TRADE WASTE MANAGEMENT PLAN

(Example - groundwater/dewatering)*

1.0 General Description

This trade waste management plan has been submitted to Watercare Services Limited to satisfy the requirement of clause 5 of our trade waste agreement application under the Auckland Trade Waste Bylaw 2013.

Company	Drainage Company Ltd.	
Site address	2 Smith Street, St Johns, Auckland.	
Discharge point	Manhole COMPKEY 123456 in Smith Street, St Johns, Auckland.	
Key contacts	John Smith, Environmental Manager Ph. 012 3456 789.	
	Garry Mill, Maintenance Manager Ph. 012 789 123.	
	Sarah Grey, Operations Manager Ph. 012 1234 543.	
Principle operations	 Drainage Company Ltd is involved in a pipe replacement project which requires trenching and the subsequent collection and removal of groundwater. 	

Refer to GIS viewer to identify manhole https://www.watercare.co.nz/Water-and-wastewater/Building-and-developing/GIS-maps

2.0 General Limits

Drainage Company Ltd will meet all conditions and discharge limits as specified in:

- the Auckland Trade Waste Bylaw 2013, including the controlled substances standards and
- the Trade Waste Agreement, once issued and signed by Watercare Services Limited.

3.0 Wastewater Pre-Discharge Treatment Systems

Pre-treatment systems treat the wastewater prior to discharge to sewer. They ensure the wastewater is within the limits of the bylaw. They may include filters, screens, oil/grit interceptors, grease traps, sedimentation tanks and ponds, pH dosing systems, balance tanks, DAFs, and pH controls to precipitate out heavy metals. Please provide specific details of each system that is in use at your site. Discuss all pre-treatment systems and system maintenance procedures applicable to your site

Control for	System	Maintenance
Suspended solids	All groundwater is pumped	Tanks are inspected weekly
	into a series of 3 settling	and cleaned out 3-monthly or

	tanks to allow solids to settle out before entering the sewer.	more if required. Tanks are to be cleaned out by licenced contractor if the sediment level reaches 25% of the tanks capacity.
Solids greater than 30 mm	Prior to entering the sewer, the water drains through a 6mm stainless steel fixed screen.	Daily inspection of screen for build-up and damage. Any material collected on screens is manually removed. Material is disposed to landfill via weekly collection.
Flow under 3 l/s	The maximum capacity of the pump is 2.5 L/s.	The pump is inspected regularly.

See site plan in Appendix A for layout position of pre-treatment systems on site.

4.0 Monitoring and Reporting

We will meet all monitoring and reporting requirements as prescribed by clause 14.2 of our Trade Waste Agreement.

There will be a flow meter to measure the discharge volume. The volume of each batch will be recorded in a discharge log. The pH of each batch of wastewater will be checked with litmus paper and recorded on the discharge log.

Include any systems that monitor and/or log your discharge eg. flow, temperature, pH.

Also include details of regular monitoring activities completed on your wastewater treatment system.

5.0 Risks and Controls

The table below identifies the on-site risks that could lead to a discharge of non-compliant wastewater to the sewer. The control measures taken to eliminate, isolate or minimise these risks are shown.

Risk	Control
Flow rate higher than allowed limit	Maximum pump capacity limits the flow rate to 2.5 L/s.
Total daily volume discharged higher than allowed limit	Discharge is timed and occurs primarily in the morning for approximately 1 hour. At a maximum flow of 2.5 L/s, for 1 hour, the volume generated is 9m³. This is well below our 40 m³ limit, and allows for dewatering later in the day if required.
Non-compliant solids entering trade waste	Discharge passes through a 6 mm fixed screen prior to entering the network. This screen will be inspected daily and replaced if it becomes

