APPENDIX B

APPLICANT'S MANAGEMENT AND MITIGATION MEASURES

Key issue	Management measure	
General	A public hand unloading area has been established outside of the northern end of the main processing shed to separate contactor and public tipping for safety reasons. Only light vehicles and trailers are permitted in the public hand unloading area. No heavy vehicles are permitted in this area.	
	Currently unsealed areas within the site that are not part of the 'Area to remain unsealed and vegetated' will be progressively sealed with concrete or asphalt.	
	Trucks delivering or picking up stored items will access the storage compounds on sealed access roads.	
	Lighting in the southern car park will be designed to comply with AS 1158.	
Rubbish and light waste	All light waste (including light waste within co-mingled waste) will be tipped inside the main processing shed.	
	The access road between McIntosh Drive and the recycling facility site will be inspected daily to ensure that there is no rubbish is left along the access road (most likely food and beverage waste from drivers).	
	The site boundary fences will be inspected daily and any wind-blown light waste within the site will be removed and sent to the main processing shed.	
	Any rubbish found along the access road between McIntosh Drive and the recycling facility site will be removed promptly.	
Security	The site's security measures will continue to be implemented, including deployment of guards when the site is not operating (including at night), use of remotely accessed security cameras and maintenance of fences and gates.	
Air quality	The following management measures will continue to be implemented to minimise air quality impacts:	
	 all existing sealed/hardstand areas will be retained; 	
	water sprays will be used over any other bare or unsealed surfaces that have not yet been sealed and have the potential to generate unacceptable amounts of dust;	
	 all vehicle movements will be restricted to designated routes marked out by appropriate signage and fencing using sealed internal roads; 	
	 access to unsealed areas will be prevented; 	
	 water sprays will be used at stockpiles, crushing and screening plants and during material handling as necessary; 	
	 a wheel wash in the weighbridge area will be used if required to clean truck tyres to prevent mud or sediment being carried to and deposited on the access road (and public roads); and 	
	 existing sheds will be used to undertake particulate generating activities where possible. 	
	Irrigation sprays will only used when the surface of a stockpile is dry and irrigation will be ceased when the surface is wet.	
	Dust and odour control procedures, including current monitoring requirements, are detailed in the EMP (see EIS Appendix D).	
Greenhouse gases	The following management measures will continue to be implemented to minimise greenhouse gases emissions:	
	 on-site equipment will be regularly maintained and serviced to maximise fuel efficiency; 	
	 vehicle kilometres travelled on-site will be minimised; 	
	 energy efficiency will be progressively reviewed and, where necessary, changes will continue to be implemented throughout the life of the operations. 	
Noise	The following management measures will continue to be implemented to minimise noise emissions:	
	 operations will be limited to the hours and types of operation approved; and 	
	 machinery will be correctly operated and maintained. 	
	Regular noise monitoring is conducted by the Site Leading Hand/Supervisor and any noise complaints received are referred to the Site Leading Hand/Supervisor and to the Site Manager.	
	The two mobile screens in the segregated heavy waste processing and stockpiling area, the crusher/screen and the shredder will be operated no further south than 130 m from the northern site boundary.	

The two mobile screens in the segregated heavy waste processing and stockpiling area will not be operated simultaneously with the crusher/screen and shredder.

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Traffic

Site generated traffic will continue to be formally directed to continue to travel only via Steel River Boulevard and McIntosh Drive when travelling within the Steel River estate.

Benedict Recycling will continue to maintain the access road between McIntosh Drive and the Recycling Facility site in a fit and proper condition and to a suitable standard, repairing it when required at no cost to Ausgrid. This will include repairing any minor areas of surface rutting using 50 mm hot mix asphalt.

Trucks will not be allowed to queue on the access road between McIntosh Drive and the Recycling Facility site.

Water

The perimeter drain, installed prior to Benedict Recycling occupying the site, captures runoff from all active areas of the site.

The site soil and water management system includes:

- prevention of runoff from external areas discharging across the site;
- a perimeter drain with seven sedimentation basins;
- a final sedimentation basin with outlet controls;
- sock filters treating runoff prior to discharge into the perimeter drain;
- flocculation of stored water in the basins as necessary; and
- pumping water in the final sedimentation basin, after testing, to the discharge chamber to reduce water levels in the basin prior to forecast rain if required.

Only commercially available non-toxic flocculants will be used at the site.

