Upgrade of the Chester Hill Resource Recovery Facility (MP_0052)

Response to Submissions

Source: **GreenWaste Recovery, Inc.**

Prepared for Builders Recycling Operations Pty Ltd

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SG HADDAD ADVISORY

Strategic Planning Services

Contents

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Abbreviations

BCA	Building Code of Australia
BRO	Builders Recycling Operations Pty Ltd
DPE	NSW Department of Planning and Environment
EA	Environmental Assessment
EPA	NSW Environment Protection Authority
EP&A Act	Environmental Planning and Assessment Act 1979
Facility	Chester Hill Resource Recovery Facility
POEO Act	Protection of the Environment Operations Act
RtS	Response to Submission
tpa	Tonnes per annum

1 INTRODUCTION

Builders Recycling Operations (BRO) Pty Ltd is seeking approval to modify its existing approval for the Chester Hill Resource Recovery Facility to transform the site from its current state into a contemporary resource recovery facility with significantly improved environmental and regulatory performance, and the ability to process up to 250,000 (tpa) of building and construction waste (including metal).

The modification application seeks approval under Section 75W of the Environmental Planning and Assessment Act (EPA Act) given the original approval was granted under Part 3A of the EPA Act. An Environmental Assessment (EA) was prepared by SG Haddad Advisory in conjunction with CW Strategic Planning Services in November 2018 to support the application. The EA was prepared consistent with the Secretary's Environmental Assessment Requirements (SEARS) which were issued on 20 December 2017.

The modification application and EA were exhibited between 21 November 2018 and 12 December 2018. During the exhibition period 13 submissions were received from Government authorities, non government organisations and community members. The submissions received included a total of:

- 6 from government authorities;
- 2 from non government organisations; and
- 5 from members of the community.

The submissions received and the issues raised therein form the subject of this report, titled the Response to Submissions (RtS). Issues raised within the submissions are addressed within this report.

1.1 Proposal Overview

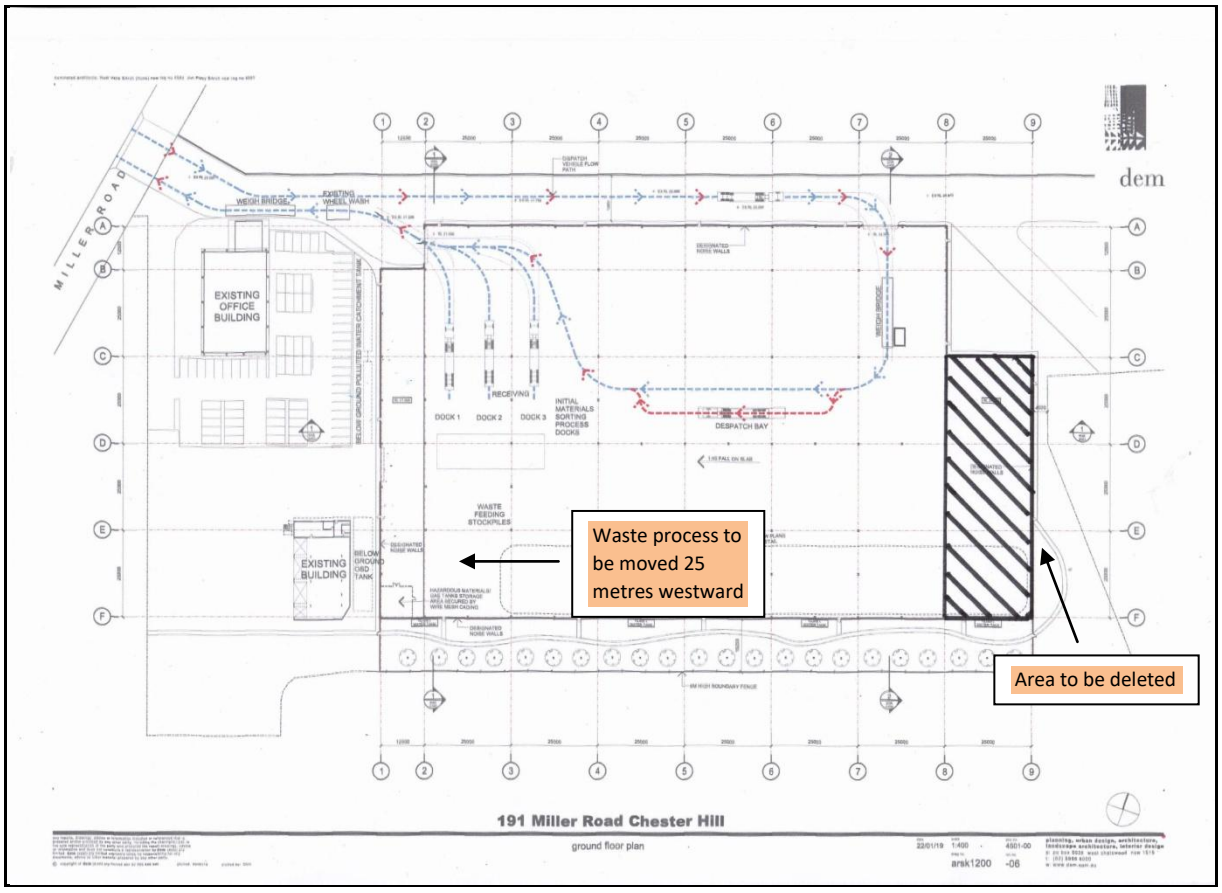
BRO seeks a modification to its existing approval to:

- Upgrade of the site including the:
  - reconfiguration of the layout including waste stockpiles;
  - erection of a full enclosure for the sorting and recycling of waste and the development of hardstand areas for the operational areas of the facility; and
  - improvements to stormwater and wastewater management to ensure required water quality standards.
- Establish a daily processing limit of approximately 910 tonnes and increase the annual processing limit from 100,000 tpa of building and construction waste (including metal) to 250,000 tpa.

A review of the current size of the enclosure and in particular the need to ensure a minimum of 6 metres around the building for firefighting purposes has necessitated a minor design modification in the enclosure resulting in the eastern edge of the enclosure being reduced by approximately 25 metres from the boundary. The deletion also requires the waste process to be moved 25 metres westward as depicted in Figure 1. An updated site layout showing the amended building and waste process is provided at Figure 2. All relevant plans have been updated and included in Appendix A.

The redesign would have negligible impact on operational aspects of the proposal but would result in a reduction in the bulk and scale of the enclosure. The new dimensions of the enclosure would be 162.5 metres long by 112.50 metres wide equating to 18,281.25 square metres of floor space, a reduction in 1,875 square metres. The reduction would increase the setback to the eastern perimeter by 25 metres enabling more than adequate space for firefighting access and superior landscaping outcomes.

Figure 1 – Ground Site Plan showing area to be deleted

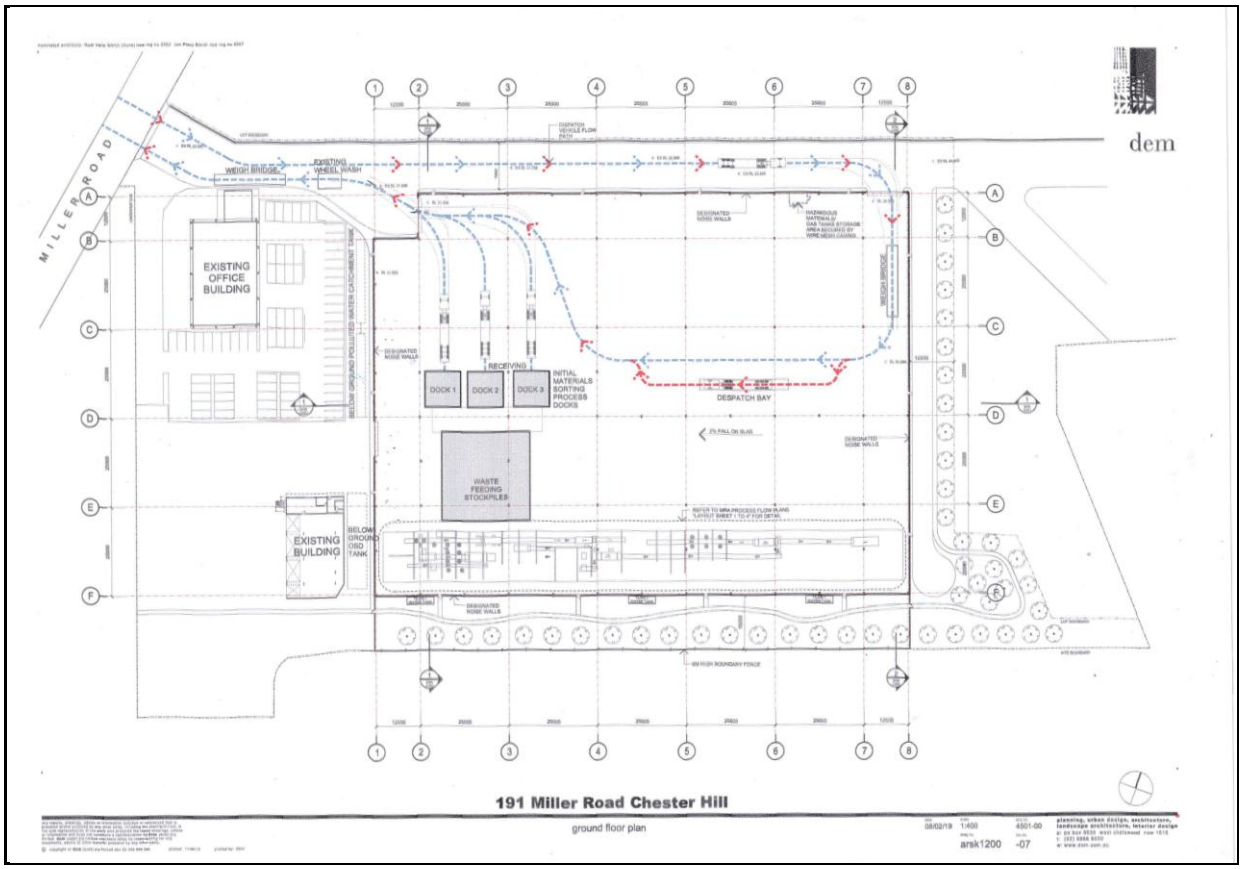


The construction of a 'State of the Art' resource recovery facility with contemporary pollution controls would ensure that future resource recovery operations at the site are undertaken in an environmentally responsible manner. Key environmental improvements associated with the development include but are not limited to the following:

- The construction of a full enclosure for all processing activities;
- The incorporation of mist sprays and dust emission controls (baghouse);
- A significantly improved waste screening process to be implemented consistent with EPA protocols for waste including asbestos;
- A superior and modernized waste recovery process all within a purpose built building;
- The implementation of contemporary fire safety systems;
- Separate clean and dirty water systems and appropriate storage, treatment and/or disposal of contaminated water;
- The capping and/stabilization of all exposed soils across the site further minimising emissions;
- The forward movement of trucks through the site and nil truck parking or maintenance onsite other than to unload/load within the enclosure; and
- Appropriate landscaping across the site including deep root planting along the eastern and southern perimeters of the site.

As demonstrated in the EA, the construction and operation of the upgraded Facility at full capacity (< 250,000 tpa) is predicted to meet all applicable environmental, amenity and land use safety criteria subject to the implementation of mitigation measures (refer to Section 6 of this report).

Figure 2 – Updated Site Plan



1.2 Purpose of this report

The purpose of this RtS is to respond to issues raised within submissions received during the exhibition of the EA. The RtS has been prepared in response to a request from the Secretary of the Department to respond to the issues raised including those raised by the Department in its consideration of the EA. Each of the submissions received has been collated, analysed and addressed as relevant.

This report supplements the EA as exhibited and should be read in conjunction with the EA.

1.3 Statutory approval process.

The Facility was originally designated as a transitional Part 3A project and as such any modifications could be applied for under S75W. On 1 March 2018 changes were made to the EPA Act including the repeal of S75W. The changes to the Act were supported by amended EPA Regulations which include transitional provisions relevant to resolving outstanding S75 W applications.

Consistent with these regulations the approved project can be modified under section 75W albeit the DPE has requested that the RtS be submitted by 25 January 2019 to assist winding up the transitional arrangements. At the request of BRO, DPE has extended this deadline until the 19 February 2019 to enable BRO's specialists to provide adequate technical responses.

Section 75W requires the Minister to be satisfied that the proposed modification is consistent with the approved project and does not constitute a new project in its own right. The modification would not:

- Change the intent or purpose of the approved project given it would remain a resource recovery facility;

- It would retain essentially the same development approval; and
- The environmental consequences of the modification would be vastly improved to those resulting from the current approved operations at the site.

1.4 Structure of this report

The structure of this RtS is as follows:

- Section 1 – Introduction: provides an introduction to and an overview of the upgrade proposal, design improvements since exhibition, the relevant statutory approval pathway, and structure of the RtS;
- Section 2 – Exhibition and Consultation: provides a description of the consultation which was undertaken as part of the EA;
- Section 3 – Overview of Submissions: provides an analysis of the submissions received during the exhibition of the EA and identifies the key issues raised;
- Section 4 – Response to Government Submissions: provides a list of submissions received from Government Authorities and their responses;
- Section 5 – Response to Community Submissions: provides a summary of the community submissions received and responses to each issue raised therein;
- Section 6 – Updated list of Mitigation Measures: provides a revised list of mitigation measures to include changes as a result of submissions received including updated technical assessments or amendments to the proposal; and
- Section 7 – Conclusion: provides a summary and conclusion to the RtS.

2 EXHIBITION AND CONSULTATION

The EA was placed on public exhibition between 21 November 2018 and 12 December 2018 consistent with the provisions of the EPA Regulations governing the exhibition of S75W modification applications. Hard copies of the EA were made available for public review at both Canterbury-Bankstown Council (at its Bankstown office) and DPE in Pitt Street, Sydney. The EA was also made available to the public in electronic format on the DPE website during this time. All documentation remains live on the Department's Major Project Register.

2.1 EA consultation

The Proponent has undertaken ongoing consultation with government authorities during the preparation of the EA including:

- Canterbury-Bankstown Council
- Department of Planning and Environment
- NSW Environment Protection Authority
- Fire and Rescue
- Roads and Maritime Services

This consultation was undertaken in a number of ways including direct meetings, emails, phone conversations and letters. Feedback from the authorities informed the preparation of the EA and the overall characterisation of the proposed upgrade. For example, all processing activities were fully enclosed (as opposed to partial enclosure) following ongoing consultation with the EPA.

Community and business consultation was undertaken with site neighbours consistent with the SEARs. In September 2018, over 90 private and commercial premises within 100 metres of the site were door knocked. At each premises community members were provided the opportunity to look at the proposed development layout plan, visual analysis and 3D model of the proposal and feedback sought. In addition, those door knocked were advised that upon application, feedback would be sought from the Department of Planning and Environment should they wish to make any comment in a formal capacity.

2.2 Post exhibition consultation

BRO continues dialogue with key stakeholders post exhibition including relevant government authorities, community members and non government organisations. The purpose of this consultation is to address concerns raised in the submissions received.

2.3 Next steps

Following acceptance of the RtS, the Department will finalise its assessment of the modification application. The Minister for Planning has delegated the functions to determine Section 75W modification requests to the Department where no reportable political donation disclosures have been made, there are less than 25 submissions by way of objection, and the Council has not objected. Given no political disclosure has been made, Bankstown Council does not object to the proposal and there were only 7 submissions by way of objection, it is understood that the application can be determined under delegation by the Department.

3 REVIEW OF SUBMISSIONS

13 government and public submissions were received during the statutory exhibition period (21 November 2018 – 21 December 2018). An overview of the consolidated submissions and a summary of the process undertaken to ensure that the submissions have been accurately summarised and appropriately addressed is provided below.

3.1 Submissions received

Submissions were received from a total of 6 government authorities as follows:

- Canterbury Bankstown Council
- NSW Environment Protection Authority
- Roads and Maritime Authority
- Transport for NSW
- Fire and Rescue NSW
- WaterNSW

The Department of Planning and Environment also raised a number of issues to be addressed when seeking the preparation of the RtS. The Department's issues letter has been treated as a submission in the RtS.

A total of 2 submissions were received from non government organisations and 5 submissions received from members of the public.

3.2 Submission response methodology

3.2.1 Technical specialist input to submissions

Government and public submissions have been made available to the Proponents nominated technical experts. The information relating to the relevant responses has been referenced and addressed in the Tables in Sections 4 and 5 of this RtS.

3.2.2 Government authorities

6 government authorities provided submissions, 5 of which made comment. The DPE also provided a letter identifying a number of issues to be addressed. Each government submission generally raised issues relevant to its respective legislative and administrative responsibilities. The submissions have been reviewed and summarised to identify key issues and provided to the Proponents technical specialists for input where relevant.

3.2.3 Public Submissions

7 submissions were received from community members and non-government organisations comprising:

- 5 submissions received from surrounding residents; and
- 2 submissions received from local businesses.

The submissions have been reviewed and summarised to identify key issues and provided to the Proponents technical specialists for input where relevant.

<u>Summary of Community Comments</u>

- Non compliance with planning approval /pollution control license particularly in relation to:
  - Noise and dust emissions from the site
  - 2014 fire and impacts on residents

  - Trucks on residential streets
- Dust emissions from the operation and subsequent health concerns particularly in relation to:
  - Dust emissions and impacts on nearby residents, schools and childcare facilities
  - Potential for airborne dust to contain asbestos
- Odour emissions from the operation
- Noise emissions from the operation
- Proximity of operations to residential properties, schools and childcare facilities and overall health risks
- Impact of operations on adjoining business interests
- Significant increase in truck movements particularly relating to trucks using residential streets particularly outside operation hours
- Suitability of the site for a resource recovery facility

4 RESPONSE TO GOVERNMENT AUTHORITY SUBMISSIONS

Submissions were received from the following government authorities:

- Canterbury-Bankstown Council
- NSW Environment Protection Authority
- Fire and Rescue NSW
- Transport for NSW
- Roads and Maritime Services
- Water NSW

The Department of Planning and Environment also requested that the Proponent address a number of issues. These are also addressed in the RtS.

It is noted that the submission from Water NSW did not provide any comments or objections to the upgrade. In addition, the submission from the RMS did not object to the proposal advising that it 'raises no objection to the modification application as it is unlikely to have a significant impact on the classified road network'. Subsequently, neither submission is considered further in the RtS

4.1 Canterbury Bankstown Council

The issues raised in Council's submission to the proposal as exhibited are outlined and addressed in Table 4.1 below.

