

Great River Pty Ltd Level 1 2 Barrack Street Sydney NSW 2000 Attention: Dylan Baudinet

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AIR QUALITY IMPACT ASSESSMENT – PENRITH LAKES FILLING DEVELOPMENT APPLICATION

Ramboll Australia Pty Ltd (Ramboll) has prepared this qualitative air quality impact assessment to inform a proposal for the importation, placement and compaction of approximately 3 million tonnes of fill at 14-278 Old Castlereagh Road, Castlereagh (referred to as the 'Project').

The purpose of this assessment is to:

- Describe the receiving environment including identification of sensitive receptors and other sources of dust impacts in the local area
- Identify the potential sources of dust generation associated with the Project
- Describe the mitigation measures to be implemented during the works

The Project

To facilitate the development the Project site requires filling with approximately 3 million tonnes of fill material. Ramboll understands that this material would be derived from NSW Government transport infrastructure projects and the general civil market.

We understand the NSW Government infrastructure projects are approved to remove the excavated material from their construction sites 24 hours per day, seven days per week. To allow these projects to achieve this, Great River NSW Pty Ltd proposes to receive, place and compact this fill material 24 hours per day, seven days per week. Ramboll Level 2, Suite 18 Eastpoint 50 Glebe Road PO Box 435 The Junction NSW 2291 Australia

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The Project site is part of the Penrith Lakes Scheme. The Project site is covered by the development consent granted in 1987 (and modified several times since) for mining and rehabilitation activities, which continue on the Penrith Lakes site.

Receiving Environment

The Project site is located north of the city of Penrith and forms a southern portion of a site known as Penrith Lakes. The Project site and its nearest neighbouring receptors are shown in **Figure 1**.

The site is bounded by rural residential to the north, industrial land use to the east and south and environmental management to the south west. There are two access point to the site which are via Lugard Street in the south east and via Old Castlereagh Road in the north.

Generation of dust from sites surrounding the Project site is generally resultant from agricultural land use, traffic movements and earthworks on other areas of the Penrith Lakes Scheme.



Figure 1: Project site and sensitive receptor locations

Impact Assessment

The principal sources of dust emissions during construction would be bulk earthworks/material handling, wheel generated dust and wind erosion from exposed surfaces. The following measures for controlling dust during construction should be considered.

• Modifying work during periods of adverse weather (hot, dry and windy conditions) and when dust is seen leaving the site (i.e. limiting clearing and material handling).



- Limiting the extent of clearing and topsoil removal to the designated footprint required for construction.
- Operation of a water cart on unsealed internal roadways and travel routes.
- Designated onsite travel routes with a speed limit of 20km/hr on unsealed roads. The speed limit of sealed roads should be guided by site safety requirements.
- Trips and trip distances should be controlled and reduced where possible, for example by coordinating delivery and removal of materials to avoid unnecessary trips.
- Dirt track-out should be managed using shaker grids and / or wheel cleaning. Dirt that has been tracked onto public roads should be cleaned as soon as practicable.
- All trucks delivering fill or leaving the site with spoil material should have their load covered.
- Wind erosion from exposed ground should be limited by avoiding unnecessary surface disturbance and limiting to the minimum footprint required.
- Upon receipt of a dust complaint, air quality monitoring should be undertaken and reported within a timely manner (say 3 to 5 working days). If nuisance is detected, the situation should be reviewed to identify means to reduce the impact to acceptable levels.

Conclusion

This qualitative construction dust assessment has concluded that the level of risk is minor and commonly applied construction dust management measures listed within this letter are sufficient to manage air quality impacts resulting from the Project.

We trust this meets your requirements however if you wish to further discuss please do not hesitate to contact Shaun Taylor or Belinda Sinclair.

Yours sincerely

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