Actions that will continue to be implemented to prevent impacts to water include:

- water is used for dust suppression but is not used for product processing;
- there are no significant excavations within the site;
- regularly maintaining sock filters;
- removal of sediment from the sedimentation basins when the sediment depth is greater than 200 mm;
- recycling of sediment if of appropriate quality or disposal to a facility approved to accept contaminated sediment:
- water in the final sedimentation basin is tested before a controlled discharge and, unless it overflows, is only be discharged if it meets water quality trigger values; and
- water in the sedimentation basins is used for dust suppression to minimise the mains water required;
- groundwater is not used.

The following actions will be taken as part of the proposal:

- the trees will be removed from the perimeter drain and the perimeter drain will be sealed;
- the final sedimentation basin will be sealed;
- additional storage volume will be provided as part of the works to seal the drain and final sedimentation basin volume;
- the sedimentation basins in the perimeter drain will be upgraded. Poorly graded rock (50–150 mm diameter) will be used to form the sedimentation basin dams in the perimeter drain. The top of each dam will be approximately 0.5 to 1.0 m wide with the crest level approximately 0.3 m below the top of the perimeter drain to allow overflow into the next basin when the storage capacity is exceeded;
- the sealed perimeter drain and final sedimentation basin will be inspected monthly to ensure that
 vegetation is not growing through the seal. If vegetation is found to be growing through the sides of the
 drain or basin, it will be removed and the seal repaired;
- the segregated heavy waste processing and stockpiling area will be sealed with concrete or asphalt with the sealed area extending to the perimeter drain;
- a bund will be erected around the segregated heavy waste processing and stockpiling area directing all
 runoff from the area to the perimeter drain;
- any material in the sealed segregated heavy waste processing and stockpiling area that is not in a stockpile will be removed using a front end loader bucket;
- the sealed segregated heavy waste processing and stockpiling area will be routinely swept using a sweeper;
- bunds will be erected to direct surface runoff away from unsealed areas; and
- concrete will be applied to the floor of the main processing shed where liquids may infiltrate to groundwater, eg through cracks.

The following actions will be taken in respect to water discharge:

- If water levels are between about 2 m and 3 m from the base of the sedimentation basin and meets water quality trigger values, water will be manually discharged from the final sedimentation basin using the outlet valve to maintain a freeboard in the final sedimentation basin.
- Water in the final sedimentation basin will be tested before a controlled discharge and unless it
 overflows, it will only be discharged if it meets water quality trigger values.
- When the basin is discharging, daily samples of the discharging water will be collected from the final basin outlet pipe and will be analysed in accordance with the discharge monitoring program.
- A water level gauge will be installed in the final sedimentation basin.

A Surface Water Monitoring and Mitigation Plan will be prepared that details:

- meteorological monitoring;
- water level monitoring;
- validation monitoring;
- routine monitoring; and
- sediment monitoring.

It will provide trigger values and responses, including treatment of site runoff prior to discharge and contingency measures.

Soils and contamination

No further ground excavation is anticipated so contaminated soil will not be disturbed. However, should excavation be required, the SMP for Subsurface Disturbance Activities (EIS Appendix E) will be implemented.

The following measures will be implemented to prevent site activities exacerbating contamination of the site:

- plant and equipment will be maintained to prevent hydrocarbon leaks;
- plant maintenance will only occur in sealed areas where spills, should they occur, will be contained and cleaned up immediately using a spill response kit;
- a spill response kit will be deployed next to maintenance activities;
- vehicles parked in the storage compounds will be parked on sealed areas; and
- maintenance activities that may result in the loss of fluids will be conducted within a shed with a sealed floor and at least 5 m from the nearest open doorway.

The diesel tank will be installed in accordance with Australian Standards and will incorporate the following measures:

Prevention:

- overfilling of tanks will be prevented through gauging or monitoring of the tank's contents;
- hoses used for transfer of diesel will be regularly inspected;
- tanks, vents and fittings will be inspected regularly and valves will be regularly overhauled (at periods not exceeding 10 years); and
- there will be regular inspections of the tank and surrounds and any liquid inside the bunded areas will be removed as soon as practicable following established procedures.

