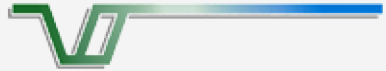


# Digital Telemetry



Successful Industry and Manufacturing is key to the success of [Hutt City](#) but it also creates waste and wastewater as a by-product of that activity. Too much waste can overload the Council's Wastewater Treatment Plant (WWTP) and Trade Waste discharge consents are used to manage the quality and quantity of those discharges.



## The Challenge

Effectively managing wastewater flowing through the underground pipe network from hundreds of Hutt City businesses requires that the Trade Wastes team carefully monitor flow rates, measure concentrations and randomly visit clients to ensure everything is as it should be. Rapid detection of accidental or non-consented discharges can prove challenging and, while overloads at the WWTP are rare, the consequences can be severe in terms of breaches of their resource consent and potential harm to the environment. Ensuring that the sewage system is on an even keel keeps treatment management costs down and the environment safe.

Current practice for compliance monitoring relies in-part on key clients providing wastewater flow metering records each month to Council. These are supplemented by random site visits and costly sampling regimes. It simply isn't possible or efficient to watch everyone all the time and 100% compliance by industry is considered unrealistic and unachievable.

Neither the Hutt City Council, nor many of the client's themselves, have any real visibility of issues occurring until sample results arrive or flow metering data is downloaded and this can be many weeks later by which time the damage is done. A solution was needed.



## The Solution

**Digital Telemetry** provided and installed customised cellular modem controllers at two key industrial pilot sites and began collecting 10 minute flow data from existing meters using 4-20mA current loop. The installation co-exists with the client's own monitoring equipment and their monthly data collection continued unchanged. The flow data is posted on the **Digital Telemetry** web site as it is collected. Both the council and the client staff can see their sewage discharges as they happen... on the internet, day or night. Information can be seen as graphs, a table of data, or downloaded as spreadsheets for further processing and analysis. Each client can now monitor their own discharges as they happen, and the Hutt City Trade Wastes gain a much better picture of discharger behaviour and when to time visits.

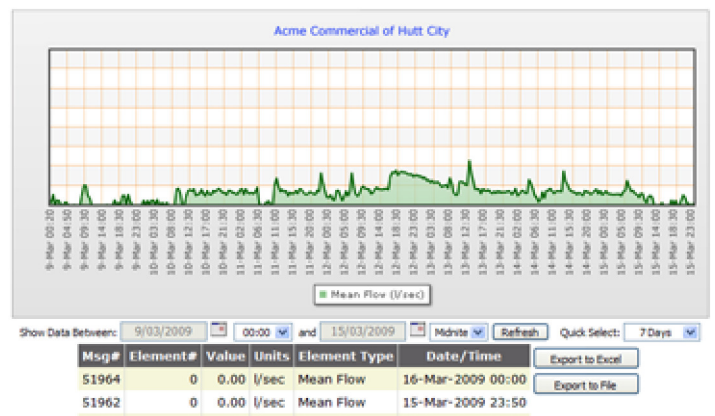
To avoid someone watching round the clock, **Digital Telemetry** automatically monitors how things are going for each site, watching for sudden changes or unexpected discharges and sending emails and SMS alarms to the Council as required. Inspection site visits no longer need to be random and both Council and Client are aware as issues unfold instead of a month after the fact. Events at the WWTP can be rapidly checked against the discharge history of sites in the system allowing faster remedial actions to occur.

## The Payoff

Penalties for breaching consents seem well and good, but by far the best result for the Council is no breaches, no penalties, successful industries and manageable cost effective sewage treatment for Rate Payers. With both the ability to monitor sewage flows from their office and the knowledge that the Trade Waste team can too, industry behaviour changes are already being seen.

Accidental and inappropriate discharges are less frequent and sudden visits from the Hutt City team have proven highly effective. For Hutt City, site visits can now occur as issues are unfolding, with constructive discussions held on how to address issues and meet commercial challenges.

The scheduling of site visits and sampling can be based on the situation right now instead of what the customer did last month.



Challenges of communications reliability, installation hassles, paying phone accounts and ongoing monitoring are left to **Digital Telemetry**. The Hutt City Trade Waste team is now more pro-active and the clients themselves can focus on their day jobs with remote managers having the ability to review site discharges from anywhere in the country via the internet.

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