

## **APPENDIX 4: UPDATED STATEMENT OF COMMITMENTS**

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Proposed deletions are shown by **RED**, amendments by **ORANGE**, those without change have no colour. Commitments that are now redundant as the works have already occurred are coloured by **TAN**, and should also be deleted for the sake of brevity.

It is emphasised that the intent of the proposed changes to the Statement of Commitments (SoC) is not to curtail the Applicant's responsibility and commitment to sound environmental management of the quarry. The proponent is conscious that approval conditions and site management plans and procedures need to be outcome-focused, reduce duplication, and provide sufficient flexibility to allow the site rehabilitation objectives to be achieved without being too prescriptive. In this context, the proposed amendments to the SoCs seek to:

- Reduce the SoCs duplication with the Conditions of Consent
- Improve clarity of environmental management
- Enable flexibility in the management plan process to ensure that site management plan controls can be adjusted to change of conditions rather than going through the lengthy process of changing the Conditions of Consent.

These commitments have been adjusted based on feedback in responses during the Response to Submissions process in Mod 3.

### REVISED STATEMENT OF COMMITMENTS

WSS intend to construct and operate the Williamstown Sand Quarry in an environmentally responsible manner.

Within this Response to Submissions and the EIS, descriptions of avoidance and mining impacts have been described, together with mitigation measures to lessen the impact of the project on the community and environment.

To ensure that the Project operates with environmental safeguards in place during its life cycle, WSS is committed to the implementation of a comprehensive Environmental Management Plan and the commitments detailed in this document.

### OPERATING LIMITS, TIMES AND CRITERIA

**Table 1: Operating limits, times and criteria.**

Aspect	Key Aspects of the Projects
<b>Project Life</b>	Approval is sought to operate the quarry for a period of up to 15 years.
<b>Production rate</b>	Up to 530,000 tonnes per annum.
<b>Operating Hours</b>	<p><b>Construction:</b></p> <ul style="list-style-type: none"> <li>• 7 am to 6 pm Monday to Friday.</li> <li>• 8 am to 1 pm Saturday.</li> <li>• No construction on Sunday or public holidays.</li> </ul> <p><b>Operations:</b></p> <ul style="list-style-type: none"> <li>• Sand extraction and processing:               <ul style="list-style-type: none"> <li>○ 7 am to 5 pm Monday to Friday.</li> <li>○ 7 am to 4 pm Saturday.</li> </ul> </li> <li>• Loading and haulage:               <ul style="list-style-type: none"> <li>○ 5 am to 6 pm Monday to Friday.</li> <li>○ 7 am to 4 pm Saturday.</li> </ul> </li> <li>• No operations on Sunday or public holidays.</li> </ul>
<b>Traffic</b>	<ul style="list-style-type: none"> <li>• Up to 6 laden trucks per hour (12 trips per hour) during the hours of 5 am to 7 am.</li> <li>• Up to a maximum of 10 laden trucks per hour (20 trips per hour) during hours of 7 am to 6 pm on weekdays and 7am to 4pm Saturday (i.e. all haulage hours excluding the morning peak).</li> <li>• Up to 6 vehicles of employees would be expected to arrive from 5.30 am to 7 am and leave between 5 pm and 7 pm.</li> </ul>
<b>Noise and Air Quality Criteria</b>	<ul style="list-style-type: none"> <li>• As per Project Approval.</li> </ul>

## MANAGEMENT AND OFFSET MEASURES

**Table 2** provides a summary of the identified mitigation and management measures proposed to be implemented to minimise the impacts of the Project on the receiving community and environment. These measures shall apply, unless superseded or made redundant by an approved management plan or the Conditions of Approval.

**Table 2: Proposed management and offset measures**

Item	Action	Trigger/ Timing	Proposed Change to Commitment
<b>8.3.1 General Management Measures</b>			
a)	Williamtown Sand Syndicate Pty Ltd will prepare an Annual Environmental Management Report (AEMR) stating the environmental performance of the project to be distributed to stakeholders.	Annually	Delete, superseded by Schedule 5, Condition 11
b)	Staff, contractor and visitor inductions will include where relevant an overview of management measures and responsibilities and will include: <ul style="list-style-type: none"> <li>• EMP requirements.</li> <li>• Environmental sensitivities.</li> <li>• Hazard and risk management.</li> <li>• Designated site access.</li> <li>• Waste management.</li> <li>• Spill response and management.</li> <li>• Heritage management and heritage finds protocol.</li> <li>• Weed and pathogen control.</li> <li>• Bushfire prevention.</li> <li>• Emergency response.</li> <li>• Incident reporting (environmental and safety).</li> <li>• Driver code of conduct.</li> </ul>	Ongoing	Nil
c)	The effectiveness of the induction and training program will be monitored and improvements implemented where identified.	Ongoing	Nil
<b>8.3.2 Community Relations</b>			
a)	Establishment of a community consultative committee (CCC) to facilitate meetings with representatives of the local community.	Ongoing	Delete – superseded by Schedule 5, Condition 7.
b)	Document CCC meeting agendas, issues raised, action items and close-out.	Ongoing	Delete – superseded by Schedule 5, Condition 7.
c)	A dedicated information contact phone number will be established prior to the commencement of construction and maintained throughout the life of the project.	Ongoing	Nil
d)	Feedback, enquiries and complaints received will be recorded in a consultation register that will be established prior to the commencement of construction and maintained throughout the life of the project.	Ongoing	Nil

