

18 February 2019

Mirvac Homes (NSW) Pty Limited

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Attention: Aaron Baker

Summary: Health and Safety Risks – Stage 1 Development and Coal Seam Gas Well

Environmental Risk Sciences Pty Ltd (enRiskS) has been engaged by Calibre Group on behalf of Mirvac Homes (NSW) Pty Limited (Mirvac) to provide an assessment of health and safety risks in relation the Stage 1 development of 97 residential lots located in the Menangle Subdivision.

Some residential lots proposed within Stage 1 will sit within the 200 m gas buffer between a gas and a dwelling house, within Section 72 of the *Petroleum (Onshore) Act 1991*. To address the requirements within Clause 7.7 of the Wollondilly Local Environment Plan 2011 (Amendment No 28), Schedule 1, Clause 7.7, which relates to developments within a 200m radius of a coal seam gas well, a location-specific assessment has been undertaken to determine if the proposed separation distance between an existing coal seam gas well, EM17, and the closest residential lots and dwelling, poses a risk to the health and safety of any persons.

The existing coal seam gas well EM17 is operated by AGL and is expected to be decommissioned by 2023 at the latest. The well is operated under the AGL Environmental Management Plan for the Camden Gas Project (current plan is dated March 2018 but is updated each year), which describes the system to manage potential environmental issues, including hazards and risks associated with the project. This includes well EM17.

All available information in relation to the operation of coal seam gas well by AGL within the Camden Gas Project¹ have been reviewed and considered.

In relation to the Stage 1 development, where EM17 continues to be operated and managed by AGL under the environmental management plan (and subsequent updates), there are no risks to the health and safety of any persons on the basis of the following:

- The management of existing coal seam gas wells by AGL is regularly evaluated by AGL and is independently audited each year to ensure the safe operation of all wells.
- The closest residential lot and dwelling is outside of the minimum separation distances required to protect individuals from potentially hazardous incidents.
- In relation to potential leaks and spills that may occur from the coal seam gas well, there are no human health risk issues of concern.

¹ https://www.agl.com.au/about-agl/how-we-source-energy/camden-gas-project



- Noise from the normal operation of the well does not impact on the health of individuals close to the well. Noise from various activities that may be undertaken by AGL during the maintenance of wells complies with relevant noise guidelines that are protective of health.
- The closest residential lot and dwelling is outside the minimum distance required to ensure that any exposures to fugitive emissions to air that may occur during normal operations of EM17 or during maintenance, should they be present, are not of concern to health.

In addition, the Stage 1 development will not impact on the continued operations of EM17.

Overall, it can be concluded that there are no risks to the health and safety of any persons within the Stage 1 development.

Full details of the assessment undertaken that further supports the above outcomes in relation to the health and safety risks relevant to the Stage 1 development, and coal seam gas well EM17, will be provided in a separate report.

Limitations

Environmental Risk Sciences Pty Ltd has prepared this letter report for the use of Calibre Group, Mirvac and the Wollondilly Shire Council in accordance with the usual care and thoroughness of the consulting profession. It is based on generally accepted practices and standards at the time it was prepared. No other warranty, expressed or implied, is made as to the professional advice included in this report.

The methodology adopted and sources of information used are outlined in this report. Environmental Risk Sciences Pty Ltd has made no independent verification of this information beyond the agreed scope of works and assumes no responsibility for any inaccuracies or omissions. No indications were found that information contained in information provided or considered for use in this assessment was false.

This report was prepared in February 2019 and is based on the information provided and reviewed in and around that time. Environmental Risk Sciences disclaims responsibility for any changes that may have occurred after this time.

This report should be read in full. No responsibility is accepted for use of any part of this report in any other context or for any other purpose or by third parties. This report does not purport to give legal advice. Legal advice can only be given by qualified legal practitioners.

Closure

If you require any additional information in relation to this assessment, please do not hesitate to contact Jackie on (02) 9614 0297 or 0425 206 295.

Yours sincerely,

Dr Jackie Wright (Fellow ACTRA)

Principal/Director

Environmental Risk Sciences Pty Ltd