

# TRADE WASTE MANAGEMENT PLAN

*(Example – large scale process)\**

## 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	XYZ Manufacturing Company Ltd.
Site address	42 Smith Street, St Johns, Auckland.
Discharge point	Manhole unit ID 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	<ul style="list-style-type: none"><li>• XYZ Manufacturing Company Ltd processes raw seafood into products for commercial sale. This involves the washing and processing of the seafood and produces wastewater which is discharged to Watercare's wastewater network.</li><li>• The company also has a blending plant. This produces wastewater with a high pH which is chemically dosed prior to discharge.</li><li>• All trucks and bins that deliver and hold the raw seafood are washed in the truck wash area. The wash water from this area is discharged to sewer as is any stormwater that falls on the area.</li><li>• Most raw products for the blending plant are delivered in 100 L containers. One raw product is delivered by tanker truck.</li></ul>

Refer to GIS viewer to identify manhole

<https://www.watercare.co.nz/Water-and-wastewater/Building-and-developing/GIS-maps>

## 2.0 General Limits

XYZ Manufacturing 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
Solids greater than 30 mm	All drains to the trade waste network are screened with 6mm stainless steel fixed screens.	Daily inspection. Any material collected on screens is manually removed. Material is disposed to landfill via weekly collection. Recorded on end of day shutdown sheet.
Flow under 2 l/s	1 l/s orifice on outlet from balancing tank in manufacturing room. 1 l/s orifice on outlet from chamber 1 of TPH/solids sedimentation tank on the truck and bin wash area.	Six monthly inspections of both orifice plates. Recorded on six monthly maintenance sheets.
Oil and grease	Three chamber (2 m <sup>3</sup> each) oil and grease interceptor connected to drain from manufacturing rooms	Monthly empty and clean by registered waste disposal company. Waste taken off site. Weekly inspection. Recorded on interceptor maintenance sheet.
Total petroleum hydrocarbons (TPH)	Single chamber TPH inceptor (5m <sup>3</sup> ) installed on drain from truck and bins wash area.	Three monthly empty and clean by registered waste disposal company. Waste taken off site. Monthly inspection. Recorded on maintenance sheet.
pH between 6.0 to 10.5	pH dosing system which measures pH and doses sulphuric acid to lower the pH. It has one probe which measures the pH in the balance tank and one probe which measures pH on the outlet to the sewer. The balance tank discharges via a 1 l/s orifice to the sewer.	The pH probes are calibrated internally monthly. An annual service and calibration is completed by an external contractor. Both are recorded on the pH probe maintenance sheet. A daily inspection is completed on the dosing system and chemicals are replaced as required. This is recorded on the end of day shutdown sheet.

See schematic and photos of each pre-treatment system in Appendix A.

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

## 4.0 Monitoring and logging systems

The pH dosing system includes two pH probes. One is in the balancing tank which provides feedback for the dosing. The second pH probe is in the outlet pipe from the balance tank. It confirms the pH of the discharged water from the production rooms.

We will record pH continuously with the outlet probe. This will be reported as a graph to Watercare Services Ltd. on a monthly basis.

Both pH probes undergo a monthly calibration by internal staff. An annual service and calibration is completed every year by an external contractor. This is recorded on the pH probe maintenance sheet. A daily inspection is completed on the pH probes. This is recorded on the end of day shutdown sheet.

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

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	Orifices on both outlets to control flow to 1 l/s or less from each outlet.
Total daily volume discharged higher than allowed limit	Manual release of wastewater from balancing tank with a sheet to record discharge. Wastewater will be stored overnight if it has reached the total daily allowed volume. Water use at the truck/bin wash is limited by use of high-pressure water-blasting system.
Non-compliant solids entering trade waste	6 mm fixed screens on all trade waste drains which lead to the sewer. Daily cleaning of screens and removal of waste. This waste is disposed offsite. All activities are recorded.
Failure of pre-treatment system	Daily and monthly inspections. Repaired and calibrated as required. Systems are routinely maintained. Inspections and maintenance are recorded. Continuous pH monitoring provides feedback on the efficiency of the pre-treatment system. Additional testing will be completed as required to troubleshoot any issues. In the event of pre-treatment system failure, all discharge will immediately cease until repairs are complete.

<b>Risk</b>	<b>Control</b>
Spill of stored chemicals	All chemicals are stored in an area which is isolated from the trade waste system. Those chemicals which are in the production areas are banded. Spill kits are available at each area and all staff are trained in our spill response procedure (see Appendix C).
Spill from tanker while unloading raw products	All unloading occurs in a banded area which is isolated from the trade waste system. All staff involved in unloading (including the tanker drivers) are trained in the unloading process and the spill response procedure. Spill kits are available at the tanker unloading area. If there was a major spill it would be disposed of via a registered water disposal company.
Fuel or oil spill while tanker unloading	See above. All tanker companies are required to provide maintenance logs to ensure tankers are regularly maintained.
Power failure	In the event of a power failure the water-blasting of trucks and bins will stop as these are mains supply. Other production in the plant will stop due to the requirement for power to run the plant. Wastewater is only discharged manually from the balancing tank when it is within the limits, so a non-compliant discharge will not occur. Once power supply is restored a complete check of the pre-treatment system will be undertaken before production continues. A small backup generator is available on site should it be required to minimise any risk of a non-compliant discharge.
Stormwater from other areas entering the truck and bin wash area	The truck and bin wash area is surrounded by a small raised hump to prevent stormwater from the surrounding area entering this area (see site plan and photos Appendix B).
Spill from or failure of processing tanks/baths	All process tanks are located in a banded area which is isolated from the trade waste system.
Fire on site	Trade waste system will be shut down as soon as possible. If any fire fighting water has entered trade waste drains, all sumps and grease traps will be cleaned out prior to production starting back up.

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

Schematic and photos of each pre-treatment system.

Include photos of each pre-treatment system discussed in section 3.0. If schematics or diagrams of the pre-treatment systems are available, provide a copy as well.

### Appendix B

Site plan and photos of open areas draining to trade waste drains.

### Appendix C

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.

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