BORG CONSTRUCTION PTY LTD

RESPONSE TO SUBMISSIONS

TIMBER PROCESSING FACILITY (PARTICLE BOARD)

LOT 1 DP 1085563, LOT 2 DP 1085563, LOT 26 DP 1200697,

LOT 24 DP 1148073 AND LOT 1 DP 1076346

124 LOWES MOUNT ROAD, OBERON

DECEMBER 2016

THE DESIGNPARTNERSHIP

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124 LOWES MOUNT ROAD, OBERON

PROJECT NUMBER: 14.023

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1.0 INTRODUCTION

1.1. Overview

Borg Construction Pty Ltd (Borg) proposed to make a number of alterations and additions to an existing timber processing facility (the Project) at 124 Lowes Mount Road Oberon under SSD 7016. The existing facility operates under DA 27/95 issued under Part 3A (repealed) of the *Environmental Planning and Assessment Act 1979* (EP&A Act). The Project represents a new State Significant Development project for a timber processing facility, and will result in the land the subject of the application being removed from the existing consent.

1.2. Overview of Approval Process and Exhibition

Approval for the Project is being sought under Part 4, Division 4.1. In Accordance with section 89F of the EP&A Act and the EP&A Regulation 2000 (the Regulation), the EIS is required to be placed on exhibition for not less than 30 days.

As exhibition of the EIS commenced on 10 June 2016, the exhibition period was extended by two weeks to the 27 July 2016 to accommodate the NSW School Holidays

The EIS was made available on the Department of Planning and Environment (DP&E) web site (http://majorprojects.planning.nsw.gov.au/). Physical copies were available for review at the Department of Planning and Environment and Oberon Council. A hardcopy was provided to the Environment Protection Authority for review.

Consultation with key stakeholders continued through, and in some cases beyond, the exhibition period.

Submissions received during and outside the exhibition period are considered in this report.

1.3. Purpose of this Report

The purpose of this report is to detail and provide responses to issues raised in the submissions received during the EIS exhibition period.

1.4. Structure of this Report

The Submissions Report has been set out to address each of the issues raised in the submissions and is structured as follows:

- **Section 1** provides an overview of the proposed modification, the EIS process and the Submissions Report purpose and structure
- **Section 2** provides a summary of the submissions received and outlines the key issues raised in the submissions
- **Section 3** provides responses to each of the issues raised in submissions received from State and local Government agencies
- **Section 4** provides responses to each of the issues raised in submissions received from community stakeholders (individuals, community groups and businesses)
- **Section 5** provides a response to key issues raised in submissions
- **Section 6** presents the final Statement of Commitments
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2.0 SUMMARY OF SUBMISSIONS

2.1. Submission Process

During the exhibition period, and for a short period thereafter, submissions in relation to the Project were accepted by the DP&E. Submissions were provided to the proponent for response. All submissions were reviewed and issues raised have been addressed in this Submissions Report.

2.2. Submissions Received

In total, twelve (12) submissions were received:

- Six (6) submissions were from State and local Government agencies (refer Appendix A) including:
    - Office of Environment and Heritage;
    - NSW Environment Protection Authority;
    - Oberon Shire Council
    - Safework NSW;
    - Roads and Maritime Service;
    - Department of Primary Industries – NSW Office of Water; and
- Six (6) submissions were received from the general public – it is noted that of this, one individual made three (3) separate submissions. One of these submissions is a duplicate due to concerns over the original submission not being received. A copy of these submissions is attached at Appendix **B**.

3.0 RESPONSE TO PLANNING COMMENTS

The following sets out the response to the direct issues raised by the Department in their RTS document.

3.1. Air Quality

> *The Department notes the Air Quality Impact Assessment (AQIA) includes an assessment of the existing and proposed development, however due to the close proximity of other similar developments (such as Highland Pine Products and Woodchem), the model does not adequately consider cumulative impacts and existing background levels in its assessment. The Department also notes the predicted levels for formaldehyde and NO2 would exceed or are close to the EPA limits. Please consider the cumulative impacts for all emissions including formaldehyde and NO2, particularly in the context of the Woodchem facility and Highland Pine Products.*

An additional Air Quality Impact Assessment has been undertaken by Todoroski Air Sciences in order to address the concerns raised, and is attached as Appendix C. In summary:

- Additional cumulative modelling has been undertaken in order to include the impacts of nearby development on the existing air quality. As part of this, baseline data from the 2014 Calendar Year from the nearest two Office of Environment and Heritage monitoring stations was included. This allowed for a more detailed understanding of the potential impacts of the Project on the existing environment. This notes that the Project will generally have a positive impact on the existing environment, including a substantial reduction in overall levels of formaldehyde, both from the subject site itself, as well as when looked at in context with the surrounding development and baseline data.
- Additional clarification regarding the modelling of NO2 has been provided, which takes a conservative approach in order to ensure that the most appropriate level of mitigation is provided. The modelling indicates that the overall level of NO2 and other particulate pollutants will be below the current licensing levels.

> *Does the AQIA consider potential air emissions from the use of wood waste products in the particleboard manufacturing process? Please detail risks associated with other potential pollutants such as dioxins, furans, heavy metals and the mitigation and management measures to deal with these type of emissions.*

Wood waste to be used in the particleboard manufacturing process will form a small component of the total makeup of the finished board and thus a much smaller component of fuel mix used on site for the Heat plants. Furthermore, dioxins, furans and heavy metals are combustion by-products which are usually found in flue gases of plant which use construction and demolition waste wood, municipal waste and Poly Vinyl Chloride (Vinyl plastic) or material with excessive Chlorine contamination as fuel. Borg does not intent to create a Waste incineration facility and will only collect specific streams of untreated waste wood products from reliable and reputable sources which will conform to the strictest requirements.

Borg are aware of the risks associated with using chemically treated and coated wood as a fuel source for solid fuel heat plants and will not use these wood sources for the particleboard manufacturing process.

Borg does not plan to use construction and demolition waste or any other high risk waste wood sources in the manufacture of its particleboard products thus the risk of creating these types of pollutants is low.

This is further underpinned by the European directive on incineration of waste, which is one of the few documents which is clear when making this type of assessment, Statement (iv) below provides the clarification regarding the incineration of wood waste:

DIRECTIVE 2000/76/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL ON THE INCINERATION OF WASTE (4 December 2000)

2. The following plants shall however be excluded from the scope of this Directive:

(a) Plants treating only the following wastes:

(i) vegetable waste from agriculture and forestry,

(ii) vegetable waste from the food processing industry, if the heat generated is recovered,

(iii) fibrous vegetable waste from virgin pulp production and from production of paper from pulp, if it is co-incinerated at the place of production and the heat generated is recovered,

(iv) wood waste with the exception of wood waste which may contain halogenated organic compounds or heavy metals as a result of treatment with wood preservatives or coating, and which includes in particular such wood waste originating from construction and demolition waste,

(v) cork waste,

(vi) radioactive waste,

(vii) animal carcasses as regulated by Directive 90/667/EEC without prejudice to its future amendments,

(viii) waste resulting from the exploration for, and the exploitation of, oil and gas resources from off-shore installations and incinerated on board the installation;

(b) Experimental plants used for research, development and testing in order to improve the incineration process and which treat less than 50 tonnes of waste per year.

Please assess the impact of burning treatment plant sludge, WESP sludge and scrubber sludge, given the potential pollutant load from the development.

The accumulated sludge has an energy value hence why it is being considered as a fuel source. It also has the added benefit of adding some moisture to the otherwise dry fuel source being utilised on site, reducing dust and cooling the flame in the furnace.

The particleboard manufacturing process will utilise virgin wood products and recycled wood products as raw material process inputs, these are the sources for any accumulation of contaminants in the WESP or scrubber sludge that will be utilised as pollution control devices.

The recycled wood will be screened and assessed for its potential contamination and the other is natural wood, hence the conclusion can be drawn that only wood products will form the source of any accumulated sludge in the WESP or Scrubber and should not require any further assessment at this time.

The site currently only utilises virgin wood for its manufacturing process as the site is allowed to burn water treatment sludge in the heat plants. However, Borg will discuss the waste wood recycling process and its ancillary effects in detail with the EPA as the project progresses. If this is found unsuitable then an alternative disposal solution will be sought.

The AQIA predicts the development would fail to meet the EPA's air quality impact criterion for formaldehyde. As per the EPA's submission, further details are required on the controls or mitigation needed to meet the impact assessment criteria.

It is noted that this question relates to a previous AQIA prepared by Stephenson Environmental. Findings from the more recent AQIA prepared by Todoroski Air Sciences are detailed below

There is some potential to exceed the NSW EPA formaldehyde criterion at the edge of the Project boundary on land used for industrial uses and as an easement. The exposure for humans at above the criteria is limited due to the fact that the area affected is predominately used for the stockpiling of process materials. This is a transitional area of the site, with no workers located in the vicinity for extended periods of time. However, the Project formaldehyde emissions at any location outside of the Project boundary, along with those from the other nearby industries, would not exceed the more current, health based World Health Organisation formaldehyde guideline set to prevent even sensory irritation. It should be noted that the Project would also reduce the current levels of formaldehyde emissions, and the modelling was undertaken on a 'worst case scenario' basis.

The equipment specified within the plant proposed has been selected in order to minimise overall pollution generated, which is shown in the significant reduction in over levels of formaldehyde generated by the site, and indeed, the overall cumulative levels of formaldehyde in the location.

During review of the RTS, the Department identified a number of additional minor points that required clarification. These are addressed as follows:

> *Section 3.1 of the RTS (pg 7) states that Borg is aware of the risks associated with using chemically treated and coated wood as a fuel source for the heat plants. Please provide further details on what protocols or quality assurance would be in place to ensure that chemically treated wood products are not used as a source of fuel.*

Current approved fuel sources for the site are Standard fuels as defined by the POEOA and Non Standard fuels are defined in the sites EPA license. Protocols currently employed by the site are visual inspections of the fuel, training and understanding the origin of all fuel products, these will remain as controls with addition of any further requirements set by the EPA as the Wood recovery program progresses.

> *Similarly, the RTS also states construction and demolition waste in the manufacture of particle board would not be used. What protocols or quality assurance procedures will be in place to ensure construction and demolition waste or other high risk wood sources are not used.*

As this Recovered Wood recycling process is not detailed in depth we cannot provide extensive details on the exact controls that will be utilised however the final outcome will be presented to the EPA for verification and acceptance. Procedures that may be utilised as part of the control strategy are:

- Borg will control the recycling process and not rely on third party providers. Visual inspections with initial collections to occur from within the Borg group only.
- Validation of unknown sources of wood products and laboratory analysis for potential treatment chemical.
- Barcode system to provide limited traceability of origin of product.
- Testing at heat plant stacks for combustion by products which are of concern
- Training of staff to allow more accurate determination as to origin of products
- Sourcing of solid wood products, not broken or wood products that have been reduced in size. This will enable visual inspections and allow faster assessment to determine if the products originate from construction and demolition waste.

Generally, Borg are planning to recycle particleboard, wood pallets and sawmilling residue in the short term. Longer term, different options will be further investigated in order to reduce overall waste generation from the site. Any such activities will be appropriately licensed.

3.2. Noise

> *The Department notes the proposed noise levels for the site are predicted to operate close to or in some instances, exceed the EPL limits. Please outline what noise attenuation measures for the proposed and existing plant and equipment (i.e. Conti 1 dryer, booster fan drive, mobile wood chippers as discussed in section 13.3 of the EIS) would be implemented to achieve the necessary sound power reductions.*

Attenuation, as detailed in the existing NIA, will be implemented as follows:

- Conti 1 Dryer Fan has had the air intake redesigned and the fan speed reduced to minimise noise generated.