Table 4.1 – Response to issues raised by Canterbury Bankstown Council

Aspect	Issue	Response	Reference
Site plan and cross sections	Need for EA to include appropriate architectural drawings that include a site plan, cross sections and elevations in correct detail	The relevant plans have been updated to include cross sections and elevations in appropriate detail. A new ground floor plan has also been provided showing internal truck flow paths.	Appendix A
	Need to identify use of land located behind staff parking	The land behind the staff car park does not form part of the major project approval or the modification application. While leased to BRO, it is currently being separately used for the retail of landscape supplies.	
Landscape plan	EA should incorporate a landscape plan that is consistent with desired character objectives for general industrial precincts	A landscape plan will be submitted for the approval of the Secretary prior to construction commencing. The landscape plan will take into consideration the final Fire Safety Study (FSS) in particular the need for perimeter access, as well as the principles identified in the DCP relevant	Included in revised mitigation measures in Section 6 of this report

		to industrial precincts.	
	EA should confirm fate of existing trees in car park	At this stage it is proposed to retain the majority of tress in the car park but this will be confirmed in the Landscape Plan to be submitted and approved prior to construction.	Included in revised mitigation measures in Section 6 of this report
Visual Impact Assessment	Architectural drawings must show RLs for existing buildings and the proposed facility	The VIA has been updated to show RLs for the proposed enclosure. The only existing building/structure of note is the amenities building which has an RL of 27.5 (refer to Figure 3.1.5 of Appendix B). Both the existing and proposed enclosure (which will have an RL of 42) have been appropriately notated in the updated VIA.	Refer to Appendix B for the updated VIA.
	Colour palette and finishes must also be shown	Colours were identified on PP 33 & 90 and shown in Figure 29. A full palette will be provided to Council and DPE with the Landscape Plan prior to construction.	Included in revised mitigation measures in Section 6 of this report
Further detail for Traffic Impact Assessment	TIA must include a SIDRA Model based on up to date volume data for various intersections to establish existing conditions	The SIDRA analysis was undertaken in late 2017 using contemporary data including industry accepted RMS and traffic growth forecasts. The analysis was undertaken for the closest and most relevant intersections. The analysis concluded that the development would not have an unacceptable impact on the level service of the subject intersections. Furthermore, the assessment was undertaken consistent with RMS guidelines and consistent with the assessment that accompanied the original application that was subsequently approved. It is noted that the RMS did not raise any concerns with the modelling or data used in the TIA and was satisfied that the proposal would not have a	

		significant impact on the classified road network.	
	TIA to include detailed calculation of the projected morning and afternoon peak period trip generation to assess the impacts on the surrounding network	The upgraded facility is expected to generate 148 movements per day (74 arrivals and 74 departures) generated by 12.5 tonne waste delivery trucks and 52 movements per day (26 arrivals and 26 departures) from 42 tonne processed waste removal trucks. Average hourly flows have been calculated from the generated daily trips, assuming 10 working hours (7:00am – 5:00pm) per day. The hourly traffic generated is broken down as follow: • approximately 16 movements (8 arrivals and 8 departures) per hour from 12.5 tonne (12.5m) waste delivery trucks; • approximately 6 trips per hour (3 arrivals and 3 departures) from 42 tonne (19m) processed waste removal trucks in each direction. In addition, the facility is expected to employ 13 staff. However, to be consistent with the previous traffic assessment which has been accepted by DPE, the TIA conservatively adopted additional traffic generation relating to 40 staff using the following assumptions: • each staff member would drive themselves to and from the facility; • all staff would arrive at the site during the morning peak hour to report for work; and • all staff would depart from the site during the evening peak hour. The assumptions regarding staff traffic generation are the same as that adopted in the previous assessment. In summary, the expected traffic	

		generation during the peak periods is as follow: • 16 heavy rigid vehicle movements per hour ; • 6 articulated vehicle movements per hour, and • 40 passenger vehicle movements per hour. These projections were derived using contemporary data and RMS growth formulas. The RMS maintains and operates a strategic traffic forecasting model. Plots showing traffic growth from the 2016 and 2026 were obtained and applied to the morning and evening peak periods respectively showing growth factors of between 1% and 2% per annum. These growth rates were applied to 2017 surveyed traffic volumes to provide 2027 future base case volumes.	
	TIA to include background data to explain the calculation of the proposed heavy vehicle trip generation to: • assess compliance with the 910 tonne per day limit and • to inform ESA calculation to determine effect of heavy vehicles on road surfaces and geometry	It is predicted that the development would generate approximately 22 heavy vehicle movements per peak period. Of these it was estimated 25 per cent or less than 6 heavy vehicle movements (two way) would access the site via Gurney Road. However, if heavy vehicles accessing the site were to be re-directed from using Gurney Road, TTPP is of the opinion that it would not create any noticeable adverse traffic effects to the operation of the surrounding intersections for the reasons explain below. As further discussed in TTPP's traffic assessment report, the heavy vehicles have been distributed to the road network as follow: • 25 per cent inbound - access the site from the north via Christina Rd and Miller Road • 25 per cent inbound – access the	Record of gate receipts including details of load weights in and out to be maintained in a register and provided to the consent authority upon request. Included in revised mitigation measures in Section 6 of this report

		site from the north via Gurney Rd and Miller Road • 50 per cent inbound – access the site from the south via Miller Road • 25 per cent outbound – travel to the north via Miller Road and Christina Road • 25 per cent outbound – travel to the north via Miller Road and Gurney Road, and • 50 per cent outbound – travel to the south via Miller Road and Hume Highway. The above distribution is consistent with those used in the traffic assessment that accompanied the previous application which was subsequently approved by the Department. Gurney Road is expected to receive approximately 6 heavy vehicle movements per hour (two-way). The 6 heavy vehicle movements are considered to be low. In addition, there are multiple route choices for these vehicles to access the site to and from the north. For example, instead of using Gurney Road the heavy vehicles could travel north using Woodville Road via Christina Road. Alternatively, they could access Woodville Road via Hume Highway. As such, these 6 heavy vehicle movements would be distributed across multiple routes further diluting the traffic effects of these heavy vehicle movements. Furthermore, the intersection capacity assessment results as reported in the traffic assessment indicate that the assessed intersections in the future would operate with good level of service (i.e. LoS C or better in all peak periods in all scenarios). As such, there would be adequate intersection	

		capacity to accommodate the re-directed heavy vehicles if required. Noting Council's concerns regarding heavy vehicles accessing the site via of Gurney Road, BRO has agreed to implement measures including contractual arrangements and the adoption of a driver Code of Conduct to ensure heavy vehicles accessing the site do not use Gurney Road. A more practical and equitable solution however would be to impose load limits along Gurney Road given that the number of BRO related trucks expected to use Gurney Road would be insignificant compared to total heavy vehicles currently using this road from other sources and destinations. In relation to compliance with the 910 tonne per day limit, BRO will ensure gate receipts are kept onsite and made available to the consent authority upon request.	
Parking	Need for TIA to determine increase in parking requirements relevant to operational needs of heavy vehicles and short term influxes associated with demand	There will be no permanent heavy vehicle parking available on site given that all heavy vehicles arrive and leave the site almost immediately after unloading/loading. The queuing analysis undertaken in the TIA also demonstrates that there is more than adequate queuing length between site access and the entrance to the shed to ensure no offsite queuing of trucks.	Commitment to ensure no offsite queuing included in revised mitigation measures in Section 6 of this report
Heavy vehicle routes	Council does not support use of Gurney Road to access the site given impacts on residential areas	BRO has agreed to adopt measures to ensure that Gurney Road is not used to access the site. Where practical these measures would include contractual arrangements and the adoption of a driver Code of Conduct. However, as mentioned above, a more practical and equitable solution would be to impose load limits along Gurney	Commitments to implement measures to ensure heavy vehicles accessing the site avoid Gurney Road Included in revised

		Road given that the limited number of BRO related trucks expected to use Gurney Road would be insignificant compared to total heavy vehicles.	mitigation measures in Section 6 of this report.
Internal Circulation	TIA should consider: • adequacy of shared right of way for both users in particular any impact on queuing; and • adequacy of perimeter access for emergency vehicles	The Logistics Sales and Hire business is a separate sub tenant to BRO. It has not raised any concerns with the proposed application. When BRO was operating at full capacity, the two businesses operated efficiently using the same driveway. The ground floor plan has been amended to identify the width of the access driveway (12.85 metres) which is considered to be more than sufficient to accommodate vehicles entering and exiting both sites side by side. There is sufficient space for fire related access around the enclosure with a minimum setback of 15.25 metres at its narrowest following the redesign. The exact location of the perimeter access will be confirmed in the final Fire Safety Study and Landscape Plan prior to construction noting the requirement for a minimum of 6 metres for perimeter access.	Included in revised mitigation measures in Section 6 of this report.
Noise and air quality	Council requests copy of advice from EPA relating to the need or otherwise of updated air and noise modelling	At a meeting with DPE and EPA on 30 July 2018, the EPA raised concern regarding the ability of the then proposed partial enclosure to consistently meet amenity criteria, particularly in relation to air and noise. Subsequently, BRO advised at the meeting that it would construct a building that would fully enclose all processing activities. At the same meeting, and on the basis that BRO had agreed to the full enclosure of all processing activities, the EPA advised that it was not necessary to revisit the air and acoustic modelling given that the original noise and air quality assessments concluded	

		that amenity criteria could be met subject to additional management measures (exclusive of full enclosure). The EPA agreed that based on the conclusions of the original assessments, full enclosure of all processing activities would conservatively enable the facility to meet noise and air quality criteria at sensitive receivers on an ongoing basis and hence no further modeling or assessment was warranted. DPE also agreed with this position.	
	Need for Construction Management Plan to identify appropriate mitigation measures to ensure no adverse air quality impacts on surrounding residents	Agreed	Included in revised mitigation measures in Section 6 of this report.
Hydrology Impact Assessment	Council recommends that proposed gross pollutant traps be strategically placed prior to the stormwater entering the OSD tank/Council's stormwater system. The architectural drawings should show location of GPTs	The pollution control device upstream of the On Site Detention (OSD) tank is identified in the Hydrology Report in drawing DA-STW-104 (Appendix J of the EA). The relevant map is reproduced in Appendix C to this report for clarification.	