Item	Action	Trigger/ Timing	Proposed Change to Commitment
e)	Complaints recorded in the consultation register will include details of complainant, WSS response and commitments to follow-up by whom and when will be detailed.	Ongoing	Nil
f)	Consultation with immediate neighbours via an annual site open day.	Annually	<p>Delete</p> <p>Existing CCC meetings and consultation with neighbours is adequate. Introduction of additional people to the quarry introduces an unnecessary risk and distraction to quarry operations.</p> <p>During Mod3 consultation the TRRA proposed the CCC should be consulted to confirm that existing consultation is adequate and that the newsletters and open day are not necessary.</p> <p>CCC was consulted during the CCC meeting held 19 December 2023, and have confirmed agreement with the cessation of newsletters and open days.</p>
g)	<p>Community information newsletters providing awareness of: Project progress.</p> <ul style="list-style-type: none"> <li>• Operating hours contact information and details of how to provide feedback.</li> <li>• Ways in which further information can be sought.</li> <li>• Details of breaches of any development approval and licence conditions and WSS response and corrective actions.</li> </ul>	Six-monthly	<p>Delete</p> <p>Quarterly CCC meetings ensure a regular presentation on the progress of the quarry and relevant matters. The minutes of these and a detailed presentation are available on the website for all members of the public.</p>
h)	<p>Website to include:</p> <ul style="list-style-type: none"> <li>• Contact numbers.</li> <li>• <del>Copies of community newsletters.</del></li> <li>• <del>Details of annual open days.</del></li> <li>• Copies of minutes from Community Consultative Committee.</li> <li>• Copies of approvals.</li> <li>• Copies of licences.</li> </ul>	Ongoing	Minor changes to reflect the above amendments.

Item	Action	Trigger/ Timing	Proposed Change to Commitment
<b>8.3.3 Access, Fencing, Gates and Signage</b>			
a)	Redundant access tracks to be removed when no longer required for bushfire control, rehabilitation maintenance, resource access or haulage.	As required	Nil
b)	The main access gate adjacent to Cabbage Tree Road, and any other installed gates that provide access to surrounding lands will be locked when the quarry is not operating.  A key will be provided to PSC, Hunter Water, NPWS, and the RFS.	Daily	Nil
c)	<ul style="list-style-type: none"> <li>Construct a Koala exclusion fence on the Subject Land boundary adjoining Cabbage Tree Road for Lot 1 DP 224587 to limit movement of Koalas from the site onto Cabbage Tree Road.</li> <li>Construct a Koala exclusion fence from the site entry to the weighbridge.</li> <li>The fence is to be installed with regard to the design specifications outlined in the <i>Koala Sensitive Design Guideline</i> (DEHP 2012).</li> </ul> <p>One-way fauna gate installed along the fence for circumstances where fauna is trapped on the road side of the fence. Total of four gates; two along Cabbage Tree Road (one on either side of the site entrance) and two along the internal access road (one on either side of the road).</p>	During construction	<p>Delete</p> <p>This condition is effectively superceded by the BRMP and enables the BRMP to more readily adapt to changes.</p> <p>Expert advice by Biolink in relation to the koala fence and the proposed fauna valves could be improved.</p> <p>During Mod3 consultation the KKEPS questioned the proposed change and whether fencing should be extended for the modification. No extension of the existing fencing is considered warranted given the proposed works do not change the potential for interaction of koalas with vehicle traffic</p>
d)	<ul style="list-style-type: none"> <li>A ticketing system <del>will be connected between the boom gate and</del> exit weigh bridge. The boom gate will be configured to only operate within the quarry operating hours and will be linked to peak permissible quarry traffic generation rates. Video surveillance will also be erected at the weighbridge for security and ticket cross checks and to monitor time and direction of travel for vehicles entering and exiting the quarry.</li> </ul>	Ongoing	<p>Amend.</p> <p>The use of a boom gate was not considered practical and has been replaced by traffic lights. <i>A ticketing system for the weigh bridge will be configured to only operate within the quarry operating hours and will be linked to peak permissible quarry traffic generation rates.</i></p>
e)	<ul style="list-style-type: none"> <li>Construct a security fence around the office and workshop compound, including security measures to manage and limit unlawful activity.</li> </ul>	During construction	Nil

Item	Action	Trigger/ Timing	Proposed Change to Commitment
f)	<ul style="list-style-type: none"> <li>Progressively delineate the perimeter of the active resource area that will prevent incidental access into Offset Lands and not impede the movement of, or be a danger to, native fauna (e.g., rope barricade, or equivalent).</li> </ul>	During construction	Nil
g)	<ul style="list-style-type: none"> <li>Remove or repair old internal fences.</li> </ul>	From Year 2 as needed	Amend timing to be <u>from</u> year 2 as needed.
h)	Install signage at main entrance on Cabbage Tree Road to advise of the following: <ul style="list-style-type: none"> <li>Development name and description.</li> <li>Contact number for general and emergency enquiries.</li> <li>Site safety requirements (e.g., PPE, evacuation routes and muster points).</li> </ul>	At commencement of construction	Nil
i)	<ul style="list-style-type: none"> <li>Install fauna signage at main entrance and either side of corridor reminding drivers of the presence of wildlife and to adhere to site speed limits.</li> </ul>	At commencement of construction	Nil
j)	<ul style="list-style-type: none"> <li>Install signage on perimeter of Project Area on adjoining access roads advising the presence of the offset area.</li> </ul>	Year 1	Nil
k)	<ul style="list-style-type: none"> <li>Install signage on perimeter of site adjoining access roads advising the presence of the operational quarry.</li> </ul>	Year 1	Nil
l)	<ul style="list-style-type: none"> <li>Install speed limit signage on quarry access roads.</li> </ul>	Year 1	Nil
<b>8.3.4 Traffic</b>			
a)	<ul style="list-style-type: none"> <li>Traffic control plans prepared by an accredited person are to be approved by TfNSW prior to implementation by an accredited person for the construction of the quarry intersection.</li> </ul>	Prior to construction	Works completed. Nil
b)	The quarry intersection and associated acceleration and deceleration lanes will have the following signage installed (subject to approval by TfNSW). <ul style="list-style-type: none"> <li>"No Stopping zones".</li> <li>Digital signage stating if quarry is opened or closed to avoid truck entry and idling at entry if gate is closed.</li> <li>Quarry approach and need to limit air breaking.</li> </ul>	Installed during construction and updated as necessary	Nil required, however there is overlap with Schedule 3 Condition 24

