

10 September 2026

Pamela Santos
Barkers & Associates
Level 4, Old South British Building
3-13 Shortland Street, Auckland

By email: [REDACTED]

Dear Pamela,

Beachlands South – s67 Request for further information

See below Air Matters Limited (AML) response to Council's preliminary information requests regarding air quality for Beachlands South's residential, commercial and community facilities development being assessed under the Environmental Protection Authority's fast-track processed.

Description of Missing Information 1

Since the plant design is modular, and additional modules are to be installed as development needs increase, there will be an increase in wastewater volume, potential odour generation, sludge production and extraction requirements. Please clarify whether the AQA is based on the WWTP operating at full capacity with the maximum number of modules in operation, including consideration of potential impacts from plant failure at each stage (considering how potential odour impacts will differ depending on how many modules are operating or how much wastewater is being treated – are odour impacts at 1,400 m³/day equivalent to those at 450 m³/day). Air Matters to review and confirm whether this has already been covered by the updated report.

Air Matters response:

The WWTP process uses modular Combined Works (CW) technology designed for an ultimate full capacity of 1,383 m³/day. The CW system forms part of a single integrated treatment solution, allowing modular expansion over time without requiring changes to treatment technology or creating redundant infrastructure. Separation distances and FIDOL factors (Frequency, Intensity, Duration, Offensiveness, Location) have been assessed under full capacity operating conditions in Section 7 of the AML report. As the process features fully enclosed treatment structures (eliminating typical open aeration basins and sludge drying beds), odour generation risk remains low regardless of whether 1 module (450 m³/day) or 2 modules (1,383 m³/day) are operational.

In the case of plant failure, all pumping stations (3 pumping stations in Stage 1, expanding to 6 pumping stations in Stage 2) are designed with 24-hour emergency storage capacity.

Description of Missing Information 2

Please confirm whether any back-up generators are proposed to be installed or any contingencies for plant power failure. If back-up generators are proposed, please provide details or input as relevant to the air quality assessment (e.g. any stack requirements etc). Air Matters to review and confirm whether this has already been covered by the updated report.

Air Matters response:

Section 4 of AML report notes that any emergency back-up generators installed for the WWTP must be designed to meet the standard permitted activity conditions under Rule E14.4.1 (A48) of the Auckland Unitary Plan (AUP) without requiring a separate air discharge consent. It has been confirmed by the applicant that back-up generators are proposed to ensure uninterrupted operation of odour control systems, particularly in the case of plant power failure. Full stack parameters and engineering specifications will be finalised during the detailed design phase and will be designed to meet the permitted activity standards as outlined below:

Table E14.4.1 Activity table (A48) Emergency generators used for the purpose of generating electricity for premises during mains power unavailability (includes operation for the purpose of generator testing and maintenance) – Permitted Activity

E14.6.1 Permitted Standards

All activities listed as permitted in Table E14.4.1 Activity table must comply with the following general standards and specific standards where applicable.

E14.6.1.1 General standards

The following standards apply to all permitted activities that discharge contaminants into air

- (1) The discharge must not cause, or be likely to cause, adverse effects on human health, property or ecosystems beyond the boundary of the premises where the activity takes place.
- (2) The discharge must not cause noxious, dangerous, offensive or objectionable odour, dust, particulate, smoke or ash beyond the boundary of the premises where the activity takes place.
- (3) There must be no dangerous, offensive or objectionable visible emissions.
- (4) There must be no spray drift or overspray beyond the boundary of the premises where the activity takes place.

Description of Missing Information 3

Considering emergency mitigation (24-hr storage at pump stations, 100,000 L storage tank etc), please comment on whether these address a worst-case scenario for a situation such as WWTP power failure, and if not, whether any other considerations may be required based on a worst-case scenario.

Air Matters response:

Table 5-1 of AML report notes that there is potential for odours to occur during abnormal operational events, prolonged power outages, or extended storage periods. To mitigate this, a 100,000-litre

emergency storage tank is incorporated within the treatment process, located between the inlet works and the mixing chamber. This provides operational resilience during abnormal events and enhances overall system robustness. It also provides operational contingency in the event of equipment or power interruption.

To address extreme or prolonged worst-case events beyond what is outlined in Table 5-1, a detailed Emergency Response Plan will be developed as part of the operational documentation prior to commissioning.

Other information

While I consider that the applicant's proposed conditions (relating to air quality) are generally similar to those in other consents for projects of similar nature (WWTPs), I recommend that the applicant adopts the AQA recommendations in full and I note that they have not proposed a condition relating to odour surveys. I will recommend a condition for this in my memo. I consider this is important given that several residential dwellings are proposed to be situated within the 200 m screening distance (and the closest one is to be approx. 85 m away). There is no comparable plant operating in New Zealand, so this concept is very interesting.

Air Matters response:

While not listed as a proposed condition, it is recommended in the AML report that 'consent conditions incorporate routine odour surveys for an initial period following commissioning to provide confirmation that the employed controls are effective. These surveys should be repeated before and after any future Stage 2 expansion and should be undertaken during periods of low winds or calm conditions, particularly during spring and summer months'. A set of conditions relating specifically to odour surveys is outlined below:

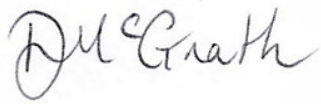
Field Odour Surveys

- a) The consent holder must engage a Suitably Qualified and Experienced Person (SQEP) to undertake a field odour survey within 6 months of the commissioning of the operation and within 6 months of the Stage 2 becoming operative. The purpose is to establish the extent of odour effects beyond the site boundary (including the potential for chronic and acute effects).
- b) The odour survey must be conducted in general accordance with guidance set out in the Ministry for the Environment Good Practice Guide for Assessing and Managing Odour.
- c) The SQEP must prepare a report for the consent holder detailing their findings and recommendations. The consent holder must submit the SQEP's report to the Auckland Council within 1 month of receipt and not later than three months following completion of the survey.

Advice Note: The intent of this condition is for field odour surveys to take place in adjacent properties as well as public land, where approval for access can be sought from landowners and/or occupiers.

Kind regards,

Written by:

A handwritten signature in black ink that reads 'Dearbhla McGrath'.

Dearbhla McGrath
Air Quality Consultant
Air Matters Ltd

Reviewed by:

A handwritten signature in black ink that reads 'Nigel Goodhue'.

Nigel Goodhue
Principal Air Quality Consultant
Air Matters Ltd