Protection:

- the diesel tank will be self-bunded (with a capacity of 10% more than the tank's capacity);
- the bund will be large enough to contain a spillage in accordance with the requirement of AS1940 para 5.8;
- the bund drain valve will be kept closed and locked except during supervised drainage, and a sign
 will be placed to display the need to keep the drain valve closed and locked;
- the tank will be enclosed by colourbond (or similar) walls to prevent leaks in the site of the tank spraying outside of the bund;
- diesel pumps will be designed such that the discharge pressure cannot exceed design limit of pump or piping in the case of dead heading (shut-off at the pump discharge);
- an emergency shut-off device will be provided on each pump;

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- provision will be made to quickly shut off the flow of liquid from the storage tank to a consuming device in an emergency. The shut off valve will comply with para 6.3.3 in AS1940, including resistance in a fire; and
- diesel pumps will be designed such that the discharge pressure cannot exceed design limit of pump or piping in the case of dead heading (shut-off at the pump discharge).

Refuelling:

- mobile plant will be refuelling within a bunded area with runoff from within the bund reporting to a oil-water separator;
- the refuelling area will be covered by an awning so that rainwater does not enter the refuelling area:
- there will be a diesel spill kit stored at the bowser; and
- In the case of a spill, used absorbent material will be disposed at an appropriately licensed waste facility.

Visual

As part of the construction of the recycling facility, the following management measures were implemented to minimise potential visual impacts to the surrounding area:

- Casuarina sp. were planted along the northern boundary and the northern section of the western boundary of the site to mitigate visual impacts from viewpoints to the north, north-east and west;
 and
- rubbish from around the site boundaries was removed.
- Litter is removed from the site on a regular basis and a number of litter control measures are listed within the EMP (EIS Appendix D).
- Irrigation pipes have been installed and screening vegetation will be watered if required to maintain healthy growth.
- Screening vegetation will be visually inspected and additional trees will be planted to ensure
 effective screening if required.

APPENDIX B: CONSIDERATIONS UNDER SECTION 4.15

Section 4.15 of the EP&A Act requires that the consent authority, when determining a development application, must take into consideration the following matters:

(a) the provisions of: (i) any environmental planning instrument, and (ii) any proposed instrument that is or has been the subject of public consultation under this Act and that has been notified to the consent authority (unless the Director-General has notified the consent authority that the making of the proposed instrument has been deferred indefinitely or has not been approved), and	Detailed consideration of the provisions of all environmental planning instruments (including draft instruments subject to public consultation under this Act) that apply to the proposed development is provided in Appendix C of this report.		
(iii) any development control plan, and (iiia) any planning agreement that has been entered into under Section 7.4, or any draft planning agreement that a developer has offered to enter into under Section 7.4, and	The Applicant has not entered into any planning agreement under Section 7.4.		
(iv) the regulations (to the extent that they prescribe matters for the purposes of this paragraph), and (v) any coastal zone management plan (within the	The Department has undertaken its assessment of the proposed development in accordance with all relevant matters as prescribed by the regulations, the findings of which are contained within this report.		
meaning of the Coastal Protection Act 1979 (CP Act) that apply to the land to which the development application relates,	The site is located within the coastal zone. In its EIS the Applicant conducted an assessment of the proposed development against Clause 9 of the CP Act. The assessment concluded that: the proposal would not impact on any areas of coastal foreshore the site is located within an existing industrial area and therefore the proposal is considered suitable the proposal would not impact on the conservation of threatened species or their habitat the proposal would not impact on coastal processes or hazards. Sea level rise attributed to climate change is not expected to affect the site. The Department has recommended a number of stringent conditions in relation to surface water quality to ensure any impacts from the site are adequately managed and		
(b) the likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality,	impacts on the Hunter River are minimized The Department has considered the likely impacts of the development in detail in Section 5 of this report. The Department concludes that all environmental impacts can be appropriately managed and mitigated through the recommended conditions of consent.		
(c) the suitability of the site for the development,	The development is a Resource Recovery Facility located on IN1 General Industrial zoned land which is permissible with development consent.		
(d) any submissions made in accordance with this Act or the regulations,	All matters raised in submissions have been summarised in Section 4 of this report and given due consideration as part of the assessment of the proposed development in Section 5 of this report.		
(e) the public interest.	The development would generate up to 14 operational jobs. The development is a considerable capital investment in the Newcastle area that would contribute to the provision of local jobs.		
	The environmental impacts of the development would be appropriately managed via the recommended conditions. On balance, the Department considers the development is in the public interest.		

