

16.0 CONCLUSION

This PER and associated appendices make reference to both the Approved Gorgon Gas Development and the Revised Gorgon Gas Development, which is the subject of this PER. For clarification purposes, the following definitions are provided:

- ◆ “the Approved Gorgon Gas Development” or “the Approved Development” refers to the development proposed in the EIS/ERMP (Chevron Australia 2005a) and subsequently approved under Statement No. 748 and EPBC Reference: 2003/1294
- ◆ “the Gorgon Gas Development Revised and Expanded Proposal” or “the Revised Gorgon Gas Development” or “the Revised Proposal” refers to the development proposed in this PER, which is yet to gain approval
- ◆ “the Gorgon Gas Development” refers to the entire proposal. This descriptor may be used when the reference is being made to elements of “the Revised Proposal” described in the PER when they replace the elements of “the Approved Development” which have changed to create the final product as proposed in this PER.

16.1 Environmental Outcomes

The major environmental issues investigated during the environmental assessment process for the Revised Proposal were:

- ◆ additional and/or new impacts to biodiversity and conservation values of Barrow Island and its surrounding waters
- ◆ quarantine management
- ◆ cumulative air, light and noise emissions
- ◆ accelerated rate of disposal of reservoir CO₂ by injection into the Dupuy Formation.

The Revised Proposal is not expected to pose any significant new or additional risks to the biodiversity and physical environment values of Barrow Island and its waters over that already approved. Furthermore, there are no unacceptable cumulative impacts to the biodiversity and physical environment values of Barrow Island and its waters as a result of the Gorgon Gas Development. In summary, the Revised Proposal will:

- ◆ increase the long term utilisation of approximately 40 ha of the available 300 ha over and above the initial land use estimate for the Approved Development. This is not expected to pose any significant new or additional risks to the terrestrial and subterranean values of Barrow Island in comparison to the Approved Development. Best practice management measures will be implemented to limit the associated impacts and ensure EPA objectives relevant to the terrestrial and subterranean environment of Barrow Island (discussed in Section 6) are met. Best practice management measures will be fully documented in a ‘Terrestrial and Subterranean Environmental Protection Plan’, which requires approval from State and Commonwealth governments as outlined in Section 14.4.
- ◆ increase the area of seabed disturbance and cause a minor increase in the area of the seabed permanently covered by marine infrastructure, noting that some of this additional area would have been subject to disturbance from the LNG Jetty (as part of the Approved Development). This is not expected to pose any significant new or additional risks to the marine values of Barrow Island in comparison to the Approved Development. Best practice management measures will be implemented to limit the associated impacts and ensure EPA objectives relevant to seabed disturbance (discussed in Section 7) are met. The best practice management measures will be fully documented in a ‘Marine Facilities Construction Environmental Management

Plan', which requires approval from State and Commonwealth governments as outlined in Section 14.4.

