



Overview of Proposed AFFCO Imlay WWTP



Land Meat & AFFCO Imlay Wastewater Source Separation: Proposed Pipeline Routes



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WASTE MINIMISATION & TREATMENT SPECIALISTS

Main Treatment Options Investigated

- Biological treatment
 - Covered anaerobic lagoon followed by aerated lagoon, clarifier and disinfection
- Acid coagulation with dissolved air flotation
- Acid/lime treatment with gravity clarifier
 - used at AFFCO Wairoa
- Electrocoagulation
- Membrane treatment
- Status Quo

Acid / Lime System (2-stage pH process)

Screened Wastewater



Acidify to pH 3.0



Raise pH to ~9.0



Flocculate



Clarify by settling or by dissolved
air flotation (DAF)

Chemical Mixing Tanks



Clarifier



Clarifier



Clarifier Influent and Effluent



Clarifier Settling 30 mins



Acid Tank



Lime Hopper



Dewatering solids



Solids



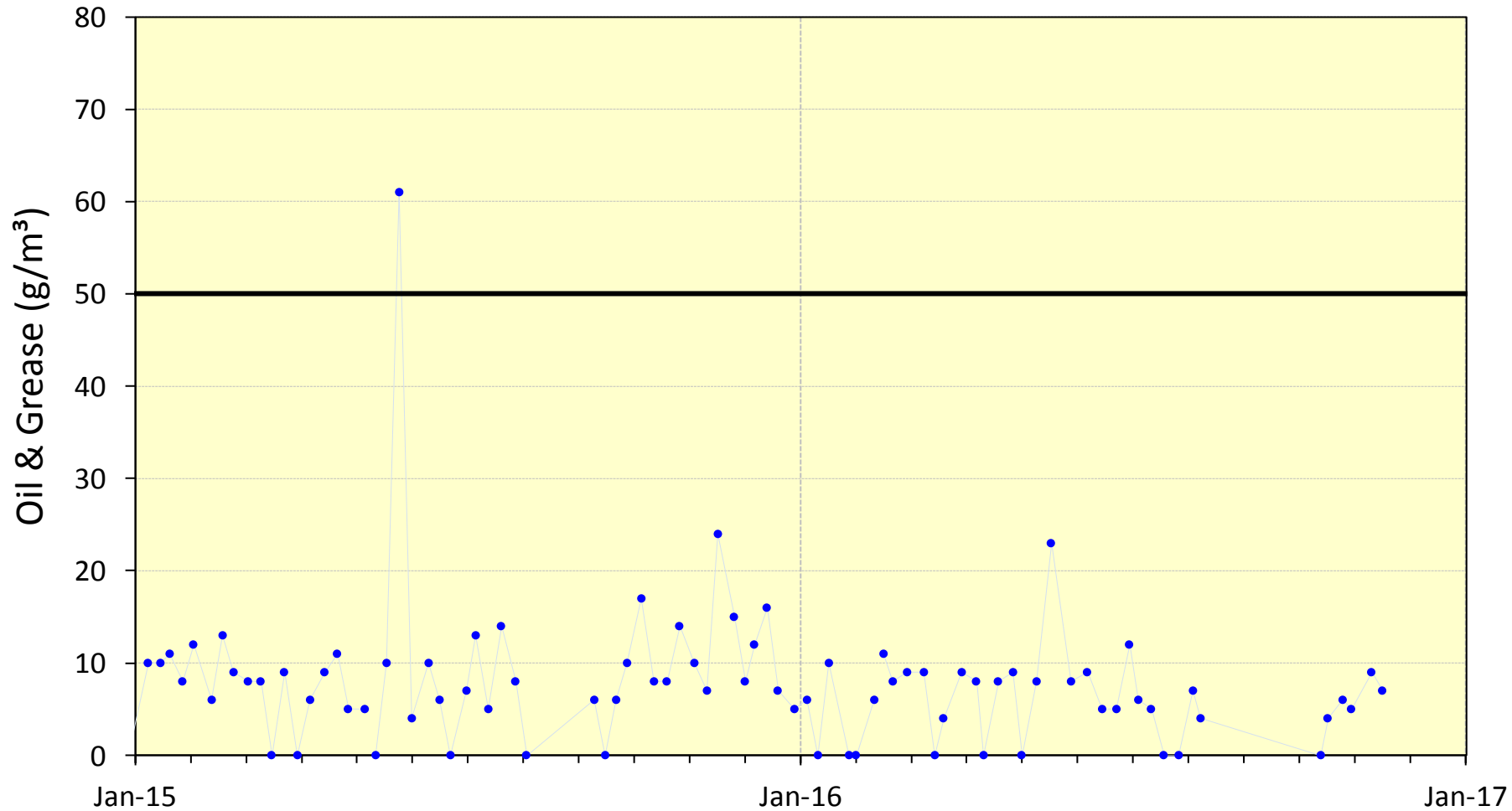
Sea Outfall Consent Limits

	<i>Prior to 30 June 2007</i> <i>At least 90% of the time and for no more than 3 consecutive days</i>	<i>After 30 June 2007</i> <i>At least 95% of the time and for no more than 2 consecutive days (except where noted)</i>
Total Grease	200 g/m ³ , 4,000 kg/day	50 g/m ³
Suspended Solids	600 g/m ³	100 g/m ³
Total Sulphides	6.7 g/m ³ ⁽¹⁾	6.7 g/m ³ ⁽¹⁾
Total Chromium	5.0 g/m ³ ⁽¹⁾	5.0 g/m ³ ⁽¹⁾
Zinc	5.0 g/m ³ ⁽¹⁾	5.0 g/m ³
Nickel	1.5 g/m ³ ⁽¹⁾	1.5 g/m ³ ⁽¹⁾
Copper	0.5 g/m ³ ⁽¹⁾	0.5 g/m ³ ⁽¹⁾
Lead	0.5 g/m ³ ⁽¹⁾	0.5 g/m ³ ⁽¹⁾
Mercury	0.01 g/m ³ ⁽¹⁾	0.01 g/m ³ ⁽¹⁾

Enterococci	Median 4,000 / 100 ml Max 12,000 / 100 ml
Faecal Coliforms	Median 10,000 / 100 ml 90% less than 25,000 / 100 ml

AFFCO Wairoa Effluent Oil & Grease

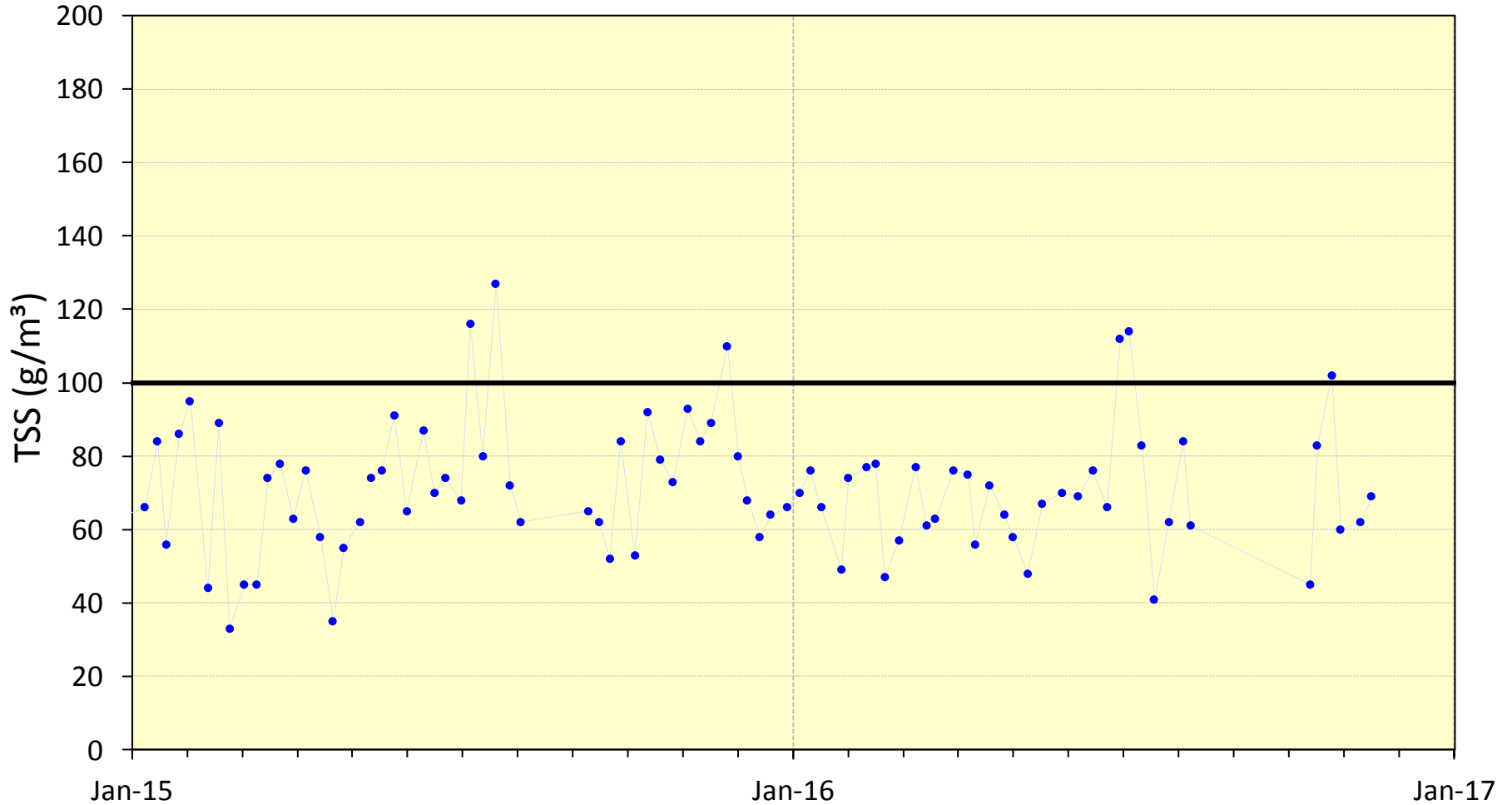
● Oil & grease — Whanganui 95th percentile limit



