

ASSESSMENT REPORT

Section 75W Modification Borg Panels – Gas Fired Cogeneration Units (DA 27/95 MOD 8)

1. BACKGROUND

Borg Panels (the Proponent) owns and operates a medium density fibre board (MDF) and door skin plant, located at the north edge of Oberon in the Oberon local government area (see **Figure 1**). The nearest sensitive receivers to the site are about 520 metres (m) north-west and about 860m to the south within the township of Oberon.

The site has been in use for timber production since 1941, employing around 160 people and producing MDF and joinery products such as shelving and melamine board. The site was formerly part of a larger timber operation, operating on either side of Lowes Mount Road and was known as the Oberon Timber Complex (the OTC). The OTC consisted of an MDF plant, particle board facility and saw mills.

The Borg facilities were acquired from Carter Holt Harvey and JELD-WEN Fibre Australia in 2010, and operate under a consent granted by the Minister in 1995 (DA 27/95). In addition, the Proponent has acquired a resin production facility adjacent to the MDF plant which was approved by Oberon Shire Council in 1998 (DA 152/98) (refer to **Figure 2**).

Highland Pine Products and Structafloor operate under a separate consent issued by the Minister in 2001 (DA 403-11-00). These facilities include two saw mills and produce a range of products for the construction and furniture industries including plywood, flooring and trusses.

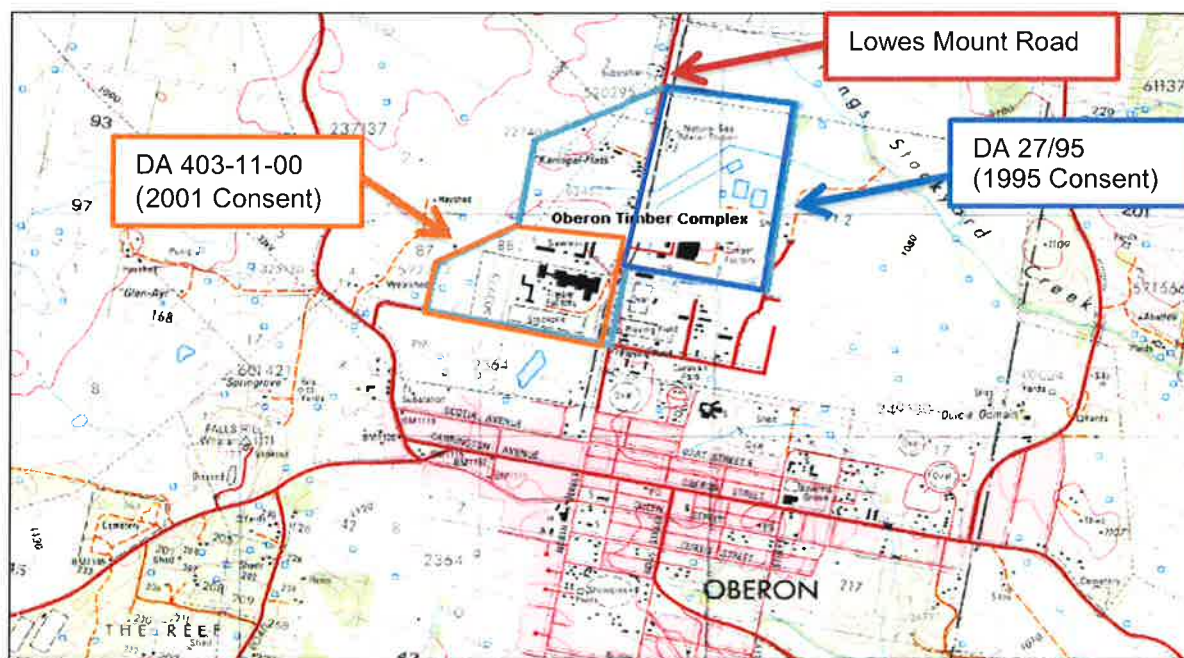


Figure 1: Location map showing the two consents that apply to the Oberon Timber Complex

A number of recent modifications to the 1995 consent have allowed the Proponent to consolidate the operation of its assets, including:

- construction of a building between the MDF plant and the door-skin plant to improve weather protection and organisation between the two plants (DA 27/95 MOD 5); and
- minor works to improve site layout and amenities through construction of a debarker enclosure, permanent and temporary hardstand areas and relocation of the fire water tanks (DA 27/95 MOD 7).