- ◆ result in an altered dredge plume footprint in comparison to the Approved Development, which is comparable in duration and extent to the Approved Development. This is not considered to pose any significant new or additional risks to benthic primary producers in comparison to the Approved Development. Best practice management measures will be implemented to limit the associated impacts and ensure EPA objectives relevant to marine water and sediment quality (discussed in Section 7) are met. Best practice management measures will be fully documented in a 'Dredge and Spoil Disposal Management and Monitoring Plan', which requires approval from State and Commonwealth governments as outlined in Section 14.4.
- ◆ have no significant new or additional risks to the marine environment and coastal processes (which are restricted to changes in the seabed profile) in comparison to the Approved Development. Best practice management measures will be implemented to limit the associated impacts and ensure EPA objectives relevant to the marine environment and coastal processes (discussed in Section 7) are met. Best practice management measures will be fully documented in a 'Marine Facilities Construction Environmental Management Plan' and a 'Coastal Stability Management and Monitoring Plan', which require approval from State and Commonwealth governments as outlined in Section 14.4.
- ◆ increase (marginally) ground level concentrations of air emissions both on Barrow Island and on the mainland in the vicinity of the Burrup Peninsula. The relative increase in regional concentrations of specific emissions is not significant, and the air quality objective will be achieved in the region and locally. Best practice management measures will be implemented to limit the associated impacts and ensure EPA objectives relevant to air emissions (discussed in Section 9) are met. Best practice management measures will be fully documented in an 'Air Quality Management Plan', which requires approval from State and Commonwealth governments as outlined in Section 14.4.
- ◆ increase (marginally) light and noise emissions, although the effects of these emissions are not expected to extend further or affect new areas that were not identified as being affected by the Approved Development. These emissions are not expected to pose any significant new or additional risks to the terrestrial or marine values of Barrow Island in comparison to the Approved Development. Best practice management measures will be implemented to limit the associated impacts and ensure EPA objectives relevant to light and noise emissions (discussed in Sections 10 and 11 respectively) are met. Best practice management measures will be fully documented in a 'Terrestrial and Subterranean Environmental Protection Plan' and a 'Marine Facilities Construction Environmental Management Plan', which require approval from State and Commonwealth governments as outlined in Section 14.4.
- ◆ increase the rate of reservoir CO₂ injection, with this management response demonstrating a significant "beyond no regrets" action to reduce greenhouse gas emissions. The accelerated rate of reservoir CO₂ injection is not expected to pose any significant new or additional risks in comparison to the Approved Development. Best practice management measures will be implemented to limit the associated impacts and ensure EPA objectives relevant to greenhouse gas emissions (discussed in Section 12) are met. The best practice management measures will be fully documented in a 'Greenhouse Gas Abatement Program, which requires approval from State and Commonwealth governments as outlined in Section 14.4.
- ◆ have no significant new or additional risks to the matters of NES in comparison to the Approved Development. Best practice management measures will be implemented to limit the potential impacts on matters of NES (discussed in Section 13). Best practice management measures will be fully documented in the relevant

management plans listed in Section 14.4, which require approval from State and Commonwealth governments.

The implementation of various plans, systems and programs consistent with those required under conditions prescribed for the Approved Development in Statement No. 748 and Commonwealth EPBC Reference: 2003/1294 is expected to manage the impacts associated with the Revised Proposal to a level consistent with that considered acceptable and therefore approved for the Approved Development. No additional measures or controls are anticipated to be necessary to manage the potential environmental impacts of the Revised Proposal.

16.2 Environmental Risks and Manageability

The approach taken in this environmental review has been based on a risk assessment approach to characterise environmental factors, determine potential impacts and develop avoidance and mitigation measures.

The GJVs have extensive experience in managing the development, operation and environmental compliance of similar projects and this experience is anticipated to lead to a greater certainty in achieving desirable environmental outcomes.

The environmental aspects of the Revised Proposal will be primarily managed through:

- ◆ implementation of the various Gorgon Gas Development environmental plans, programs and systems
- ◆ Chevron Australia's Operational Excellence Management System (which fully addresses and, in some respects, goes beyond ISO 14001: 2004)
- ◆ relevant environmental licences that will be required
- ◆ implementation of the other environmental conditions that will apply to the Revised Proposal.

This process will be greatly assisted by the establishment of three subject matter Expert Panels, as required by the conditions prescribed in Statement No. 748 (Appendix A), that will provide advice to both the GJVs and the Western Australian Minister for the Environment.

Furthermore, the environmental undertakings described in Section 15.3, and the indexed Net Conservation Benefits described in Section 15.2, are applicable and relevant to the Revised Proposal, and the GJVs consider that they adequately address the significant residual environmental risks of the Revised Proposal.

The GJVs have consulted with relevant stakeholders to scope the potential impacts of the Revised Proposal and to determine the significance of environmental issues and the level of mitigation required. This process substantially improves the likelihood that all significant environmental issues have been identified, investigated and avoided or mitigated as far as reasonably practicable.