

Appendix A: Wellington Water Improvements to Porirua Wastewater Treatment Plant



Value for Money Initiative

PWWTP Emulsion Polymer

Opportunity

The solids at the Porirua waste water plant were building up due to ineffective dewatering. This was causing the clarifiers to overtop with sludge and discharge during periods of high hydraulic load. The sludge from the centrifuges was at 13% dry solids and the build-up of the sludge level in the plant caused the oxygen demand to increase which meant we had to run the air blowers harder.



Key Facts

Beneficiaries	PCC & WCC
Action	Opex Response
Status	Completed
Net Saving (p.a.)	\$315,000

Solution

Using an alternative type of polymer – a chemical that helps bind sludge and increase its solid content - for the dewatering of waste water sludge

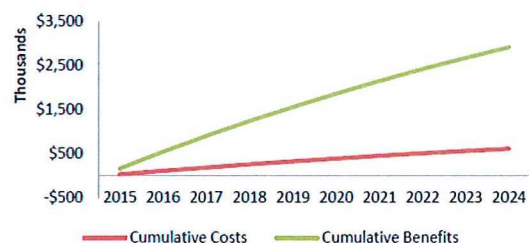
Estimated Costs

- Additional cost for polymer is around \$85,000 per annum

Performance Indicator	Impacts
Public Health	<input checked="" type="checkbox"/>
H&S Performance	
Customer Satisfaction	<input checked="" type="checkbox"/>
Environmental Performance	<input checked="" type="checkbox"/>
Regional Economy & Resilience	
Culture & Engagement	
Simplification & Standardisation	
Financial Benefit	<input checked="" type="checkbox"/>

Potential Benefits

- Reduced the number of overflows from the clarifiers from 15 (Jan-Jul15) to 2 (Aug-Dec15) and improved the effluent quality considerably. This keeps us in the good books with our friends from GWRC environment and reduces the risk of fines and bad publicity
- Reduced the amount of water been trucked to the landfill as the dry solids % has improved from 14% to around 19%, over35% increase in solids content
- Reduced complaints of landfill odour from residents
- Saving on landfill cost is around \$400,000 per annum



Appendix B: Water supply non-financial performance measures

Part 2 – Performance Measures

Sub-part 1 - Water supply

(1) Performance measure 1 (safety of drinking water)

The extent to which the local authority's drinking water supply complies with:

- (a) part 4 of the drinking-water standards (bacteria compliance criteria), and
- (b) part 5 of the drinking-water standards (protozoal compliance criteria).

(2) Performance measure 2 (maintenance of the reticulation network)

The percentage of real water loss from the local authority's networked reticulation system (including a description of the methodology used to calculate this).

(3) Performance measure 3 (fault response times)

Where the local authority attends a call-out in response to a fault or unplanned interruption to its networked reticulation system, the following median response times measured:

- (a) attendance for urgent call-outs: from the time that the local authority receives notification to the time that service personnel reach the site, and
- (b) resolution of urgent call-outs: from the time that the local authority receives notification to the time that service personnel confirm resolution of the fault or interruption.
- (c) attendance for non-urgent call-outs: from the time that the local authority receives notification to the time that service personnel reach the site, and
- (d) resolution of non-urgent call-outs: from the time that the local authority receives notification to the time that service personnel confirm resolution of the fault or interruption.

(4) Performance measure 4 (customer satisfaction)

The total number of complaints received by the local authority about any of the following:

- (a) drinking water clarity
- (a) drinking water taste
- (b) drinking water odour
- (c) drinking water pressure or flow
- (d) continuity of supply, and

(e) the local authority's response to any of these issues

expressed per 1000 connections to the local authority's networked reticulation system.

(5) **Performance measure 5 (demand management)**

The average consumption of drinking water per day per resident within the territorial authority district.

Source: Accessed at <https://www.dia.govt.nz/Resource-material-Our-Policy-Advice-Areas-Local-Government-Policy#performance-measures>