4.2 NSW Environment Protection Authority

The issues raised in NSW EPA's submission to the proposal as exhibited are outlined and addressed in Table 4.2 below.

Table 4.2 – Response to issues raised by Environment Protection Authority

Aspect	Issue	Response	Reference
Removal of existing stockpiles	EPA reiterates need to comply with Prevention Notice (15557793) requiring the	BRO accepts that this would be addressed by a condition of approval requiring the legacy stockpile to be addressed to the satisfaction of the Secretary and EPA prior to construction commencing. BRO will continue to	

	removal of contaminated waste from the site prior to any construction associated with the upgrade.	liaise with EPA to address this legacy issue.	
Contamination Management Plan (CMP)	EPA requires that the proposed CMP is prepared and provided to the EPA for comment, prior to any works commencing at the Premises should the modification be approved.	BRO accepts that this would be addressed by a condition of approval requiring the Contamination Management Plan to be prepared to the satisfaction of the Secretary in consultation with the EPA.	Included in revised mitigation measures in Section 6 of this report.
Water Management	The EPA requires details of leachate management particularly should leachate not be disposed of offsite	At this stage BRO intends to use an independent authorised liquid waste disposal company for the disposal of any leachate as there are no alternatives. Until operations commence, and in the absence of real data concerning what contaminates are in the water, it is difficult to determine what alternative (bolt on/filter) mechanisms for dealing with polluted water BRO could feasibly implement.	
	The EA must identify predicted volumes and quality of indoor runoff/leachate and its fate	As indicated above, for initial operations all polluted water will be pumped out by an authorised operator noting that the system is being designed to ensure that no contaminated waste water enters the stormwater system and no stormwater enters the waste water system. However, minimal waste water will be generated inside the enclosure with the size of the polluted water tank driven primarily by the need to capture firefighting water. Incoming waste is generally dry with the key source of moisture in the enclosure being the mist sprays (which to some degree will be absorbed in the process), and wash down water.	Included in revised mitigation measures in Section 6 of this report.

	If there are to be discharges to water from inside the building, then a discharge characterization assessment of potential pollutants must be conducted	No polluted water is anticipated to be discharged from the site under proposed management arrangements. Consistent with advice from the EPA, during the first 12 months of operations, BRO will monitor, quantify and characterise the nature of waste water being disposed offsite (at a licensed facility) with a view to identifying potential alternative disposal/treatment options or system improvements. This will be identified in the Operational Environmental Management Plan (OEMP).	Included in revised mitigation measures in Section 6 of this report.
	The EA must clearly identify whether: • there are stormwater connections from inside the building to the general stormwater system; and • whether the downpipes from the roof are conveyed to the internal leachate collection system.	The Stormwater runoff and the leachate capture and control systems will be designed as separate systems. All water generated within the enclosure will be conveyed to the polluted water tank. All stormwater from the roof and hardstand areas external to the enclosure will be conveyed to the onsite detention tanks, unless contaminated with fire fighting water or water from a spill etc.	Included in revised mitigation measures in Section 6 of this report.
	The EA should clarify the purpose of the leachate collection tanks and the underground detention storage and whether they are fully contained or drain to offsite stormwater system.	The onsite detention tanks are designed for roof water, impervious outdoor water, and water from the upstream Ecosol Stormpit Class 2 System only. As a result no further downstream filtration system is required.	
Wheel wash	EA to confirm	The site is currently characterised by	

	whether additional truck movements will affect the operation and efficiency of the current wheel wash to manage pollutants.	impacted fill which has the potential, along with existing onsite waste to be tracked from the site. However, as identified in the EA, apart from the landscaped and grassed areas immediately surrounding the proposed enclosure, the entire site will be either sealed roadway or hardstand area and subject to regular cleaning to ensure the site is generally free from dirt and contaminants. This would include the waste unloading and product loading areas. Under these circumstances it is expected that the wheel wash will operate efficiently despite the increase in trucks numbers.	
Air quality	The air quality assessment must consider the point source emissions from the baghouse given these emissions may include particulates and Type 1 and 2 metals. Design specifications and performance guarantees should be considered	At a meeting with DPE and EPA on 30 July 2018, the EPA raised concern regarding the ability of the then proposed partial enclosure to consistently meet amenity criteria, particularly in relation to air and noise. Subsequently, BRO advised at the meeting that it would construct a building that would fully enclose all processing activities. At the same meeting, and on the basis that BRO had agreed to the full enclosure of all processing activities, the EPA advised that it was not necessary to revisit the air and acoustic modelling given that the original noise and air quality assessments concluded that amenity criteria could be met subject to additional management measures (exclusive of full enclosure). The EPA agreed that based on the conclusions of the original assessments, full enclosure of all processing activities would conservatively enable the facility to meet noise and air quality criteria at sensitive receivers on an ongoing basis. The design of the ventilation system and bag house is part of the detailed	

		design. Typical baghouse filter performance is: - Volume Capacity: 64,800m^3/hr - Dust emission <1 mg/m^3 - Air to cloth ratio: 135 m/h The design would meet all requirements under the POEO (Clean Air Regulation) 2010.	
Emissions from the shredder	The AIA should identify the use of the shredder and its contribution to emissions to air.	There is an existing timber shredder on site that was used to shred timber. The new process will not include a shredder. Large timber products such as wooden pallets will be removed in the pre sort process along with other materials incompatible with the processing plant including tyres, large ferrous, steel products, oversized waste products and large cardboard boxes.	
Emissions from paved roads	The EA should confirm whether all roads/haul roads are to be paved	As indicated above, all roads will be sealed and regularly cleaned.	Included in revised mitigation measures in Section 6 of this report.

4.3 Fire and Rescue NSW

The issues raised in Fire and Rescue NSW's submission to the proposal as exhibited are outlined and addressed in Table 4.3 below.

Table 4.3 – Response to issues raised by Fire and Rescue NSW

Aspect	Issue	Response	Reference
Fire and Rescue recommendations	Consideration should be given to FRNSW's fire safety guidelines *'Fire Safety in Waste Facilities'*.	BRO supports this recommendation and will consider all relevant guidelines in finalizing the FSS.	Included in revised mitigation measures in Section 6 of this report.
	DPE include a condition that a FSS is completed to the satisfaction of	BRO supports this recommendation and will accept a condition ensuring that the FSS is finalised to the satisfaction of FRNSW prior to construction.	Included in revised mitigation measures in

	FRNSW.		Section 6 of this report.
	Further detail regarding the types of waste and corresponding maximum storage volumes be included in the PHA and considered when assessing a 'worst credible fire' scenario as part of the FSS.	The SEPP 33 analysis in the EA concluded that a PHA was not required for the proposal. However, the final FSS will include consideration of 'a worst credible fire' scenario based on proposed waste levels and storage requirements.	Included in revised mitigation measures in Section 6 of this report.
	In preparing the FSS due consideration should be given to clauses E1.10 and E2.3 of the National Construction Code	BRO supports this recommendation and will ensure that clauses E1.10 and E2.3 of the National Construction Code are considered in the final FSS.	Included in revised mitigation measures in Section 6 of this report
	Consultation with FRNSW be undertaken in preparing the FSS	BRO supports this recommendation and will consult with FRNSW in finalising the FSS.	Included in revised mitigation measures in Section 6 of this report

4.4 Transport for NSW

The issues raised in Transport for NSW's submission to the proposal as exhibited are outlined and addressed in Table 4.4 below.

Table 4.4 – Response to issues raised by Transport NSW

Aspect	Issue	Response	Reference
Vehicle access arrangement	The EA should include consideration of potential vehicular conflicts that might arise from the existing car park	Minimal vehicle conflicts are expected given: • There would only be a maximum of 13 light vehicles/cars coming to the site in the morning and the same leaving the site in the evening; and	

	access being located next to the site access particularly given the increase in heavy and light vehicles.	• The majority of these movements would occur prior to deliveries commencing in the am or ceasing in the pm.	
Road and Traffic Safety	Recommends conditions requiring: • an independent Detailed Design Road Safety Audit prior to the issue of a construction certificate; and • a detailed Construction Pedestrian and Traffic Management Plan	The Department of Transport has not indicated why a detailed Design Road Safety Audit is required. It is assumed that it is concerned about the access intersection into the site off Miller Road. Noting that the RMS has not raised any concerns with the proposal, BRO submits that a road safety audit is not required in this instance. There have only been five reported road crashes on Miller Street (between Christina Road and the creek south of the site's access) within the last five years, none which involved access to the site. These crashes resulted in property damage with two recorded injuries and no fatalities. Similarly, Transport has not provided justification for a detailed Construction Pedestrian and Traffic Management Plan. The proposal is located in an industrial precinct with minimal pedestrian activity. However, measures to manage construction related traffic and ensure pedestrian safety will be included and implemented as part of the Construction Environmental Management Plan.	Measures to manage construction related traffic and to ensure pedestrian safety included in revised mitigation measures in Section 6 of this report

4.5 Department of Planning and Environment

The issues raised in DPE's letter dated 17 December 2018 are outlined and addressed in Table 4.5 below.

