Report

Reverse Amenity Air Quality Assessment – Pondicherry Tranche 41

Greenfields Development Company Pty Ltd

Job: 20-102

Date: 25 September 2020



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Client Greenfields Development Company Pty Ltd

Approved for release by

G. Galvin

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1 INTRODUCTION

Astute Environmental Consulting Pty Ltd ("Astute") was engaged by Greenfields Development Company No. 2 Pty Ltd ("Greenfields") to prepare a report relating to the Tranche 41 development which forms part of the Pondicherry Precinct.

1.1 Background

The Pondicherry Precinct ("Pondicherry") sits in the Oran Park area and is shown below in Figure 1-1. Tranche 41 forms a sub part of Pondicherry and is shown in Figure 1-2. Note that the indicative layout for Pondicherry shown in Figure 1-1 is notional and has no official status.

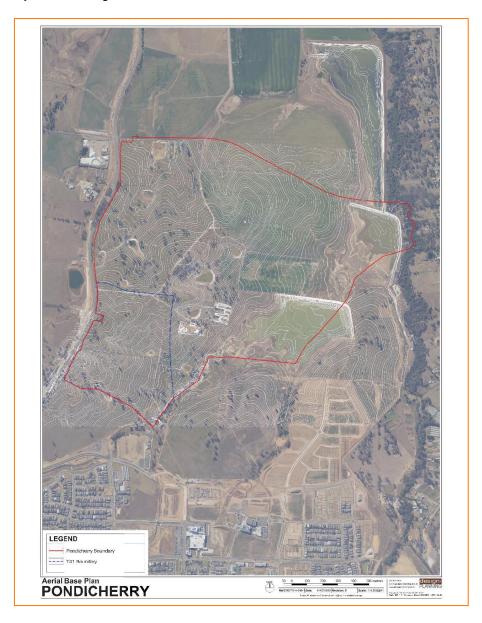


Figure 1-1: Pondicherry Precinct (Red Polygon)



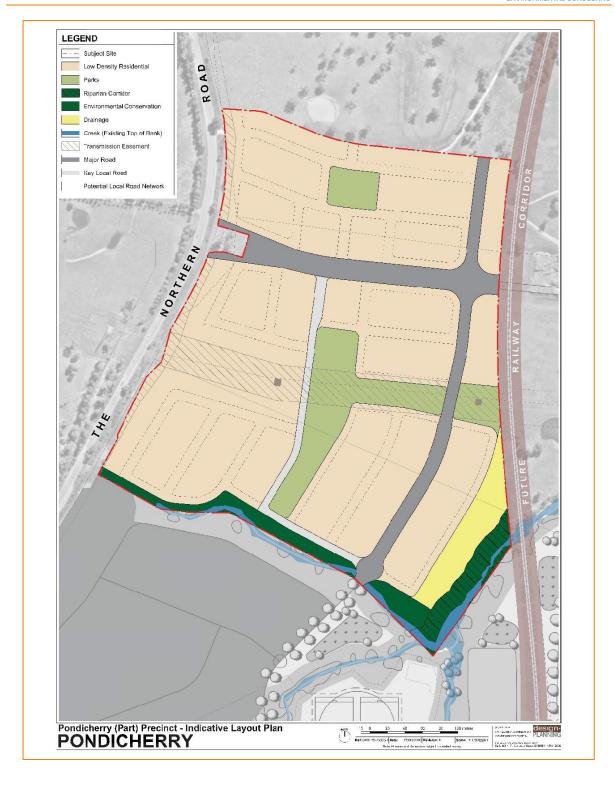


Figure 1-2: Tranche 41 Indicative Layout Plan 17/09/2020 Rev E

In July 2017 a draft preliminary review was prepared by Pacific Environment Limited (Pacific Environment Limited, 2017) ("the PEL report") which investigated potential existing uses which emit odour to air that could impact Pondicherry. The PEL report identified 10 uses in the wider Pondicherry area which had the potential to emit to air. Considering Tranche 41, only four of these (numbered 3-6 in the PEL report) have the potential to impact Tranche 41. We note that not all of the identified



location actually would lead to impacts but they were identified as part of the original assessment. The closest facilities when the original report was prepared are shown in Figure 1-3 and are as follows:

- 3. Resource Recovery and Recycling Facility Hi-Quality Waste;
- 4. Irrigation (centre pivot);
- 5. Silage operation; and
- 6. Wood chipping company.