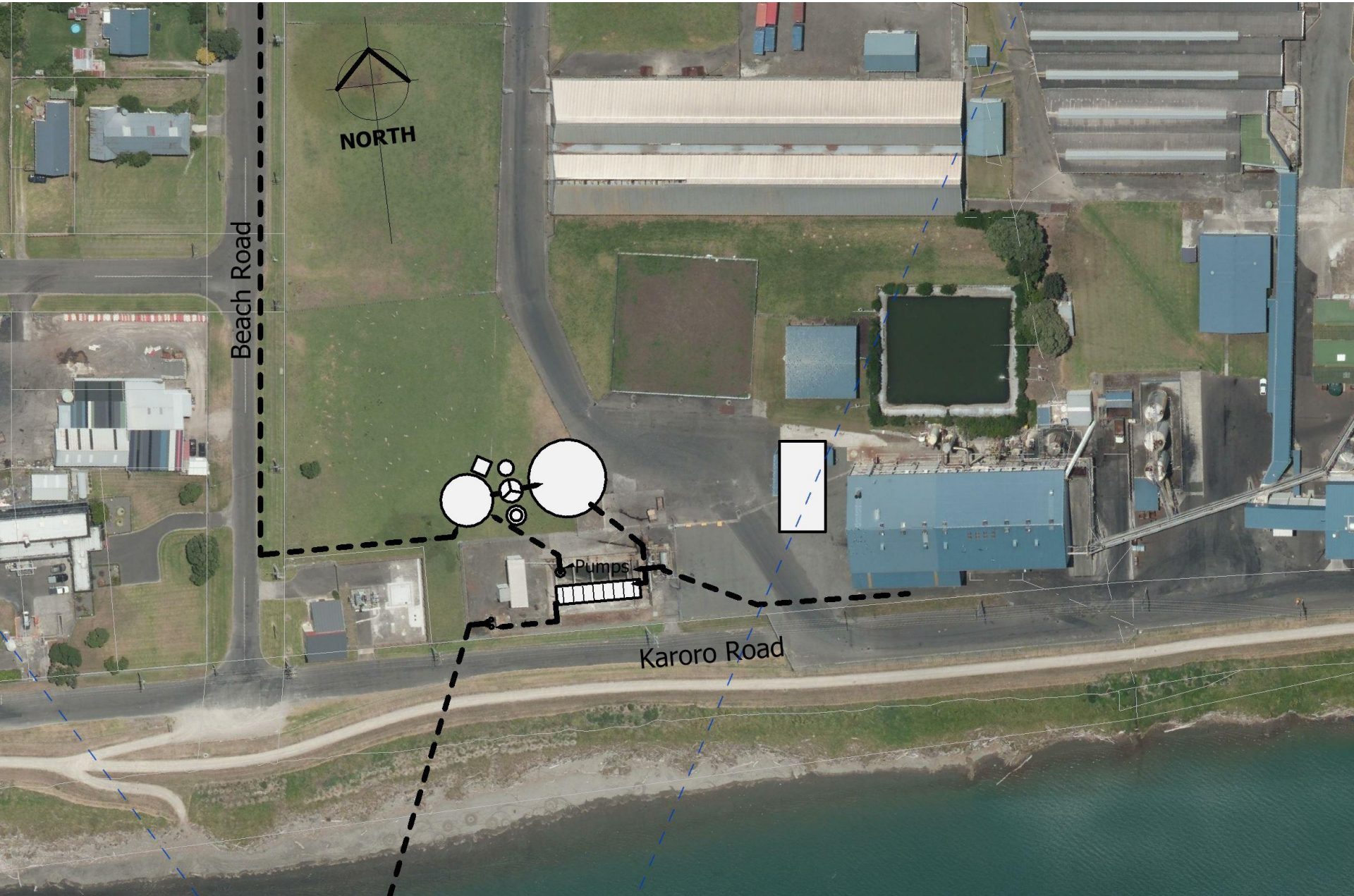
AFFCO Wairoa Effluent Total Suspended Solids

• Total suspended solids

— Whanganui 95th percentile limit



Location Plan



Site Layout