Table 4.5 – Response to issues raised by the NSW Department of Planning and Environment

Aspect	Issue	Response	Reference
Plans	The Plans as submitted should include: • The total volume of waste that can be stored within each storage bunker (m3) • Label each stage shown in the plans in accordance with the staging as shown in the process flow diagram on page 34.	The bunker size is driven by the need to accept a front end loader and allow sufficient room for the loader to manouvre. Assuming an "average loader size, the bunkers would be a minimum of 3.5 metres wide, 4 metres deep and 4 metres high giving a volume of 56 cubic metres. The relevant stages are depicted on sheets 1-4 of Appendix O in the EA.	
Soil and Water	Need to clarify if on-site detention tank is proposed to be utilized to contain firewater	The on-site detention tank is not designed to contain fire water. The polluted water detention tank is the proposed storage mechanism for fire water.	Included in revised mitigation measures in Section 6 of this report
	Need to clarify why it is proposed to use leachate catchment tank for fire services.	The polluted water detention tank was originally designed and intended for fire water runoff and catchment. However, given their design capacity, BRO will also use the tank to store polluted water from the enclosure noting that: • there will be minimal polluted water generated inside the enclosure; and • no stormater will be conveyed to the polluted water detention tank.	
	Need to confirm how leachate is transferred to	Polluted water and fire fighting water will be conveyed to the polluted water tank via a series of slope and pipe	

	leachate tank	diversions. Water runoff generated during a particular event such as a fire will be diverted to the polluted water tank and not the onsite detention tanks.	
	More detail required on management of leachate in general including pump out requirements and disposal	Prior to construction BRO will engage an environmental waste services company to develop a Polluted Water Management Plan which will include pumping requirements and disposal. Specific management pertaining to onsite filtration and pumping will also be provided to DPE prior to construction detailing a complete Integrated Leachate/Polluted Water Pumping System.	The need for a Polluted Water Management Plan (PWMP) Prior to issues of construction Included in revised mitigation measures in Section 6 of this report.
	Need to provide finished floor levels	Ground floor levels are provided in Stormwater Drawings DA-STW 101 to 105 in the EA.	Levels are also identified in updated drawings and site plans provided in Appendix A.
Traffic and Transport	Detail how final products will be loaded onto delivery trucks	All final products will be loaded by either front end loader or forklift.	
	More detail required relating heavy vehicles transporting finished products and their maneuverability within building	The ground floor plan included in Appendix A of this report identifies the receiving vehicle flow path and the dispatch vehicle flow path. There is over 50 metres in distance (minimum) between the 'bays' and the receiving vehicle flow path providing more than adequate maneuverability for a 19 m semi-trailer (max). Dispatch vehicles will drop below the receiving vehicle flow path and be loaded before re-joining the existing flow path, always in a forward direction.	Updated Ground Floor Plan provided in Appendix A.

	Detail measures to avoid movement conflicts between waste delivery and finished product dispatch	The dispatch flow path identified on the ground floor plan has been designed so dispatch vehicles have no effect on receiving vehicles, and further, enter the site, are loaded and exit the site in a forward direction (refer to Figure 1 and Appendix A of this report).	Updated Ground Floor Plan provided in Appendix A.
Waste Management	Provide a detailed breakdown of incoming waste stream	Based on a review of a number of large scale C&D processing operations within the metropolitan area, it has been assumed that total waste input by % of type of waste will be as follows: • Asphalt - 0.8% • Brick/Concrete Mix - 9.2% • Clean Heavies - 8.8% • General Solid Waste -Recyclable - 2.4% • Green Waste - 0.1% • Mixed Heavy Building & Demolition Waste – 33.8% • Mixed Light Recyclable Waste - 0.05% • Mixed Medium Building & Demolition Waste - 19% • Mixed Waste - 25% • Paper / Cardboard - 0.05% • Plasterboard - 0.05% • Steel - 0.2% • Timber - 0.2% • NRECW - 0.1% • VENM - 0.2% • VENMS - 0.1% Note: Based on the assumption that most of the waste is demolition waste with a low percentage of timber.	
	More detailed inspection protocol to address asbestos not simple reliance on EPA Protocol	It is paramount that BRO protect the health of its workers and the integrity of the process. Subsequently, the facility will not accept hazardous materials. Any trucks containing non-compliant waste would be directed off-site. Heavy vehicles would be pre-screened at the entry weighbridge to determine	

		whether the load is generally compliant for acceptance at the facility. Any load deemed non-compliant would exit the Proposal site via the processing shed and the exit weighbridge and the wheel wash. Key procedures for managing non-conforming waste will be outlined in the Operational Environmental Management Plan (OEMP), and are likely to include: • Inspecting incoming waste prior to its processing to minimise the risk of non-conforming material in processed and recovered waste materials; • Waste tipped onto the tipping floor would be spread to approximately 100 mm thick so that each load can be visually inspected; • Rejection of waste loads that may contain non-conforming material to prevent acceptance of non-conforming materials; • Recording details of non-complying waste generators; and • Review of the waste processing systems in line with EPA requirements. In the event that non complying materials such as ACM are found it will be managed in accordance with the EPA's protocol for managing asbestos (Appendix O of EA) specifically: • take a photograph of the asbestos and its location on the floor; • immediately cease applying, removing or disposing of waste from the supplied waste; • immediately restrict access to the waste with a visible barrier around the area of supplied waste; • provide signage identifying that the waste is contaminated with asbestos; • ensure that no dust or runoff is	

		generated from the asbestos; • conduct a careful visual inspection of the surface of the supplied waste to identify any further asbestos and, if any is observed, take further photographs as set out above; • sample and test the suspected asbestos at a NATA-accredited laboratory; and • notify the EPA by phoning 131 555 within five days of the suspected asbestos find and provide documentary evidence of how Sections 3-5 of this protocol have been complied with. In the event that BRO is able to demonstrate compliance with the above including the submission of a completed Asbestos Report to the satisfaction of the EPA, BRO will: • remove and lawfully dispose of all the waste identified in the Asbestos Report in accordance with the proposed timelines for the removal of that waste contained in the OEMP; and • provide a disposal notice to the EPA within seven days of the final disposal of the said asbestos waste.	
Noise	Need to update the NIA to reflect the current design of shed	At a meeting with DPE and EPA on 30 July 2018, the EPA raised concern regarding the ability of the then proposed partial enclosure to consistently meet amenity criteria, particularly in relation to air and noise. Subsequently, BRO advised at the meeting that it would construct a building that would fully enclose all processing activities. At the same meeting, and on the basis that BRO had agreed to the full enclosure of all processing activities, the EPA advised that it was not necessary to revisit the air and acoustic	

		modelling given that the original noise and air quality assessments concluded that amenity criteria could be met subject to additional management measures (exclusive of full enclosure). The EPA agreed that based on the conclusions of the original assessments, full enclosure of all processing activities would conservatively enable the facility to meet noise and air quality amenity criteria at sensitive receivers on an ongoing basis.	
	Need to update EA to include a plan/figure of preferred noise management measures.	As above.	
Contamination	Need to provide depths of excavation for stormwater detention basin and footings for main building	The assessment undertaken for the original approval found that the existing subgrade should not be excavated due to the presence of contaminated materials. The assessments that support the current modification application also found that while the site was fit for the intended use, care would need to be taken when undertaking any excavation on site. At this stage the exact depth of the detention and polluted water tanks and piers for the enclosure are unknown. This will only be confirmed once detailed design of the enclosure is complete. These design details will be incorporated into both the Contamination Management Plan (CMP) and the Construction Environmental Management Plan (CEMP) which must be prepared and approved by the Secretary (in consultation with EPA) prior to construction commencing. At this stage a consolidated map of known contaminants which includes information garnered through the	Included in revised mitigation measures in Section 6 of this report

		detailed design process will be provided as part of the Contamination Management Plan. Furthermore, appropriate techniques will be adopted when constructing the proposed enclosure to ensure contaminants are handled correctly. Construction management measures will be identified in the CMP and CEMP to ensure contaminants are dealt with appropriately including overlay of design, due diligence and protocols for dealing with suspect material.	
	A plan showing the location and depth of contamination hotspots as well as location of waste processing building footings is required	As identified above.	
	The EA needs to provide more detail on construction stockpiles removal activities including quantum of soil to be excavated, depths, management measures and destination of material.	This information will be included in the construction environmental management plan (CEMP) to be submitted and approved by the Secretary prior to construction.	Included in revised mitigation measures in Section 6 of this report
Air quality and Odour	Need to clarify use of shredders and potential for noise and dust emissions	There is an existing timber shredder on site that was used to shred timber. The proposed process does not include a shredder. Large timber products such as wooden pallets are removed in the pre sort process along with other materials incompatible with the processing plant including tyres, large ferrous, steel products, oversized waste products and large cardboard boxes.	

