

## **Delmore Fast-Track**

25/06/2025 – Auckland Council Response

### **Annexure 11:**

**Hazardous Substances** 

**Louis Boamponsem** 



# **Technical Memo:**

## **Hazardous Substances**

23/05/2025

To: Carly Hinde, Principal Project Lead, Planning and Resource Consents Dept.

From: Louis Boamponsem, Senior Specialist – Contamination, Air and Noise

Subject: BUN60444768: Hazardous substances facility: Review for development

at Orewa (Delmore)

I have reviewed the AEE and supporting information submitted for resource consent application BUN60444768, with respect to the actual and potential hazardous substances effects of the proposal and the provisions of the:

- Resource Management Plan (RMA) 1991
- Auckland Unitary Plan (Operative in Part), Chapter E31: Hazardous Substances (AUP(OP)).

The documents I have reviewed are:

- Delmore Fastrack Approval Application Assessment of Environmental Effects (AEE), prepared by B&A Consulting Limited, 17/2/2025
- Appendix 15: Site Plans
- Appendix 22 Delmore Fast-track Proposed Consent Conditions
- Appendix 23: Rules Assessment
- Appendix 32: Delmore Subdivision: Hazardous Substances and ITA Assessment (HSITA)

### Introduction and proposal

I understand that the Proposal, as relevant to hazardous substances involves:

• the transformation of 109.18 hectares of Future Urban Zone land at 88, 130, 132 Upper Örewa Road and 53A, 53B & 55 Russell Road, Örewa, into a planned residential development of approximately 1,250 dwellings, plus one superlot, supporting infrastructure (roads, stormwater, wastewater, water supply, power, fibre), open spaces, ecological restoration and the delivery of the regionally significant NoR 6 arterial road. The applicant Vineway Limited ('Vineway') has proposed a new Wastewater Treatment Plant (WWTP) to service the Delmore housing project. The WWTP will treat municipal wastewater and is designed as a temporary solution until public wastewater infrastructure upgrades are completed by 2031.

The hazardous substances to be stored and used at the proposed WWTP are summarised in Table 1 and detailed in Appendix B of the HSITA report. These include (all volumes quoted are on-site maxima):

Acetic acid (30–50% aqueous) – 10 000 L (≈10.5 t), HSNO Classifications: 6.1D (Toxic), 6.9B, 8.1A (Corrosive), 8.2C, 8.3A, 9.3C (Eco-toxic).

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- Sodium hydroxide (>5% aqueous) 10 000 L (≈14 t), o HSNO Classifications: 6.3A (Toxic), 6.4A, 8.1A, 9.1B (Eco-toxic).
- Aluminium sulphate (>25% formulation) 2 000 L (≈2.7 t), o
   Classifications: 6.3A (Toxic), 6.4A, 8.1A, 9.1B (Eco-toxic).
- Citric acid (10–50% formulation) 2 000 L (≈2.5 t), HSNO Classifications: 6.3B (Toxic), 8.3A
- Sodium hypochlorite (5–25% formulation) 2 000 L (≈2.1 t), HSNO Classifications: 6.3A, 8.3A, 9.1B.
- Diesel fuel (for standby generator) contained in the generator's internal tank (≈500 L), HSNO Classifications: 3.1D (Flammable), 6.1E, 6.7B, 9.1B

Under the AUP E31 standards the proposed WWTP will not meet the following permitted-activity rules:

- Table E31.4.3 (Future Urban Zone) Permitted volume thresholds
  - Toxic substances (Class 6.1C, 6.3–6.9): Permitted < 0.3 t; proposed ~ 18.2 t</li>
     → Discretionary
  - o Corrosive substances (Class 8.1, 8.2A, 8.3): Permitted < 0.05 t; proposed  $\sim$  31.8 t → Discretionary
  - Eco-toxic substances (Class 9.1–9.4 within 30 m of a watercourse): Permitted
     3 t; proposed ~ 5.2 t → Discretionary
     (i.e. all three hazard-class thresholds are exceeded, so the activity defaults to Discretionary as per Table E31.4.3)
- E31.6.1(1)(a) Setbacks from watercourses and sensitive zones
  - Requires a 30 m separation between any Class 9 storage and a watercourse, and 50 m from more sensitive zones for Classes 6 & 8.
  - The proposed layout has some tank farm and IBC storage within those setback distances → cannot comply with the site-design standard.