Item	Action	Trigger/ Timing	Proposed Change to Commitment
	<ul style="list-style-type: none"> <li>Speed limit signage for 40 km/h entering site before intersection.</li> <li>Sign-on gate: in the event of arriving prior to gate being open turn off vehicle immediately.</li> </ul>		
c)	Speed limit signage within the site as follows: <ul style="list-style-type: none"> <li>Outgoing traffic at 60 km/h between outgoing weighbridge and Cabbage Tree Road.</li> <li>Incoming traffic at 40 km/h between Cabbage Tree Road and the incoming weighbridge.</li> <li>20km/h from the weighbridge to the processing plant / stockpiles.</li> </ul>	Installed on completion of construction	Nil
d)	WSS will implement a Driver Code of Conduct signed by all drivers during their site induction and will allow WSS to strictly enforce the access requirements and penalise non complying drivers, the Driver Code of Conduct will include but is no limited to the following: <ul style="list-style-type: none"> <li>Quarry operating times.</li> <li>Proposed digital signs prior to deceleration lane stating status of quarry being open or close subject to TfNSW approval. This will mitigate early arrivals to the quarry.</li> <li>No stopping signage for extent of site for deceleration lane to deter early arrivals.</li> <li>Pre booking of high demand slots between 0500 and 0700 which are anticipated to be limited, these slots are likely to be pre-booked. Any unexpected truck turning up on site will have to wait on-site prior to exiting the site in the allocated slots.</li> <li>Quarry approach and need to limit air breaking.</li> <li>Respect our neighbours internal signage on exit of quarry.</li> <li>Sign-on gate: in the event of arriving prior to gate being open turn off vehicle immediately.</li> <li>UHF radio contact to quarry manager for enquiries prior approach to the quarry.</li> </ul>	Ongoing	Delete Superseded by Schedule 3, Condition 25
e)	Peak traffic generation limits from the site are as follows: <ul style="list-style-type: none"> <li>6 laden trucks per hour (12 trips per hour) during the hours of 5 am to 7 am.</li> <li>10 laden trucks per hour (20 trips per hour) during hours of 7 am to 6 pm.</li> <li>No haulage on Sundays or Public Holidays.</li> </ul>	Ongoing	Delete Superseded by Schedule 3 Condition 23 and Schedule 3, Condition 1.
f)	<ul style="list-style-type: none"> <li>Incoming trucks will be weighed on entry to the site via a weigh bridge at the site office complex and again on leaving the site where product weight and tickets will be generated</li> </ul>	Ongoing	Delete Superseded by Schedule 3, Condition 26

Item	Action	Trigger/ Timing	Proposed Change to Commitment
	and recorded for each load.		
g)	Boom gate on outgoing weigh bridge linked to peak haulage rates. <ul style="list-style-type: none"> <li>CCTV system to be installed on outgoing weigh bridge to provide compliance assessment of haulage numbers.</li> </ul>	Ongoing	Delete Superceded by Schedule 3, Condition 27
<b>8.3.5 Weed Control</b>			
a)	<u><b>Vehicles and access tracks</b></u> <ul style="list-style-type: none"> <li>All machinery used on the site will be cleaned of all soil and organic matter prior to entering the Project Area. Road registered haulage vehicles will be required to remain on the formed access roads.</li> <li>Vehicle access to the rehabilitation will be restricted to authorised personnel.</li> <li>Once access tracks are no longer required they will be revegetated to minimise their potential as weed vectors.</li> </ul>	Ongoing	Nil
b)	<u><b>Weed-infested topsoil handling</b></u> Pre-clearing surveys: <ul style="list-style-type: none"> <li>Pre-clearance survey to record approximate cover and abundance of environmental weeds within each area to be cleared.</li> <li>Where infestations of environmental weeds occur they will be mapped and pegged as a “weed area” prior to clearing to allow for separate stockpiling and re-spreading. For practicality purposes during clearing and topsoil stripping, weed infestations greater than 100 m<sup>2</sup> (i.e. 10 m x 10 m) will be delineated and pegged.</li> </ul>	Prior to clearing of each sector	Nil
	<ul style="list-style-type: none"> <li>Topsoil containing environmental weeds (as delineated in pre-clearance) will stockpiled separately and will not be blended or stockpiled with “clean” (weed-free) topsoil.</li> <li>Topsoil stockpiles containing environmental weeds will be respread within a mapped “weed area” similar to its pre-disturbance location to avoid weed spread across the site.</li> <li>Weed containing topsoil will not be transported between the Southern and Northern Resource areas.</li> <li>The extent of respread topsoil with environmental weeds will be delineated and</li> </ul>	When clearing, stockpiling and respreading topsoil.	Nil

Item	Action	Trigger/ Timing	Proposed Change to Commitment
	recorded.		
c)	<p><b><u>Inspections</u></b></p> <ul style="list-style-type: none"> <li>During monitoring of the rehabilitation, annual monitoring will be conducted to identify any weeds, including non-local native species within the site. Inspections will include the outer perimeter of the current disturbance (i.e. interface with conservation areas) and the verges of internal access roads.</li> </ul>	During monitoring of each sector	Nil
d)	<p><b><u>Weed control</u></b></p> <p>Weed management will be conducted by a suitably qualified contractor with a focus on the recommendations made as a result of rehabilitation monitoring and inspections.</p> <ul style="list-style-type: none"> <li>Control of weeds will predominantly be through manual removal to limit the use of chemicals. Chemical controls will only be utilised where there are significant outbreaks.</li> </ul>	When required, as identified during monitoring events	Nil
<b>8.3.6 Vertebrate Pest Control</b>			
a)	<ul style="list-style-type: none"> <li>All putrescible waste bins to be securely covered and removed from the site on a weekly basis to remove potential food source for vermin.</li> </ul>	Ongoing	Nil
b)	<p>Undertake monitoring for presence of pests through one of the following methods:</p> <ul style="list-style-type: none"> <li>Conducting searches and spotlighting, and mapping evidence of pest species across Project Area (e.g. rabbit warrens, pig scratching, evidence of wild dogs).</li> <li>Installing remote motion sensing camera traps at a minimum of five locations across the Project Area for a two-week period.</li> <li>The presence of domestic or wild cats and dogs within the central wildlife corridor (consistent with PSC lease conditions) should be included within the program.</li> </ul>	Annually	Nil
c)	Recording of incidental observations for evidence of pests and where suspected to be domestic and (if considered safe to do so) are to be captured and reported to PSC and returned to the owner if known or animal shelter if unknown.	Opportunistically	Nil
d)	Where detected during monitoring, implement a pest control program to reduce vertebrate pest numbers where there is potential for impacts on native wildlife and rehabilitation. The program is to have regard for the presence of domestic	Within three months of an observation with potential for impacts.	Nil