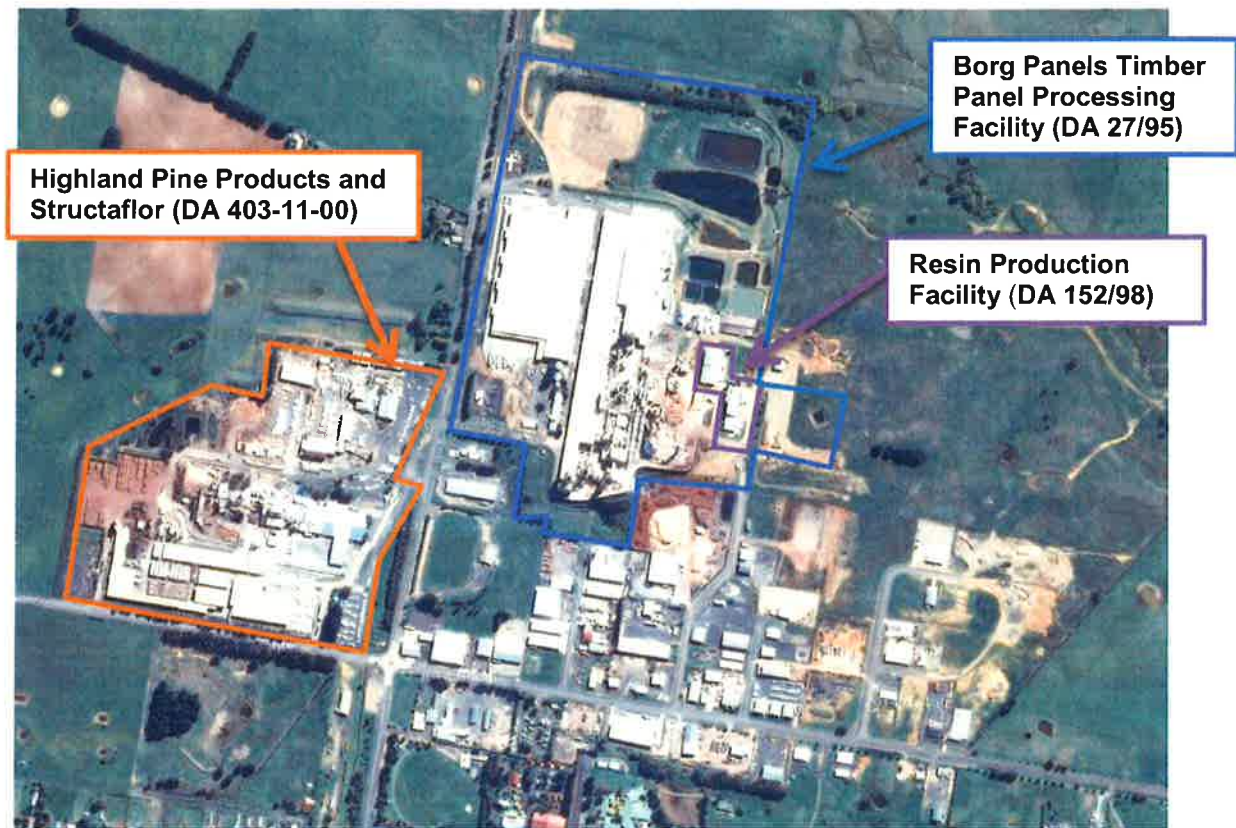


Figure 2: Aerial photo showing the location of the Borg Panels Facility

The Proponent has now made a further request to modify the 1995 consent and proposes to install and operate two gas-fired cogeneration units which would provide heat energy for the MDF production process and generate electricity to go back into the power grid.

2. PROPOSED MODIFICATION

On 8 July 2015, the Proponent submitted a modification request (DA 27/95 MOD 8) and supporting report prepared by The Design Partnership to install and operate two gas-fired cogeneration units.

