

HEARING SUMMARY – NORBERT SCHAFFOENER – RISK ANALYSIS

1. My role in the Project has been to advise on public health and safety risk issues in relation to the EWL traversing a part of Mercury's Southdown site. I became involved in this Project in early June 2017. As a result I have only prepared rebuttal evidence, not evidence in chief.

Changes or corrections

2. Since preparing my evidence a number of developments have occurred. Expert conferencing took place on 13 July 2017. I was overseas at the time and was not able to take part in that conferencing. Mr Erskine of GHD attended the conference and has also prepared an initial risk assessment report for the Agency analysing the various hazards that were identified and perceived to be relevant by Mercury.
3. I note that I stated in my rebuttal evidence (paragraph 5.16) that in my opinion such a risk assessment cannot be undertaken by an external third party as it relies on detailed technical data and commercially sensitive information not available to a third party. I have reviewed the risk assessment prepared by Mr Erskine. Having read that report I would like to qualify my previous statement as I consider Mr Erskine's risk analysis to be credible within the limitations and assumptions outlined in the report and during his evidence. I understand that Mr. Erskine has been provided with some technical data by Mercury to assist in his assessment, and has otherwise used plausible and conservative assumptions where he had to.

My key conclusions/findings are:

4. In my opinion at this point there is no credible information available to indicate that operation of the Southdown power plant would generate public health and safety risks that can be considered unacceptable or intolerable to users of the EWL. To the contrary Mr Erskine's risk assessment indicates that most risks can be considered to be tolerable or acceptable. I have not seen any evidence by Mercury's risk expert, Mr Phillis, that risks have been assessed with different results. I am only aware of Mr. Phillis contribution to identify hazards in his written evidence in chief and during expert conferencing, not any qualitative or quantitative assessment of risks on his part, or the presentation of different risk acceptance criteria, or the identification of other risk scenarios not assessed by Mr Erskine.
5. Mr Erskine stated that, due to the uncertainties with the available information, the analysis in the risk assessment has overestimated rather than underestimated assumptions. I consider that is the case, and that is generally in line with good risk management practice.
6. The Southdown site is a workplace. As such there are requirements under the Health and Safety at Work Act 2015 to eliminate risks so far as is reasonably practicable. Public health and safety risks relevant to the EWL are those residual risks that arise after elimination and minimisation of workplace safety risks. Operations on the site will also have to comply with other relevant legislation such as the Gas Act 1992 and regulations under that Act, and the Hazardous Substance and New Organisms Act 1996.

7. I consider Mr. Erskine's risk analysis a credible and useful step in the process. I support his view that, based on the information made available to him, the First Gas pipeline/pigging station is the primary source of risk which in its current location would be unacceptably high. I understand that discussions between the Agency and First Gas about relocating that facility are taking place. I am not aware of any details of these discussions.
8. I support Mr. Erskine's view that there are control measures available that can act as effective risk mitigation for other hazards associated with operating a power plant.
9. I would like to comment briefly on the issue of gas pipework on the Mercury site allegedly of similar length and pressure to the First Gas pipeline between pigging stations raised during Mr Erskine's cross-examination. It was claimed that this could present a similar risk as compared to the pigging station. If that was indeed the case a significant part of the site would also be subject to individual fatality risks over 1×10^{-5} /year (that is more than one fatality every 100,000 years). Under the Victorian Interim Guidelines this would be deemed an intolerable risk and in my opinion would not be consistent with the requirement to eliminate or minimise risks so far as is reasonably practicable under New Zealand law. It is beyond my comprehension that such a risk, if it did indeed exist, was not identified before or during expert conferencing, or could be allowed to exist for an operational site.
10. As this subject matter has been evolving in the last few months, I am not aware of whether Mercury's risk expert, Mr. Phillis, agrees with the findings of the risk assessment undertaken, or whether he has prepared his own assessment. On that basis I cannot state whether there is any remaining disagreement between the risk experts. However, I note a high degree of agreement in the expert conferencing report.

Conclusion

11. In my opinion all available evince at this point indicates that the identified hazards and subsequent risks of co-locating the EWL with an operating Southdown power plant are not significant enough to be intolerable or such that they cannot be mitigated sufficiently. In the case of the First Gas pigging station that mitigation would require a relocation. If other credible public health and safety risks which were not identified by Mercury, or on behalf of Mercury by Mr Phillis, before or at expert conferencing, or afterwards in response to written (emailed) requests, exist they may require further examination. However, in the first instance that would involve considering documentation about risk elimination and minimisation undertaken by Mercury with controls and internal management measures necessary to meet statutory workplace safety requirements. To the extent EWL creates additional risks significant enough to warrant it, further controls could then be adopted.