- Booster fan, while not detailed entirely at DA level, will receive additional insulation and a reduction in fan speed.
- Main fibre transport fan will have a concrete enclosure constructed around it
- The implementation of an electric chipper has significantly exceeded the anticipated reduction in the expected noise levels, creating a more positive impact than previously modelled.

Table 18 of the Noise Impact Assessment shows that compliance can be achieved during the day period when operating mobile chippers without acoustic enclosures during non-enhancing met conditions (neutral met). Table 19 shows minor exceedance with prevailing wind conditions. This indicates that weather management controls should be sufficient to control noise from the chippers. As such, noise attenuation for the mobile chippers is not required. Conditions relating to not being used during enhancing meteorological conditions can be applied. These mobile chippers are only to be used as a back-up if the electric plant fails. As such, they are not considered to present a significant, ongoing noise generating activity.

In short, the approach taken by Borg to mitigate noise is based on a number of factors:

1) Continuation of the use of mobile chippers (that is, not to enclose the mobile chippers). However, these are backup items (only to be used when enclosed, electronic chippers are not operational), and will not be used in enhancing met conditions.
2) Implementation of additional items to minimise noise generated by equipment as detailed above.
3) Provision of sound attenuation structures and enclosures where appropriate

Irrespective of the above, Borg undertakes to meet the existing plant sound power reductions specified in the NIA. If the proposed attenuation measures to the existing plant are found to be insufficient in achieving these reductions, additional works will be undertaken.

During review of the RTS, the Department identified a number of additional minor points that required clarification. These are addressed as follows:

> *Section 3.2 of the RTS (pg 9) states that if the proposed attenuation measures to the existing plant are insufficient in achieving reductions, additional works will be undertaken. Can you provide examples of what other attenuation or management measures might be applied if noise reductions are insufficient under the proposed attenuation measures?*

As the design of the plant is being finalised the sound attenuation requirements that have been detailed in the NIA for the existing site have been exceeded, therefore we do not see the need for this. However further noise mitigation if required may be implemented post commissioning of the plant. This could include:

- More sound enclosures for existing site or developed site plant and equipment,
- Alternative materials of construction for particular noise generating sources,
- Production hall building insulation,
- Fine tuning of process and/or
- Site boundary controls.

3.3. Surface Water Management

> *The Department understands that stormwater runoff from the Highland Pine Products site is discharged via the Borg Panels site. Please provide details of any existing or proposed stormwater management arrangements/agreements between the two sites and evidence of any agreements with Carter Holt Harvey/Highland Pine Products.*

As detailed below, there is an existing easement over the land which benefits both the Highland Pine Products site and Carter Holy Harvey/Structaflor site. The easement for the CHH/Structaflor site is proposed to be modified under this application. Modelling has been undertaken which demonstrates that the Project will have no negative impact on the function of the easement. As such, the easement will continue to function with no detriment to either site.

The existing stormwater management plan, prepared by Parsons Brinkerhoff, details how stormwater from both sites is currently dealt with. This is attached as Appendix D.

This is proposed to be altered under the application by diverting the existing CHH/Structaflor stormwater channel to the northern boundary of the site (see Appendix E and Drawing DA-02 in the original application). This allows for additional on-site treatment of the water, further improving the quality of the water discharged.

This revised stormwater management plan will not create any adverse impacts on the existing discharge arrangements for either site. As Borg is responsible for the water quality discharged from the sites, inclusive of CHH/Structaflor flows, it is important that any modification to the stormwater system does not create a greater impact than is currently approved. As such, the proposed design improves the overall quality of the water which will flow from the site.

Appendix F details the existing easement over the land. This will be re-negotiated prior to CC for the automated storage building being issued. Correspondence relating to this ongoing discussion is attached as Appendix G.

This clearly demonstrates that the existing arrangements relating to the disposal of stormwater have been considered, the user benefiting from the easement will not be impacted upon, and that there will be no additional adverse impacts upon the environment as a result of the revised location of the easement. In essence, the proposed amendment will create a positive environmental impact, as additional, natural, treatment of the stormwater will be undertaken on Borgs land prior to discharge.

> *Please confirm if a Water Management Plan exists for the Oberon Timber Complex (including Highland Pine Products and Structaflor) or if there are separate water management plans for each site. A copy of the existing Water Management Plan for the Borg Panels site should be included.*

An approved Water Management Plan exists for the Borg Panels site. This is attached as Appendix D. This includes measures for addressing the run-off from the Structaflor site.

> *The EIS stated an existing v-notch weir on Kings Stockyard Creek would be moved upstream (pg 94 of the EIS). As per DPI's comments, please assess the impacts of removing the existing infrastructure as well as the impact of installing the new infrastructure upstream. This should also include mitigation measures.*

The existing V notch weir will not be removed. A review of the EPL has found that in fact there is no need to construct any flow measuring device such as a V notch weir downstream. Therefore, the proposal would be amended as follows:

a. The existing V notch weir would not be impacted by the works and left in place

b. No new V notch weir is proposed

c. It will be necessary to construct new swales to connect overflows from the proposed pond with the existing creek line and these will all be carried out in accordance with any Controlled Activity guidelines/permits or conditions of consent.

> *Please assess the impact on downstream users (including impacts on biota) as a result of the proposed harvesting and reuse scheme.*

DPI noted that it was reported that the volume of runoff would remain above rural levels despite harvesting 120 ML/year of polluted water from the site. Given the large areas of impervious areas, and the large velocities and volumes of run-off as a result, not harvesting this stormwater would have a negative impact on biota. The harvesting of clean, undeveloped rural water will not occur, and existing, natural flow rates will be maintained. This is considered to be the most appropriate approach in order to ensure that impacts on downstream users are minimised, and natural flow levels are maintained. Refer to Appendix H, Sustainability Workshop response to submissions for further detail.

> *Further details are required on the proposed removal of the easement to drain water on Lot 1 DP 1200697, including details of consultation with other users of the easement.*

No removal of the easement is proposed. Amendments and alterations are proposed. This will not impact upon the functioning of the easement. Ongoing negotiation has been held with the parties benefited by the easement and will be resolved prior to the issue of CC for the Automated Storage Building. This has been included in Appendix G.

Modelling has been undertaken as part of the Water Cycle Assessment Report, included in the EIS, which illustrated that the proposed changes to the easement will have no detrimental effect to the flow rates and quality of the water currently discharged from the site. No changes to the existing arrangements regarding the processing of stormwater prior to discharge are proposed. As such, it is considered that the concerns regarding the modifications to the easement have been addressed and are no longer an area of concern.

3.4. Use of Recycled Materials

> *Please provide further details of the classes and quantities of recycled wood products to be used as a source material in the particle board manufacturing process. Outline the procedure that would be implemented to control the inputs to the development, including contingency measures to be implemented if inappropriate materials are identified.*

The materials that are to be used would be subject to an amended EPA licence. No such operations can be undertaken by the proponent until the amendment is approved by the EPA. As such, the proponent seeks approval for the future use of recycled materials, subject to EPA approval.

Given the above, it is considered that this is best addressed during the application for the EPA licence amendment. However, the site waste management plan (Appendix I) has begun rationalising and identifying these sources of raw materials. The majority of the raw materials will be sourced internally; that is, from Borg operations both on site and from other Borg operations throughout the state such as the Somersby and Charmhaven plants. These recovered wood materials will predominantly comprise of particleboard offcuts, sawmill residue and untreated wood pallets. These materials, once collected, inspected and validated, will be transferred to the Oberon facility to be used as a raw material for the particle board manufacturing process. As an example of this commitment, a development application is currently being prepared to create a dedicated warehouse for the storage of reject board from the Somersby operations, which can then be transported to Oberon on backloads.

There is a strong commitment within Borg to a re-use, reduce, recycle approach to materials. This decreases the amount of virgin material that is unnecessarily used, and also significantly minimises the amount of waste generated by the facility that requires offsite disposal.

3.5. Soil and Contamination

> *Please provide additional details about potential soil and groundwater contamination on the Borg Panels site. This should also include details of any remediation and validation that has taken place on site as well as consideration of the potential mobilisation of contaminants as a result of the construction works*

There are a number of former contaminated areas of site the subject to this application. These have all been remediated, with the exception of the existing fuel depot fronting Lowes Mount Road. The validation reports associated with these works can be provided to the department if required.

In particular a Remediation Action Plan (RAP) was implemented in 2008 for historical spills that occurred on the Structaflor site. This has been the source of the majority of contamination within the Oberon Timber Complex, including Kings Stockyard Creek. This RAP was completed in 2010 by Carter Holt Harvey.

The following additional remediation has been undertaken:

- Underground Diesel tank (Lot 26 DP 1200697). Remediation was undertaken in November 2015, during the removal of an old, unused underground diesel tank. Soil sampling was undertaken which identified minor levels of contamination, and this soil was then appropriately managed. The assessed area was deemed to be suitable for continued commercial land-use.
- Kings Stockyard Creek/CSR Land (Lot 1 DP 1076346). This was previously a registered contaminated site. Remediation was undertaken by CSR Ltd prior to Borg purchasing the land. The land was purchased with a validation report, and is no longer on the register. However, as part of remediation there were two (2) borrow pits on site. These are outside of the development footprint, and will not be impacted upon. See Appendix J, Survey Plan.

- CSR Fibre Dump (Lot 24 DP 1148073). This remediation was undertaken by CSR Ltd prior to Borg purchasing the land. The land was purchased with a validation report.

It is noted that the existing fuel depot (Lot 1 DP 1085563) has not been remediated. This will be undertaken prior to any works commencing, and can be conditioned as such. A consultant has been engaged to assist with the remediation to allow for the ongoing use of the site for industrial purposes.

As a result of uncertainty regarding the activities of previous land owners, ongoing testing is being undertaken across Lot 26 DP 1200697 to ensure that there are no additional contaminants that can potentially be mobilised as a result of any construction activity. A soil testing plan has been developed to guide this process, and is attached as Appendix K.

3.6. Waste Management

> *Table 16 (pg 95) of the EIS shows the current and proposed levels of waste generation. It is unclear how existing and proposed operational waste is generated on site. Please describe how the waste products in Table 16 (proposed and existing) are generated and include further details on how waste products are to be disposed of or recycled. Please show on a map/figure where the main waste treatment/recycling systems are located on the site.*

A waste management plan detailing this information is included as Appendix I. This includes a detailed map that clearly illustrates the location of the main waste storage, treatment and recycling facilities on the site. This WMP also provides additional detail as to levels and types of waste generated on site.

> *Please assess the impact of boiler ash going to local council landfill, particularly if urban waste is used.*

The Project does not significantly increase the amount of ash generated, as can be seen in the waste management plan (Appendix I). The ash as under previous operation is disposed of at the Oberon Council waste disposal facility. Borg is currently researching alternative solutions for waste ash disposal, as part of a wider approach to reducing the amount of waste generated by encouraging re-use and recycling of materials. This has included characterisation of ash under current operating parameters, and Borg is committed to continuing this once particle board recycling processes are implemented.

A 2014 analysis of the ash indicates that the quality of the ash is suitable for on-site re-use as fill for commercial/industrial development. As such, no concerns are raised as to potential contaminants from disposing of this at landfill. This report can be provided to the Department if requested.

