

Attachment 1 – Department’s response

1. Vibration Trial Report

- The Department’s assessment report considered the information provided by the Applicant in its various Noise and Vibration Impact Assessments (NVIAs) prepared in accordance with the former NSW Department of Environment and Conservation’s *Environmental Noise Management Assessing Vibration: A Technical Guideline*. The Applicant’s assessment concluded vibration impacts from construction of the development on residential receivers would be very low due to the distance from the nearest receivers to the site. As the vibration impacts from operation were predicted to be even lower than for construction, these were deemed to be negligible and not considered further. Nevertheless, the Department recommended a number of conditions of consent to manage any potential vibration impacts.
- At the request of the IPC, the Department has reviewed the *Vibration Trial Report* prepared by Douglas Partners, submitted on behalf of nearby property owners. The stated aim of the vibration trial was to “establish the relationship between the vibration levels near the source and the rate of attenuation over long distances at various locations in the vicinity of the waste recycling (concrete crushing) plant.”
- The vibration trial used a 15.5 tonne (t) vibratory roller at various locations to the north and east of the boundary of the site to predict vibration levels at other locations. The Department notes this roller is a vibration intensive plant used during construction works and is not representative of the concrete crushing plant. In addition, the Department does not consider the vibration trial locations chosen to be representative of the concrete crushing plant location, which is in the south-western corner of the site, approximately 140 metres (m) from the eastern site boundary and greater than 300 m from the nearest residence.
- The results of the vibration trial showed exceedances of the maximum human comfort acceptable vibration values for continuous vibration at distances less than 100 m from the source. As the concrete crusher would have lower vibration levels than the vibratory roller and be located greater than 100 m from the nearest residence, the Department considers the operation of the development would likely result in low vibration impacts on residential receivers. The Department notes this is consistent with its previous assessment of the potential vibration impacts of the development.
- The Department notes no additional information has been submitted for consideration regarding potential vibration impacts during construction. The Department is satisfied with its assessment on this matter and does not consider further assessment is warranted.
- The Department recognises the concerns of the public regarding the potential vibration impacts of the development and has therefore recommended additional conditions to ensure any potential impacts are managed and mitigated. These are set out below.

2. Draft Vibration Conditions

The Department recommends the following amended conditions and additional conditions shown in red below, to ensure potential vibration impacts are managed and mitigated.

Vibration Criteria

- B16 Vibration caused by construction and operation at any residence or structure outside the site must be limited to:
- (a) for structural damage, the latest version of *DIN 4150-3 (1992-02) Structural vibration - Effects of vibration on structures* (German Institute for Standardisation, 1999); and
 - (b) for human exposure, the acceptable vibration values set out in the *Environmental Noise Management Assessing Vibration: a technical guideline* (DEC, 2006) (as may be updated or replaced from time to time).

- B17 The Applicant must offer and, if the offer is accepted, implement monitoring of vibration levels during construction at all residential properties within 200 m of the site boundary, to the satisfaction of the Planning Secretary. Any vibration monitoring must be undertaken during the entirety of the construction period. If the criteria in Condition B16 are exceeded, management and mitigation measures must be developed and implemented to address any exceedances.
- B18 The Applicant must offer and, if the offer is accepted, implement monitoring of vibration levels during operation of the development at all residential properties within 200 m of the site boundary, to the satisfaction of the Planning Secretary. Any vibration monitoring must be undertaken for a period of not less than three months following commencement of Stage 1, 2 and 3 operations. If the criteria in Condition B16 are exceeded, management and mitigation measures must be developed and implemented to address any exceedances.
- B19 Vibratory compactors must not be used closer than 30 metres from residential buildings unless vibration monitoring confirms compliance with the vibration criteria specified in Condition 0.
- B20 The limits in Conditions 0 apply unless otherwise outlined in a Construction Noise and Vibration Management Plan, approved as part of the CEMP required by Condition **Error! Reference source not found.** of this consent.

Dilapidation Reporting

- B21 Prior to commencement of construction, the Applicant must offer and prepare (if the offer is accepted) a pre-construction dilapidation report for all residential premises within 200 m of the external boundary of the development. The reports must be submitted to the Planning Secretary and the relevant property owners prior to construction works commencing on the site.
- B22 Within one month of completion of construction and prior to commencement of operation, the Applicant must offer and prepare (if the offer is accepted) a post-construction dilapidation report for all residential premises within 200 m of the external boundary of the development. These reports must identify any damage caused by construction of the development through comparison with the pre-construction dilapidation reports required by Condition B21. Any repairs required to residential premises as a result of the development must be paid for in full by the Applicant in a timeframe agreed by the Planning Secretary.

