DOC17/543113-05; EF15/8883

Department of Planning and Environment
GPO Box 39
SYDNEY NSW 2001
Attention: Anthony Ko

By email: anthony.ko@planning.nsw.gov.au

Dear Mr Ko,

Newcastle Gas Storage Facility (10_0133 MOD 3)
Exhibition of Environmental Assessment

I refer to your email to the Environment Protection Authority (EPA), dated 2 November 2017, requesting the EPA review the Newcastle Gas Storage Facility modification application, 10_0133 MOD 3, and provide any issues or recommended conditions in relation to the proposal.

The EPA has reviewed the project and information provided in the report titled '*Newcastle Gas Storage Facility Modification 3 – Environmental Assessment – Tail gas project*' (EA), dated 20 October 2017 and prepared by EMM Consulting, and the relevant appendices to the EA.

The EPA does not have any significant issues with the assessment and has determined that the proposal is unlikely to result in any increased environmental impact from the activities conducted at the site.

The EPA confirms that:

- The assessment has been prepared in accordance with the *Approved Methods for the Modelling and Assessment of Air Pollutants in NSW*;
- Predicted incremental ground level concentrations at sensitive receptors and across the modelling domain are minor;
- No exceedances of the impact assessment criteria for the pollutants assessed are predicted;
- The proposed flair will need to be designed and operated in accordance with the relevant parts of Section 49 within the *Protection of the Environment Operations (Clean Air) Regulation 2010*.

Air Quality Assessment comments

The Air Quality Impact Assessment prepared for the application assesses two operating scenarios:

1. Gas treatment flaring scenario, which assesses potential impacts from the liquefaction system stack and the process flare; and
2. Maintenance flaring scenario, which assesses potential impacts from the proposed maintenance flare.

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The AERMOD dispersion model has been utilised to predict ground level concentrations (GLCs) for nitrogen dioxide (NO_2), particles (PM_{10} and $PM_{2.5}$), carbon monoxide (CO), sulphur dioxide (SO_2) and formaldehyde. Predicted GLCs are provided for sensitive receptors and across the modelling domain.

Emission estimates for the scenarios are based on:

- The maximum from two compliance monitoring tests for the existing liquefaction system stack. Half the limit of detection limit was used in cases where a pollutant was not detected; and
- US EPA emission factors for flare emissions.

Incremental results (project contribution only) from the scenarios are an order of magnitude below the impact assessment criteria contained in the *Approved Methods for the Modelling and Assessment of Air Pollutants in NSW*. The assessment includes conservative assumptions, such as:

- Assuming continuous operation at peak design flow rates, where in reality flaring rates and operating periods are likely to be variable; and
- Assuming that all oxides of nitrogen (NO_x) are in the form of nitrogen dioxide (NO_2).

Environment Protection Licence matters

The premises is already licensed by the EPA through Environment Protection Licence 20130. If the application is approved the licensee will be required to submit a licence variation application in relation to the amended operations. This will be dealt with separately to this planning application matter.

If you require any further information regarding this matter please contact me on 4908 6819 or by email to hunter.region@epa.nsw.gov.au.

Sincerely

17/11/17

MICHAEL HOWAT
Regional Operations Officer - Hunter
Environment Protection Authority