Item	Action	Trigger/ Timing	Proposed Change to Commitment
	animals and return these to the owners where captured. The vertebrate pest control program is to be conducted: <ul style="list-style-type: none"> <li>• In consultation with the LLS and adjoining landholders.</li> <li>• In accordance with Humane Pest Animal Control: Codes of Practice (DPI 2014).</li> <li>• By suitably qualified and experienced personnel.</li> <li>• Other control methods such as shooting or trapping can also be used if deemed necessary or appropriate with advice from BCD or the LLS. Given the proximity of residential properties baiting programs may not be appropriate.</li> </ul>		
<b>8.3.7 Erosion, Sediment Control and Soil Management</b>			
a)	<ul style="list-style-type: none"> <li>• A construction environmental management plan (CEMP) including erosion and sedimentation controls has been prepared and implemented for all construction activities proposed.</li> </ul>	Prior to commencement of Project construction	Nil
b)	<ul style="list-style-type: none"> <li>• Erosion and sediment control plans (ESCP) to be prepared and implemented with all internal road construction activities.</li> </ul>	Prior to internal road construction	Nil
c)	<ul style="list-style-type: none"> <li>• Vegetation and soil excavated during the initial block construction will be stockpiled (vegetation and then topsoil) within an area adjacent to the processing plant. The initial area of cleared vegetation and topsoil will be used to supplement other extraction areas over the life of the project that are deficient in organic matter.</li> </ul>	During construction/ Ongoing	Nil
d)	<ul style="list-style-type: none"> <li>• During excavation of each new extraction zone, vegetation and topsoil cleared will be laid over the previous extracted zone to encourage regrowth and rehabilitation.</li> </ul>	Ongoing	Nil
e)	Install erosion and sediment controls on-site as required in accordance with the <ul style="list-style-type: none"> <li>• Erosion and Sediment Control Regional Policy (PSC, 2002b) and the Code of Practice for Managing Urban Stormwater – Soils and Construction (Landcom, 2004).</li> </ul>	At commencement of project	Nil
f)	<ul style="list-style-type: none"> <li>• Maintain erosion and sediment controls as required and consistent with the Code of Practice for Managing Urban Stormwater – Soils and Construction (Landcom, 2004).</li> </ul>	Monthly / post major rainfall inspections.	Nil

Item	Action	Trigger/ Timing	Proposed Change to Commitment
g)	<ul style="list-style-type: none"> <li>Maintain a bund at the downslope side of each of the extraction areas to contain any sediment and runoff that may be generated from disturbed areas on site.</li> </ul>	During extraction of block.	Nil
h)	<ul style="list-style-type: none"> <li>Maintain a low level bund around the silty loam stockpile to limit potential for offsite transport and spread.</li> </ul>	During establishment of processing areas	Nil Note. Only relevant to the air separator when used.
i)	<ul style="list-style-type: none"> <li>Final landform batters with edge of Project Boundary not to exceed 4H (horizontal) to 1V (vertical), 4H:1V.</li> </ul>	During rehabilitation	Nil
j)	<ul style="list-style-type: none"> <li>Disturbance of potentially contaminated soils or potential hazardous building materials or pipe (e.g. fibre cement containing asbestos) must be reported to the quarry manager immediately and no further disturbance of area to continue. Quarry manager to determine need for formal classification.</li> </ul>	As required	Nil
k)	<ul style="list-style-type: none"> <li>Erosion and sediment controls will be monitored to ensure performance is maintained.</li> </ul>	Monthly and after significant rainfall	Nil
l)	<ul style="list-style-type: none"> <li>The post extraction landform must be surveyed on completion of the primary site rehabilitation works and the results presented in the form of plans to demonstrate compliance with the extraction limit of 1 m above highest predicted groundwater level.</li> </ul>	Ongoing	Nil
<b>8.3.8 Water Management</b>			
a)	<p>Water management controls will be revised and updated on determination of the project to ensure management measures proposed adequately reflect the requirements of the Conditions of Consent.</p> <ul style="list-style-type: none"> <li>The revised controls will be prepared in consultation with the NSW EPA, NSW Water and Hunter Water for approval by NSW DPE.</li> </ul>	Prior to commencement of operations	Delete Superseded by Schedule 3 Condition 15
b)	<ul style="list-style-type: none"> <li>Water for potable use and dust suppression will be drawn from Hunter Water's reticulated water supply at Cabbage Tree Road. No groundwater will be extracted or utilised.</li> </ul>	Ongoing	Nil
c)	<ul style="list-style-type: none"> <li>Surface water will be contained onsite through incorporation of bunds around the perimeter of the resource area. Most of the bunds will be created as a result of the extraction process being topographically lower than the adjacent</li> </ul>	Ongoing	Delete Not practical within road network, provision of frog fence/ sediment fence on perimeter controls runoff in the unlikely event it

