27 December, 2010

[redacted]

Planning considerations in the Gellibrand Pier / Nelson Place Village area.

Dear Ms Orange,

Per recent discussions with you and Bill Korevaar, I am happy to provide this written advice regarding the proposed new Nelson Place Village (NPV) development near the Gellibrand Pier and associated crude oil storage facilities.

This advice is based on:

- A review of documents, in particular the submission by Mobil Refining Australia Pty Ltd to the Nelson Place Advisory Committee (dated 23 August, 2010) and the Statement by Ian F Thomas to the Ports and Environs Advisory Committee on behalf of Nelson Place Village Pty Ltd (dated 5 September, 2010).
- My professional skills and experience in major hazard safety as detailed in Attachment A.

As summarised in Mobil's submission, and apparently accepted by Ian Thomas, 300m is a common rule of thumb for an acceptable separation distance between industrial sites containing crude oil storage tanks and proposed residential developments. Such a rule of thumb is based on consideration of risks (frequency and consequence of possible incidents) for typical storage tanks and typical developments. Ian Thomas's report suggests that the separation distance between existing tank bunding (not the edge of the facility per se) and the closest part of the NPV is almost exactly 300m. It is clear therefore that firm conclusions should not be drawn for this specific situation on the basis of the "typical" safe separation distance and that further analysis is required.

In my view, it is essential that the ongoing safety of members of the public who may live in the proposed new Nelson Place Village be addressed systematically before the development goes ahead. The best way to do this is for an independent technical expert to conduct a risk assessment. Such a risk assessment must:

- Review the possible effects of radiation and smoke from fires, as well as overpressure and debris from explosions that could originate from the Gellibrand Pier facility.

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- Include the possible impact of marine activities (especially the potential for escalation of a marine-related incident to the adjacent crude oil storage tanks) in addition to normal operations in the tank farm itself.
- Consider the current and likely future activities at the Gellibrand Pier site.

Ian Thomas's submission makes much of the current arrangements at the Gellibrand site regarding tanks in and out of service. As Mobil points out in their submission, this facility provides an increasing volume of the feedstock for one of Victoria's two oil refineries. It would be inappropriate to make a decision regarding this residential development without consideration of reasonable future plans for the adjacent, important state infrastructure.

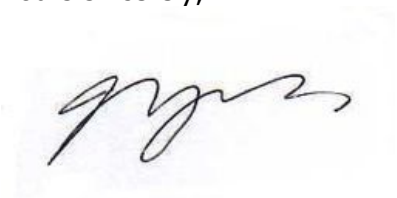
This work could not be conducted without co-operation from Mobil (the operators of the Gellibrand Pier facility). The scope would be closely related to parts of the Safety Case for the site, but the planning considerations should not be limited by the scope of the regulations defining Major Hazard Facility Safety Cases.

My understanding based on our discussions is that the proposed new development may introduce as many as one thousand new residents to the area. This has implications for emergency response in the event of an incident at the Gellibrand Pier site since those extra people may be seeking to evacuate the area at the same time as emergency services are trying to make their way to the facility. The practicalities and logistics of emergency response arrangements should also be carefully considered during the planning process to ensure that appropriate egress arrangements from the NPV site and from the entire suburb are in place.

In summary, it is my view that responsible decision making regarding the appropriateness or otherwise of the development of the Nelson Place site cannot proceed without taking into consideration the risk to possible residents associated with current and likely future uses of the Gellibrand Pier site.

Please do not hesitate to contact me if you need any further clarification.

Yours sincerely,



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Qualifications:	Senior Research Fellow, Research School of Social Science, Australian National University Bachelor of Engineering (Chemical) (Honours), University of Adelaide Master of Business (Leadership and Organisation Dynamics), Swinburne University PhD, ANU Graduate, Australian Institute of Company Directors Associate Fellow, Australian Institute of Management Member, Australian Aviation Psychology Association
Special Fields of Competence:	Facilitator for qualitative risk assessment workshops, organisation behaviour studies, training, HAZOP Chairperson, Project Managemen
Employment History:	2004 Halcyon Risk Management 1992-2004 Qest Consulting 1990-1992 Davy John Brown Pty Ltd - Lead Process Engineer 1987-1990 Restech Consultants Pty Ltd - Risk Assessment Co-ordinator / Process Engineer 1984 - 1987 Esso Australia Ltd - Process Engineer

Selected Professional Experience:

- Conducted a risk-based review of environmental performance at a major oil refinery site for the EPA.
- Risk Specialist developing regulatory policy and guidance material in the Office of Airspace Management.
- Project manager and lead analyst for the Basell Geelong Polypropylene Safety Case
- Technical mentor for Caltex Lytton Refinery Safety Case
- Member of the DITR Improving Safety project developing the implementation plan for the new National Offshore Petroleum Safety Authority and revising the offshore Safety Case content guidelines.
- Project Manager for the Origin Energy BassGas onshore pipelines and gas plant Safety Cases.
- Project manager & lead analyst for 3 metalliferous mine site risk assessments.
- Presenter of highly successful public Hazop Leader Courses
- Lead analyst on AS2885 pipeline QRA for existing LPG pipelines
- Project managed preparation of QRA models for 16 offshore facilities of Esso Australia and wrote associated Safety Case Submissions.
- Prepared and conducted risk assessment training and a qualitative risk assessment with site personnel for Cairn Energy, India.
- Chaired qualitative risk assessment workshops and HAZOP studies on behalf of many clients including Santos, Airservices Australia, Esso, BHP and various drilling and construction companies.
- Project Manager for preparation of the Safety Case for BHP Petroleum's Griffin Gas Plant.
- Project Manager for preparation of an aviation-industry safety case
- Developed risk-based engineering & maintenance strategies for aviation industry client.
- Reviewed VWA draft Safety Case Assessment Framework.
- Acted as the key focus for BHP Petroleum's safety improvement program.
- Prepared and conducted Safety Case training courses for BHP Petroleum personnel, including safety specialists, Managers, design staff, Operations personnel and Drilling personnel.
- Responsible for preparation of the bridging Safety Case for EAL/Forwest/Expro well testing offshore WA including coordination of the Safety Case acceptance by WADME.
- Responsible for the preparation and supervision of Formal Safety Assessment studies of West Tuna and Bream B installations for Esso Australia, including development drilling.
- Lead Process Engineer on the Altona Petrochemical Company P.R.U. Project.
- Process / mechanical Engineer leading the design team for Water Handling System Upgrades on seven Bass Strait Platforms (Esso Australia).
- Led the design team for Flare, Vent and Drain Upgrades on West Kingfish, Cobia, Tuna, Snapper, Kingfish A and Kingfish B platforms (Esso Australia).
- Member of Esso Australia's Piper Alpha Response Team.