



**Recommended odour notification zone
associated with von Ah Contracting Composting
Application**



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Disclaimer:

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1. INTRODUCTION

On 28 April 2025, West Coast Regional Council contacted Mote Limited requesting advice on the extent of the area potentially affected by a proposal to discharge contaminants to air associated with composting operations.

This report follows on from an earlier Mote report (2024/029 completed in December 2024). The December 2024 report details the initial odour assessment based on the information provided by the applicant at the time. This more recent odour assessment builds upon the information from the earlier assessment but also incorporates more recent information provided by the applicant.

The original December 2024 odour assessment by Mote limited was based upon an enclosed storage/mixing facility with associated biofilter. The applicant has now clarified that the receipt of raw materials and the mixing will occur within a mixing bunker which will be open to the air and the assessment and potential area of effect have been amended to reflect these changes.

The applicant has also clarified that they expect to receive up to 80 cubic metres of organic waste material per week. They have also clarified that the waste material will consist of:

- Paunch Grass
- Wastewater Sludge (industrial)
- Dairy farm manure
- Green waste
- Old balage
- Animal carcasses

The waste streams selected by the applicant range from low risk (Green waste) to high risk materials (Animal carcasses).

For the purposes of this assessment, it is assumed the applicant will be composting animal carcasses and that 80 cubic metres of material is being composted (worst case scenario).

2. ODOUR ASSESSMENT

The meteorological information and the resulting CALMET meteorological data grid generated in the December 2024 report were re-run using the new information provided by the applicant.

2.1 Nuisance odour dispersion radius

Based upon the information provided in the application, the meteorological data for the site and the terrain, I estimate that the area potentially affected by odours is within 870 metres of the proposed site. This figure was derived from basic odour receptor modelling using ISC3 (Industrial source complex version 3) steady state plume model based on published emission factors (AP42, Capelli et al 2014) and is based upon previous experience with similar composting operations around New Zealand. This distance is also consistent with separation distance guidance from the EPA Victoria 2017 publication on composting facilities.

3. POTENTIALLY AFFECTED AREA

The potentially affected area covers land immediately adjacent to the proposed composting facility out to approximately 870 metres from the proposed location. While effects of both odour and dust nuisance were considered as part of this assessment the potential impacts of odour were the primary determinant in the bounded area.

The area potentially affected area extends to the east through to include both sides of Acland Street in Kokatahi. The southern and western areas are essentially bounded by the Kokatahi River while the northern boundary extends approximately 150 metres north of the residential dwelling situated at 994 Kaniere Kowhitirangi Road.

A map displaying the potentially affected area is shown below in **Figures 1 and 2** below.