Item	Action	Trigger/ Timing	Proposed Change to Commitment
	surfaces. The bund will also be incorporated into the access road through a trafficable mound that ensures all surface water within the resource area must percolate vertically into the groundwater.		occurs.
d)	<ul style="list-style-type: none"> <li>Rainwater will be captured from the workshop and office roofed area and reused for dust suppression as needed.</li> </ul>	Ongoing	Amend Adopted workshop roof does not allow for capture of water.
e)	<ul style="list-style-type: none"> <li>All impervious areas will be shaped such that water sheds to infiltration areas constructed in areas adjoining rehabilitated areas.</li> </ul>	Ongoing	Delete Superseded by Schedule 3 Condition 15
f)	<ul style="list-style-type: none"> <li>WSS will consult with DPI Water with regards to the locations of and construction of proposed groundwater monitoring points, installation of loggers and selection of sampling points.</li> </ul>	Prior to construction	Delete Superseded by Schedule 3 Condition 15
g)	<ul style="list-style-type: none"> <li>WSS will install groundwater monitoring wells, so that monitoring can be performed immediately up and down gradient of the main extraction areas after destruction of existing bores.</li> </ul>	As required if monitoring bore removed	Delete Superseded by Schedule 3 Condition 15
h)	<ul style="list-style-type: none"> <li>Data loggers will be installed in monitoring wells to continuously monitor and provide additional data for input to the groundwater model.</li> </ul>	Prior to construction	Delete Superseded by Schedule 3 Condition 15
i)	<ul style="list-style-type: none"> <li>Trigger levels for monitoring will be developed in consultation with DPI Water to ensure the groundwater table is not intersected.</li> </ul>	Prior to construction	Delete Superseded by Schedule 3 Condition 15
j)	<ul style="list-style-type: none"> <li>Management protocols for PFAS for sub-water table disturbance during construction.</li> </ul>	Prior to construction	Delete Superseded by Schedule 3 Condition 15
k)	<ul style="list-style-type: none"> <li>WSS will update the groundwater model every two years from commencement of quarry activities to determine maximum predicted groundwater level along with updated topography showing the progress of the quarry.</li> </ul>	Every 2 years	Delete Superseded by Schedule 2 Condition 11
l)	<ul style="list-style-type: none"> <li>The quarry floor height will be reviewed every two years against the revised groundwater model (refer to Rehabilitation section for establishing the adopted level), unless trigger levels determine a review is required.</li> </ul>	Every 2 years	Delete Superseded by Schedule 2 Condition 11

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m)	<ul style="list-style-type: none"> <li>No equipment maintenance will occur within Tomago Sandbeds Special Area.</li> </ul>	Ongoing	Nil
<b>8.3.9 Hydrocarbon Controls</b>			
a)	<ul style="list-style-type: none"> <li>If obvious signs of contamination such as discoloured or odorous soils are encountered during site set-up and extraction, work will stop in the vicinity of the area and, if safe to do so, samples will be taken for analysis</li> </ul>	Ongoing	Nil
b)	<ul style="list-style-type: none"> <li>A fully bunded and undercover hardstand for fuel, hydrocarbon and chemical storage will be constructed outside of the Tomago Sandbeds Special Area.</li> </ul>	Ongoing	Delete Superseded by Schedule 3 Condition 20
c)	<ul style="list-style-type: none"> <li>Personnel to be trained in spill containment and response procedures.</li> </ul>	Ongoing	Nil
d)	<ul style="list-style-type: none"> <li>Hazardous material stored onsite will be kept to the minimum practicable amount.</li> </ul>	Ongoing	Nil
e)	<ul style="list-style-type: none"> <li>Spill response kits will be kept and maintained onsite.</li> </ul>	Ongoing	Nil
f)	<p>Processing plant area (moved around the site based on resource area) installed on site will include:</p> <ul style="list-style-type: none"> <li>A bunded parking area for the overnight parking of the bull dozer.</li> <li>If power via electrical mains supply is unavailable, diesel generators will be required. If used, diesel generators will:               <ul style="list-style-type: none"> <li>Be located within a bunded area.</li> <li>Include an internal double skinned and self bunded diesel storage tank.</li> <li>Be refuelled as required within the bunded refill area.</li> </ul> </li> <li>Be returned to the Office and Workshop Compound on conclusion of operations each Saturday. This is proposed in the context of reducing the risk of vandalism over the weekend, and limiting risks (e.g. electrical and diesel) associated with the daily transport of the generator to and from processing plant area.</li> </ul>	Ongoing	Nil

Item	Action	Trigger/ Timing	Proposed Change to Commitment
g)	Mobile equipment installed on site will: <ul style="list-style-type: none"> <li>• Be refuelled at a lined and bunded refuelling area.</li> <li>• Include spill control kits.</li> <li>• Operators trained in the use and maintenance of spill control kits.</li> <li>• Return of all mobile equipment at end of each day to Office and Workshop Compound (excluding the bulldozer tracked equipment).</li> </ul>	Ongoing	Amend Change bulldozer to tracked equipment.
h)	<ul style="list-style-type: none"> <li>• Electric screen and air separator installed on site will include bunding under the electric screen and air separator plant to capture hydraulic leaks.</li> </ul>	Ongoing	Delete Limited practical value
i)	<ul style="list-style-type: none"> <li>• Refuelling of equipment will be undertaken over a bunded concrete pad by a registered contractor. No fuel or diesel will be stored on site contained in plant and equipment. Oils and grease will be stored in a bunded area.</li> </ul>	Ongoing	Delete Superseded by Schedule 3 Condition 20
j)	Mobile plant used in the extraction process will be refuelled outside of the Tomago Sandbeds Special Area, including: <ul style="list-style-type: none"> <li>• Pneumatic tyred loaders (2x full time)</li> <li>• Dump Trucks (campaign usage as required for extraction area 7C).</li> <li>• Sales truck (Daily).</li> <li>• Trailer mounted diesel generator to power processing plant interim or back up in the event electricity is not available.</li> </ul>	Ongoing	Delete Places unnecessary restriction on operations and sup[receded by Schedule 3 Condition 15-21
k)	All diesel powered pneumatic tyred mobile plant will be removed from the Tomago Sandbeds Special Area at the end of each day's operation, including: <ul style="list-style-type: none"> <li>• Loaders x 2 (daily)</li> <li>• Dump trucks (campaign usage as required for extraction area 7C).</li> <li>• Sales trucks (daily)</li> <li>• Trailer mounted diesel generator (where used)</li> <li>• This plant will be stored within fenced area with CCTV and back to base security at the Office and Worksop area located outside the Special Area.</li> </ul>	Ongoing	Delete Superseded by Schedule 3 Condition 21
l)	<ul style="list-style-type: none"> <li>• When plant and equipment is not operating, pressure will be removed from hydraulic lines and hydraulic fluid returned to the tank. The tank will be bunded to 110% of capacity.</li> </ul>	Ongoing	Delete Limited practical value and implementation complex

