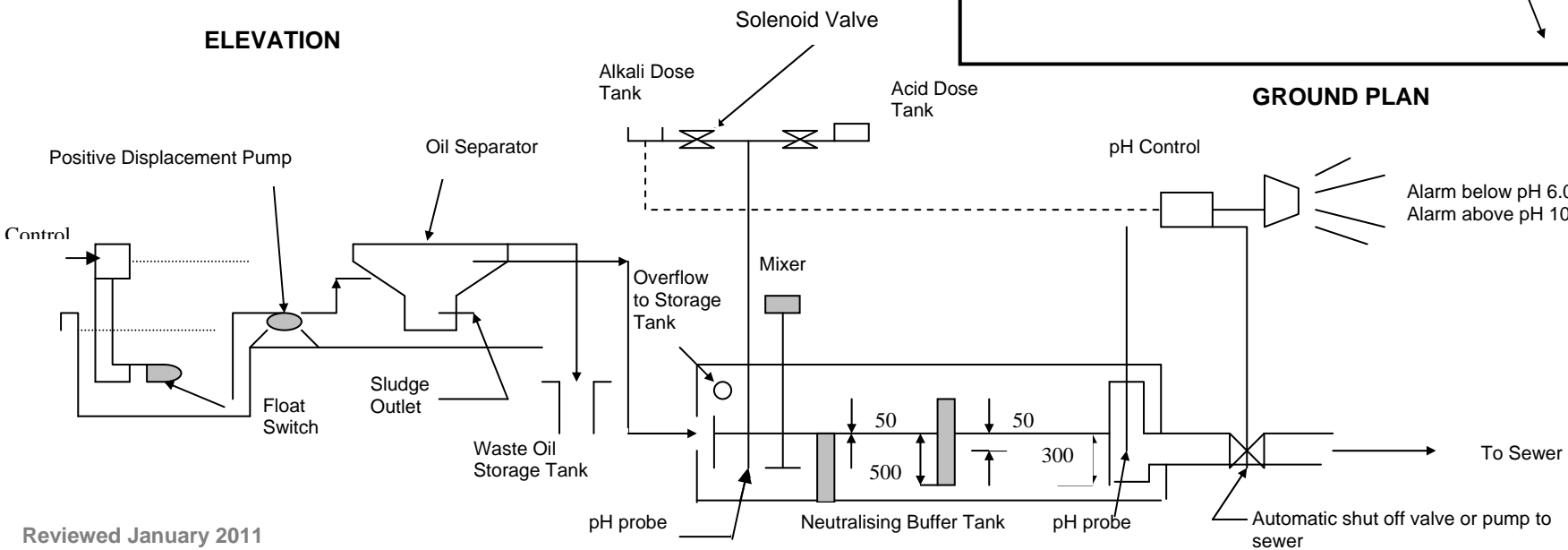
Wash down area shall be designed to prevent:

- stormwater from entering the system (e.g. roofed with a suitable overhang)
- polluted waste water discharging overland or into the stormwater drainage system. (E.g. Bunding or channels where necessary).

A trapped connection to sewer is required.



ELEVATION



Roof - Minimum 1m overhang past bund) for every 3m in height, if no walls

Reviewed January 2011

Further information
 (08) 7424 1336
 www.sawater.com.au
 tradewastebranch@sawater.com.au

