

Before Hawkes Bay Regional Council and Hastings District Council

In the matter of the Resource Management Act 1991

And

In the matter of Applications by Hastings District Council and Napier City Council
(**Applicants**) for approvals relating to Area B at Ōmarunui Landfill
(**Landfill**)

Summary of evidence by Jason Pene (Air Quality)

Dated 28 October 2021

1. I prepared a statement of evidence dated 2 September 2021 on the topic of discharges to air from the Proposal and associated effects on local air quality.
2. The proposed landfilling activities at Area B will result in the release of emissions to air, primarily of odour but also of dust, hazardous components of landfill gas and by-products of landfill gas combustion. These emissions currently occur with the operation of Area D.
3. I consider the adjoining rural environment to have a generally low sensitivity to odour and the other emitted air contaminants, except at dwellings that are interspersed throughout the two valleys to the east and west of the landfill. People are likely to be present on a consistent basis at dwellings and expectations for air quality amenity will be high.
4. The proposal will involve the transfer of landfill activities currently occurring at Area D (located within the western portion of the site) to Area B (located toward the east). This will generally lead to a greater degree of separation between emission sources and local dwellings. Notwithstanding this, one dwelling is located within 500 m of Area B at 419 Omarunui Road and this dwelling will likely be downwind in both the prevailing wind direction and in katabatic overnight drainage flows in which dispersion of odour will be poor.

5. Odour emissions are associated with a range of landfill activities and will primarily occur while the landfill is in operation. Odour emissions from the site may be increased during irregular events, such as excavation of previously filled areas for infrastructure installation and cessation of LFG extraction for maintenance purposes. Odour from the type of event has been noted in complaints historically and more recently in early 2021 when the receipt of odorous tannery waste loads increased substantially. The latter activity resulted in the HBRC confirming objectionable odour beyond the site boundary in April 2021 and resulted in HBRC implementing measures to reduce this waste stream.
6. The odour management regime employed when operations are moved to Area B should take account of both the potential for odour exposure at 419 Omarunui Road and the potential impacts of irregular events. In this vein I have recommended a number of odour management measures be adopted at Area B, which have been incorporated into the draft conditions attached to the evidence of Ms Andrea Brabant.
7. Provided the measures I have recommended are rigorously implemented, I consider that the potential odour nuisance effects of the Proposal would be appropriately avoided or mitigated and reoccurrence of offensive or objectionable odour in the surrounding environment would be unlikely.
8. In relation to emissions of hazardous air pollutants, which are associated with emissions of landfill gas and exhaust emissions from the combustion of landfill gas, these emissions are relatively small in scale. Given there is a relatively large degree of separation between the emission sources and local dwelling I consider these emissions are unlikely to result exposure of people to ambient contaminant levels exceeding relevant health-based assessment criteria.
9. In relation to the emission of dust from the proposal, due to the large degree of separation of dust sources from sensitive locations, I consider that these emissions are unlikely to cause adverse effects on property or amenity in the area with the measures already employed at the site.
10. In relation to conditions of consent for the discharges to air (from Area B and the combustion plant respectively), I have had input into the development of the draft conditions proposed in the evidence of Ms Brabant and consider them to provide

for appropriate management of the discharges to air and associated air quality effects.

11. I note that the Hawkes Bay Regional Council reporting officer has recently (26 October 2021) provided suggested modifications to the discharge to air consent conditions from its air quality technical review expert. However, in the timeframe since receipt I have not had the opportunity to consider the proposed modifications in detail (prior to completing this summary). I will be able to comment on these at the hearing.
12. Overall, I consider the air quality effects of emissions to air from the Proposal can be adequately mitigated and offensive or objectionable off-site impacts avoided through imposition appropriate conditions of consent. I further consider that the applicant's conditions set out in Ms Brabant's evidence would achieve this purpose.

Jason Pene
28 October 2021