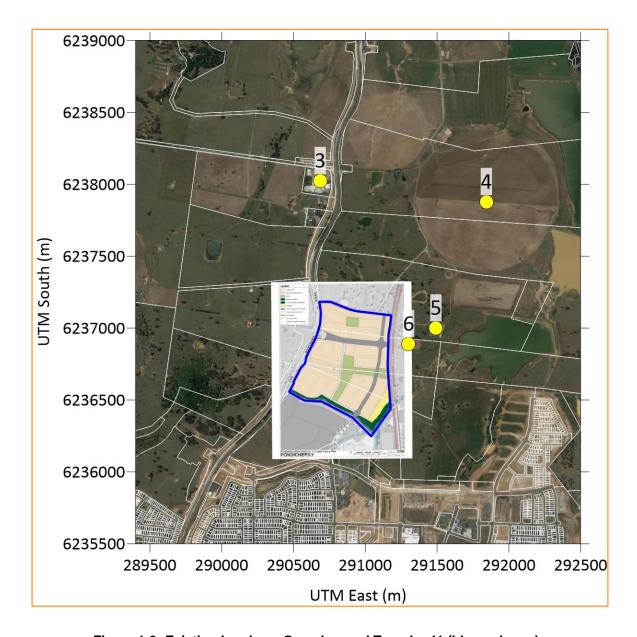


Figure 1-3: Existing Land use Overview and Tranche 41 (blue polygon)

1.2 Objective

The objective of this project was to assess whether the aforementioned land uses are still occurring, have been joined by other uses and whether any of these uses could impact Tranche 41.



2 DISCUSSION

Each of the identified uses is discussed below.

2.1 Resource Recovery and Recycling Facility;

Hi-Quality Waste Management Pty Ltd ("Hi-Quality") operate at recycling site located at 761 The Northern Road, Bringelly. This is shown as number 3 in Figure 1-3 above.

A review of recent aerial imagery as well as Google Street View imagery has highlighted that the site has a number of stockpiles of material and these have been covered by large tarps since at least November 2018. Recent aerial imagery is shown below in Figure 2-1 and Street View images in Figure 2-2.

Hi-Quality is licensed by The NSW EPA under License 11233 ("the License"). The License has been varied a number of times with a Clean Up Notice and subsequent variations of the Clean Up Notice. The Clean Up Notice was associated with, amongst other things moving and removal of stockpiles associated with changes to the alignment of Old Northern Road results from reconstruction.

The most recent version of the License is dated 5 April 2018. The condition relevant to this report is O3 – Dust - The premises must be maintained in a condition which minimises or prevents the emission of dust from the premises.

Relevant to this condition is the location of nearby sensitive locations. These are shown with regard to the Hi-Quality site in Figure 2-3. Considering the prevailing winds and the location of the receptors shown in Figure 2-3 it is considered that the Hi-Quality site would need to be in breach of its License if impacts were to occur at Tranche 41. This is because there are existing sensitive locations far closer to the Hi-Quality site than Tranche 41. Therefore, the risk of impact at Tranche 41 is low.







Figure 2-1:Google Earth – December 2018 (top) and April 2019 (bottom)



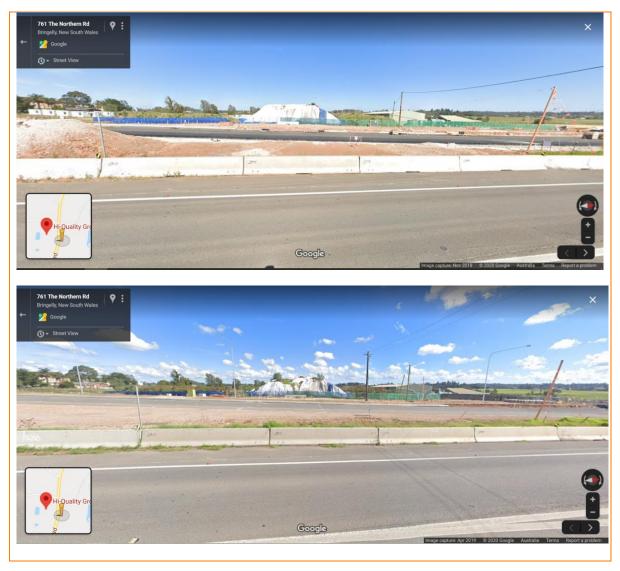


Figure 2-2:Google Street View - November 2018 (top) and April 2019 (bottom)