> *As per the EPA's comments, please confirm if the wastewater treatment plant has the capacity to treat the additional volume of waste water produced as a result of the commissioning of the wet electrostatic precipitator and the wet scrubber.*

The wastewater treatment plant is currently operating at approximately half maximum capacity. There is adequate capacity to treat the additional volume of waste water produced as a result of the new pollution control devices. A water treatment process diagram will be provided to the agencies. This demonstrates current water usage levels and outlines the maximum capacities. All new works will not result in any exceedance of the maximum capacities.

During review of the RTS, the Department identified a number of additional minor points that required clarification. These are addressed as follows:

> *Please provide additional details on the construction and demolition waste to be generated by the proposed development (including volumes and where it will be disposed) and any potential impacts and mitigation measures.*

Site Construction waste to be generated by the project will include packaging materials from containerised plant equipment arriving to site, these will be primarily plastic, wood and metal products. These will be recycled where possible with the remaining material being disposed of to landfill. Further waste will include other paper, plastic film, steel strapping and timber packing products which will be recycled where possible. As the site will remain fully

operational normal procedure for recycling of onsite materials will apply, these include Waste steel bins, Waste Oil and if required a paper products recycling bin will be used during the construction process.

Demolition of the existing offices, fuel depot, Eastern structure and gatehouse will generate waste products predominantly consisting of steel, wood, concrete and various cementitious products. Steel products of a suitable standard will be re used otherwise they will be recycled, wood products will be disposed of to landfill, concrete shall be recycled.

> *It is unclear what 'downgrade product generated from process upsets out of spec material' means. Please provide a simple definition for this type of operational waste.*

Down grade or out of spec material is reject board material that does not meet the normal product specifications required for sale into the market place. It is manufactured with the same raw materials but does not achieve end performance required because of the process upset conditions, process breakdown or other influence. Normally this is only picked up after the board is pressed and checked in the laboratory.

> *The waste management table shows that 'new particle board dust burner' will be disposed offsite. What is this waste product and can it be recycled?*

The waste product is Ash and is generated from the new particle board dust burner. It is seen as a potential conservative increase to the amount of ash generated from the site, it cannot be recycled. However laboratory combustible products analysis of the dust currently utilised on site anticipates that the volume generated in the dust burner will be below the quoted value in the Waste Management Plan.

3.7. Traffic

> *The Traffic Impact Assessment does not consider the cumulative traffic impacts of nearby industrial developments including Highland Pine Products. A cumulative assessment of traffic impacts should be carried out to include other developments along Lowes Mount Road.*

A traffic report for the Project was prepared by SMEC Pty Ltd. This demonstrated that the proposed development would not have a detrimental impact upon current traffic movements in the area. This was supported by traffic counts that were carried out during August-September 2015. This included assessment of the eight (8) key intersections for traffic movements in/out of the Oberon area. At no point in time were these numbers only counting movements to/from the Borg Panels site. The traffic count focussed on all movements within the Oberon Industrial Complex.

The response prepared by SMEC Pty Ltd notes:

> *The previous assessment undertaken involved determining the performance of various intersections within close proximity to the site during peak periods under the following scenarios:*
> *1. Existing Conditions (i.e. 2015 traffic without development);*
> *2. Conditions post development (i.e. 2019 with development); and*
> *3. Future Conditions 10 years post development (i.e. 2029 with development).*

Despite this, additional studies have been undertaken by SMEC Pty Ltd to determine capacity of the road network. These include a background growth of 5% year on year of all traffic movements to determine when intersections reach capacity and then adding traffic movements from potential, future development on the Borg site to determine when the level of service will change from A to B. This is included as Appendix M.

This report included three (3) separate assessment scenarios:

Assessment Scenario 1 – 5% annual growth rate to all movements through the intersection to determine the year in which each intersection will fail. The assessment will also provide a comparison of the traffic volumes through the intersection in the year of failure to the current 2015 traffic volumes during each peak period;

Assessment Scenario 2 - 5% annual growth rate to all movements through the intersection to determine the year in which each intersection's performance transitions from LoS A to LoS B. The assessment will also provide a

comparison of the traffic volumes through the intersection in the year where the intersection is performing with LoS B (i.e. an average delay time of 14.5 seconds) to the current 2015 traffic volumes during each peak period; and

Assessment Scenario 3 - 10% annual growth rate to the current 2015 traffic generation for the site to determine the year in which each intersection's performance transitions from LoS A to LoS B. The assessment provides a comparison of the traffic volumes through the intersection in the year where the intersection is performing with LoS B to the current 2015 traffic volumes during each peak period.

Assessment Scenario 1 had the following result:

> *The results of this assessment indicates that applying a conservatively high annual growth rate of 5% on all movements as observed in the 2015 traffic volumes will not cause any of the intersections assessed to fail for at least 78 years. This demonstrates that all intersections are operating well within their notional capacity with ample spare capacity to accommodate the proposed development with no adverse impact to the road network.*

Assessment Scenario 2 had the following result:

> *The results of Assessment 2 indicate that LoS B will not be reached on any intersection for 61 years, which again indicates the extent of spare capacity on the surrounding road network.*

Assessment Scenario 3 had the following result:

> *The results of the assessment indicates that based on the conservative trip generation growth rate, the earliest an intersection will reach LoS B (i.e. where one movement at an intersection experiences an average delay of 14.5 seconds) is 2048. This is 33 years after 2015. In addition, the adopted trip generation through each intersection at the point in which LoS B is achieved at each intersection is considered to be extremely high, demonstrating the conservative nature of the intersection as well as the extent to which the traffic generation can grow without any adverse impact on the surrounding road network.*

From the above it is clear that the existing road network has more than sufficient capacity to accommodate a substantial increase in the amount of traffic. The proposed development can be undertaken without any upgrade to the surrounding road network being required. This is the case even assuming for a significant increase in non-Project associated traffic movements along Lowes Mount Road.

It is also noted that that RMS made the following comments on the Project:

> *The submitted documentation, including a traffic study with traffic models, has been reviewed. Roads and Maritime does not object to the proposed expansion and makes no submission.*

No concerns were raised by the RMS over the adequacy of the Traffic Impact Assessment prepared.

3.8. Existing Borg Panels Site Processes

In order to address Department and other agency queries over the existing site activities, the following is provided as way of explanation:

The Borg Oberon site has 3 presses capable of producing MDF.

Conti I was commissioned in May 1988. Conti I is a Siempelkamp Conti-Roll press which has a capacity of 100,000 m3 p.a. It is equipped with a 46 inch Sunds Refiner, coupled with a 3.5 MW motor and Sunds Pendistor air formers. It can produce MDF with thicknesses in the range of 4.75 – 32mm.

Conti II was commissioned in September 1997. Conti II is a 33.4m Siempelkamp Conti-Roll press with a capacity of 160,000 m3 p.a. It is equipped with a 60 inch Sunds refiner coupled with an 8MW motor capable of producing 25 tonnes of dry fibre per hour. It can produce MDF with thicknesses in the range 2.5mm to 49mm.

A **Washington Iron Works multi daylight press** previously owned by an independent company, Jeldwen, manufactured 3-dimensional door skins for the international internal door fabrication market. This line was capable of manufacture 30,000 door skins per day until Jeldwen ceased manufacturing operations in Australia in 2010 at which point Borg purchased the equipment including all assets and buildings. However, Borg has not operated the press since that time

The process below is the same for Conti I, Conti II and the door skin line.

OUTDOOR OPERATIONS

LOGS - Cut to size Pinus Radiata logs are brought to site using dedicated trucks from in-forest operations. The majority of the timber comes from within a 100km radius and is stored in the log yard and surrounding the log handling crane, ready for debarking and chipping.

DEBARKER - A rotating drum debarker is used to remove bark from logs, as bark is unsuitable for the MDF manufacturing process but provides a high-quality fuel for the on-site energy plants. This process of debarking is carried out inside the debarker/chipper building, the bark is stored to the side of a building in the fuel pile.
Mobile debarking and chipping plant are used as a back up

CHIPPER - Log from the debarking drum is fed directly into the disk chipper which reduces the log to desired smaller 35mm square chips, these are stored for the MDF process. This operation is also carried out within the debarker/chipper building.

ALTERNATIVE CHIP - Chip is also sourced from other producers of wood products in the region, including Highland Pine Products and Carter Holt Harvey. These are introduced into the silos and process by various conveyors in the log yard.

CHIP STORAGE - Chip silos of approximately 3000m^3 capacity are utilised for storage of chips which are to be used at the sites MDF manufacturing processes.

CONVEYORS/TRANSPORT TO PROCESS - Belt conveyors transport chip from silos in a continuous process to the chip wash. These conveyors can also feed chips between site processes.

CHIP WASH - Chip is washed via a water washing system which is used to remove the contaminants (foreign particles and minerals) from the chip, this process promotes longevity of the refiner discs and improves board quality and usability.

EFFLUENT generated from this process is sent to the Water treatment plant for refinement and reuse.

ENERGY PLANTS - The site has 2 existing energy plants (Esteel and Sunds) both utilising dust burners to create supplemental Hot gas for the dryers and solid fuel grate burner systems to create primary hot air and oil for all site requirements. Fuel is prepared by creating a homogenous mix of bark, waste board and chip reject material, which is automatically fed to both furnaces as required.

CHIP SQUEEZE OUT AND STEAMING BIN - After the chip washing process large steel vessels are filled with clean chip, these are heated using steam to soften the chips making the refining process easier, this also increases the fibre length as it prevents overworking. Prior to refining the chip is squeezed to remove excess water. This excess water is used for top up water for the chip wash process.

REFINER - Once sufficiently softened the chip is fed in between the refiner discs and where it is ground and separated into the individual wood fibres. The Refiner consists of two large, toothed metal discs which rotate and grind the chip.

BLOWLINE - Connection of the Refiner to the dryer is via a very sturdy stainless steel pipe which is used to evacuate the steam and fibres from the refiner and feed it into the dryer tube. The blow line is also where Urea/Melamine formaldehyde resin and various additives are spray applied onto the surface of the fibres. The fibre is about 100% moisture content here.

FIBRE DRYER - Is a large diameter pipe which serves as air transport material conveyor and a fibre dryer, it utilises hot air generated at the site energy plants for transporting, and drying the resinated fibres, to the cyclones and ultimately to the forming and pressing process. After drying at approximately 125DegC the fibres will be about 12% moisture content.

FIBRE DRYER CYCLONES - Fibres travelling via air in the dryer tube at approximately 25m/sec are fed into the dryer cyclones where the cyclonic separation process allows their capture for further processing. The cyclones enable the separate release of excess air and moisture to the atmosphere without allowing uncontrolled escape of fibre.

FIBRE BIN - The dry resinated fibres collected at the base of the cyclones are accumulated in the Fibre bin ready for forming into a mat prior to pressing.

INDOOR MDF OPERATIONS

FORMING STATION - The forming station captures the fibre after being transported by air from the fibre bin to pendistors. The pendistors assist in capturing fibres in order to lay these onto the forming belt in the required orientation. This critical function marks the beginning of the continuous fibre forming and pressing process

QUALITY AND SAFETY CHECKS - After forming and trimming online mat quality checks are carried out as the material travels towards the press, these include foreign material contamination, formed mat density, moisture and mat weight.

PRESS - The formed mat is then fed into a Heated Continuous Belt (Contiroll) hydraulic press, which applies heat and pressure to cure the fibre mat into the finished board. This is the same as the technology that will be utilised in the particleboard project and is well established throughout the world. The mat needs to remain in the press for a determined time to ensure the performance characteristics are met.

DIAGONAL SAWS - Diagonal saws are used to remove the excess from the edges of the pressed board and to cut the continuous board coming from the press into the required lengths. These cut panels are called Master panels which are approximately 7.2m long x 2,5m wide and are usually only used within the board plant boundaries due to their large size and awkward handling requirements.