Construction Noise and Vibration Management Plan

- B23 The Applicant must prepare a Construction Noise and Vibration Management Plan (CNVMP) for the development to the satisfaction of the Planning Secretary. The CNVMP must form part of a CEMP in accordance with Condition **Error! Reference source not found.** and must:
- be prepared by a suitably qualified and experienced noise and vibration expert;
 - be approved by the Planning Secretary prior to the commencement of construction;
 - describe procedures for achieving the noise management levels in EPA's *Interim Construction Noise Guideline* (DECC, 2009) (as may be updated or replaced from time to time);
 - describe procedures for achieving the criteria in *Structural vibration - Effects of vibration on structures and Environmental Noise Management Assessing Vibration: a technical guideline*;
 - describe the measures to be implemented to manage high noise and vibration generating works such as piling, in close proximity to sensitive receivers, including contingency measures;
 - include strategies that have been developed with the community for managing high noise and vibration generating works;
 - describe the community consultation undertaken to develop the strategies in Condition B22(f); and
 - include a complaints management system that would be implemented for the duration of the construction.
- B24 The Applicant must:
- not commence construction of any relevant stage until the CNVMP required by Condition B23 is approved by the Planning Secretary; and
 - implement the most recent version of the CNVMP approved by the Planning Secretary for the duration of construction.

Operational Noise and Vibration Management Plan

- B27 Prior to the commencement of operation, the Applicant must prepare an Operational Noise and Vibration Management Plan (ONVMP) for the development to the satisfaction of the Planning Secretary. The ONVMP must form part of an OEMP in accordance with Condition **Error! Reference source not found.** and must:
- be prepared by a suitably qualified and experienced person(s) whose appointment has been endorsed by the Planning Secretary

- (b) describe procedures for achieving the operational noise limits detailed in Condition B23;
- (c) describe procedures for achieving the vibration criteria in *Structural vibration - Effects of vibration on structures and Environmental Noise Management Assessing Vibration: a technical guideline*;
- (d) describe the measures to be implemented to manage high noise and vibration generating works in close proximity to sensitive receivers, including contingency measures;
- (e) include evidence of consultation with nearby sensitive receivers and justification for the selection of receivers consulted;
- (f) describe how any matters raised by sensitive receivers under Condition B27(e) have been addressed; and
- (g) include a complaints management system that would be implemented for the duration of the development.

B28 The Applicant must:

- (a) not commence operation of any relevant stage of the development until the ONVMP required by Condition B27 is approved by the Planning Secretary; and
- (b) implement the most recent version of the ONVMP approved by the Planning Secretary for the duration of the development.

3. Air Quality

- The Department has reviewed the updated *Air Quality Issues Report* prepared by Todoroski Air Sciences and notes it raises concerns with the uncertainty of meteorology affecting results, the appropriateness of the design of the facility, the potential underestimation of impacts and other matters. The Department notes these concerns were previously raised by Todoroski Air Sciences which was reviewed by EMM who was commissioned by the Department. This was outlined within its assessment report.
- The following matters were also considered during the Department's assessment:
 - the outcomes of the various air quality reviews undertaken by ERM and the peer review by EMM commissioned by the Department, which all confirmed the Applicant's air assessment was appropriately robust
 - advice from the EPA that it was satisfied with the assessment of air impacts
 - the Applicant's conservative approach of limiting the initial waste throughput to 100,000 tonnes per annum to enable impacts at this lower level to be validated prior to increasing to a higher processing capacity.
- On the basis of the above, the Department does not recommend any amended conditions or new conditions of consent. The Department considers the existing recommended conditions of consent are robust and address the potential for modelling uncertainties or underestimation of impacts.

4. Requirements of Sch 2 Pt 3 Cl 7 of EP&A Regulation

- The Department considers the Applicant's Amended EIS has addressed the relevant requirements of Sch 2 Pt 3 Cl 7 of EP&A Regulation and no further analysis is required:
 - 7(1)(a) – a summary of is provided in the Executive Summary
 - 7(1)(b) – objectives of the development are provided in Section 2.3, including 'expansion of the current facility into a best practice recycling plant to assist the Central Coast to achieve an 80% recycling rate for C&D waste and produce a number of building products for reuse in the Central Coast region'.
 - 7(1)(c) – having regard to the objectives, the alternative of not carrying out the development is considered in the project justification (Section 2.4) as the strategic drivers of reducing waste to landfill, increasing C&D waste recycling capacity in the Hunter and Central Coast Region and creating new regional jobs would not be achieved if the development were not to proceed.
 - 7(1)(d) – Sections 2, 3, and 6-18 provide an analysis of the development and its impacts.
 - 7(1)(e) – an overview of mitigation measures is provided in Section 18

- 7(1)(f) – justification for the carrying out of the development, including the principles of Ecologically Sustainable Development, is provided in Sections 2.3, 2.4 and 2.5

5. Suggested Amended Conditions

- The Department’s comments on the suggested amendments to the recommended conditions of consent (from Attachment B) are provided below. Amendments to conditions are provided in **red**.

