

Delmore Fast-Track

04/05/2026 – Auckland Council Response

Annexure 15:

Air Quality

1.0 APPLICATION DESCRIPTION

Application and property details

Fast-Track project name: Delmore Fast-Track

Fast-Track application number: FTAA-2512-1164

2.0 Technical Specialist Memo – Air Quality

To: Dylan Pope – Lead Planner & Carly Hinde - PPL

From: Louis Boamponsem

Qualifications
& Relevant
Experience:

I hold a PhD in Environmental Science degree from The University of Auckland (specialising in air quality monitoring and assessment). I have 14 years' experience in air quality monitoring, research and broad environmental science lecturing including more than 20 published articles.

I am employed as a Senior Specialist within the Contamination, Air and Noise team of the Specialist Unit, Planning and Resource Consents Department, Auckland Council. I have held this role since May 2024 and am principally involved in evaluating and preparing specialist and technical input to resource consenting issues and proposals. I was previously employed by the Research and Evaluation Unit (RIMU), Auckland Council as an Air Quality Scientist.

Preparation in
Accordance
with the Code
of Conduct:

I confirm that I have read the Environment Court Practice Note 2023 – Code of Conduct for Expert Witnesses ([Code](#)), and have complied with it in the preparation of this memorandum. I also agree to follow the Code when participating in any subsequent processes, such as expert conferencing, directed by the Panel. I confirm that the opinions I have expressed are within my area of expertise and are my own, except where I have stated that I am relying on the work or evidence of others, which I have specified.

Signature:



Date:

17/3/2026

3.0 Executive Summary / Principal Issues

The revised Delmore application introduces several important changes that affect air quality outcomes and the suitability of the proposed conditions. The updated air discharge assessment covers the project more fully than the withdrawn version, and it identifies several new activities that have the potential to generate odour or dust. These additions change the overall risk profile of the proposal and require stronger, more targeted conditions to ensure any effects remain appropriately managed.

The key points are summarised below:

1. New odour-generating activities now form part of the proposal

The introduction of off-site tankering of untreated wastewater is a significant change from the earlier application. This creates new odour sources at the tanker filling point, the tanker back-vent, and the raw wastewater holding tank. These activities were not previously assessed or conditioned, and they sit close to existing and future residential receptors. As a result, the application now presents greater odour risk than the withdrawn proposal.

2. Odour control conditions have been strengthened to match the increased risk

The new set of conditions responds to these new sources through:

- Dedicated odour control for tanker back-vent air.
- Odour control for holding tank ventilation.
- Early-stage verification of odour control performance by a Suitably Qualified and Experienced Practitioner (SQEP).
- A broader and more robust Odour Management Plan (OMP) that covers both the WWTP and tankering operations.

These additions address the gaps in the earlier conditions and are necessary to maintain acceptable odour performance at the site boundary.

3. Construction dust is now addressed

A key improvement in the new application is the requirement for a Construction Air Quality Management Plan (CAQMP). This introduces clear expectations around dust mitigation, daily inspections, complaints handling, and contingency actions. Given the extent of earthworks and the use of an unsealed portion of Russell Road for tanker movements, these measures are essential.

Additional conditions requiring inspection, maintenance and re-surfacing of the unsealed road further reduce the likelihood of dust problems beyond the site.

4. Core WWTP odour controls are retained and strengthened

The main odour control measures for the WWTP (enclosure, extraction, activated carbon treatment, and stack discharge) remain in place. The new conditions make them more rigorous by requiring SQEP verification and by embedding them within the expanded OMP. This improves the enforceability and operational clarity of the controls.

5. Overall conclusion

From an air quality perspective, the new application represents both an increase in potential risk (through untreated wastewater tankering) and a substantial improvement in the control framework designed to manage those risks.

With the strengthened conditions (particularly for odour control, dust management, verification, and ongoing operational planning) the air quality effects of the proposal can be managed so they remain acceptable and less than minor.

4.0 Documents Reviewed

The following documents have been reviewed in preparing this memorandum:

- Delmore Fast-track Approval Application – Assessment of Environmental Effects (AEE), prepared by Barker & Associates Ltd, dated 17 February 2025.
- Appendix 22 – Delmore Fast-track: Proposed Consent Conditions (withdrawn application).
- Appendix 31 – Technical Assessment of Discharges to Air from the Proposed Wastewater Treatment Plant – Delmore, Ōrewa, prepared by Air Matters Ltd, dated 11 February 2025 (withdrawn air quality report).
- Appendix 44 – Proposed Conditions (December 2025 application), including the updated air discharge conditions.
- Appendix 39 – Air Discharge Assessment, prepared by Air Matters Ltd, dated 19 December 2025 (updated air quality report).
- Wastewater Disposal Memorandum (Vineway Ltd), dated 18 December 2025 (supporting information for treated/untreated wastewater tankering).

5.0 Additional Reasons for Consent Not included in AEE / Incorrect Reasons for Consent

N/A

6.0 Specialist Assessment

6.1 Existing Environment and Sensitivity of Receptors

The receiving environment is a developing area with a mixture of rural land, ongoing construction activities, and new residential neighbourhoods emerging through the Delmore and Ara Hills developments. Sensitive receptors exist in all directions around the WWTP site, including dwellings within approximately 70 -150 metres of the plant footprint. These receptors will increase in number as subdivision progresses.