<table>
<tr>
<td></td>
<td>EA should include an analysis of the predicted air quality impacts against the original predictions undertaken in the original AQIA prepared by Heggies Australia dated 7 November 2006</td>
<td>A comparison between the Heggies Australia assessment dated 7 November 2006 and the air quality assessment for the current project has been conducted.

It should be noted that the two projects are different in that the modification proposes the full enclosure of all processing activities. The table below shows the comparison of the PM10 worst case cumulative results for the two projects at the closest residential receivers.

The results indicate that under worst case operations, the 24-hour PM10 criterion of 50 µg/m^3, is not exceeded at any sensitive receptor locations for both projects, and that the proposed modification will result in lower dust emissions than that predicted for the original proposal.

<table>
<tr><th>Location</th><th>Heggies Report</th><th>Current Project</th><th>Criteria</th></tr>
<tr><td></td><td>PM10 (µg/m^3)</td><td>PM10 (µg/m^3)</td><td>PM10 (µg/m^3)</td></tr>
<tr><td>Waldron Rd</td><td>48.9</td><td>40.3</td><td>50</td></tr>
<tr><td>Goodstate Pl</td><td>49.3</td><td>39.4</td><td></td></tr>
</table>

It should be noted that through negotiations with the EPA, BRO have decided to construct a building that would fully enclose all processing activities. As such, dust emissions from the site would be expected to be lower than reported in the EIS.</td>
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<td>Need to provide details on how odour control system would be retrofitted if required</td>
<td>Odorous materials such as putrescible waste will not be accepted at the site. A review of the proposed site activities has not identified any activities with the potential to generate odour. Furthermore, loads will be visually checked at the weighbridge and then visually checked when materials are dumped onto the tipping floor of the</td>
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		processing building. If any loads are found to contain any prohibited materials, such as putrescible waste, it would be immediately loaded back onto the delivering vehicle and removed from the site. Subsequently, the site is unlikely to generate any significant odour. Given the very low potential for odour generation from the site activities, the potential for odour nuisance at surrounding sensitive receptors is concluded to be extremely low.	
Flooding	Need for an assessment of the proposal against the *Bankstown DCP – Catchments Affected by Flooding*	The site is Classified as Industrial or Commercial Land with a Medium Flood Risk (refer to Section 4.5 of EA and page 9, schedule 5 of Appendix J of EA). Bankstown Council DCP 2015 - Part B12 makes the following recommendations about Medium Flood Risk Land: ***"2.2.2 Medium flood risk precinct Medium Flood Risk Precinct is land below the 100–year flood that is not subject to a high hydraulic hazard and where there are no significant evacuation difficulties.*** ***There would still be a significant risk of flood damage in this precinct. However, these damages can be minimised by the application of appropriate development controls."*** The relevant controls identified in Section 4.5 of the EA and Appendix J were sourced from Canterbury-Bankstown Stormwater System Report (Ref: WP-SIA/156/2017) Schedule 5. When read in conjunction with part B12 of the DCP, it is evident that a flood impact assessment is not required and that the controls listed in Section 4.4 of the EA and Appendix J can easily be met. Furthermore, these conditions are largely concerned with habitable space	

		and flood evacuation routes. No habitable space is proposed in the EA and flood evacuation is easily achieved given the existing road network and the height and location of the premises. Given the above, the hydrology assessment concludes that: ***"It is noted that Council's site-specific Stormwater System Report takes precedence over the general Council guidelines and that no additional flood study is considered necessary".***	
Construction	Need for location of construction stockpiles	The location of construction stockpiles will be provided in the Construction Environmental Management Plan to be submitted and approved by the Secretary prior to construction commencing.	Included in revised mitigation measures in Section 6 of this report
Statement of Commitments (SoC)	The SoC is for DA (MP 06_0052 not the subject modification request. Please update.	In preparing the EA the need for a Statement of Commitments (SOC) was considered. It was concluded that the SOC in this instance adds little value to the outcome and hence was no longer justified given: • The SOC by and large duplicates the approval; • There is the potential for inconsistency between the two documents; and • SOC's are unique to Part 3A which has now been repealed. Subsequently, as part of the modification proposal, the SOC has been reviewed and any provisions relevant to the ongoing operation of the facility incorporated into the draft modified approval attached as Appendix A to the EA. The Department had previously agreed to this approach.	

Impact on Adjoining Business	In term of access the EA needs to demonstrate how the proposal has considered the operation of the business to the north	The Logistics Sales and Hire business is a separate sub tenant to BRO. It has not raised any concerns with the proposed application. When BRO was operating at full capacity, the two businesses operated efficiently using the same driveway. The ground floor plan has been amended to identify the width of the access driveway (12.85 metres) which is considered to be more than sufficient to accommodate vehicles entering and exiting both sites side by side.	

5. RESPONSE TO COMMUNITY SUBMISSIONS

This section provides a summary of public submissions including those provided by organisations and members of the community. As described in Section 3, issues raised in submissions have been grouped and responded to accordingly in Table 5.1 below.

Table 5.1 – Response to issues raised by the Community

Aspect	Issue	Response	Reference
Non compliance with planning approval /pollution control license.	Previous noise and dust emissions from the site	BRO acknowledges that the facility has been the subject of ongoing regulatory non-compliance matters since 2010. The majority of these matters (including the 2014) fire where associated with the previous owner /operator of the facility and inherited when BRO became the new operator in late 2015. However, BRO submits that the most appropriate way to address the compliance issues in the long term is to develop a contemporary and sustainable resource recovery facility as described in this modification proposal. Together with a strong commitment to environmental and amenity performance, the construction of a 'state of the art' fully enclosed facility on hardstand areas with appropriate water management would resolve residual on-site and off-site environmental and amenity impact issues, whilst contributing to the social and economic benefit of waste recycling. In the meantime BRO's commitment to compliance is demonstrated by the current measures that BRO has adopted in the interim including the cessation of all processing activities on site.	
	2014 fire and impact on residents	While BRO was not the operator at the time, as part of the current modification application, BRO has prepared a preliminary Fire Safety Study. A final Fire Safety Study will be prepared and submitted to the Secretary of the DPE prior to construction commencing	

		which will identify the proposed implementation of contemporary fire management and fire fighting management measures prepared and to be adopted in consultation with Fire and Rescue NSW.	
	Trucks on residential streets	BRO is committed to implementing measures to ensure that Gurney Road is not used to access the site. Where practical these measures would include contractual arrangements and the adoption of a driver Code of Conduct. As already mentioned, a more practical and equitable solution would be to impose load limits along Gurney Road given the number of BRO related trucks expected to use Gurney Road would be insignificant compared to total heavy vehicles from other sources and destinations.	Included in revised mitigation measures in Section 6 of this report
Dust emissions	Dust emissions and potential health implications particularly for nearby residents, schools and childcare facilities	As detailed in Section 4 of the EA, a number of engineering controls to minimise the generation and dispersion of dust have been incorporated into the design of the proposal to ensure compliance with relevant criteria at sensitive receptors. These include but are not limited to: • With the exception of vehicle movements, the full enclosure of all processing activities within a purpose built contemporary processing shed; • Loaded vehicles travelling to and from the site will be required to be covered while in transit; • Apart from landscaped areas, the site will be sealed as either hardstand areas or sealed roadways and regularly cleaned to avoid windblown dust or the generation of dust from vehicles and equipment movements; • Dust suppression systems will be installed within the processing shed	Included in revised mitigation measures in Section 6 of this report.

		and will include a sprinkler and misting system; • Dust ventilation system which includes a baghouse to filter dust particles; and • The existing wheel wash will continue to operate which is located near the existing weighbridge to ensure dirt is tracked from the site. An assessment of air quality impacts associated with the modified proposal is included in Section 4 and Appendix F of the EA. The assessment found that the cumulative annual average ground level concentrations of dust (both PM10 and PM2.5) would comply with relevant impact assessment criteria at all sensitive receptors. On this basis, and noting that asbestos related materials will not be accepted at the site, the proposal is unlikely to have any unacceptable health related impacts at sensitive receivers including nearby residences, schools and childcare centres. It should be noted that through negotiations with the EPA, BRO have decided to construct a building that would fully enclose all processing activities. As such, dust emissions from the site are expected to be lower than reported in the EIS.	
	Potential for airborne dust to contain asbestos	Asbestos will not be accepted at the site. Protocols will be applied to ensure unforeseen asbestos material found in incoming waste is addressed consistent with EPA Guidelines.	
Odour and noise	Concern over odour emissions	Odorous materials such as putrescible waste will not be accepted at the site. A review of the proposed site activities has not identified any activities with the potential to generate odour. Materials would firstly be visually inspected at the inbound weighbridge and inspected again dumped onto the tipping floor of	

		the processing building. If any loads are found to contain any prohibited materials, such as putrescible waste, it would immediately be loaded back into the delivering vehicle and removed from the site. Given the above, the site is unlikely to generate any significant odour. Given the very low potential for odour generation from the site activities, the potential for odour nuisance at surrounding sensitive receptors is concluded to be extremely low.	
	Concern over noise emissions	An assessment of the acoustic impacts associated with the modified proposal is included in Section 4 and Appendix F of the EA. The assessment was conducted consistent with EPA acoustic guidelines. The proposal as identified in the EA included significant noise mitigation including noise barriers and a partial enclosure of the processing plant. The assessment found that the Project is predicted to comfortably comply with noise goals at all sensitive receivers, at all times of the day. On this basis the proposal is unlikely to have any unacceptable acoustic impacts at sensitive receivers. It should be noted that through negotiations with the EPA, BRO has decided to construct a building that would fully enclose all processing activities. As such, noise emissions from the site would be expected to be lower than reported in the EA resulting in a significant improvement to past practices and of benefit to the wider community.	
Significant increase in truck	Impacts from increased truck numbers	The traffic impact analysis found that the upgrade would generate an additional 22 heavy and 40 passenger vehicle movements per hour during the	