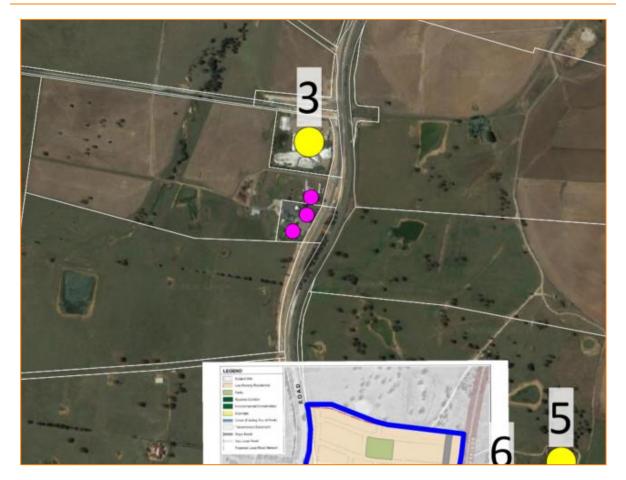


Figure 2-3:Location 3 and Receptors (Pink Circles)

2.2 Irrigation (centre pivot)

As noted in the PEL report the primary risk with the operation of the centre pivot was the inoffensive smell of wet grass. The centre pivot is shown in Figure 1-3 as location 4.

Ploughing of the centre pivot irrigation area and the use of herbicides could occur from time to time, however considering the prevailing winds, the usage limitations (label requirements) and the frequency of these events, the risk of this area impacting Tranche 41 is considered low.

With regard to label requirements, under the *Pesticides Act 1999* (NSW Government, 2018) there are requirements to follow label instructions as to avoid injury to people, damage to property and avoid harm to non-target plants and animals from using a pesticide (NSW EPA, 2018). It is important to note that the *Pesticides Act 1999* covers both pesticides and herbicides and therefore if the use of these at the centre pivot were to impact a use offsite, this would mean that the operation was not meeting the requirements under the *Pesticides Act 1999*.

As the location of the use is unlikely to change and move closer to Tranche 41 the risk will remain low.



2.3 Silage Pits

The silage pits are shown in Figure 1-3 as location 5. Silage refers to the storage of grass or other fodder including grain in airtight conditions. When the silage covers are removed, odour can be emitted. This can be managed by only opening the covers as required.

A review of Google Earth Aerial Imagery from 2017 to 2019 has confirmed that the silage area has not been used since at least 2018. We are informed by Greenfields that the silage pits on the site are a storage of last resort, with the site only being used if the silos on other farms are full and the silage on Base Farm at Bringelly are full. If the silage pits are used again, there is little risk of air quality impacts (specifically odour) during filling and storage of silage after covering. The only time where odour impacts can occur is when the pits are opened. However, provided they are only left open whilst silage is being removed, the risk of impacts on Tranche 41 is low.

Furthermore, silage pits are often not left open in areas where rainfall can occur due to the risk of the silage being damaged, meaning that the pits are normally managed as to be a low risk source.

2.4 Wood Chipping

The wood chipping site was shown in Figure 1-3 as location 6. As noted in the PEL report, it has been operating at the site for a number of years. During the 2017 site visit, when the site was in operation, no odour was detected. Dust may have been present from time to time when it was operational.

We are informed by Greenfields that the site is no longer operational, therefore there is no risk from the wood chipping site.

2.5 Potential Impacts from New Uses

Based on our review of recent aerial imagery and discussions with Greenfield we understand that there have been no changes of land use at Pondicherry or nearby properties owned by others which would have emissions which would lead to impacts on Tranche 41.



3 CONCLUSION

We have reviewed up to date information regarding the sources around Tranche 41 which have the potential to emit to air. We consider there to be a low risk of impacts associated with the sites above occurring at Tranche 41.



4 REFERENCES

NSW EPA, 2018. Pesticides Act. [Online]

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