6.2 Potential Adverse Effects

6.2.1 Odour Effects from the WWTP

The proposed WWTP includes standard odour generating components such as screening, sludge handling, and biological treatment. These processes can produce strong and unpleasant odours if not adequately controlled. The updated air discharge assessment indicates that, under normal operating conditions, odour can be effectively contained through enclosure, extraction, and treatment using activated carbon. However, the plant's close proximity to residential areas means that abnormal events (e.g., mechanical failure, loss of aeration, extraction faults) could result in temporary but noticeable odour off-site if not well managed.

6.2.2 Additional Odour Sources - Untreated Wastewater Tankering

A key change in the revised application is the potential for off-site tankering of untreated wastewater, which introduces new odour risks at the filling point, the tanker back-vent, and the raw wastewater holding tank.

These activities have a higher probability of generating acute, short-duration odour plumes, particularly during filling operations. Given the short separation distances to housing, these sources require robust controls to ensure effects remain within acceptable levels.

6.2.3 Dust Effects from Earthworks and Tanker Movements

The scale of the development means construction dust is an inherent risk, particularly on dry days and during periods of significant earthworks. The use of an unsealed portion of Russell Road by wastewater tankers presents an additional dust pathway that needs to be addressed in the conditions. Without specific mitigation, dust emissions from truck movements could result in nuisance effects for nearby properties and construction workers.

6.3 Proposed Mitigation Measures

6.3.1 Odour Mitigation

The application includes a more complete and appropriate set of mitigation measures. These include:

- Enclosure of key odour-producing components.
- Negative pressure extraction systems.
- Activated carbon odour treatment with pre-heating to reduce humidity.
- Backup power to maintain aeration and extraction in the event of outages.
- A strengthened Odour Management Plan (OMP).
- SQEP verification of odour control system performance following installation.

For tankering, the new requirement to install odour control for both tanker back-vent air and holding tank venting, along with mandatory performance certification, materially reduces the risk of off-site odour.

6.3.2 Dust Mitigation

The new Construction Air Quality Management Plan (CAQMP) introduces appropriate minimum standards for dust control, including routine inspections, water suppression, wheel wash controls, and contingency actions.

Additional measures requiring surface maintenance of the unsealed road and soil tracking management at the turning head will help reduce dust generated from tanker activity. These controls were absent from the withdrawn application and are important for protecting amenity.

6.4 Alignment with AUP (OP) E14 Provisions

The proposed conditions and mitigations are consistent with the expectations of the Auckland Unitary Plan (AUP), Chapter E14 (Air Quality). The discharge of odour from a municipal WWTP is discretionary activity under AUP (OP) E14 provisions.

Based on the controls now proposed; especially the enclosure, extraction and treatment systems, the OMP, and the new tankering-related odour controls; the proposal meets the intent of the AUP provisions and the Ministry for the Environment's Good Practice Guide for Assessing and Managing Odour (2016).

6.5 Overall Opinion and Recommendation

In my view, the revised proposal presents higher inherent air quality risks than the withdrawn application due to the introduction of untreated wastewater tankering. However, the proposed conditions have also been significantly strengthened, and now include the necessary measures to manage both odour and dust effects to an acceptable level.

Provided the full suite of new air quality conditions is included without dilution; particularly those relating to tanker odour control, verification, the OMP, the CAQMP, and unsealed road dust management; I consider that the air quality effects of the proposal can be managed so that they remain less than minor.

Accordingly, I support the application from an air quality perspective, subject to the retention of the strengthened conditions in the updated package.

7.0 Section 67 Information Gap

I have identified that there are no section 67 information gaps.

8.0 Recommendation

Based on the information provided in the application, the updated air discharge assessment, and the strengthened package of conditions, I consider that the air quality effects associated with the proposal can be appropriately managed. The introduction of untreated wastewater tankering certainly increases the potential for odour and dust impacts; however, the revised conditions now include the necessary controls, verification steps, and management plans to reduce these effects to an acceptable level.

On this basis, I support the application from an air quality perspective, provided that the full suite of air quality related conditions contained in the updated proposal is included without weakening or removal. These conditions (particularly those relating to odour control for tanker operations, the Odour Management Plan, verification requirements, construction dust management, and ongoing monitoring) are essential to ensuring that adverse air quality effects remain less than minor.

9.0 Proposed Conditions

The updated air discharge conditions (18, 245 - 257) in Appendix 44 represent a significant improvement over the withdrawn version. They introduce targeted controls for tankering odour, strengthen WWTP odour requirements, and add a robust Construction Air Quality Management Plan. This is a solid base, and all of the proposed conditions are appropriate.

Recommended amendment:

Add a condition requiring a field-based odour survey undertaken by an independent SQEP within the first 2 months of operation (WWTP + tankering), with a requirement to implement corrective actions if odour is detected at the boundary.

Within two months of the first operation of the wastewater treatment plant and commencement of tanker filling activities (whichever occurs first), the consent holder must engage an independent Suitably Qualified and Experienced Practitioner (SQEP) to undertake a post-commissioning odour assessment.

The assessment must:

- (a) Include field-based odour observations at and beyond the site boundary under representative operating conditions for both the WWTP and tanker filling activities;
- (b) Be carried out in general accordance with the Ministry for the Environment's *Good Practice Guide for Assessing and Managing Odour (2016)*;
- (c) Identify any odour that is, in the opinion of the SQEP, offensive or objectionable beyond the boundary of the site; and
- (d) Recommend corrective actions where necessary to avoid future odour effects.

Within 20 working days of completing the assessment, the consent holder must provide the odour assessment report to the Council and implement any corrective actions identified in the report within the timeframe specified by the SQEP.

10.0 Supporting Documents

N/A