movements		morning and evening peak periods. This is similar to the predicted level of development traffic assessed for the original approved development. An analysis of key intersections concluded that there would be sufficient capacity to accommodate the expected traffic. It was concluded that existing intersections would continue to operate satisfactorily with similar performance to that found under existing and future base case conditions. Existing access and parking arrangements were also found to be adequate. While the proposal would result in some queuing, it would be contained well within the site boundaries. Neither the Department of Transport nor RMS raised any issue with the traffic impact assessment or the increase in heavy vehicle movements. Issues raised by Council have been addressed above.	
	Trucks using residential streets	BRO has agreed to adopt measures to ensure that Gurney Road is not used to access the site. Where practical these measures would include contractual arrangements and the adoption of a driver Code of Conduct.	Included in revised mitigation measures in Section 6 of this report
Suitability of the site for a resource recovery facility	Proximity of operations to residential properties, schools and childcare facilities and overall health risks	The principle health risk for a resource recovery facility is dust generation. As detailed in Section 4 of the EA, a number of engineering controls to minimise the generation and dispersion of dust have been incorporated into the design of the proposal to ensure compliance with relevant criteria at sensitive receptors. These include but are not limited to: • With the exception of vehicle	

		movements, the full enclosure of all processing activities within a purpose built processing shed; • Loaded vehicles travelling to and from the site will be required to be covered while in transit; • Apart from landscaped areas, the site will be sealed as either hardstand areas or sealed roadways and regularly cleaned to avoid windblown dust or the generation of dust from vehicles and equipment movements; • Dust suppression and ventilation systems will be installed within the processing shed and will include a baghouse, and sprinkler and misting system; and • The existing wheel wash will continue to operate which is located near the existing weighbridge to ensure dirt is tracked from the site. Furthermore, an assessment of air quality impacts associated with the modified proposal is included in Section 4 and Appendix F of the EA. The assessment found that the cumulative annual average ground level concentrations of dust (both PM10 and PM2.5) would comply with relevant impact assessment criteria at all sensitive receptors. On this basis the proposal is unlikely to have any unacceptable health related impacts at sensitive receivers including nearby residences, schools and childcare centres. It should also be noted that through negotiations with the EPA, BRO have decided to construct a building that would fully enclose all processing activities. As such, dust emissions from the site would be expected to be lower than reported in the EIS.	

	Impact of operations on adjoining business interests	The modification will result in a significant improvement in overall performance, particularly environmentally and from a safety and amenity perspective. The assessment has demonstrated that the construction and operation of the upgraded facility will meet key environmental, land use safety and amenity criteria beyond site boundaries resulting in minimal impact on adjoining land uses including adjoining business interests. Importantly, the upgrade will lead to a significantly improved regulatory compliance outcome.	

6 REVISED COMPLILATION OF MITIGATION MEASURES

The EA identified a range of environmental impacts and recommended management and mitigation measures to avoid, remedy or mitigate residual impacts. These mitigation measures have been revised in response to submissions received during the public exhibition period, and generally to strengthen environmental controls during both construction and operation of the modified facility.

6.1 Construction Environmental Management

Construction Environmental Management Plan (CEMP)

BRO will prepare and submit to the satisfaction of the Secretary a CEMP which will include but not be limited to:

- An incident response plan to be followed in the event of a spill, including the notification requirements and the use of absorbent material to contain the spill;
- Sediment and erosion controls and other management procedures to minimise contaminants in site surface water discharge including the management and removal of gross pollutants;
- Acid sulphate soil identification protocols;
- Traffic management measures to be adopted during construction including onsite speed limits (<10kph) and pedestrian routes around and through the site;
- Full details of materials to be excavated, depths, stockpiles and proposed disposal; and
- An Environmental Engineer to be contacted upon the encounter of any unexpected finds with work to cease immediately within the area until such time that the Environmental Engineer determines its safe.
- The implementation of additional management measures to minimise dust during construction including but not limited to:
  - The premises being maintained in a condition that minimises and prevents the emission of dust including the limitation of exposed soil to those areas being worked on and disturbed areas to be stabilised as soon as practicable to avoid dust emissions;
  - All vehicles on-site limited to a speed of 10 kilometres an hour;
  - All construction trucks entering and leaving the premises with covered loads; and
  - All construction vehicles leaving the premises having been cleaned of dirt, sand and other materials to avoid tracking the materials onto public roads.
- An ongoing surface water monitoring program to measure the success of pollution mitigation measures to be implemented.

Importantly, the CEMP will be read in conjunction with the required Contamination Management Plan (CMP) which is to be prepared and implement3ed prior to construction.

As part of the CEMP, BRO will also prepare Construction Noise and Vibration Management Plan which will:

- Ensure that vibration resulting from construction does not exceed the continuous or impulsive vibration criteria in the EPA's Assessing Vibration: A Technical Guideline (February 2006) at residential receiver;
- Ensure that construction hours are complied with being 7am to 6pm Monday to Friday, 8am to 1pm Saturday, and nil on Sunday and Public Holidays.
- Ensure regular maintenance of machinery to minimise noise emissions;
- Include consultation with residents and business owners immediately adjacent to proposed works including letter box drops and verbal communication prior to works commencing and at regular intervals during construction;
- Include noise monitoring during construction activities predicted to generate maximum impacts;

- Confine maintenance to standard daytime construction hours and where possible, away from noise sensitive receivers; and
- Ensure all contractors and staff undergo noise awareness training.

The **Construction Noise and Vibration Management Plan** must also include details of a community complaints line that will be available throughout the construction activities. Records of all community complaints will be maintained on an up-to-date complaints register and will include:

- Date and time of the complaint;
- The means by which the complaint was made (telephone, mail or email);
- Any personal details of the complainant that were provided, or if no details are provided, a note to that effect;
- The nature of the complaint;
- Any actions taken by the construction contractor in relation to the complaint, including any follow up contact with the complainant and the timing for implementing action; and
- If no action is taken by the construction contractor in relation to the complaint, the reason why no action was taken.

6.2 Operational Environmental Management

BRO is committed to operating the modified facility consistent with its applicable planning approval and pollution control license.

BRO will process no more than 910 tonnes of building and construction waste (including metal) per day or 250,000 tonnes per annum. To ensure compliance with the 910 tonnes per day limit, BRO will maintain a record of all incoming and outgoing trucks, nature of loads, weight of load and time in/out. All details will be recorded and made available to the consent authority on request.

The modified development will operate:

- Monday to Friday 7:00am to 6:00pm
- Saturday 8:00am to 1:00pm
- Sunday & Public Holidays: Nil

With the exception of non-intrusive and non audible activities which can be undertaken outside these hours. The operation of heavy machinery is only able to occur between 7am-5pm Monday to Friday.

BRO will ensure that the new enclosure is constructed in accordance with the relevant requirements of the BCA. BRO will also ensure that all plant and equipment used for the upgrade is maintained and operated in a proper and efficient manner.

BRO will construct a waste resource recovery facility comprising:

- A fully enclosed shed comprising contemporary inspection, sorting, processing and storage of waste products;
- Full hardstand area and sealed roads accessing the site and shed;
- Designated unloading/loading areas, sorting and storage facilities for both incoming waste and finished product;
- Extensive landscaping to soften the appearance of the shed;
- Dust emission controls including a ventilation system (baghouse) and water sprays/misters; and
- Separate clean (stormwater) and polluted (leachate/fire fighting) water systems.

Operational Environmental Management Plan (OEMP)

Prior to operations commencing, BRO will prepare and submit to the satisfaction of the Secretary an OEMP which will include but not be limited to:

- Non conforming waste procedures consistent with EPA Guidelines to minimise the risk of non-conforming material in processed and recovered waste materials in particular asbestos;
- An incident response plan to be followed in the event of a spill, including the notification requirements and the use of absorbent material to contain the spill;
- A refueling procedure that will be implemented for all refueling activities undertaken on site;
- Measures to ensure that any leachate or fire fighting water generated will be conveyed to the polluted water detention basin and pumped out by an authorised liquid waste disposer;
- Protocols for inspection of stormwater detention basins following heavy rainfall events and the where necessary the subsequent removal of litter and sediment;
- Maintenance measures aimed at ensuring the integrity of both the clean and polluted water systems including regular inspection and repairs where necessary;
- The regular sweeping of hardstand areas including roadways. Where wash down of the hardstand areas is required, the sediment laden water should be prevented from entering stormwater pits so that sediment can be captured above ground and managed accordingly; and
- An ongoing surface water monitoring program to measure the success of pollution mitigation measures.