Item	Action	Trigger/ Timing	Proposed Change to Commitment
m)	<p>The tracked plant will be refuelled on a fully bunded and lined hardstand. The following plant that are permitted to be refuelled on the fully bunded and lined hardstand area within the Tomago Sandbeds Special area include:</p> <ul style="list-style-type: none"> <li>• 1 x Dozer (Maximum of 3 campaigns of 2 weeks each, 42 days per year).</li> <li>• 1x Excavator (Maximum of 3 campaigns of 2 weeks each, 42 days per year).</li> </ul>	Ongoing	Delete Inconsistent with proposed amendment to operations
n)	<p>Any hydrocarbon spills on site will include the following response:</p> <ul style="list-style-type: none"> <li>• Immediate deployment of spill control kits.</li> <li>• Notifications of relevant stakeholders (e.g. EPA and HWC) consistent with the Pollution Incident Response Management Plan (PIRMP) for any spills estimated to be greater than 30 L.</li> <li>• Recovery of all contaminated sands or gravels regardless of size for collection and offsite disposal at a licenced waste facility.</li> </ul>	Following Spill	Nil
o)	<ul style="list-style-type: none"> <li>• Appropriate maintenance schedules for plant and equipment must be followed to detect and repair leaks.</li> </ul>	Ongoing	Nil
<b>8.3.10 Greenhouse Gas and Energy</b>			
a)	<ul style="list-style-type: none"> <li>• Record diesel and electricity by the operations.</li> <li>• Review of opportunities to improve energy efficiency.</li> </ul>	Ongoing	Nil
b)	<p>On site diesel efficiency will continue to improve based upon the following measures:</p> <ul style="list-style-type: none"> <li>• Scheduling activities so that equipment and vehicle operation is optimised.</li> <li>• The quarry fleet will continue to be replaced by more efficient equipment over the life of the project, where replaced. Fuel use efficiency will be an important factor in selecting quarry fleet.</li> <li>• Resource recovery will be optimised within the constraints of the Project.</li> <li>• Machines will be working to their upper design performance. Optimising machine performance is key performance indicator for operators.</li> <li>• Fleet will be serviced and maintained to OEM specifications.</li> </ul>	Ongoing	Nil
<b>8.3.11 Waste</b>			

Item	Action	Trigger/ Timing	Proposed Change to Commitment
a)	<ul style="list-style-type: none"> <li>Application to Port Stephens Council for installation of effluent management system.</li> </ul>	During construction (prior to construction of ablutions and effluent management system).	Delete Superceded by Schedule 3 Condition 43
b)	<ul style="list-style-type: none"> <li>All wastes generated by Cabbage Tree Road Quarry will be managed by the way of Council collection services or via appropriately licensed waste contractors.</li> </ul>	Ongoing	Delete Superceded by Schedule 3 Condition 43
c)	<ul style="list-style-type: none"> <li>The on-site pumping system must be located and constructed in accordance with Port Stephens Councils <i>Development Assessment Framework</i> for on-site sewerage.</li> </ul>	During Construction	Delete Superceded by Schedule 3 Condition 43
d)	<ul style="list-style-type: none"> <li>No onsite disposal of waste will occur.</li> </ul>	Ongoing	Delete Superceded by Schedule 3 Condition 44
e)	<ul style="list-style-type: none"> <li>Scrap metal will be deposited into a dedicated receptacle for periodic collection and recycling.</li> </ul>	Ongoing	Delete Superceded by Schedule 3 Condition 43
f)	<ul style="list-style-type: none"> <li>Diesel fuel will be stored within self-bunded above ground tank and all refuelling will be undertaken on a bunded and covered hardstand area.</li> </ul>	Ongoing	Nil
g)	<ul style="list-style-type: none"> <li>During excavation any foreign materials encountered will signal an immediate stop work in the proximate area until the nature of the object/s can be determined. In the case of uncovered potential asbestos sheeting or pipe laboratory testing may be required to determine if asbestos fibres are present in the surrounding sand.</li> </ul>	Ongoing	Nil
h)	<ul style="list-style-type: none"> <li>Where excavation is to occur below the quarry floor, an excavation specific spoil and water management procedure is to be developed to manage PFAS contaminated soil and groundwater and/or acid sulphate soils.</li> </ul>	As required	Delete Superceded by Schedule 3 Condition 15 (iii)
i)	<ul style="list-style-type: none"> <li>All waste oil will be collected and stored in containers within a covered and bunded area, and will be removed from the site by an appropriately licensed contractor with all relevant waste tracking documentation completed.</li> </ul>	Ongoing	Delete Superceded by Schedule 3 Condition 43