Due to the above breaches:

 The hazardous-substance storage and use is a Discretionary Activity under AUP E31. The HSITA report notes that the hazardous facilities that store or use hazardous substances above the specified thresholds for controlled activity and restricted discretionary activity status in the activity tables or are not otherwise provided for are a discretionary activity under E31.4.1(A7).

I recommend that the consent application can be granted subject to conditions similar to those proposed at Appendix 21 of the AEE (detailed at the end of this memo). The reasons for this recommendation are:

- A Hazardous Substances Assessment report (HSITA) has been prepared by Williamson Water & Land Advisory (see Appendix 32) which provides an assessment of effects on people, property and the environment arising from the use hazardous substances within the proposed WWTP. I consider the HSITA report has been prepared by a suitably qualified and experienced hazardous substances consultant.
- To ensure compliance with AUP (OP) E31 provisions (and to minimise environmental and health risks), several control and operational measures have been proposed,

including secondary containment, and a site-specific environmental management plan (to be consent-conditioned)

- I concur with the HSITA report's conclusion that it is very unlikely that hazardous substances will be released from the site, and since the consequence of a release is low to moderate, the operation of the WWTP presents a low risk overall.
- The full implementation of the proposed conditions of consent will ensure that the
  design and management of the proposed WWTP with regard to hazardous
  substances will avoid or adequately mitigate any adverse effects, including risks to
  people, property and the environment.

#### Applicant's proposed consent conditions

- (40) If a Wastewater Treatment Plant is constructed on-site, the consent holder shall prepare a Wastewater Treatment Plant Management Plan (WTPMP) a for the Wastewater Treatment Plant. The WTPMP must be submitted to Auckland Council for certification as part of the building consent application process (or sooner if available). The purpose of the WTPMP is to manage and reduce risks to the natural environment and to people from hazardous substances stored for wastewater treatment purposes. The WTPMP must include, but not be limited to:
- (e a) Identification of the specific activities conducted on the site;
- (d b) Identification of potential contaminants associated with these activities, including a Hazardous Substance Inventory and associated Material Safety Data Sheets;
- (e c) Methods used to contain identified contaminants and prevent them contacting stormwater runoff as far as practicable, and methods to manage environmental risks from site activities:
- (f d) A Spill Response Plan (which includes the provision that all spills over 20 litres, or any spill of environmentally hazardous substances that has entered the stormwater system, a waterbody or has contacted unsealed ground, must be reported immediately to the Auckland Council's 24 Hour Pollution Hotline (09-377-3107));
- (g e) Accurate site drainage plan(s) showing the location of all site catchpits, containment systems, treatment devices and the discharge point(s) of the site stormwater system:
- (h f) An appropriate auditing programme to ensure site performance with all components of the WTMP;
- (j g) Methods for providing and recording staff training; and
- (h) An Operation and Maintenance Plan.
- (97) The site must be operated and managed in accordance with the Wastewater Treatment Plant Management Plan (WTPMP) while the Wastewater Treatment Plant is operational. While the Wastewater Treatment Plant is operational:
- (h) The WTPMP must be reviewed and updated after 12 months from the date of commissioning to the Wastewater Treatment Plant, to ensure all components of the WTPMP are still relevant;

- (i) The WTPMP must be kept on site and accessible at all times;
- (j) The Hazardous Substance Inventory, associated Material Safety Data Sheets, and Spill Response Plan must be kept up to date and maintained onsite at all times;
- (k) Suitable spill kits must be made available onsite at all times; and (a) The consent holder must report all spills over 20 litres, or any discharge of environmentally hazardous substances, including wastewater to the environment, to Auckland Council within 24 hours of the spill occurring.

### Memo and technical review prepared by:

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Date:	23/5/2025

<sup>\*&#</sup>x27;Shall in condition (40) could be changed to 'must'

<sup>\*&#</sup>x27;for Certification' inserted in condition (40)