The cogeneration units are internal combustion engines which would be powered by natural gas to generate electricity (which would go back into the power grid) and provide additional heat energy for use in the manufacturing process of MDF boards. Previously, the cogeneration units were located at a landfill and were operated using digester gas. The cogeneration units would be located adjacent to the log yards and laminating plant and would be housed within a soundproof enclosure and awning (see **Figure 3** and **4**).

The modification would not result in an increase in production capacity or a significant change to the processes that occur on the site. The Proponent considers the cogeneration units will reduce overall energy usage at the site and would have lower pollution emissions and running costs.

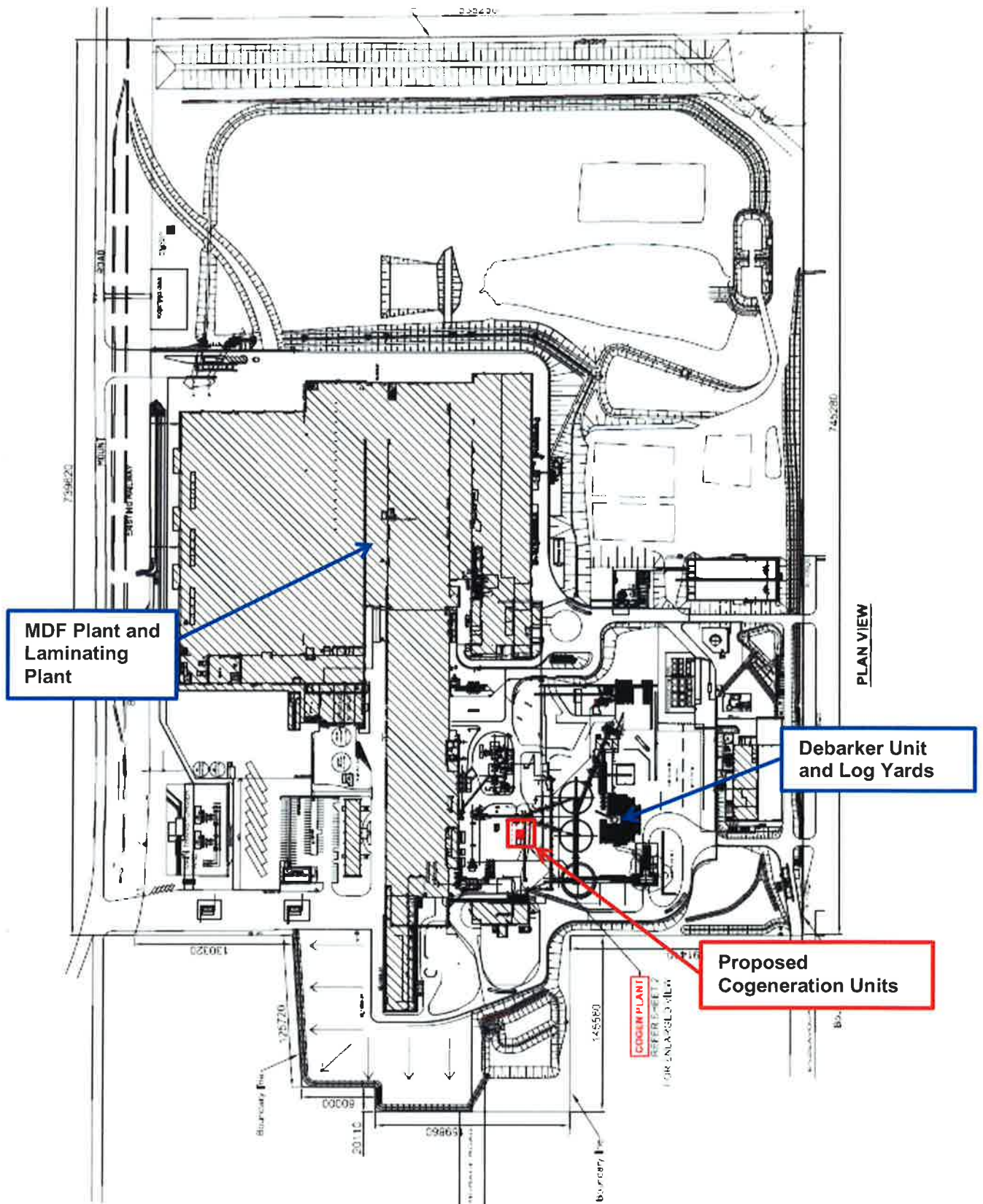


Figure 3: Site layout and location of the proposed cogeneration units



Figure 4: Cogeneration units contained within a soundproof enclosure

3. STATUTORY CONTEXT

3.1 Approval Authority

Under Clause 8J(8) of the *Environmental Planning and Assessment Regulation 2000*, a development consent granted by the Minister for Planning under *State Environmental Planning Policy No 34 – Major Employment Generating Development* is to be modified under Section 75W of the EP&A Act.

The Minister for Planning delegated responsibility for the determination of section 75W modification requests to Directors who report to the Executive Director, Key Sites and Industry Assessments where:

- the relevant local council has not made an objection; and
- a political disclosure statement has not been made; and
- there are no public submissions in the nature of objections.

The proposal complies with the terms of the delegation as Oberon Shire Council (Council) does not object to the proposal, a political donations disclosure has not been made in relation to the application, and no public submissions were received in the nature of objections. Accordingly, the Director, Industry Assessments may determine the application in accordance with the Minister's delegation.

3.2 Modification

The Department is satisfied that the request can properly be characterised as a modification to the original development consent, and can therefore be assessed and determined under section 75W of the EP&A Act.

The Department notes that there are no changes to the processes that occur on site, however with the installation of two cogeneration units, there may be some minor changes to the environmental impacts that affect the surrounding environment.

3.3 Consultation

The Department made the request publicly available on its website and consulted with the Environment Protection Authority (EPA) and Council. The issues raised in their submissions are summarised below and provided in **Appendix C**.

Wider consultation with other agencies and the community was considered to be unnecessary because the modification would not impact on the surrounding environment.