Item	Action	Trigger/ Timing	Proposed Change to Commitment
j)	<ul style="list-style-type: none"> <li>All oil filters will be separately stored in containers with a covered bunded area, and will be removed from the site by an appropriately licensed contractor with all relevant waste tracking documentation completed.</li> </ul>	Ongoing	Delete Superceded by Schedule 3 Condition 43
k)	<ul style="list-style-type: none"> <li>Silt will be periodically removed from the various silt control structures and used in progressive rehabilitation of the site</li> </ul>	Ongoing	Delete Superceded by Schedule 3 Condition 43
l)	<ul style="list-style-type: none"> <li>All office paper and general waste originating from the office, amenities building and packaging from routine equipment and vehicle maintenance consumables will be placed in appropriate containers for collection by council or a licensed contractor for disposal/ recycling at an appropriate waste management facility.</li> </ul>	Ongoing	Delete Superceded by Schedule 3 Condition 43
m)	<ul style="list-style-type: none"> <li>Wastewater from the amenities, workshop and laboratory will be collected in a pump-out system and transported off-site by a licensed contractor.</li> </ul>	Ongoing	Delete Superceded by Schedule 3 Condition 43
n)	<ul style="list-style-type: none"> <li>All waste tyres will be removed by the supplier of replacement tyres.</li> </ul>	Ongoing	Delete Superceded by Schedule 3 Condition 43
<b>8.3.12 Air Quality</b>			
a)	<p>Air Quality controls and management measures will be revised and updated on determination of the project to ensure management measures proposed adequately reflect the requirements of the Conditions of Consent.</p> <ul style="list-style-type: none"> <li>The revised controls will be prepared in consultation with the NSW EPA for approval by NSW DPE.</li> </ul>	Prior to commencement of operations	Delete Superceded by Schedule 3 Condition 9
b)	<ul style="list-style-type: none"> <li>Bitumen seal access road through to the boundary for the southern boundary of the northern resource area.</li> <li><i>Bitumen seal access road through to the northern boundary of the southern resource area.</i></li> </ul>	During Construction	<p>Amend Sealing through to the northern resource area restricts the effective movement of machinery between resource areas. Sealing to a practical distance past the weigh bridge is considered adequate.</p> <p>Concerns were raised in Mod3 by TRRA &amp; KKEPS about the potential for increased dust. Based on</p>

Item	Action	Trigger/ Timing	Proposed Change to Commitment
			existing observations there is limited difference between a sealed and gravel road at low speeds in dust generation given the extent of cleaning required to remove dust from sealed pavement compared to gravel roads.
c)	<ul style="list-style-type: none"> <li>Utilise water carts or a sprinkler system for dust suppression of exposed areas and haul roads.</li> </ul>	Ongoing	Nil
d)	<ul style="list-style-type: none"> <li>Water sprays will be incorporated into transfer points where higher levels of moisture are acceptable, such as conveyer transfers to product and reject stockpiles.</li> </ul>	Ongoing	Nil
e)	<ul style="list-style-type: none"> <li>Install a suitable continuous air quality monitoring network.</li> </ul>	Ongoing	Delete Superseded by Schedule 3, Condition 9
f)	<ul style="list-style-type: none"> <li>WSS will install a meteorological station to allow quarry personnel to access instantaneous wind speed and direction data and also generate site specific meteorological data records.</li> </ul>	Ongoing	Delete Superseded by Schedule 3, Condition 10
g)	<p>Quarry operations will be subject to a staged shutdown of equipment based on rolling 24 hour average PM10 concentrations, PM10 concentration spikes and adverse background air quality and meteorological conditions. Indicative completion criteria are set out below, it important to note that these triggers will be adapted and refined as the project progresses based on actual monitoring data. The proposed draft triggers include:</p> <p>Where the wind is directed toward surrounding residences, that is the weather station indicates winds are blowing from the quadrants west (270 degrees), through North (0 degrees) to East (90 degrees) the quarry should review dust controls (e.g. stockpile sprays and need for dust suppression on trafficked areas). In addition, based on the real-time air quality monitoring network, the following controls should be implemented:</p> <ol style="list-style-type: none"> <li>No topsoil stripping or dozer push to occur where:             <ol style="list-style-type: none"> <li>Wind is directed toward</li> </ol> </li> </ol>	Continuous	Delete Unnecessary restriction on operations with limited practicality, superseded by Air Quality Management Plan under Schedule 3 Condition 9

Item	Action	Trigger/ Timing	Proposed Change to Commitment
	<p>surrounding residences; AND</p> <ul style="list-style-type: none"> <li>b) Rolling PM10 24-hour average exceeds 35 µg/m<sup>3</sup> OR</li> <li>c) Rolling PM10 1-hour average exceeds 50 µg/m<sup>3</sup>.</li> </ul> <p>2. If levels continue to increase after two hours, suspend sand extraction and processing (loading trucks only) where:</p> <ul style="list-style-type: none"> <li>a) Wind is directed toward surrounding residences; AND</li> <li>b) Rolling PM10 24 hour average exceeds 42.5 µg/m<sup>3</sup> OR</li> <li>c) Rolling PM10 1-hour average exceeds 50 µg/m<sup>3</sup>.</li> </ul> <p>3. If levels continue to increase after two hours, suspend loading trucks (no machinery operating) where:</p> <ul style="list-style-type: none"> <li>a) Wind is directed toward surrounding residences; AND</li> <li>b) Rolling PM10 24 hour average exceeds 45 µg/m<sup>3</sup>. OR</li> <li>c) Rolling PM10 1-hour average exceeds 50 µg/m<sup>3</sup>.</li> </ul>		
h)	<p>In the event the Trigger Response Framework fails to maintain levels below criteria, monitoring results are to be assessed for compliance using the following protocol:</p> <ol style="list-style-type: none"> <li>1. Results above 24 hour average PM10 criteria of 50 µg/m<sup>3</sup>.</li> <li>2. Is wind direction in the preceding three hours toward receptors and the monitoring location? If <b>No</b>, unlikely to be due to project, suspend extraction activities until levels drop below 48 µg/m<sup>3</sup>. Sales can continue. If <b>Yes</b> continue to Step 3.</li> <li>3. Are regional levels also elevated as per the EPA monitoring network?</li> <li>4. Does the quarry monitoring network show upstream and downstream air quality levels are above criteria? If <b>Yes</b>, unlikely to be due to project, suspend extraction activities until levels drop below 48 µg/m<sup>3</sup>. If <b>No</b> continue to Step 5.</li> <li>5. Exceedance directly related to activities onsite. Non-compliance has occurred.</li> </ol> <p>Review activities onsite and develop actions to mitigate future non-compliance.</p>	<p>When exceedance of air quality criteria measured. DPE notified within 24 hours where non-compliance identified.</p>	<p>Delete Superseded by Schedule 3, Condition 9</p>

