

VINEWAY

Memorandum

Re: Commercial aspects of on-site wastewater servicing

Treated and untreated wastewater

The fast-track application for the Delmore development includes an on-site wastewater treatment as its primary wastewater solution for the entire development. It also includes an option to transport untreated wastewater for up to 475 homes (equivalent of Stage 1) as a temporary measure if Watercare Services Ltd confirms that the Delmore development can connect to the Army Bay Wastewater Treatment Plant, and there is a period of time between the Stage 1 upgrade to the Army Bay Wastewater Treatment Plant being completed and houses at the Delmore development being brought to market. This is necessary to avoid the environmental impacts of, and inefficiencies associated, with constructing an on-site wastewater treatment that is only going to be used for a short period and by a small number of homes.

The advice we have received is that treated water for the first 475 homes (the number of homes in the Stage 1 area) can be predominately discharged on-site. However, over some of the treated water needs to be disposed of off-site to avoid adversely impacted the on-site waterways (see APEX and Viridis Consultants analyses). Similarly, if the temporary untreated wastewater option is employed because Watercare Services Ltd confirms the Delmore development can be serviced by the Army Bay Wastewater Treatment Plant untreated wastewater would have to be disposed of off-site.

The volumes of treated wastewater/untreated wastewater and the number of vehicle movements associated with each of these options has been provided to Vineway by APEX and is set out in APEX's report.

Vineway Ltd's preference is to transport treated wastewater/untreated wastewater to one of Watercare Services Ltd's Auckland-based facilities. Watercare's 2021-2024 Asset Management Plan states that the Rosedale Wastewater Treatment Plant currently (as at 2021) services about 251,000 people and it has capacity to service around 578,000 people.¹ That means the Rosedale Wastewater Treatment Plant is only operating at about half capacity and so has capacity for the treated or untreated wastewater from the Delmore development. There is also the Pukekohe Wastewater Treatment Plant which is currently servicing around 33,800 people (as at 2021) and which has been upgraded to now serve around 60,000 people.² This means it too has capacity for the treated or untreated wastewater from the Delmore development.

However, because there is currently no agreement with Watercare Services Ltd enabling this, Vineway Ltd has put in place alternative arrangements for off-site disposal of treated wastewater / untreated wastewater:

¹ 2021-2041 Watercare Asset Management Plan pg 66

² 2021-2041 Watercare Asset Management Plan pg 67

VINEWAY

- Delmore has confirmed with Whangarei District Council that it can receive treated wastewater/untreated wastewater at its disposal facility. The correspondence confirming this is **attached**.
- Delmore is also in negotiation with Chem Waste (Auckland) to receive treated wastewater/untreated wastewater at its treatment facility. At this stage Chem Waste has confirmed it can take up to 400m³ per day. The correspondence confirming this is **attached**.

The advice we have received is that nature of the streams within the Delmore site means that it is not, at this point in time, possible to discharge the treated wastewater associated with the balance of the houses (738, equivalent of Stage 2) on-site. This means that we will need to identify and gain the necessary approvals for disposing that treated wastewater off-site somewhere else if a connection to the Army Bay Wastewater Treatment Plant is not available. Given the timeframes for developing the overall site this will not hold up construction beginning promptly if approvals are granted, and a condition requiring this has been included in the proposed conditions of consent.

Sludge

Any sludge waste produced by the on-site wastewater treatment plant can be disposed of at a managed facility, such as Hampton Down in Auckland, or trucked to the Whangarei District Council facility as part of a wider disposal contract.

[REDACTED]
Development Manager

Delmore

18 December 2025

From: [REDACTED]
Subject: FW: RO Reject Waste
Date: 16 December 2025 at 10:41 PM
To: [REDACTED]

AA

From: [REDACTED]
Date: Wednesday, 10 December 2025 at 4:50 PM
To: [REDACTED]
Cc: [REDACTED]
[REDACTED]
[REDACTED]
Subject: RE: RO Reject Waste

Greetings [REDACTED]
Our current site conditions / permits allow us to discharge a max of 400 m³ per day (at 5 L/s) from all activities on site (including treated stormwater)

Kind regards



[REDACTED]
National Technical Manager
[REDACTED]
[REDACTED]
[REDACTED]

From: [REDACTED]
Date: Wednesday, 26 November 2025 at 5:47 PM
To: [REDACTED]
[REDACTED]
Cc: [REDACTED]
[REDACTED]
Subject: RE: RO Reject Waste

[REDACTED],
The deliveries being considered for brine is a daily volume from the plant.
For the wastewater this may be daily (in some of our options) or only when we are unable to discharge. The volume is likely the same. If there is wastewater off site, then there will be no brine produced as we bypass treatment.

The raw wastewater will be domestic in origin with expected concentrations as below. As the network is not yet built these are typical wastewater strengths that we see around North Island with low infiltration rates.

BOD 250- 300 mg/l
TSS 250 -350 mg/l
TKN 40-60 mg/l
NH3-N 30 -55 mg/l
TP 5-9 mg/l
E coli 1000000 cfu/100ml

If you have any more queries, please get in touch.

[REDACTED]



[REDACTED]
Director

WWTP Limited

[REDACTED]

From: [REDACTED]
Subject: FW: Tankered wastewater to Whangarei
Date: 26 November 2025 at 12:14 AM
To: [REDACTED]

AS

Received in confirmation that Whangarei can accept all volumes of wastewater.

Regards

From: [REDACTED]
Sent: Wednesday, 26 November 2025 12:59 pm
To: [REDACTED]
Cc: [REDACTED]
Subject: RE: Tankered wastewater to Whangarei

Hi [REDACTED],

As previously discussed, Whangarei District Council is happy to accept the volumes indicated below.

Our position remains that the tanker company must hold a current Code of Compliance and use Waste Tracker for all loads.

Please note that these loads will incur an out-of-district disposal fee of **\$44.98 per m³**, charged at our discretion. This fee is subject to review and **may increase in the future to reflect operational costs**.

The Wastewater Operations Manager has also confirmed that they are happy to receive these loads into a designated area. This will help prevent congestion caused by other tanker operators within the district and will also reduce wear and tear on the headworks.

Many thanks

[REDACTED]
Pollution Prevention Officer | Waste and Drainage Department
Whangarei District Council | Te Iwitahi, 9 Rust Avenue | Private Bag 9023, Te Mai, Whangārei 0143

[REDACTED] www.wdc.govt.nz

From: [REDACTED]
Sent: Monday, 24 November 2025 11:11 am
To: [REDACTED]
Subject: Tankered wastewater to Whangarei

EXTERNAL: This email originated from outside Whangarei District Council. Do not click links or open attachments unless you recognise the sender and know the content is safe.

[REDACTED],
I have been provided some updated flow figures for a possible tankered discharge to Whangarei. Can you please confirm that WDC can take the following.

18 x 28 m³ tankers of domestic wastewater or

18 x 28 m³ tankers of treated wastewater effluent (Typically < 10 BOD, < 10 TSS, < 5 NH₃).

In a later stage of project these volumes may be increased to

28 x 28 m³ tankers of domestic wastewater or

28 x 28 m³ tankers of treated wastewater effluent (typically < 10 BOD, <10 TSS, < 5 NH₃)

In the case of domestic wastewater this will become a daily activity all year, whereas the effluent will typically only be in summer months when local discharge is not possible as the stream has too low dilution.

I will be grateful if you can confirm that these volumes can be received by WDC at Whangarei, subject to contracts and periodic testing as outlined in previous correspondence.

Many thanks



WWTP Limited

[REDACTED]
Director

[REDACTED]