GRADING - After cutting to required size, the panels are scanned for quality by online measuring equipment. This includes density, moisture and board integrity using internal bond blister detection.

COOLING WHEELS - Cooling Star wheels used to accumulate the master panels post cutting, allowing them to cool sufficiently prior to stacking into large bundles. Panel temperature is required to be less than 90 deg C otherwise board properties are affected due to the resin breaking down.

HIGH BAY STORAGE - A High bay storage system is utilised to allow the boards to rest till completely cooled and full strength is achieved. This is an automated racking system utilising guided rail carts and warehouse management system. Once cooling is complete the boards are sampled for their final performance characteristics, including Internal bond strength, water resistance, surface smoothness and machinability.

SANDING - After post curing the boards are removed from the high bay storage system sanded to prepare the surface of the sheet ready for further processing on and off site. This usually involves multiple sanding passes using different roughness sanding belts.

SITE VALUE ADD PROCESSES

PAPERTREATER - The Vits paper treater is used as part of the onsite value add process and it applies the Urea and melamine formaldehyde resins to the rolls of various plain, coloured and printed papers. The treated paper is then dried in a flotation drier so it can be stored for extended periods prior to reuse in decorative laminating pressing processes, both on and off site.

HYMMEN PRESS - The Hymmen laminating press applies treated paper to the surface of the MDF and particleboard providing the colour and aesthetic appeal to the finished board. This process utilises a heated Continuous Belt press which applies pressure using high pressure air rather than oil. A material package consisting of a treated paper either side of the board is passed through the belts of the press in a continuous process. The heat activates the uncured glue

causing it to flow and become permanently adhered to the surface of the board. This now decorative pressed board is then visually inspected, graded, cut and packed ready for despatch off site.

MOULDINGS - The Moulding plant utilises the raw MDF board manufactured on site and prepares mouldings, skirtings and architraves for use in the construction industry. The moulding strips are usually cut down out of larger master panels of MDF and then machined to provide the desired profile or effect. The machined strips are then painted with a primer in a vacuum coater process and then dried ready for installation in a construction project.

DOORSKINS - The door skin paint line is where flat 3.2 and 6.4mm MDF panels are painted with a UV curable primer via a roller coater and Infra Red cured primer via curtain coater process, panels are then ready to be used in the various customers' door manufacturing processes. These painted panels are visually inspected, QC checked and graded prior to packing and entry into the warehouse

WAREHOUSE - All finished goods manufactured on site which are deemed ready for despatch are stored in the warehouse adjacent to Lowes mount road. The warehouse also incorporates 3 weighbridges and a truck loading and unloading area.

EFFLUENT TREATMENT PROCESS - All site effluent is treated in the water treatment plant on site a process flow document provided below provides a visual aid for the entire recycling process. The Water treatment plant utilises filtration and biological degradation to reduce remove contaminants from the water for re use, capturing over 300kL per day from the site and reusing it in the manufacturing process.

EXISTING PROCESS ALTERATIONS UNDER THIS APPLICATION

This application makes a number of minor process alterations. These are to be provided to relevant agencies. These alterations have been made to improve work health and safety on site, improve process efficiency, reflect advances in technology, and decrease overall pollution levels. The end product, and amount of product generated, and indeed, the footprint of the machinery itself, remain consistent with the existing development. These changes are detailed within the EIS, and are as follows:

- EPA ID 23 together with another additional Paper treater (with a total flow rate of 80,000 m3 per hour), will be diverted to EPA ID 11 (Conti II heat plant) where 95% of formaldehyde will be removed before discharge to the atmosphere;
- EPA ID 12-2 (Conti I roof vent) will be diverted to EPA ID 17 (Conti-1 heat plant) were 95% of formaldehyde will be removed before discharge to the atmosphere;
- A new 'combined stack' will be installed. This stack is proposed to be 40 metres high, 2.1 metres diameter, with a total flow rate of up to 200,000 m3 per hour;
- EPA ID 4 (DC1 baghouse) and EPA ID 5 (DC2 baghouse) will be discharged to the atmosphere through the proposed combined stack;
- A wet scrubber system will be upgraded on the Conti 2 press line.

These works to the existing plant decreases the overall emissions generated by the existing operation of the site.

During review of the RTS, the Department identified a number of additional minor points that required clarification. These are addressed as follows:

> *What is the combined area (in hectares) of the proposed development (including the existing MDF facility*

The proposed development as detailed in SSD 7016 will cover a land area of approximately of 60.5ha, this is detailed in the consolidation plan (DA-04) as part of the original application.

> *The EIS for SSD 7016 states the MDF facility currently produces up to 280,000 m^3 a year (pg 15). Is this your maximum output and how does it compare to what you have approval for under DA 27/95?*

To convert this value is not straight forward as products are produced with different densities thus a different finished weight. The previous estimate of production capacity within the RTS was strictly the continuous Siempelkamp MDF

presses currently operating., This did not include the potential volumes which were previously produced by the multiday light Washington Iron Works press.

> *Under DA 27/95, the approved combined production capacity of the timber facilities (MDF, particle board and sawmills) is 403,000 tonnes a year, of which the annual production capacity for MDF board is 272,000 tonnes (as stated in the EIS for DA 27/95, pg 34). Please convert the approved production output for MDF under DA 27/95 from tonnes to cubic metres.*

The CSR feature panels (Jeldwen) and MDF facility can produce up to 272,000 tonnes of board according to DA 27/95, to convert this m3 is not easy as the products both have different density thus a different final weight. The preferred site production limitation on the consent is m3 and as such we have estimate the conversion for current productions (including potential volumes for the Multidaylight press) for the site under DA 27/95 is 380,000m3 p.a.

The total site estimate for the combined facility including Particle board production and the basis for our studies has been 880,000m3 or 620,000 tonnes of product that can be manufactured on site.

4.0 CONCLUSION AND UNDERTAKINGS

The Project represents a significant investment in jobs and industry within NSW, and allows for the expansion of one of the main employment generating industries within the region. Overall, the impacts from the Project are minimal, and generally represent an overall decrease in pollutants generated in the area. This is as a result of the investment in new, cleaner technologies.

Concern was raised in public submissions over the potential impacts on the road network. Although the RMS had already considered the report as appropriate, and no concern was raised, additional studies were undertaken. These confirm that no significant impacts on the road network will occur as a result of the development.

There has been concern raised over the relocation of the existing easement across the site that allows for site drainage. Borg Manufacturing undertakes that the existing requirements for drainage will not be impacted upon (in terms of flow rates) and the lot benefiting from the easement will be in no way impacted upon. As Borg is responsible for the quality of water discharged from the site, it is their interests to ensure that no negative impact upon existing water quality results from the work.

Borg Manufacturing is committed to reducing overall levels of waste generated by their operations. As such, a reduce, re-use, recycle initiative is being rolled out. This will decrease the amount of waste that is disposed of off-site in favour of utilising the waste material on site. This is a long term project, and will require separate approval from the EPA. This will occur before any such activities are undertaken.

The plant undergoes regular and routine monitoring as part of the EPA license that currently applies. This will continue, albeit with new license conditions imposed. Borg Manufacturing undertakes to ensure that all processes comply with these requirements, and where any exceedance occurs, will ensure that compliance is achieved through either mitigation measures in the plant, or through the installation of revised plant and machinery.

Noise is another cause of concern for the community. The main source of this appears to be the mobile chippers on site. It is proposed that these mobile chippers only be used in favourable meteorological conditions, and only as a temporary, emergency chipper for when the main electric chipping unit is unable to be operated. However, as they are mobile units, locating these in an enclosure is not feasible. By limiting their use, impacts on the surrounding area are significantly mitigated.

5.0 GOVERNMENT AGENCIES

No.	Issue	Response	Relevant Section
Office of Environment and Heritage			
1	The landscape value in the BioBanking credit calculator has been incorrectly calculated, however as the site score is below 17 this is of no consequence.	Noted	N/A
2	Four Aboriginal sites have been recorded for the development site and that a Consent to Destroy (with collection) was issued to AMCOR Pty Ltd for these sites in 1987. OEH recognises that Due Diligence has been undertaken for this project and, in relation to these four sites, no further action is required.	Noted	N/A
3	If subsequent information indicates that any areas within the OEH's responsibility require further investigation, OEH may provide future input.	Noted	N/A
Roads and Maritime Services			
4	Roads and Maritime does not object to the proposed expansion and makes no submission.	Noted	N/A
Department of Primary Industries			
5	Appendix J indicates a water supply demand from the proposed stormwater treatment pond of 200m3/day (73ML/yr). This report also refers to a proposed stormwater harvesting demand of 120ML/yr, the proponent should clarify the demand.	The demand for stormwater from both the existing and future pond would be regulated at a maximum of 400m^3/day, i.e. 200m^3/day from each pond with an estimated operational time of 300 days per year. This demand can't always be met as the ponds may or may not have a volume of water in them. This is the theoretical demand which is entered into the MUSIC model and it is the demand which will be drawn from the ponds assuming there is sufficient volume available. Two ponds are available, the existing and proposed storm water quality basins.	Appendix H of this RTS
6	The proponent should confirm the source of the runoff for the proposed storages and identify how they are considered under water legislation. The proponent should undertake further consultation with DPI Water to confirm licensing requirements where water is captured from other sources.	Only runoff from roof and operational areas will be harvested. No runoff from undeveloped rural land that feeds into the catchment will be harvested. The unpolluted rural runoff is kept separate from the polluted industrial runoff, and has a dedicated swale to the north of the site that avoids the stormwater harvesting ponds. Given that there is no clean runoff to be harvested, it is not considered appropriate to calculate or exercise any harvestable rights in this instance.	Appendix H of this RTS

		The level of undeveloped rural land run off will be maintained. By capturing the polluted industrial runoff, scouring and other downstream impacts caused by increased water velocities and volumes are to be minimised. Stormwater harvesting is considered to be a very important control mechanism for the project which will significantly mitigate the impacts to the natural waterways.	
7	Clarification of whether the proposed pond is more than 40m from the high bank of the watercourse is required.	The proposed 6 ML water quality dam will be constructed at least 40m from the top of bank of the nearest watercourse. As such it is not considered a Controlled activity However, any works within the watercourse will be carried out in accordance with any Controlled Activity guidelines/permits or conditions of consent	
8	Figure 10 of Appendix J indicates an existing v-notch weir on the watercourse at the downstream end of the site is proposed to be moved upstream. This work would be within 40m of the watercourse. The proponent should complete further assessment on the impacts of removing the existing site and the necessary mitigation measures, in addition to an impact assessment of installing the new work.	The existing v-notch weir will not be removed. A review of the EPL has found that in fact there is no need to construct any flow measuring device such as a v-notch weir downstream. Therefore, the proposal would be amended as follows: a. The existing V notch weir would not be impacted by the works and left in place b. No new V notch weir is proposed, however a sampling point will be created c. It will be necessary to construct new swales to connect overflows from the proposed pond with the existing creek line and these will all be carried out in accordance with any Controlled Activity guidelines/permits or conditions of consent.	Appendix H of this RTS
9	The assessment of the proposed harvesting and reuse scheme indicates a reduction in runoff from the site by 133ML/yr due to implementing the proposed harvesting option. This is despite an increase in runoff of 39ML/yr from the additional impervious area (10.5 hectares of roof area). The proponent should complete an assessment of the impact on existing downstream water users due to this reduction.	DPI noted that it was reported that the volume of runoff would remain above rural levels despite harvesting 120 ML/year of polluted water from the site. We again reiterate that harvesting of clean, undeveloped rural areas will not occur. By restricting and detaining the amount of industrial runoff flow, downstream creek impacts such as scouring and biota impacts are minimised. An increase in the size of the Borg impervious area should not be classified as water available to downstream users. Pre-development rural	Appendix H of this RTS