No **public submissions** were received.

Council did not object to the proposal.

The **Environment Protection Authority** (EPA) required clarification on a number of issues relating to the noise and air quality assessment and potential impacts. The EPA advised that the existing Environment Protection Licence (EPL) for the site may be amended for the proposed modification.

3.4 Response to Submissions

On 12 October 2015, the Proponent provided a response to the issues raised in the submissions (see **Appendix D**). This response has been made publicly available on the Department's website.

The Response to Submissions (RTS) report addressed the issues raised by the EPA as identified in section 4.1 below and included an updated Noise Impact Assessment. The EPA reviewed the Proponent's RTS and was satisfied that all matters had been addressed.

4. ASSESSMENT

The Department has assessed the merits of the proposed modification. During this assessment, the Department has considered the:

- environmental assessment (EA) for the modification (see **APPENDIX B**);
- assessment reports for the original development consent and previous modifications;
- existing consent conditions;
- all submissions (see **APPENDIX C**);
- Response to Submissions (see **APPENDIX D**);
- relevant environmental planning instruments, policies and guidelines; and
- requirements of the Act, including the objects of the Act.

The Department considers that the main issues associated with the proposal relate to noise, air quality and hazards and risk.

4.1 Noise

Noise limits are currently in place for the facility and are set out in the site's existing EPL. The existing noise limits for the facility are 55 dB(A) during daytime periods, 50 dB(A) during evening periods and 45 dB(A) during night-time periods. The EA included a noise impact assessment (NIA) carried out by Vipac Scientists and Engineers (see **Appendix A** of the EA) which considered the potential noise impacts from the proposed cogeneration units.

The cogeneration units would be located in the middle of the site next to the existing laminating plant and the log yards and are proposed to be enclosed within a steel enclosure which would be internally lined with insulation (See **Figure 3** and **4**). The steel enclosure would have three open areas: an air intake vent, air discharge vent and an exhaust pipe that run from the muffler on the cogeneration units to the process plant. The NIA stated that these open areas would be the primary noise sources related to the proposed cogeneration units.

Under a worst case scenario, the NIA predicted that noise levels from the fully enclosed cogeneration units alone would range from 24 dB(A) to 35 dB(A) at the closest sensitive receivers in the daytime and 25 dB(A) to 35 dB(A) during evening/night-time periods. These predicted noise levels are well below the applicable criteria during the day, evening and night time periods.

