

## APPENDIX I

### Acid Gas Management System Trigger Action Response Plan – Draft

This Trigger Action Response Plan (TARP) framework outlines the proposed plan during infrequent unplanned events of hot venting at the Darwin Liquefied Natural Gas (DLNG) facility. The purpose of this TARP is to prevent potential exceedances of Environment Protection Licence 217 (“EPL217”) limits (as defined by Table 3 of Appendix B) by identifying operational conditions (“trigger”) at which preventative actions will be undertaken, what these preventative actions will be and how data will be used to validate these actions in controlling operations to within regulatory limits.

#### Trigger

1. Unplanned events of hot venting are defined as times during otherwise normal operations, the thermal oxidiser unexpectedly trips or is unable to treat acid gas from the natural gas compression process. Any unplanned events of hot venting are the *trigger* for this Action and Response Plan.

#### Action

2. The DLNG Plant control system is linked to the thermal oxidiser and will immediately identify when the Acid Gas Management System’s (AGMS) thermal oxidiser is not operating. The concentration of H<sub>2</sub>S and benzene in the acid gas (measured by analysers in the solvent regenerator reflux drum - V-1206) will be reviewed and continue to be monitored during the periods of hot venting. If the concentration of H<sub>2</sub>S exceeds 224 ppm and/or the concentration of benzene exceeds 82 ppm, the gas feed rate will be reduced to 50% of full operating capacity within 10 minutes of the thermal oxidiser trip. This will prevent the potential risk of air emissions above the regulated licence limits.
3. After 15 minutes, the continuous measurements of the acid gas composition and acid gas exhaust flow rate will be used to determine the emission concentrations and mass rates (determined by the DLNG Process Engineer). This information will be used to determine the maximum gas feed rate to meet air emission limits. This gas feed rate will be set at this calculated maximum to ensure compliance with regulatory limits.

#### Response

4. The DLNG Process Engineer will investigate and determine the cause of the AGMS issue, and corrective actions determined and implemented to enable the restart of the AGMS’s thermal oxidiser as soon as practicable.
5. Where restart cannot be implemented within 24 hours of the issue being identified, a timeframe for investigation and corrective action will be developed in the site Incident Management System.

#### NOTES:

1. The DLNG Production Manager will ensure that regulatory notifications, in line with the Environment Protection Licence and the *Waste Management and Pollution Control Act 1998*, will be made within the mandated timeframes, as necessary.
2. All details relating to the incident will be recorded and kept in line with the requirements of the Environment Protection Licence and Santos’ internal Incident Management System.