		run off is the water available to downstream users, and this level is being maintained. Thus it is considered that no further assessment is required.	
SafeWork NSW			
10	On the same site is located Woodchem which has been determined by SafeWork NSW as a major hazard facility. The Woodchem facility was recently granted an MHF licence for a period of 2 years with 5 conditions attached. The licence is due for renewal 21 March 2018.	Noted. The Woodchem facility is located on a separate lot and DP and operates as a separate business. No application is made to vary any element of the Woodchem operations.	N/A
11	Safe Work NSW has concerns regarding the water management and discharges contained within the SEARS doc, Appendix A: Requirements 7,8 & 9, where it appears fixed infrastructure currently directs all Borg surface waters through to the Woodchem dam and swale installations which we believe to be undersized.	The dam is for fire water retention and deemed adequate in draft report carried out by Core Engineering currently under review by Borg. The redesign of the site water flows will convert this dam to an emergency catchment area ensuring sufficient volumes are always available. Furthermore, any overflow from the site system will be able to be captured in the new water treatment ponds proposed as part of the Project.	N/A
12	The proposed Fire Safety Study that will be prepared in consultation with FRNSW will need to ensure that the risk is adequately assessed and scoped to include the Woodchem interests. Particular attention needs to be given to the potential of a wood dust explosion and plant initiated fires… The question is raised whether the facility be it Borg or Woodchem could adequately address a methanol storage tank fire.	Noted. Impacts on Woodchem and the impacts of a methanol storage tank fire will be considered in this future report. However, this is not required at this point in time.	N/A
13	It is anticipated that an increase in the Borg Panels Timber Processing facility will ultimately lead to an expansion of the Woodchem plant. SafeWork NSW has general concerns regarding Woodchem's capabilities in this regard – recognising this is only a potential consequence of the expansion of the Borg facility.	Woodchem is a separate entity and is currently approved by Oberon Council. No changes to the existing approved facility are proposed under this application. Any relevant future application regarding Woodchem will be referred to SafeWork NSW.	N/A
Environment Protection Authority			
15	List of conditions relating to noise	Borg Panels does not necessarily disagree with the list of conditions (with the exception of mobile chipper operation within acoustically treated enclosures as detailed in Section 3.2 of this RTS) relating to noise. However, it is considered that where an equivalent condition is included within the Environmental Protection Licence (EPL) for the project, a separate development condition should not be imposed as part of the project approval. Clarification is requested (as per Global Acoustic comments in Appendix M) as to the whether an update to the site noise model is required if compliance with Sound Power Levels is achieved.	Appendix M provides further details regarding the mobile chipper operations

16	Confirmation that stormwater harvesting will be deployed as part of the surface water management practices at the premises.	It is confirmed that stormwater harvesting will be deployed as part of the surface water management practices of the Project. It is however important to note that the new process does not consume large quantities of water, the stormwater harvesting is to predominantly formalise intentions and support the existing approved production plant.	Appendix H
17	List of conditions relating to water	Borg Panels does not necessarily disagree with the list of conditions relating to water. However, it is considered that where an equivalent condition is included within the Environmental Protection Licence (EPL) for the project, a separate development condition should not be imposed as part of the project approval.	N/A
18	Details of expected volumes of waste material generated at the facility at any one time (including bark and waste board) and how and where this material will be stored.	Although a list of waste material has been provided in EIS, an amended version has been prepared which details material flows requested and a plan has been prepared to indicate location of these materials at the site. A site plan indicating the location for all stored materials also forms part of this RTS.	Appendix I
19	Confirmation from Borg Panels that the waste water treatment plant has the capacity to treat the additional volumes of waste water produced as a result of the commission of the wet electrostatic precipitator and the wet scrubber.	The waste water treatment plant is currently running at approximately 50% capacity. As such, there is adequate future capacity for the treatment of waste water produced from the wet electrostatic precipitator and the wet scrubber pollution control devices. This is demonstrated in the current water treatment process flowsheet A mass water balance flow sheet for the new particle board plant WESP and Scrubber System will be provided to the EPA and the Department but will not form part of public exhibition.	N/A
20	Confirmation from Borg Panels whether the resulting additional treated volume of waste water has been incorporated within the existing/proposed surface water storage system at the facility (i.e. in addition to the potential volumes of water stored in these same dams/ponds following surface water runoff and rainfall events).	Surface water runoff and treated water storage ponds operate as two independent systems. However, existing ponds are maintained at a level to accommodate rainfall. This is approx. 1m below the high level alarms. Other water storage ponds which will be utilized as part of the process waste water treatment system have sufficient capacity to deal with new flows. Furthermore, the development provides an improvement to the existing system which will capture any uncontrolled overflows from the waste water treatment area, in the form of an emergency catchment dam.	Appendix H
21	List of conditions relating to waste	Borg Panels does not necessarily disagree with the list of conditions relating to waste. However, it is considered that where an equivalent	

		condition is included within the Environmental Protection Licence (EPL) for the project, a separate development condition should not be imposed as part of the project approval. Remediation of Lot 1, DP 1085563 will occur to the relevant legislation and guidelines. Borg Panels will submit a separate application to the EPA for the Waste recycling process that will be used to assist the particle board manufacturing process.	
22	Further detail is required to demonstrate that all potential emissions to air have been listed and characterized in order to define regulatory requirements, evaluate emissions, interpret assessment results, and evaluate whether proposed controls are appropriate.	It is understood that process diagrams were not provided to EPA, as they were not made available for public exhibition. These have since been provided and address these concerns. These diagrams assist with the understanding of the process description and are synchronised by area number with the information contained within the EIS. Furthermore, diagrams where existing plant connections have been modified as part of this application will be provided to the EPA and the Department but will not form part of public exhibition	N/A
23	The following further information and supporting data is required: • Detailed process flow including any flow between the MDF plant and the PB plant. • Flow balance for both plants. • Mass balance calculation for both plants to support emissions estimates. • Emission data for the current operations related to emission estimates for the modified plant. • Evidence of the efficiency of thermal destruction of formaldehyde. • The course of the energy for heat and pressure to the PB ContiRoll. • Test reports and manufacturers performance guarantees.	It is understood that the new plant process diagrams were not provided to EPA, as they were not made available for public exhibition. These have since been provided and address these concerns. There is no cross over of process emission exhaust flows. Flow diagrams of the changes proposed to existing Borg panels equipment processes which assist with the compliance of the entire cumulative Borg Panels Oberon site have been supplied as part of the RTS. Thermal destruction efficiency testing has been carried by Stephenson Environmental and is detailed in Appendix N. Pressure to the PB Contiroll will provided via the press supplier utilising electrically driven hydraulic oil pressure pumps. The heat required will be	N/A

		supplied using a new gas fired thermal oil heater meeting the requirements of "group 6 plant standards of concentration". Total solid particle performance from the dryer WESP is provided in Appendix O however it is noted that process conditions and raw material choices can influence the final emission values.	
24	The AQIA requires: • A comparison of existing plant performance with existing licence limits (at standard conditions); and • A demonstration that principal toxic air pollutants are controlled to the maximum extent achievable.	Refer supplementary AQIA attached as Appendix C.	Appendix C of this RTS
25	Further information is required setting out: • The configuration for MM5 – type of run, domain size and grid interval, time step; • The accuracy of MM5 for this domain; • AERMET configuration – what method was used to process MM5 data and whether observations were included; • Justification for the choice of 2014 as a representative year – usually by considering at least five years of observed data, preferably contiguous and recent; • Demonstration that the modelled meteorology is representative by comparing it to observed meteorology; and • An explanation of how the expectedly low frequency of calm winds is representative of the meteorology controlling dispersion of plant emissions.	A meeting has been held with the EPA. At this, the specific meteorological data gaps were identified and have been provided as part of this RTS. In addition, an updated AQIA has been prepared by an alternative consultant. This includes additional information and modelling results. This has been provided as Appendix C. The 2014 calendar year was selected as the meteorological year for the dispersion modelling based on an analysis of long-term data trends in the meteorological data records. Figure 5-6 and Figure 5-7 of the AQIA at Appendix C graphs the meteorological analysis conducted using data from the Bathurst Airport monitoring station. Among the data for each of the different calendar years (2012 to 2015) analysed, the calendar year 2013 and 2014 were the most similar to the recorded trends in the meteorology. Examination of the recorded dust data found that the maximum 24-hour average PM10 recorded during 2014 is the closest to the average maximum 24-hour average PM10 in the data set, and also the annual average PM10 levels in 2014 were closest to the recorded annual average of all of the data. Thus, the year 2014 was chosen in preference to 2013 for use in the modelling. In much the same way, the annual and seasonal windroses for Bathurst Airport from 2014 were used. These are presented as Figure 5.2 of the report at Appendix C. These illustrate that in summer, winds are typically from the east-northeast and east. During autumn, winds are typically	Appendix C of this RTS

		lighter than the rest of the year, with dominant winds from the east-northeast and north. During winter, there are fewer winds from the northeast quadrant, and a dominance of winds from the west-southwest. The spring distribution is similar to annual but with a higher proportion of winds from the west-southwest and southwest and lesser proportion of winds from the eastern quadrants.	
26	Additional information is needed to support the emissions estimates: • A clear description of plant processes to ensure all potentially significant emissions have been captured; • Stack test reports showing current emissions and how modified emissions relate to them; • Demonstration that estimates are conservative, noting previous sampling results and explaining any improvements; • Emission points related to process description to demonstrate that all sources have been included and properly characterized; • A clear document of all assumptions used to calculate emissions rates; and • Manufacturer's performance specifications and guarantees.	It is understood that process diagrams were not provided to EPA, as they were not made available for public exhibition. These have since been provided and address these concerns. All other requirements have been provided to EPA as part of this RTS. Stack testing reports and emission estimates are based on the previous 8 years' results. These results are averaged over this period, including an addition of a standard deviation to provide for more conservative estimates. Mass emission estimates employed for all new plant have been conservatively guided by suppliers of equipment with the exception of formaldehyde which has been based on real world testing results obtained from other plants located around the world.	N/A
27	Conversion of NO to NO2 has been done assuming a 40% conversion. This is not a method described in the Approved Methods. Alternative methods are permitted, but require robust justification. No such justification is provided.	Justification has been provided within the AQIA attached in Appendix C. In summary: Collated NO2/NOx percentage emissions data from forest product industry boilers, fired on various combinations of wood, coal, bark, waste oil and non-condensable gases have been measured as having ranges from 2.5 to 13.4% (NCASI, 2015). The NO2/NOx percentage of emissions from natural gas-fired heaters was found to be approximately 11% (Hunton & Williams, 2011), and the NO2/NOx percentage would typically be up to 23% for a natural gas-fired boiler (ECT, 2013). Some fraction of the NOx emitted from the Project would also undergo chemical change to form additional NO2 by the time the emissions reach receptors. On the basis that the plant NOx emissions would typically comprise 2.5 to 23% NO2, and to account for any potential change in the emissions once released, it was assumed that 40% of all of the emitted NOx would be in the form of NO2 at the sensitive receptors. Considering	Appendix C of this RTS