The NIA also considered cumulative noise levels taking into account noise from the cogeneration units and existing operations. The NIA concluded that the potential cumulative noise impacts are likely to be negligible at each of the sensitive receivers, except at R3 (Oberon High School, 680m south, see **Figure 5**) and R4 (a residential address – 10 Tasman Road), where there is a predicted minor increase of 1 dB(A) to 38dB(A) at R3 during daytime periods and 42 dB(A) and 44dB(A) at R4 during daytime and evening periods. This minor increase is generally not perceivable and the cumulative noise levels are still below the applicable noise criteria for daytime and evening periods. The NIA also stated that noise from the existing facility and other industrial activities in the surrounding area are likely to mask noise from the cogeneration units.

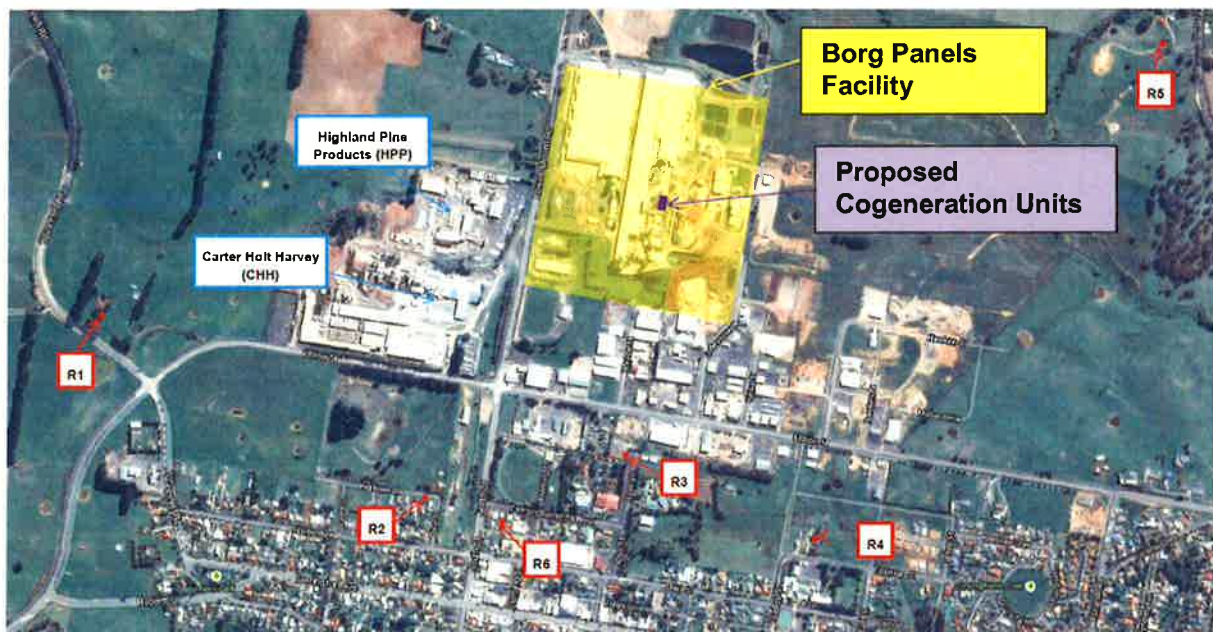


Figure 5: Nearest sensitive receivers to the site

In its submission, the EPA sought clarification on cumulative noise impacts arising from the existing operation and proposed noise attenuation strategies. The Proponent provided a revised NIA which confirmed that the cogeneration units would be acoustically treated to achieve the predicted noise levels outlined in the initial NIA.

Based on the information in the revised NIA, the Department and EPA consider that noise impacts from the proposal would be negligible provided that the cogeneration units are acoustically treated. The Department and the EPA are satisfied that the cogeneration units would not contribute to existing noise levels on the site as existing noise would generally mask noise emitted from the new cogeneration units. To ensure that the cogeneration units do not exceed noise limits at the nearest sensitive receivers, the EPA has recommended that post commissioning noise testing be undertaken by the Proponent.