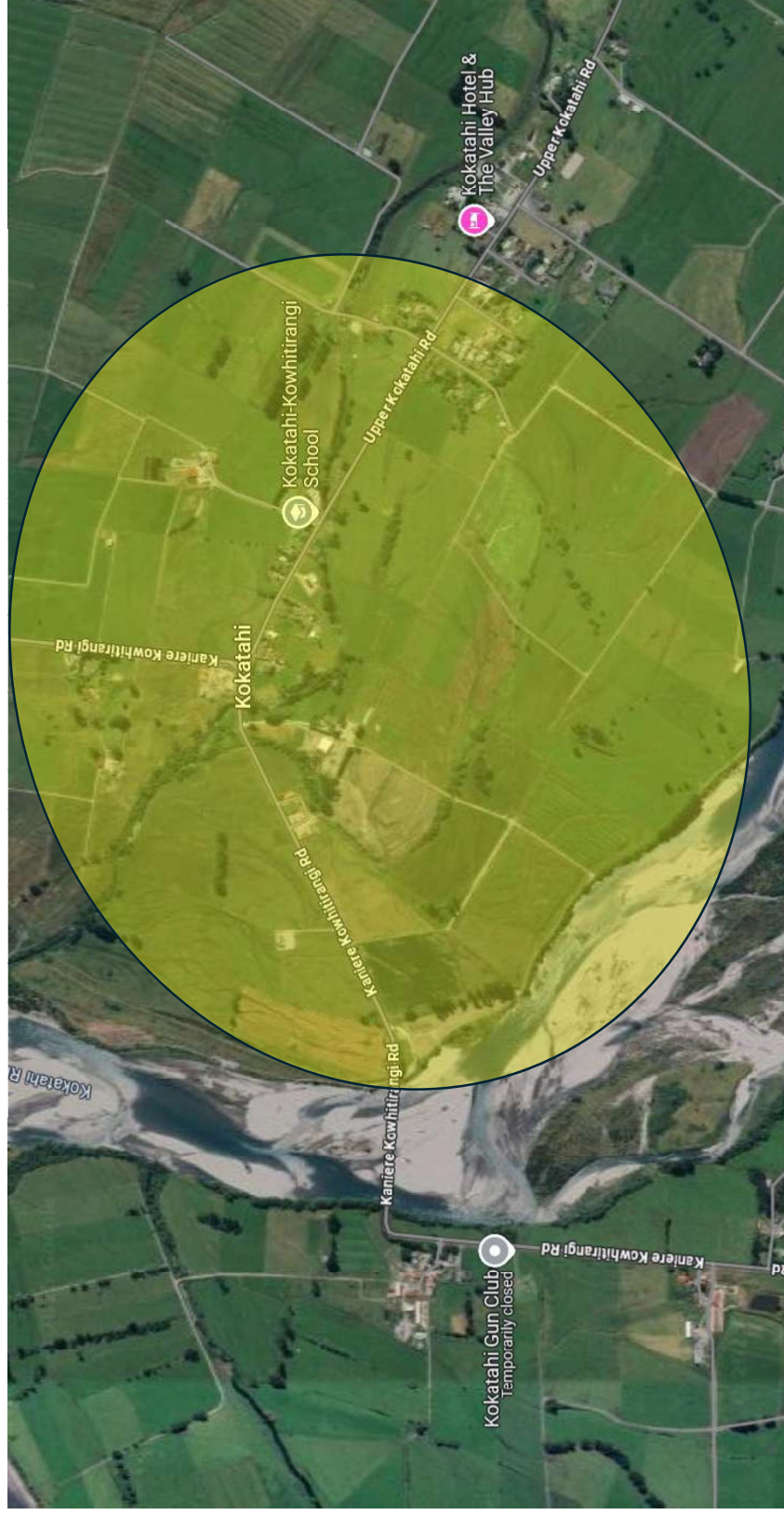


Figure 1: Area potentially affected by odours from proposed composting operation

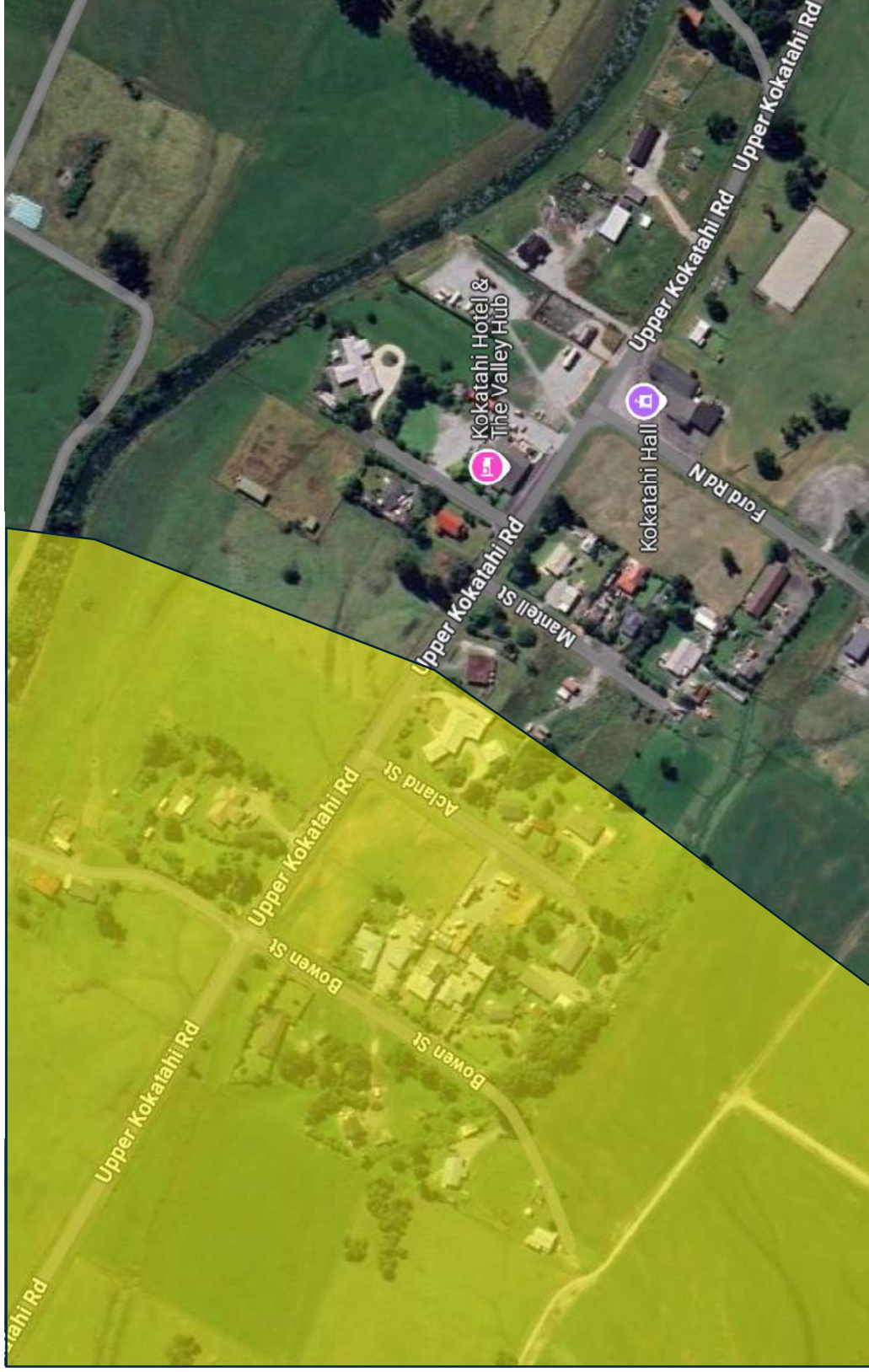


Figure 2: Area potentially affected by odours from proposed composting operation (close up of Kokatahi)

References

- AP-42, Compilation of Air Pollutant Emission Factors, Volume I, Chapter 1.2, Section 1.2.1
- Bidlingmaier W, Grauenhorst V, Schlosser M, Müsken, J Odour Emissions from Compost Plants. 1997
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- Designing, constructing and operating composting facilities. Environmental Protection Authority Victoria. Publication 1588. 2017.
- New Zealand Standard 4454:2005 Composts, soil conditioners and mulches