		the relatively short-distance between the sources and the receptors there would be little time for NOx reactions to occur, and given also the generally cooler climate, and overall relatively low fraction of NO2 in the emissions from the main sources, the assumed 40% conversion of NOx to NO2 would be a conservative approach to estimating the potential NO2 effects of the Project at the most affected receptors. Note also that all NOx emissions, including those from nearby industries are considered in the cumulative assessment.	
28	Assessment requires either use of a listed method for estimating NO2, or robust justification for the alternative method used.	Justification has been provided within the updated AQIA attached in Appendix C. For abridged response please see Comment 27 above.	Appendix C of this RTS
29	The AQIA fails to present ambient data from which to establish baseline air quality and enable cumulative prediction of impacts. It also fails to consider other emission sources in the region such as proximate premises emitting similar substances, and power stations.	Additional data has been provided within the AQIA attached in Appendix C. In summary, the main sources of air pollutants in the area are emissions from local, man-made sources, such as commercial/industrial activities, motor vehicles and domestic wood heaters. It is noted that no ambient air quality monitoring data equipment is located in proximity to the site. As such, the data stations in Bathurst and Oakdale, both operated by OEH, were used. These are located 42km and 71km from the subject site respectively.	Appendix C of this RTS
30	Additional information is needed to provide a comprehensive estimate of impacts to the air environment as set out in section 5 of the Approved Methods. The impacts labelled "cumulative" in section 9 are the assessed impacts for the full proposal - modified MDF plant and new PB plant. They do not estimate the cumulative impact to the airshed.	Appendix A of Appendix C of this RTS provides cumulative impact details. This demonstrates that the Project will not exceed PM10 criteria at a cumulative level. Section 5.2 of Appendix C details cumulative formaldehyde levels, and illustrates the project will have an overall beneficial impact on these levels within Oberon.	Appendix C of this RTS
31	The pollutants assessed in the AQIA are nitrogen dioxide (NO2), particles, and formaldehyde (HCHO). Assessment of impacts are provided for the modified MDF plant alone, and for both the modified MDF plant and the proposed PB plant. Impacts from the full proposal are labelled "cumulative". Ambient data have not been provided and there is no assessment of the total impact of the proposal.	Additional data has been provided within the AQIA attached in Appendix C. This includes a detailed breakdown of ambient data, taken from the two nearest OEH stations.	Appendix C of this RTS
32	There are other sources of nitrogen dioxide in this locality, and the potential for emissions from this facility to combine with emissions from other industry near Oberon and the coal-fired power station to the north. There is potential for exceedance of the one-hour nitrogen	These additional sources of nitrogen dioxide have been identified and tabulated in the revised AQIA and included in modelling. The modelling indicates that the Project will not cause any exceedance of the one-hour nitrogen dioxide criterion.	Appendix C of this RTS

	dioxide criterion.		
33	Assessment of the total impact of the proposal consistent with guidance in section 5 of the Approved Methods is needed to determine whether the existing and proposed plant may exceed the one-hour nitrogen dioxide criterion.	These potential additional sources of nitrogen dioxide have been identified in the revised AQIA and included in modelling. The modelling indicates that the Project will not cause any exceedance of the one-hour nitrogen dioxide criterion.	Appendix C of this RTS
34	The maximum impacts are well below the impact assessment criteria, but there is no assessment of the total impact of the proposal and the predicted 24-hour increment is significant. Cumulative assessment is needed to assess whether emissions from the plant could exceed the PM10 criteria.	Further modelling has been provided as part of the RTS.	Appendix C of this RTS
35	Maximum impact from the proposal within the model domain is a one-hour concentration of *0.03mg/m* This exceeds the impact assessment criterion of 0.02 *mg/m*"- As set out in sections 2.4.4 and 7.7 of the Approved Methods, maximum impact greater than an impact assessment criterion requires further control or mitigation sufficient to meet the impact assessment criteria. Formaldehyde is a principal air toxic pollutant and, as set out in the Approved Methods, requires control to the maximum extent achievable through the application of best practice process design and emission control.	Further modelling has been provided as part of the RTS. The controls employed exhibit the best available, repeatable and economical technologies for the production/manufacturing processes employed at the project site.	Appendix C of this RTS
Oberon Council			
36	Council are in support of the rationalisation of the conditions of consent associated to DA 27/95	Noted.	N/A
37	Subject to the implementation of noise mitigation measures it is expected that the site will comply with the EPL for operational noise. In this regard a condition of consent should be imposed requiring a management plan to incorporate the mitigation measures in Section 8.2 of the Acoustic Report including the construction activities.	Agreed.	N/A
38	Council acknowledges the existing visual impacts associated to the existing site infrastructure. However, a condition of consent should be considered requiring a management plan in accordance with the recommendations made with in the Visual Impact Assessment Report should approval be considered. Additionally, further landscaping needs to be considered adjacent to the Oberon Leagues Club and needs to be addressed in the hardstand	Compliance with the recommendations of the Visual Impact Assessment is agreed with. This can be conditioned. However, these mitigation measures are focussed on soft landscaping treatments and general upkeep of the landscaping and can be incorporated into the Site Environmental Management Plan. Noted. Additional planting will be provided along the IN1/RU1 boundary to the east of the site to minimise visual impacts. Appendix P is a revised	Appendix P

	areas to the east. It is considered that this can be easily incorporated in any approval, should it be considered.	landscaping plan.	
39	The information provided does not fully articulate the intended use for the hard stand areas identified as area 30 and 31, are these areas designated for car parking or for storage of products? Evidence needs to be provided to minimise and perceived impacts.	Hardstand area to the north (area 30) will primarily be used for parking. Hardstand to the east (area 31) will be used for storage of equipment.	N/A
40	The applicant needs to be aware and address the potential impact associated to works within the remediation area of King Stockyard Creek. This area involved soil materials containing Aldrin and Dieldrin being deposited within borrow pits, on the ground surface and a drainage channel. The EPA have advised Council that any future site owner and occupier(s) need to be aware of the presence of the material retained on site so that any future activities at the site do not result in the reintroduction of that material into King Stockyard Creek.	The borrow pits have been identified on a survey plan and no works will be carried out in the vicinity of these locations.	Appendix J of this RTS
41	Council requests that a condition of consent be imposed for the submission of a dilapidation report in accordance with the recommendations of the Traffic Management Report.	Agreed.	N/A
42	Based on future production outputs and associated heavy vehicle movements clarification via a traffic distribution plan needs to be provided supporting the proposed increase in heavy vehicle traffic movements associated to key roads and Councils infrastructure to enable Council to consider the potential impacts of the development.	A movement summary for each key intersection is provided in Appendix F – SIDRA Intersection Results (Operational Conditions) of the Traffic Impact Assessment prepared by Smec Pty LTD. This is detailed in S.3.7 of this RTS.	Appendix F of Appendix E of the EIS

6.0 PUBLIC SUBMISSIONS

Markus Schmitz (submission 1)			
43	dust / noise / additional traffic concerns.	Noted. Dust, noise and traffic impacts are considered within the EIS	Section 10, 11 and 13 of the EIS
44	Concerns over the disposal of particleboard, MDF and boiler ash being disposed of at local landfill.	The response to planning comments above provides additional information regarding waste disposal, including ash. On site re-use of the MDF is the preferred option, and the proposed particle board production process aims to recycle all reject product. In addition, a waste management plan has been updated.	Section 10, 11 and 13 of the EIS
45	Concerns about the devaluation of properties in the close proximity of the proposed new plant as further developments / subdivisions / granny flats had been rejected for property owners in a 2km range from the current BORG operations by the Oberon Council.	Cl.6.6 of the Oberon LEP sets standards for development in proximity to the Oberon Timber Complex, including setting controls for minimizing impacts on employment through implementation of building measures for new development to ensure noise impacts are mitigated	Section 7.3 of the EIS
Carter Holt Harvey/Highland Pine Products			
46	Carter Holt Harvey Australia Pty Limited (**CHH**) is a member of the Carter Holt Harvey group of companies, which is the largest supplier of wood-based building products, including timber, plywood and laminated veneer lumber, in Australia and New Zealand.	It is noted that this objection comes from a major competitor in the marketplace and should be considered as such.	N/A
47	The formaldehyde emission modelling in the EIS fails to consider emissions from the Woodchem MHF Major Hazard Facility (**Woodchem MHF**), owned and operated by the Borg group of companies. This is so despite Woodchem MHF being the largest manufacturer in NSW of formaldehyde-based resins and the second-largest in Australia. This is concerning as the EIS formaldehyde emission modelling, even without consideration of Woodchem MHF, shows that the Proposed Development will exceed the ground level concentration limits for formaldehyde by 50% in certain areas of Oberon.	Woodchem is a separate business entity, and is not considered as part of this application. Within the revised AQIA, Woodchem has been considered, and has been found to be a very minor contributor to levels of formaldehyde due to the mitigation measures already implemented. The AQIA concluded that current total formaldehyde emissions will significantly reduce as a result of the Project and modification to existing plant.	Appendix C of this RTS
48	The EIS does not include a robust baseline for assessing impact on air quality, particularly with regard to formaldehyde, fine particulates (PM10) and nitrous oxide (NOx) emissions. Three of the four facilities at the Oberon Timber Complex manufacture or utilise formaldehyde, and all facilities generate combustion by-products. The EIS fails to adequately consider changes to ground level concentration of pollutants of concern. It also fails to use a baseline derived from the emission	Further modelling has been provided as part of the RTS.	Appendix C of this RTS

	limits in the licence for each operating facility, as well as any background levels.		
49	The Noise testing methodology set out in the EIS is inadequate and the sample size used is too small to be accurate or meaningful. Further, the cumulative impact assessment is inadequate, in that it does not consider the cumulative impact of all sites operating at full capacity.	Attended noise measurements included in the NIA were never intended to form the baseline noise data as inferred. The purpose was to obtain data to inform a model validation assessment. This is detailed in Section 4 of the NIA. The NIA has been assessed as appropriate by the EPA and specific conditions of consent have been recommended.	Appendix H of the EIS and Appendix N of this RTS
50	The EIS sets out relatively random baseline measurements of noise levels. It fails to provide information on whether those measurements represent typical operating conditions, or whether any of the existing operations at the Oberon Timber Complex are below capacity or within their licence limits. A robust baseline should be measured or derived, and cumulative impact assessment made against it.	The NIA has been assessed as appropriate by the EPA and specific conditions of consent have been recommended.	Appendix N of this RTS
51	The EIS fails to provide evidence that the traffic study undertaken represents the conditions that would occur when all operations are operating at permitted capacity. Equally, the data that was provided was based on relatively few traffic counts, which undermines its credibility. The traffic study has also failed to consider current usage by other businesses along the adjacent Lowes Mount Road. Legal access to Lot 11 DP 1017456, Lot 1 DP 360361 and Lot 1 DP 128404 (all within 150m of Borg's Gate 4 entrance) has not been assessed and the traffic report fails to discuss the need for turning lanes (in both directions) to access Gate 4, suggesting by implication that the impact would be negligible. Given the current road profile (single lanes both ways), the existing railway level crossing (100m from Borg's Gate 4) and existing rights of use for adjacent industry, the traffic study fails to provide an adequate assessment of impacts to road users along Lowes Mount Road.	Traffic modelling has indicated that there is adequate capacity within the existing road network to accept estimated project traffic. The traffic count conducted at intersections included all heavy vehicle, Highland Pine Products and Structafloor traffic movements. The approved site access arrangements for Borg remain unchanged, with heavy vehicle traffic utilising existing approved access points. Potential impacts have been further mitigated through the provision of an expanded waiting area within the driveway to the site to avoid potential impacts from queuing trucks on Lowes Mount Road. The TIA has been assessed as appropriate by the RMS with no specific conditions of consent recommended.	Section 10.0 of the EIS
52	The EIS modelling relies on the assumption that the Proposed Development will receive exemption from application of the *Water Management Act 2000*. There is no guarantee that this exemption will be granted. In the event that the storm water harvesting and reuse scheme is not approved or fails operationally, the EIS fails to provide information on the impact on Oberon's potable water supply and subsequent water use impact on other Oberon Timber Complex	Noted. However, the modelling carried out indicates that there is more than sufficient water capacity to meet demand, therefore no impact on the potable water supply of Oberon is anticipated to occur. Department of Primary Industries has also indicated the eligibility of Borg to harvest polluted industrial runoff from the site, including that of the Carter Holt Harvey/Structaflor site without the need for application for a WAL.	N/A