The Department has included new conditions requiring the Proponent to:

- ensure that the cogeneration units are acoustically treated to achieve the predicted levels described in noise impact assessment; and
- undertake post commissioning noise monitoring of the cogeneration units to demonstrate compliance with EPA noise limits. Should compliance not be achieved with the existing noise limits for the facility, additional acoustic mitigation would be required.

The Department's assessment concludes that noise impacts associated with the modification can be generally managed through the existing and proposed consent conditions and the EPL for the facility.

4.2 Air Quality

The EA indicated that the cogeneration units would not generate a significant amount of dust or air emissions. The cogeneration units would operate on natural gas and produce exhaust emissions (in the form of waste heat), which would be directed into a drying and blending chamber as part of the MDF production process. Any emissions from the drying and blending process are then released via an existing licensed discharge point in the facility.

The cogeneration units have been classified as a Group 6 plant or activity under the *Protection of the Environment Operations Act 1997* because it commenced operation after 1 September 2005. As such, the Proponent is required to comply with the emission standards set for Group 6 plant or activities under Schedule 4 of the *Protection of the Environment Operations (Clean Air) Regulation 2010* (Clean Air Regulation).

The EA stated that the proposed cogeneration units were previously operating on digester gas at a landfill site which previously complied with the Group 6 emission limits under the Clean Air Regulation. The Proponent further considers that when run on natural gas, air emissions are likely to be lower than when the cogeneration units were running on digester gas. Notwithstanding, the EA concluded that the cogeneration units are capable of being 'tuned' to meet the Group 6 emission standards.

The EPA advised that the Proponent would need to undertake post commissioning testing of the cogeneration units to verify that the cogeneration units comply with the Clean Air Regulation. Should emissions not comply with Group 6 emission standards, the EPA would require the Proponent to source an emissions control device.

The Department supports this approach and has included a condition in the recommended instrument requiring the Proponent to undertake post commissioning testing of the cogeneration units to demonstrate compliance with the Group 6 emission standards in the Clean Air Regulation. The Department considers that with these conditions in place, air quality impacts would be adequately managed. The Department's assessment concludes that air quality impacts are likely to be minimal.

4.3 Hazards and Risk

The cogeneration units are proposed to operate on natural gas which would be supplied to the cogeneration units via an existing gas supply. The units would also be enclosed and placed in the middle of the site.

The Department sought further information regarding a potentially hazardous scenario involving the failure of equipment, which could potentially result in the release and ignition of flammable gas into the surrounding environment. To minimise this risk, the Proponent indicated that the cogeneration units would be installed with an over pressure shutoff valve to prevent excessive gas pressure, while the enclosures would also have two ventilation areas to reduce pressure in the event of an explosion. In addition, the Proponent has committed to ensuring that the installation of the gas supply to the cogeneration units complies with AS 5601 – *Gas Installations*.

The Department is satisfied that with these control measures in place, the potential risks from the proposed modification would be adequately managed. Further, the Applicant is required under an existing condition in the development consent to update the Fire Safety Study for the site following any modification to the development consent.

5. CONCLUSION

The Department's assessment has found that the proposed modification can be carried out with minimal additional environmental impact and would have negligible air quality and noise impacts, as:

- the cogeneration units would be located within steel enclosures lined with insulation; and
- pollution controls would be in place to ensure air emissions comply with the Clean Air Regulation.

The modification does not involve an increase in production capacity but modernises the facility, allowing it to operate more efficiently and continue its contribution to the employment of people in Oberon.

The existing suite of consent conditions include requirements for ongoing impact mitigation relating to air quality, noise and hazards and risk and these requirements would apply to the proposed modification. The EPA advised that the EPL for the site would need to be varied for the proposed modifications, but that the existing noise limits in the EPL would remain as they are.

The Department has identified the need for additional conditions around air quality, noise and hazards and risk to reflect the addition of the two cogeneration units. Consequently, the Department is satisfied that the proposed modification should be approved subject to these conditions.


6. RECOMMENDATION

It is RECOMMENDED that the Director – Industry Assessments:

- **consider** the findings of this report;
- **approve** of the proposed modification under Section 75W of the EP&A Act; and
- **sign** the attached instrument (Tag A).

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Endorsed:

 4/12/15
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