Condition	Position	Comment
B1 Publishing of real-time meteorological data	No change recommended	<ul style="list-style-type: none"> • It is the Applicant’s responsibility to manage the monitoring of adverse conditions both inside and outside of operating hours. • The Department does not recommend the addition of a requirement to publish the real-time meteorological data.
B4 Installation of wheel wash	Agreed, with amended wording	<ul style="list-style-type: none"> • Condition B4 relates to dust minimisation during <u>construction</u>. Conditions B4(c) and B4(d) already require that trucks do not track dirt onto the public road and that public roads are kept clean. • The Applicant is therefore responsible for ensuring trucks are cleaned of dirt before leaving the site during construction. • A wheel wash was not proposed by the Applicant and the development was assessed on this basis. While the Department does not consider this is necessary, it is open to the IPC to include a requirement for a wheel wash for use during operation at Condition B33. Suggested wording for this is provided below: B33 The Applicant must ensure: <ul style="list-style-type: none"> (a) internal roads, driveways and parking (including grades, turn paths, sight distance requirements, aisle widths, aisle lengths and parking bay dimensions) associated with the development are constructed and maintained in accordance with the latest version of AS 2890.1:2004 Parking facilities Off-street car parking (Standards Australia, 2004) and AS 2890.2:2002 Parking facilities Off-street commercial vehicle facilities (Standards Australia, 2002); (b) the swept path of the longest vehicle entering and exiting the site, as well as manoeuvrability through the site, is in accordance with the relevant Austroads guidelines; (c) the development does not result in any vehicles queuing on the public road network; (d) heavy vehicles and bins associated with the development are not parked on local roads or footpaths in the vicinity of the site; (e) all vehicles are wholly contained on site before being required to stop; (f) all loading and unloading of materials is carried out on-site;

Condition	Position	Comment
		<p>(g) all trucks entering or leaving the site use the wheel wash to be installed prior to commencement of operation;</p> <p>(h) all trucks entering or leaving the site with loads have their loads covered and do not track dirt onto the public road network;</p> <p>(i) all trucks must enter and exit the site in a forward direction;</p> <p>(j) all trucks enter the site from an eastbound direction on Gindurra Road and depart the site onto Gindurra Road in a westbound direction; and</p> <p>(k) the proposed turning areas in the car park are kept clear of any obstacles, including parked cars, at all times.</p>
<p>B13 Amendment to hours of construction and operation</p>	<p>No change recommended</p>	<ul style="list-style-type: none"> The Department notes the recommended construction hours are consistent with standard construction hours as set out in the <i>Interim Construction Noise Guideline</i> (DECC, 2009) (ICNG). The Department does not recommend amending the standard construction hours. The Department notes the proposed operation hours fall within the 'day' hours as defined in the <i>Noise Policy for Industry</i> (EPA, 2017) (NPfI). The Department's assessment report provides a detailed assessment of operational noise, air quality and traffic impacts (including haulage routes) and further consideration of vibration impacts has been provided under Section 1 of this letter. The Department does not recommend limiting the proposed hours of operation.
<p>B14 Consultation with the community prior to certain works outside of normal operating hours</p>	<p>No change recommended</p>	<ul style="list-style-type: none"> Condition B14 allows for various emergency and low- impact activities to occur when necessary. Due to their nature, the Department does not deem it appropriate that residents are informed in advance of the works described in Condition B14(a), (c) and (d). Should the Applicant request to undertake activities outside of hours under Condition B14(b), the Planning Secretary may require the Applicant to consult with the community if deemed necessary or appropriate at that time. The Department does not recommend amending the hours of work.
<p>B16 Requirement for dilapidation reports and installation of vibration</p>	<p>Agreed, with amended wording</p>	<ul style="list-style-type: none"> See amended wording of conditions under Section 2 above.

