

18 September 2018

Jarrod Irving Jemena Limited Level 13, 99 Walker Street North Sydney NSW 2060

Dear Jarrod,

Goulburn Gasworks Remediation Southern Regional Planning Panel Deferral

GHD has reviewed the Record of Deferral (dated 28 August 2018) for Goulburn Gasworks as provided by the Joint Regional Planning Panel (JRPP). We provide the following clarifications in response.

Our ref: 2127430-35600(01)

The Panel agreed to defer the determination of the matter until additional detail is supplied by the applicant that:

Q1. Revisits the extent of asphalt proposed to provide for surface or some surface that could support some vegetation

GHD Response: Construction of low-permeability hardstand (i.e. asphalt) over the remediated areas of the former gasworks is a requirement of the Remediation Action Plan (RAP). The RAP needs to be fully implemented at the site to comply with the Voluntary Management Proposal and NSW Contaminated Land Management Act 1997. The asphalt hardstand will minimise infiltration of rainwater into the ground and will reduce the potential for residual contaminants to remobilise into groundwater and migrate offsite to Mulwaree River. The asphalt will also act as a barrier to prevent future commercial users of the site from becoming exposed to residual contaminants that may remain in the soil upon completion of the remedial works and will form part of the Long Term Environmental Management Plan for the site. Reducing the area of hardstand or compromising the hardstand layer by introducing areas of landscaping or other vegetation could pose a risk to the successful remediation of the site and implementation of the RAP.

Q2. Review the relationship of the asphalt area to the vegetated embankment to provide greater setback and potential surface that could support vegetation.

GHD Response: The setback of the asphalt area is determined by the position of the low permeability seacant wall that is to be constructed below ground along the southeast side of the former gasworks site (in general accordance with drawing 207036-A02 provided in the Council's Supplementary Assessment Memo to the JRPP dated 17th August 2018). The low permeability wall needs to be constructed down hydraulic gradient of the main source area to minimise the potential migration of residual contamination from entering Mulwaree River, and as close as possible to the embankment to maximise the extent of contamination that can be removed from the site – hence greater setback cannot be provided. The location of the wall has also been designed to provide stability to the adjacent embankment and facilitate removal / excavation of the contaminated soils on the gasworks site. The remediation works do not

require vegetation to be removed from the embankment. The existing vegetation along the embankment is to be retained.

Q3. Provide a Concept landscape plan that identifies areas for replacement landscape that respond to the potential land uses permitted under the zone – this is anticipated to mean that landscape space is likely to be in proximity to boundaries or building being retained that have heritage value.

GHD Response: The site is zoned as B4 'Mixed Use' in the Goulburn Mulwaree Local Environmental Plan (2009) and, in accordance with the zoning, Jemena proposed to continue to use the site for commercial purposes. We are not aware of any requirements to have landscape space on a commercial property unless the property were to be subject to redevelopment and landscaping were to be included in the redevelopment design. However, given the site is to undergo remediation rather than redevelopment, the need to include additional areas of landscape would not provide any benefit to the proposed remediation. It should be noted that upon completion of the remediation, landscaping would be retained in the following areas:

- The existing landscaped verge along the entire northwest boundary of the site adjacent to the railway
- The existing vegetation along the embankment between the gasworks site and foreshore area
- The existing vegetation near the office building and northwest entrance to the site.

Should the JRPP require additional landscaping to be incorporated into the remediation design, it may be possible to construct raised beds above the asphalt layer for planting of vegetation. However, this would require careful consideration, placement and long term management of the beds, so that they do not damage the asphalt capping layer.

We trust this clarification is acceptable and we are happy to discuss further if required.

Sincerely GHD

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Contamination and Environmental Management

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