Operational Noise Management Plan (ONMP)

Prior to operations commencing BRO will prepare and submit to the satisfaction of the Secretary a ONMP. The Plan will include but not be limited to:

- Requirements for machinery engine covers to be kept closed, equipment well maintained and silencers/mufflers used as appropriate, including routine maintenance for major items of operational equipment that contribute to operational noise emissions;
- Requirements for on-going maintenance of fixed and mobile plant in accordance with manufactures specifications;
- Details of awareness training for all staff and contractors in environmental noise issues including:
  - minimising the use of horn signals and maintaining to a low volume;
  - consideration of alternative methods of communication;
  - avoiding any unnecessary noise when carrying out manual operations and when operating plant; and
  - switching off any equipment not in use for extended periods.

Operational Air Management Plan (OAMP)

Prior to operations commencing BRO will prepare and submit to the satisfaction of the Secretary a OAMP. The Plan will include details of control measures to manage dust including:

- Measures to ensure that all plant to be well maintained and comply with EPA emission standards;
- Ensuring that Dust deposition monitoring continues consistent with BROs EPL;
- The full enclosure of all processing activities to reduce wind erosion and dispersion of dust;
- Details relating to the operation of the mist sprays and dust extraction system including:
  - Measures to ensure that dust mitigation equipment is available and operating at the required frequency;
  - Cclear direction to equipment operators concerning speed of operation (s) and duration of watering; and

- Staff and sub-contractors being appropriately trained to ensure that they are aware of air quality /dust suppression techniques to be used onsite.
- Ensuring the use of hoppers and bays to store materials are appropriately managed.

The Plan should also include the following additional measures to minimise dust including details relating to:

- How the mist system will be used to control dust from the unloading/loading of vehicles or the waste process including screens and the conveyor circuit;
- Details regarding the cleaning of the internal and external hardstand areas including roadways through either sweeping or washing;
- Details of visual monitoring to ensure air quality objectives are being met. If there is visible dust being generated then additional measures to be implemented would include:
  - identification of activities occurring at the time dust is being generated;
  - identify the activities that were most likely contributing to the dust being generated;
  - review site works and environmental controls in place for this activity; and
  - implement an agreed alternative to more adequately control dust generation.
- A Complaints register. The Site Manager will maintain a complaints register. Any complaints will be investigated. Complaints will receive a verbal response as soon as possible.

Operational Traffic Management Plan (OTMP)

Prior to operations commencing, BRO will prepare and submit to the satisfaction of the Secretary an Operational Traffic Management Plan (OTMP) for the upgrade which will:

- Be prepared in consultation with Council;
- Include measures aimed at ensuring road safety and network efficiency including the implementation of a 5kph speed limit onsite;
- Include heavy vehicle routes to be used to access the site (noting that residential streets including Gurney Avenue are to be avoided), access and loading and unloading arrangements including measures ensuring all vehicles enter and leave the site in a forward direction;
- Measures aimed at minimising conflict between heavy vehicle and light vehicles accessing the site;
- Include a Driver Code of Conduct which should cover but not be limited to: licensing, speed limits, access routes, site inductions, operational hours, on site communications, incidents, behaviour, load covering, non- conforming waste, load limits, mass limits, wheel washing, weighbridges and entry and exit;
- Include onsite traffic control measures; and
- Include parking for 35 light vehicles (including disabled parking to AS).

Soil and Water Management

The upgrade will consist of separate clean (stormwater) and polluted (leachate/firefighting water) systems which will be fully detailed in both the CEMP and OEMPs. Construction related soil and water controls will be detailed in the CEMP and include:

- Sediment fencing on the low side of earthmoving operations;
- Areas of exposed soil will be limited to those being worked;
- Disturbed areas to be stabilised as soon as practicable;
- Regular monitoring of soil movement characteristics and cleaning of sediment deposits;
- Regular dewatering of low points in the excavation works; and
- Security fencing around the area of constructions works.

For operations the Stormwater quality improvement measures will include:

- 4 x 10m3 rainwater tanks to collect roof water for non-potable demand;
- Ecosol litter baskets to collect gross pollutants; and
- An Ecosol Storm Pit Class 2_20L filtration device.

BRO will ensure that all polluted water (including leachate and fire fighting water) collected is appropriately diverted/piped and stored in a leachate sump and disposed of offsite at an appropriately licensed facility.

Operationally, maintenance measures aimed at ensuring the integrity of the clean water (stormwater) and polluted water systems (collection and storage) will include:

- regular inspections and cleaning of detention systems and leachate sumps;
- internal inspections of rainwater tanks;
- The regular sweeping of hardstand areas including roadways. Where wash down of the hardstand areas is required, the sediment laden water should be diverted to the dirty water system; and
- An ongoing surface water and leachate monitoring program to measure the success of pollution mitigation measures to be implemented.

Contamination Management Plan (CMP)

BRO will prepare and submit a CMP to be prepared to the satisfaction of the Secretary in consultation with the EPA to support the management of onsite contamination during both construction and operational activities. The CMP will:

- Establish best practice procedures for the identification and management of contaminated soil/water if encountered during construction or operations;
- Have a key objective of ensuring that impacts from the disturbance of contaminated soils/water are minimised through appropriate management;
- Provide for pre construction testing to determine the most appropriate form and location of structural support for the enclosure and handling requirements with support locations informing the final contamination map identified below;
- Include a consolidated map identifying existing areas of known contaminants that require avoiding or additional mitigation measures particularly during construction and establishment of landscaping; and
- Include an unexpected finds protocol. Adherence to the CMP and the unexpected finds protocol will help ensure full compliance with the relevant legislative requirements, conditions of approval and EPA requirements, and enable focused personnel training on contaminated land management for the site.

Polluted Water Management Plan

Prior to the commencement of operations, BRO will submit for the Secretary's approval a Polluted Water Management Plan prepared in consultation with the EPA. The Plan will detail but not be limited to the following:

- Full details of the polluted water systems including collection, piping, diversion where necessary (i.e. fire fighting water) pumping and disposal; and
- Details of polluted water monitoring and characterisation.

Visual Amenity

Prior to construction commencing the Proponent is committed to preparing a Landscape Plan to the satisfaction of the Secretary. It is intended that the Plan would:

- Include consultation with Canterbury-Bankstown Council;
- Take into consideration the final Fire Safety Study in particular the need for 6m perimeter access around the enclosure;
- Include consideration of Bankstown DCP 2012;
- Identify trees to be retained;
- Include a building materials list for the Resource Recovery Building; and
- Include details of landscaping, in particular deep root landscaping along the southern and eastern boundaries.

BRO is committed to ensuring all external lighting associated with the modification is appropriately mounted, screened and directed in such a manner so as to not create a nuisance to the surrounding environment, properties and roadways. All lighting will be consistent with Australian Standard *AS 4282 1997.*

Where not exempt and complying, the Proponent will install any new signage in consultation with Council and shall comply with the provisions of *State Environmental Planning Policy 64 – Advertising and Signage*, as relevant.

Hazards and Fire Safety

BRO will prepare and submit a detailed Fire Safety Study prior to construction commencing which will include:

- Consideration of FRNSW's fire safety guideline - *Fire Safety in Waste Facilities*;
- Further information on types of waste and maximum storage volumes to enable the assessment of a 'worst credible fire' scenario;
- Consideration of clauses E1.10 and E2.3 of the National Construction Code;
- Consultation with FRNSW in finalizing the FSS; and
- Identify that the polluted water detention tank is designed to accommodate fire fighting water.

BRO will also provide the following onsite as part of the upgrade:

- The provision of a dedicated dangerous goods storage facility within the main building;
- A fully bunded 15,000 litre diesel smart tank;
- Continuous perimeter access around the enclosure for emergency vehicles which is integrated with site landscaping requirements;
- The provision of external fire hydrants consistent with the relevant provisions of BCA Clause E1.3 and AS 2419.1-2005 and designed to provide 50 L/s of flow at the required operating pressures;
- A fire hose reel system to serve the building in accordance with the relevant provisions of BCA Clause E1.4 and AS 2441-2005;
- A fire sprinkler system throughout the building in accordance with the relevant provisions of BCA Specification E1.5 and AS 2118.1-1999;
- A fire sprinkler system that automatically activates a building occupant warning system;
- Portable fire extinguishers, a fire control centre, and an automatic smoke exhaust system;
- A minimum 3m exclusion zone around the operational stockpile and the appropriate concrete separation of the individual storage bays that contain the different waste products;
- The retention of contaminated water run-off; and
- Measures to ensure all external areas of the site are level, clear of all rubbish and combustible materials, and enclosed by fences or walls constructed of non-combustible construction.

7 CONCLUSION

To permanently address the non-compliance issues that has affected the operation of the Chester Hill Resource Recovery Facility, and following the cleanup of the site, BRO seeks approval to develop a $20m contemporary, state of the art resource recovery facility which includes the hardstand of the site and the erection of a fully enclosed building with contemporary environmental management controls to house processing activities.

The Environmental Assessment (EA) for the Modification was publicly exhibited between 21 November 2018 and 12 December 2018. This RtS has been prepared in accordance with the Environmental Planning and Assessment Regulation 2000, to address issues raised by both government agencies and the community during the public exhibition of the EA. This RtS provides further information and justification for the Modification in order to respond to and address the submissions received.

The mitigation measures provided within the EA have also been updated to respond to the submission received (refer to Section 6 of this RtS). Overall, the assessment identifies that the Modification would, subject to the implementation of updated mitigation measures, meet relevant environmental, amenity and safety standards resulting in significantly improved environmental performance whilst at the same time making a positive contribution to resource recovery rates promoted by the State Government, the construction industry, and the local and regional economy through capital investment and employment.