Condition	Position	Comment
monitoring equipment		
B21 Reduction of noise limits for rural residential receivers to 43 dB	No change recommended	<ul style="list-style-type: none"> The Department's assessment report provides a detailed assessment of operational noise impacts. The Department is satisfied noise limits have been set in accordance with the NPfl and therefore does not recommend reducing the noise limits.
Sealing of entire site with concrete handstand	Not recommended	<ul style="list-style-type: none"> The Department's assessment report provides a detailed assessment of operational air quality impacts, including impacts from the proposed part concrete hardstand surface and part crushed concrete base. The assessment of dust emissions demonstrated that concentration levels at surrounding sensitive receivers would meet the relevant criteria. Mitigation measures include dust suppression with water throughout the site, which is appropriate to prevent dust on crushed recycled concrete surfaces. The Department does not recommend requiring the Applicant to concrete hardstand the site.
B61 Preparation of plan to manage operations on days of high bushfire risk – to be approved by RFS and FRNSW	Agreed. See suggested wording	<ul style="list-style-type: none"> Suggested wording: B60 Prior to the commencement of operation, the Applicant must prepare an Emergency Plan for the development. The Emergency Plan must form part of an OEMP in accordance with Condition Error! Reference source not found. and must: <ul style="list-style-type: none"> (a) be prepared by a suitably qualified person(s); (b) be prepared in accordance with <i>AS 3745–2010 Planning for emergencies in facilities</i>; and (c) include a plan to manage operations on days of high or catastrophic fire danger in consultation with Rural Fire Service.
B62 Storage of dangerous goods in bushfire rated building	No change recommended	<ul style="list-style-type: none"> The development includes storage of low levels of dangerous goods and fuels below the thresholds in Applying SEPP 33. The Department's hazards specialist reviewed the Preliminary Hazard Analysis and concluded the development would not be potentially hazardous. The Department's conditions require the Applicant implement the safeguards detailed in the PHA and store dangerous goods in accordance with Australian Standards. The Department does not recommend additional requirements for the storage of dangerous goods.

Condition	Position	Comment
<p>B76</p> <p>Consultation with landowners on landscaping</p>	<p>Agreed. See suggested wording</p>	<ul style="list-style-type: none"> • Suggested wording: <p>B75 Prior to the commencement of operation, the Applicant must prepare a Landscape Management Plan (LMP) to manage the revegetation and landscaping works on-site, to the satisfaction of the Planning Secretary. The LMP must form part of an OEMP in accordance with Condition Error! Reference source not found. and must:</p> <ol style="list-style-type: none"> (a) include evidence of consultation with nearby sensitive receivers and justification for the selection of receivers consulted, regarding the landscaping and screening of the acoustic barrier on the eastern boundary of the site; (b) detail the species to be planted on-site in accordance with the Landscape Plan prepared by Concept Landscape Architects, dated 3 July 2020, Revision G (see Figure 5 in Appendix 1); (c) describe the monitoring and maintenance measures to manage revegetation and landscaping works; and (d) be consistent with the Applicant's Management and Mitigation Measures detailed in Appendix 2.
<p>Noise logger – share data with residents in real time</p>	<p>Not recommended</p>	<ul style="list-style-type: none"> • The Department notes the Applicant is required to comply with the noise limits within Condition B21. The Department takes compliance with the conditions of consent seriously and reported exceedances will be investigated by the Department's compliance team. Furthermore, the Department notes the facility will also be licenced and regulated by the EPA. • The Department does not recommend requiring the Applicant to install a noise logger on site.
<p>Establish Community Consultative Committee (CCC)</p>	<p>Not recommended</p>	<ul style="list-style-type: none"> • The Department finds that a CCC is not required for this development, however if the IPC choose to require a CCC, suggested wording for a condition is provided below. <p>Community Consultative Committee</p> <p>Before the commencement of construction of the development, a Community Consultative Committee (CCC) must be established for the development in accordance with the Department's <i>Community Consultative Committee Guidelines: State Significant Projects</i> (2016). The CCC must begin to exercise functions in accordance with such Guidelines before the commencement of construction and continue to do so for the duration of construction and operation and for at least six months following the completion of operation.</p>
<p>Vibration fittings on machinery to prevent impacts</p>	<p>Not recommended</p>	<ul style="list-style-type: none"> • The Department's assessment report includes consideration of the impacts of vibration during operation and concluded these would be minimal, subject to conditions. This is further discussed under Section 1 above. • The Department has recommended a number of changes to conditions relating to vibration under Section 2 above and does not recommend additional requirements.

Condition	Position	Comment
Use of alternative energy	Not recommended	<ul style="list-style-type: none"> • The Department's assessment report provides a detailed assessment of air quality impacts. • The Applicant has not proposed use of an alternative energy source. The Department does not recommend additional conditions regarding air quality.
Dilapidation reports before and after construction	Agreed, see amended wording.	<ul style="list-style-type: none"> • See amended wording of conditions under Section 2 above.