Environmental Protection Authority  
Westralia Square  
141 St. Georges Terrace  
Perth  
Western Australia, 6000

25th April 2006

Dear Dr. Cox

Quarantine Management System for the Gorgon Gas Development

Thankyou for your letter of the 20th April 2006.

The strengths of the Quarantine Management System (QMS) for the proposed Gorgon Gas development lie in the multi-disciplinary team that Chevron Australia gathered to develop the system, and the detailed hazard analysis that this team has conducted. This provides a good basis for a "world class" QMS. I agree that the decision to remove the decision rules published in Table 12-6 of the Environmental Review and Management Plan (ERMP) removes the "fatal flaw" in the QMS that we referred to in our recent review of the ERMP.

To achieve a "world class" QMS, however, I believe it is essential that Chevron Australia:

- translate the infection score for each of the last pathway steps into a quantitative performance indicator – i.e. quantitative predictions of the expected number of organisms that will reach Barrow Island (for relevant biological groups) for each year of construction and operation;
- develop and implement a monitoring strategy that is designed to detect these organisms with a high level of statistical certainty;
- identify the key uncertainties in the predictions and monitoring strategy and test the robustness of the strategy to this uncertainty; and,
- provide for a regular independent audit of the monitoring strategy and its outcomes.

The steps described above provide a "safety net" against unforeseen events and errors of judgement that all people are prone to when making qualitative assertions about quarantine risks. Moreover, without this type of analysis I cannot see how Chevron Australia will be able to test the efficacy of their proposed quarantine barriers, identify deviations in the QMS over the lifetime of the Gorgon Gas project or demonstrate to the community that Barrow Island is actually being protected from the quarantine hazards associated with the project.
Finally, I note from the minutes of the Special Meeting of the Gorgon Quarantine Advisory Committee (held on the 6th October 2005) that the committee remains concerned that Gorgon has not “taken the opportunity to collect data on the rates and types of infection of existing pathways to Barrow Island”. I agree with the committee that this is of concern and emphasise that this type of data could provide an empirical starting point for the development of the quantitative performance indicators recommended above.

Please do not hesitate to contact me further if you wish to discuss any of these recommendations further.

Yours sincerely,

Keith Hayes