

NZ Trade & Industrial Waste Forum - Trade Waste Summary Report 2012 - Porirua City Council

Report presented by Greenwood Consultancy Ltd - Trade Waste Contractors to Porirua City Council.

Background

Porirua City has a population of approximately 50,000 people with four distinct zones within the city, the city centre, Industrial, suburban and rural zone. Approximately 80% of the land area of Porirua City is rural.

The city is serviced with a modern waste water treatment plant commissioned in 1990. The plant comprises micro biological treatment of sewage at primary and secondary level and UV treatment of liquid effluent waste prior to marine discharge. Screening and sludge waste is removed for landfill disposal. The screenings and the sludge are mixed with domestic waste on a ratio of 6 parts domestic to 1 part of council waste.

The WWTP also services the sewer catchment districts of Tawa and Granada which is the northern zone of Wellington City. Porirua City adopted a new trade waste bylaw in 2010 and currently is in the process of establishing a trade waste licensing system.

A recent feature of trade waste management in Porirua City is the use of the Trade Waste Data Management System (DMS) supplied by AWT Water Ltd. This electronic system allows us as contractors to record TW field data direct and will form an important part of the new licensing system

Greenwood Consultancy Ltd is engaged by council to:

1. Identify trade waste premises that were discharging liquid trade waste into the sewer network system and the performance standard of pre treatment systems in place.
2. Prepare and maintain a database of Trade Waste premises.
3. Actively promote the new trade waste bylaw to trade waste customers.

GWC Ltd - Summary of Trade Waste Activities to 2012.

In excess of 200 premises have been identified as having activities that are generating a liquid trade waste. The majority of premises generating are food operators and manufacturers.

The District does not have a main player generating a liquid trade waste but collectively there are trade waste issues potentially impacting on the waste

water net work system from the discharge of cooking fats from food premises and to a lesser degree from solvent residuals discharged from industrial premises.

Unsolicited liquid trade waste impacting on the waste water system is attributed to illegal discharges, absence of a pretreatment unit on trade waste premises, and the failure of operators to maintain pretreatment systems.

Two trade waste categories recently identified for monitoring involved food premises and the site operation of grease traps and service stations operating interceptor traps and secondary containment systems.

Food operators were visited and assessment of the working state of the grease trap (including grease trap convertors) and internal controls e.g. presence /absence of sink/floor basket arrestors, recycling of cooking oils, and keeping of grease trap cleaning records was made. If applicable written correspondence is sent to undertake repairs and to ensure scheduled cleaning of the grease trap is occurring. Defects observed - overloaded and undersized grease trap, inspection lids to GT chamber seized, - gully trap holding and surcharging fats to ground, GT in poor repair (unsafe) and GT subject to infiltration from surface water run off.

Services stations and other premises operating interceptor traps (car washing) were visited. Traps found to be sound structurally but in many cases inadequately monitored. Defects observed involved poorly maintained traps, in cases absence of records, and excessive waste water liquid contaminated with oil and hydrocarbon sediment (flammable liquid) inside holding chambers. Strip drains and SW sumps also a problem - trapped sediment deposits.

Trade waste sampling of 10 sewer catchments servicing specific industrial areas commenced to establish a TW characteristic profile in flow path - re presence of chronic substances (heavy toxic metals).

Council partnership with TW clients - A lot of time allocated to speaking with the business owner/manager re the purpose of the new trade waste bylaw and responsibilities this placed on council to protect the waste water treatment system. Supplemented with public information - Trade waste information sheet and pamphlet for food operators, trade waste article in the local newspaper, and circular information letter to specific trade waste categories.

Control system introduced for handling trade waste activities that form part of the building consent process. The use of scaled drawings and 'best practise guidelines' for pre-treatment systems. Introduction of trade waste sampling for compliance purposes - new premises.

Communication and close working liaison with council staff re trade waste monitoring and fault reporting - Sewer drainage gang, Waste water

treatment staff (plant hits) and EHO's undertaking food inspections to include visual observation of grease traps/keeping of records/ and other features equals trade waste monitoring feed back.

Other important matters - SW infiltration and dealing with trade waste nuisances and non compliance (specific surveys)