Risk	Control
	damaged.
Failure of pre-treatment system	The sediment tanks are inspected weekly. Currently we have a 3-monthly cleanout scheduled. However if weekly checks reveal sediment levels are building rapidly, the tanks will be cleaned out before sediment levels reach 25% of tank capacity.
Spill of stored chemicals	All chemicals are stored in an area which is isolated from the trade waste system. A spill kit is available and is located next to the site office, in a bright yellow, clearly marked storage bin. All staff are trained in our spill response procedure (see Appendix B).
Fuel or oil spill from site vehicle/ machinery	See above. All company vehicles are regularly maintained and maintenance logs are kept at head office. Refuelling and topping up of oil is carried out in an area that doesn't drain to trade waste.
Power failure	In the event of a power failure the pump will cease as it runs on mains supply. We do have a generator on site for use in case of power failure. The sediment tanks work via gravity and therefore power is not required for pre-treatment.
Stormwater from other areas entering trenching area	Stormwater falling directly onto the trenches will be discharged via the treatment system. Stormwater from other areas will not be redirected into the trench. Booms are available to divert water flow away from the trench.
Heavy rain causing an overflow in the network.	Weather report checked daily. During periods of heavy rain (greater than 5mm in 30 minutes) discharge will cease and will not resume until at least 1 hour after the heavy rainfall stops. All staff are briefed on this and know where the valve to cease discharge is located. Times when discharge has ceased and resumed will be recorded in the discharge log. Tanks have available capacity to store wastewater.
Overflow in the network caused by increased pressure during high tides. (requirement in some areas)	A tide chart for the area is stored with the discharge logs and checked prior to discharging each batch. Discharge must cease 1 hour before high tide and can recommence 1 hour after. Tanks have available capacity to store wastewater.
Stormwater from areas outside the wheel wash entering trade waste	The wheel wash is surrounded by a small raised hump to prevent stormwater from the surrounding area entering the wheel wash.

Risk	Control
Safety around manholes	Watercares manhole opening procedure will be followed. The manhole lid will be fitted with a camlock fitting or will be sealed with epoxy. Prior to opening the manhole, gas detectors will be used. Gas detectors will be worn at all times by staff working around an open manhole. The manhole will not be left unattended. No entry will
	be permitted into the manhole.

This section should include all risks at your site as well as the controls in place to prevent non-compliant discharge, as per section 5.1 (c) and (d) of your application. It must at least include the risks for flow rate and volume exceeding the limits, failure of a pre-treatment system, non-complaint solids, spills and power failure.

6.0 Internal Notification Procedure

All staff are trained to notify their superior in the event of an incident. Within 60 minutes of the event the following will occur:

- The superior will notify the shift supervisor. Depending on the nature of the event it
 will escalate through the following roles. The most appropriately qualified role will
 attend to the incident.
 - Shift Supervisor reports to Operations Manager and Environmental Manager.
 - If appropriate the Operations Manager reports it to the Maintenance Manager for any repair requirements.
 - The Environmental Manager will report the incident to Watercare Services Ltd through the process outlined in the external notification procedure in section 7.0.
 - The General Manager will be notified of a major incident by the Operations Manager.
 - This notification procedure is posted on the staff board in the main administration building along with a copy of this plan.
- Authority will be delegated in the event any role is absent or not available.
- On-call numbers are identified in the staff board in the main administration building.

All incidents will be discussed at our monthly operations meeting. Remedial work will also be monitored and reported at this meeting. Any changes to existing protocols and this plan are reported at this meeting.

Include that any incident will be attended to within 60 minutes as per section 5 (e) of your application. List any additional methods to avoid, remedy or mitigate the breaches as per section 5.1 (f).

7.0 External Notification Procedure

In the event of a potential or actual breach of any of the discharge limits of our trade waste agreement, the following will occur:

- a) As soon as practicable after becoming aware of the potential or actual breach, we will notify Watercare on (09) 442 2222;
- b) (b) Within two working days, we will provide Watercare with written details of the potential or actual breach, and work undertaken to remedy or mitigate any adverse effects to the Watercare network arising from the breach;
- c) (c) Within five working days, we will provide Watercare with written details of investigations into the cause of the breach, and implement measures to avoid a similar breach occurring in the future.

The plan must include the external notification procedure above as per section 5.1 (g) of your application.

8.0 Review of this Plan

This plan will be reviewed 12 months after the commencement date and annually thereafter. We will provide Watercare with a copy of the plan if it has changed. If it has not changed we will notify Watercare that it has been reviewed and no amendments have been made. The review of the plan will be discussed on an annual basis at our monthly operations meeting.

9.0 Appendices

Appendix A

Site plan (including layout of pre-treatment system) and photos of open areas draining to trade waste drains.

Appendix B

Emergency spill response procedure.

If this procedure forms part of another document, you may simply provide a copy of the relevant section from the other document. Please ensure you attach any appendices you have listed.

*This trade waste management plan is an example only. The plan for your company must reflect your processes and trade discharges at your site.