	members, including CHH and HPP.		
53	The EIS also fails to provide an assessment of the environmental impact of the use of bore water by the Proposed Development.	Noted. No changes to current approved extraction rates or water access licenses are proposed. Thus further assessment is not required.	N/A
54	The Proposed Development site has been the subject of significant contamination issues in the past, resulting in two Site Audit Statements (Nos. 214 & GN243B). Some contaminated material is buried on the site and may be disturbed by the Proposed Development. The EIS fails to discuss how contamination risk will be managed.	The Project site has been remediated and validation reports have been provided to relevant government agencies. This was discussed at a meeting on site on 19 August 2016 between representatives of Carter Holt Harvey and Borg. Furthermore, the borrow pits are clearly identified on a survey plan, and no works will be carried out in the vicinity of these.	Appendix J of this RTS
55	The EIS has not given consideration to the mobilisation of any contamination found across the site and the management, control, testing and disposal of soil during the construction phase of the project.	It is understood that the Borg site was not the source of OCP contamination. This was as a result of a spill/leak at the Structaflor site. However additional soil testing will be conducted to ensure all remediation has been successfully carried out and to implement any control measures to avoid mobilisation.	N/A
56	In addition to the above concerns, the EIS undermines the compliance objectives of DA 27/95 in that it seeks to have DA 27/95 set aside, but does not provide any detail on the content of the proposed replacement consent, nor the extent to which the existing conditions of DA 27/95 will be retained.	An undertaking was made within the EIS that all lots not under the ownership of the Borg Group of companies would not be removed from DA 27/95 under this State Significant Development application. The lot and DPs of the affected properties have been identified in the EIS. The current Project only removes 3 of the 14 lots originally part of the DA. Significant consultation and discussion with the Department of Planning has been undertaken in regards to the operation of the existing consent, and how it will continue to operate. The objective is not to repeal the 27/95 consent. The objective is to consolidate the Borg Panels operations under one consent, removing the site from this consent. Mapping is being prepared in consultation with the Department to identify those lots still operating under the current consent for the site. The existing easement arrangements and drainage can operate independently of this consent. It is also noted that under DA 403-11-001, the Highland Pine Products facility, already operates under a separate consent from the subject site at 124 Lowes Mount Road.	N/A
57	CHH and HPP have serious concerns that the EIS does not adequately assess the cumulative impact of the existing environment at the Oberon	Noted. Government agencies have provided relevant comments which have been addressed above. The addendum reports prepared expand upon the	N/A

	Timber Complex.	information previously submitted to the Department	
58	Review of current Google Earth imagery suggests that some of the Proposed Development works may have already commenced. The Proposed Hardstand (item 31 in Figure 3, page 20), Emergency Basin (item 32 in Figure 3, page 20) and First Flush Basin (item 33 in Figure 3, page 20), all of which are listed as 'Proposed Infrastructure' in the EIS, are all at various stages of development.	Works that have been commenced on site have approval under previous modifications to the consent. It is also noted that Google Earth in no way represents the most up to date satellite imagery, and should not be used to form any assessment of works that have or have not been undertaken.	N/A
59	The EIS (page 10) notes that the nearest sensitive receptor is approximately 600m from the boundary of the Proposed Development. Receptors are located 400m to the north; 450m to the east; and the local high school is 420m to the south of the site boundary.	Noted. It is however a receptor that is not susceptible to noise as there is no significant noise generating activities located at the northern end of the site.	N/A
60	Borg currently uses approximately 200,000m3 of particleboard per annum for its manufacturing operations, of which CHH supplies approximately 80% from its Australian sites. The EIS states that Borg currently sources its particleboard needs from 'a mix of off-shore and inter-state suppliers'. This is incorrect. Carter Holt Harvey's particleboard facility in Tumut, NSW supplies Borg with approximately 64,000m3 of particleboard per annum. This volume comprises approximately 30% of Borg's total particleboard needs.	It is noted that this loss of market share is the primary concern of CHH.	N/A
61	The EIS states that Borg is currently operating in accordance with both DA 27/95 and its Environmental Protection Licence (EPL 3035). This is incorrect. Borg has been the subject of five penalty notices (each resulting in a fine) under the *Protection of the Environment Operations Act 1997* for various non-compliances during the past four years.	Noted. Not relevant for assessment of the current application. Regardless of penalty notices the project will be making a significant improvement to the environment in the Oberon area. The marked improvements to the overall cleanliness of the plant since the site came under the control of the current operator is testament to the commitment of Borg Panels to the ongoing environmentally friendly operation of the site.	N/A
62	As source material, the EIS refers to using 'external urban waste supplies', 'chipped waste products', 'broken pallet material', 'urban waste material' (page 35) and 'strange material' (page 36). Critical information is missing as follows: The EIS should set out fully what these materials are and their constituent parts. Without this information, the impact on air emissions from processing this material is unknown. For example, the waste material could be chemically treated timber.	As this is a product waste recycling and landfill reduction initiative, this information will be provided to EPA prior to implementing any process changes to ensure appropriate updates to the EPL. Borg is aware of the risks associated with chemically treated timber and intends to have a robust system for the control of recycled process material input products.	N/A
63	The quantity of throughput is insufficiently detailed, only stating that an additional 500,000m3 of particle board will be produced. These numbers will be key drivers of some environmental impacts (notably heavy vehicle traffic, air emissions, noise and water quality) and should	The application sets a maximum output of 500,000m^3. This is appropriate for the Department to make an assessment, and forms the basis of all studies conducted. Whilst it is noted that a major market competitor would like more details as to exact levels of product generated, it is not	N/A

	be substantiated.	considered necessary to assess beyond maximum output.	
64	A mass balance, indicating all inputs and outputs from the site is required to support the claims made in the EIS regarding traffic, emission, usage and benefits to the region.	Noted. Additional information has been provided to the relevant government agencies. Addendum reports regarding traffic and emissions are attached to this RTS.	N/A
65	Given that there are fibre supply constraints in the region, and because Borg is proposing to use recycled timber as a processing input, a detailed assessment of proposed supply mix is required in order to sufficiently measure the impacts outlined in the EIS.	Supply mix and material inputs are an operational matter for Borg to resolve. If necessary, Borg will be seeking an amended EPL from the EPA. However, this is not relevant to the assessment of the Project given there is fibre available to commence operations of the plant.	N/A
66	We note that the study uses an assumption that Oxides of Nitrogen (NOx) is multiplied by 40% to provide Nitrous Oxide (NO2) concentrations. This number is conservative, as stated in the report, for the one-hour averaging period. CHH and HPP understand that the Approved Methods typically assume that that all NOx is converted to NO2 or use the ozone limiting method and seeks to understand why this method was not applied in this case.	Further modelling has been provided as part of the RTS.	Appendix C of this RTS
67	A risk assessment of the use of 'urban waste' (page 35) as substrate, including a full lifecycle assessment considering potential impacts from emissions and also wind born emissions from ash residues; The risks associated with other potential pollutants, such as dioxins, furans, heavy metals and other potential carcinogenic emissions, given Borg's proposed use of 'urban waste' and other non-standard fuels, and what measures Borg will put in place to control the potential impact.	Air Quality Impacts have been assessed in accordance with EPA Guidelines. Any use of 'urban waste' will require the separate consent of the EPA, and an application will be made at that time. This will fully detail the treatment and management approach proposed.	Appendix C of this RTS
69	Why the Proposed Development has not considered the use of a Reverse Catalytic Oxidiser or equivalent technology to reduce the impacts of formaldehyde and Volatile Organic Compounds (VOC). Wet Electrostatic Precipitator (WESP) technology, as proposed in the EIS, is ineffective in dealing with these type of emissions.	Air Quality Impacts have been assessed in accordance with EPA Guidelines. Additional information to address specific EPA concerns are included as Appendix C. It is noted that the WESP technology is the best available and economical technology for particle board driers.	Appendix C of this RTS
70	Impacts from the 8MW gas fired heat plant (installed as part of the new press line) have not been adequately discussed in the EIS.	Air Quality Impacts have been assessed in accordance with EPA Guidelines. Additional information to address specific EPA concerns are included as Appendix C. The impacts from the gas fired heat plant are included within the AQIA. However, the impacts are negligible.	Appendix C of this RTS
71	Justification for the claimed 95% reduction in formaldehyde emissions through the diversion of roof vent emissions to the existing site wood fired heat plants. The heat plants do not have any emissions control technology on their stacks. The claim for destruction of 95% of	Air Quality Impacts have been assessed in accordance with EPA Guidelines. Additional information to address specific EPA concerns are included as Appendix C. Third party verification of this process has been provided in Appendix N.	Appendix C and N of this RTS

	formaldehyde has no supporting documentary evidence and remains unsubstantiated.		
72	Confirmation of whether any altered emission point on the existing Borg facility will meet Group 6 emission standards, given that new plant at the Proposed Development will be vented via existing emission points. Existing heat plants at the Borg Facility are currently Group 4 emission standards, and one plant is unable to comply with this standard (as noted in the latest available Borg Panels Annual Return submitted to the EPA).	Air Quality Impacts have been assessed in accordance with EPA Guidelines. Additional information to address specific EPA concerns are included as Appendix C. All new equipment proposed as part of the Project will meet Group 6 emissions standards. Existing plant not subject to modification will maintain the current level of classification.	Appendix C of this RTS
73	An explanation of why the existing heat plants have not been considered as waste incinerators to be regulated under Group 6 (waste incineration limits), given that resinated urban and other wood waste, treatment plant sludge and resinated waste from existing and new processes (including from other Borg facilities) may be consumed as fuel.	The heat plants should not be considered as waste incinerators, as detailed in Section 3.1 above.	N/A
74	Given the presence of pollutants of concern such as formaldehyde (classified by the World Health Organisation as a Group 1 carcinogen), it would be prudent to undertake a Human Health Risk Assessment based on the cumulative impact assessment as part of the EIS. This has not been done.	Air Quality Impacts have been assessed in accordance with EPA Guidelines. Additional information to address specific EPA concerns are included as Appendix C. It is also noted that the limits imposed by the World Health Organisation on formaldehyde sensitivity criteria are significantly different to the EPA guidelines and have helped underpin the preparation of the AQIA.	Chapter 11 of EIS and Appendix C of this RTS
75	The EIS does not include consideration of Borg's own Woodchem MHF, which is a manufacturer of formaldehyde and a designated Major Hazard Facility. Construction of the Proposed Development will occur in close proximity to the Woodchem MHF facilities, and the proposal includes further storage of dangerous goods. No cumulative impact assessment on these risks has been provided. This issue should be considered in both a Plant Hazard Analysis and also in the EIS, given that the location of Woodchem MHF is within the Proposed Development site.	Adequate separation exists between the works and the Woodchem facility, which is a separate business on a separate lot and DP. The Woodchem facility is not included in the current approval and is not part of this application.	N/A
76	Given that the EIS acknowledges the level of noise generated with the use of a mobile chipper on-site, CHH and HPP suggest that conditions should be applied to the consent and EPL requiring: □ Mobile chipping only at daytime (7AM-5PM) Mon-Fri; and □ No mobile chipping during enhanced wind conditions (any direction).	Discussions are being held with the EPA regarding limiting the use of mobile wood chippers. Conditions will be negotiated with relevant government agencies.	N/A
77	Historical underground storage tanks (**USTs**) on the existing Borg MDF site are located in an area which would place them under the proposed particleboard production hall. CHH and HPP can find no reference to the	It is noted that a UST was located on the Borg site. These have been removed, the soil remediated, and the site validated.	Section 14.0 of EIS

	USTs in the EIS and it is not clear whether Borg has removed them. If not, CHH and HPP seek to confirm whether there are any remedial or management procedures proposed to prevent any future impact on surface water, groundwater or soil (including the validation and remediation of any spoil prior to its relocation as fill for other areas)		
78	In addition, CHH and HPP are aware of a number of redundant USTs on Lot 1 of DP 1085563 (formerly used as a fuel depot). This would place them under the new flake dryer which is to be constructed as part of the Proposed Development. Once again the EIS does not make mention of any proposed remedial action in relation to these USTs, or any future impact on surface water, groundwater or soil (including the validation and remediation of any spoil prior to its relocation as fill for other areas).	The EIS notes the operation of the fuel depot and undertakes that appropriate remediation as prescribed by SEPP 55 to a level suitable for the ongoing industrial use of the site will be undertaken.	Section 14 of EIS
79	CHH and HPP note that Borg plans to construct two large water storage ponds and a considerable area of hard stand on Lot 1 of DP 1076346. This lot was made subject to an EPA *Declaration of Significantly Contaminated Land* (No. 20091105) in October 2009	This land has been remediated and validated. Borrow pits located on Lot 1 DP1076346 will not be impacted by the development and are clearly identified in the plan attached.	Appendix J of this RTS
80	Neither the EIS nor the Water Cycle Assessment Report (**WCAR**) provides a full explanation of the following issues with respect to the impact of harvesting on the catchment: - Impacts on downstream users; - Biota impact assessment in Kings Stockyard creek; - Alternatives if extraction rates are not acceptable considering existing use rights of other industry; - An assessment of the current allowable extraction rate of existing groundwater (via the spring dam) including impacts of extraction from the Woodchem MHF bore on Borg owned land; - An assessment of historical extraction and its impacts on the perched and deep aquifer utilised by upstream users under licence; - Information on what measures and controls will be implemented if extraction is not allowed; - Supporting information regarding grounds under which the EIS recommendation that the project be granted dispensation under the Water Management Act; - An assessment of water quality considering worse case inflows managed under a commercial agreement with upstream contributors to the storm water system; and	See response to DPI – Water and Section 3.3 of this RTS.	Appendix H of this RTS

	- Consideration of existing easements and commercial agreements with upstream contributors to the storm water system given the EIS proposes to alter water flow across the catchment;		
81	The EIS does not provide proper assessment of the impacts of the Proposed Development on groundwater given that: - the perched aquifer is within 1 metre of storm water drainage network infrastructure at the adjacent industrial facility; - changes to groundwater flows could impact on existing containment cells of contaminated spoil upgradient of the Proposed Development site; and - the Proposed Development engaged Sustainability Workshop to complete a WCAR. It should be noted that Table 13 (p.91) is incorrect by three orders of magnitude (i.e., 1000X) for the discharge of aldrin and dieldrin. The EPL (3035) has a 0.3µg/L (not mg/L) limit on aldrin and dieldrin. This error has the potential to significantly distort the water impact assessment.	Noted. This is a typographical error in the report and does not alter the outcome of the WCAR assessment. The containment cells are located well outside the development footprint and will not be impacted upon by the Project. It is also noted that the stormwater drainage network will not be relocated in most areas and a thorough assessment of potential impacts in the new water quality ponds area to the east of the site will be conducted prior to the CC stage of the project.	N/A
82	The EIS refers to 'burning of gas products on site' as a 'key aspect of the Project' (EIS 16.3 p 96) but there is limited detail regarding this in Chapter 6 of the EIS. EIS 16.2 Table 16 indicates that the existing wood fired heat plants on site are to be used in the role of waste incinerators. CHH and HPP is aware that these heat plants have little or no emissions control equipment currently fitted to them.	Specific process information has been provided to agencies only. It is not considered appropriate to release this level of detail to a major competitor in the market. Third party validation of the proposed burning of gas products has been provided in Appendix N.	Appendix N of this RTS
83	Lot 26 DP 1200697 is burdened by registered Easement to Drain Water 5 Wide 10 Wide & Variable Width (AA) (shown as item 1 on DP 1200697) (**Easement**). The Easement is a proprietary right in favour of neighbouring Lot 86 DP 574012, Lot 10 DP 1017456 (both HPP facility land) and Lot 11 DP 1017456 (on which a CHH facility is situated). The Easement infrastructure allows the benefited lots the opportunity to contain any form of surface water pollution if required. The changes mooted in the EIS have the effect of removing this infrastructure to a large extent. The EIS provides no information on how any surface water pollution from the benefited lots would otherwise be contained and managed.	Noted. This is a legitimate concern for CHH. Borg undertakes to ensure that no negative impacts to the existing water quality will occur. Ongoing discussions have been held with CHH regarding this easement. Stormwater loads from benefitted lots have been assessed in the current modelling. Final details will be included within the Stormwater Management Plan. However, it is noted that Borg is ultimately responsible for the water quality from the CHH facility	Appendix G of this RTS
Jenolan Caravan Park			
84	Smoke can be hard to determine from where it is coming. It seems in the main part to come from the area of the other parts of the timber complex, not Borgs. However, we make mention of it here as smoke	Noted. Excessive smoke is not a part of the normal operations of the Borg plant. As a result it is more likely that this comes from a different operator within the Oberon Timber Complex, or indeed the wider industrial estate.	N/A

	comes over the caravan park often on a Sunday, and also on other days of the week. It is a 'blue' smoke.		
85	It is even harder to detect the direction of smells than it is for smoke. An unpleasant smell is not as frequent as the smoke (or the noise) but can be extremely unpleasant and very hard to describe when it does occur. We have considered other businesses in the area e.g. the relatively new bitumen plant but when we situated ourselves outside their business we could not smell any bad smells. Again it is mentioned here because it has been a problem and finding the source seems to be a big problem.	The Project should not result in any unpleasant smells, and the operation of the existing Borg facility does not generate any offensive odour off site. As there are a number of industrial facilities in the area it is hard to locate where this may come from (as the submission notes).	N/A
86	In 2011, when we had the opportunity to manage the caravan park for the previous owners before purchase, the synonym used by both people operating the Park and guests in the Park when describing the noise was "like waves on the seashore". During February/March 2011, a six week period, the Mill (complex) was quiet and the sound was not an unpleasant background noise. After purchasing the caravan park we believe the noise has steadily grown in volume and this could probably be measured against improved sales in the Borg business.	Noted. Borg purchased the business in a state of disrepair and has since improved and modernised the site. A considerable portion of this has been in process improvements which have resulted in noise attenuation including a completely enclosed truck loading facility. The latest noise study completed over a 3-month period shows the OTC is in full compliance.	N/A
87	Sound monitoring has been carried out at the Park on a number of occasions by both the EPA and Borgs Panels. We have not been privy to the results of these but whenever we have asked we have been advised that the noise is within the allowable limits. It concerns us that the loud bangs (spikes on the noise monitor) that wake up our guests are not monitored individually but they are averaged out over the nightly period. That is no consolation to our guests as they were awakened by the bang and still can't get back to sleep!	The sound monitoring program has been concluded and the results provided to the EPA. The report findings will be discussed with the public once the EPA investigation is concluded.	N/A
88	Looking forward to the new extension we would ask that there be no loud noises or 'spikes' between the hours of 9.00pm and 8.00am.	As acknowledged in the submission, there are a number of noise generators in the vicinity.	N/A
89	We understand that when the portable chippers were in the forest they were required to operate at a distance of not less than 600 metres from a house.	Noted. The site is subject to noise limits and operation of the chippers is thus also governed by those controls.	N/A
Markus Schmitz (Submission 2)			
90	formaldehyde emission will be above the legal limit for my home and workplace address.	Exceedance of the criteria is in one location, which is close to the site boundary on an adjoining industrial property. No exceedance of the limits occurs in any residential area.	N/A
91	emissions and airborne fibre the population of Oberon had to endure in the past	Noted. There are a number of unrelated timber processing and manufacturing facilities within the Oberon Timber Complex. The Project upgrades existing infrastructure, and will be constructed utilising the most	N/A

		up to date emission controls which will minimise impacts on Oberon.	
92	On a windy day my car would be covered in what appears to be wood fibres from the BORG site	Noted. There are a number of unrelated timber processing and manufacturing facilities within the Oberon Timber Complex. The Project upgrades existing infrastructure, and will be constructed to the most up to date emission controls which will minimise impacts on Oberon.	N/A
93	I am also worried that no study had been carried out during a rainy period as formaldehyde is water soluble and could end up in the rain over the township of Oberon.	The AQIA prepared addresses the required details.	
94	I live in Oberon and my house was build in 1946 before the current PB plant was constructed	Noted.	
95	Oberon Council will not allow dual occupancy in areas close to the current BORG site and justify their decision on the fact that the current BORG site is close to my address.	Noted. Oberon Council has set guidelines to ensure that new development is not unduly affected by noise from the wider Oberon Timber Complex, which includes a number of different companies, including Borg and Carter Holt Harvey/Highland Pine Products. Nowhere within the LEP are dual occupancies prohibited explicitly, except in certain large lot and rural zones. Oberon Council have made a strategic planning decision to ensure that the major employer in the region does not unduly impact upon new dwellings, and provided the standards that Council requires are met, there is no reason why development should not be able to be carried out.	
96	I can also see an increased risk to the environmental pollution	Noted. A number of studies have been commissioned that outline that the Project will reduce overall levels of pollution. Also new equipment being installed is the best available technology and is designed to meet more stringent environmental standards.	N/A
97	Defective PB panels regularly appear at the local landfill site	Noted. Borg Panels has not previously manufactured Particle Board Panels on site.	N/A
98	PB panels had also been buried in the state forest at black bullock road in the past.	Noted. Borg Panels has not previously manufactured Particle Board Panels on site. This particular issue was associated with the original developer and owner of the site and cannot be controlled by Borg.	N/A
99	The Oberon Council had burned truckloads of panels from the BORG site in the past at the local landfill site.	Noted.	N/A
Oberon District Museum			
100	Letter of support for the proposed development, citing the proponents' merits as a business operator and community partner	Noted. Borg Panels, as a major employer in the region, is appreciative of the benefit that such organisations contribute to the community.	N/A

APPENDIX A

Submissions from State and Local Government Agencies

APPENDIX B

Submissions from Community Stakeholders

APPENDIX C

Air Quality Impact Assessment

APPENDIX D

Existing Stormwater Management Plan

APPENDIX E

Proposed Stormwater Management Plan

APPENDIX F

Existing Easement Details

APPENDIX G

Consultation Regarding Easement

APPENDIX H

Sustainability Workshop Response to Submissions

APPENDIX I

Site Waste Management Plan

APPENDIX J

Survey Plan with Borrow Pit

APPENDIX K

Soil Testing Plan

APPENDIX L

Traffic Impact Assessment Addendum

APPENDIX M

Noise Impact Assessment Addendum

APPENDIX N

Proof of Performance Testing

APPENDIX O

Equipment Supplier Guarantee

APPENDIX P

Landscaping Plan