Item	Action	Trigger/ Timing	Proposed Change to Commitment
i)	<ul style="list-style-type: none"> <li>If noncompliance is demonstrated, additional monitoring will be undertaken within one week following implementation of additional mitigation controls.</li> </ul>	Following non-compliance.	Delete Superseded by Schedule 3, Condition 9
<b>8.3.13 Noise</b>			
a)	<p>Noise controls will be revised and updated on determination of the project to ensure management measures proposed adequately reflect the requirements of the Conditions of Consent.</p> <ul style="list-style-type: none"> <li>The revised controls will be prepared in consultation with the NSW EPA for approval by NSW DPE.</li> </ul>	Prior to commencement of operations	Delete Superseded by Schedule 3 Condition 6
b)	<p>The following noise management measures will be employed during construction activities:</p> <ul style="list-style-type: none"> <li>The proponent will inform potentially noise affected residents of the nature of works to be carried out, the expected noise levels and duration, as well as contact details.</li> <li>All feasible and reasonable work practices will be implemented where possible to meet the noise affected level.</li> <li>Construction personnel will be made aware of the requirement to minimise noise, and to implement best practice operating techniques to minimise noise.</li> <li>Consideration should be given to operating low noise emission plant where possible.</li> </ul>	During Construction	Nil Redundant
c)	<p>Operational noise mitigation measures will include:</p> <ul style="list-style-type: none"> <li>Areas 8, 9 and 10 will be extracted last to retain the natural sound attenuation of the sand dunes for as long as possible.</li> <li>Extraction orientation will, where feasible, maintain the sand face between the operating plant and the nearest dwelling.</li> <li>Use of a dozer for operational material push up will be restricted to areas within the northern resource area and only used in the southern resource area where monitoring determines noise criteria will not be exceeded at dwellings.</li> <li>All dozers operating within the southern resource area will be restricted to first gear in reverse to minimise associated track noise.</li> <li>All equipment frequently used onsite will be fitted with a BBS-Tek "backalarm" broadband reversing alarms or similar.</li> </ul>	Ongoing	Nil

Item	Action	Trigger/ Timing	Proposed Change to Commitment
	<ul style="list-style-type: none"> <li>All plant is to be positioned on each pad with regard to minimising the potential for offsite noise at the surrounding dwellings.</li> <li>Diesel generators used for backup power will be positioned such that the exhaust is generally directed to the north.</li> </ul>		
d)	<p>The following noise monitoring is recommended for the construction phase of the project:</p> <ul style="list-style-type: none"> <li>Attended noise monitoring at the potentially most affected residences at commencement, or during the highest noise emitting period, of each construction activity.</li> <li>If noncompliance is demonstrated, additional monitoring will be undertaken within one week following implementation of additional mitigation controls.</li> <li>Vibration monitoring at the potentially most affected residences at commencement, or during the highest vibration emitting period, of Cabbage Tree Road intersection construction activity.</li> </ul>	During estimated 12 week construction phase.	Nil Redundant
e)	Detailed dilapidation reporting will also be undertaken at all properties within a 300 m radius of quarrying activities and/or intersection works where access is provided to undertake the reporting prior to the commencement of any works. Each property owner will be provided a copy of the dilapidation report for their property.	Prior to commencement of any work within a 300 m radius of private dwelling	Delete Superseded by Schedule 3, Condition 40
f)	<p>The following monitoring is recommended for the operational phase of the Project:</p> <ul style="list-style-type: none"> <li>Attended noise monitoring at the potentially most affected residences at commencement, or during the highest noise emitting period, of each phase of the Project. These phases should include:             <ul style="list-style-type: none"> <li>Clearing and stripping in Areas 1, 3, 7, 8, 9, 10.</li> <li>Extraction and processing works in Areas 1, 8, 9, 10.</li> </ul> </li> <li>Periodic attended monitoring with a frequency of one day per quarter unless targeted monitoring is already scheduled in that quarter.</li> </ul>	Quarterly, unless targeted monitoring scheduled.	Delete Superseded by Schedule 3 Condition 6
g)	<p>Attended monitoring results are to be assessed for compliance using the following protocol:</p> <ul style="list-style-type: none"> <li>Results above intrusiveness criteria.</li> <li>Do standard weather conditions apply (as per INP)?</li> </ul>	When exceedance of noise criteria identified.	Delete Superseded by Schedule 3 Condition 6

Item	Action	Trigger/ Timing	Proposed Change to Commitment
	<ul style="list-style-type: none"> <li>If non-standard weather conditions apply, undertake follow-up monitoring.</li> <li>Are the results considered to be directly related to activities onsite or are they from an unrelated source?</li> <li>If related to activities onsite and standard weather conditions apply a non-compliance has occurred.</li> </ul>		
h)	<ul style="list-style-type: none"> <li>If noncompliance is demonstrated, additional monitoring will be undertaken within one week following implementation of additional mitigation controls.</li> </ul>	Following non-compliance.	Delete Superseded by Schedule 3 Condition 6
i)	<p>Where noise monitoring or complaints suggest the project is unable to achieve these noise goals the proponent will undertake the following sequence of investigations and controls:</p> <ul style="list-style-type: none"> <li>Review the details of the noise level exceedances, the weather, operational activities at the time and the nature of the noise exceedance.</li> <li>If due to failure or equipment or to follow operational procedures, undertake corrective actions to prevent recurrence.</li> <li>If exceedance not as a result of failure, review and refine procedures.</li> <li>If operational practices cannot be improved, consult with the residents of impacted dwellings to discuss potential mitigation measures, this may include:               <ul style="list-style-type: none"> <li>Double glazing of windows or similar improvements to dwellings.</li> <li>Erection of a noise barrier (on resident's property or near source).</li> </ul> </li> <li>Provide compensation to allow receptor to seek relief from noise emissions.</li> </ul>	Complaints and non-compliance.	Delete Superseded by Schedule 3 Condition 6
j)	<ul style="list-style-type: none"> <li>Attended noise monitoring at representative dwellings will be carried out during normal operations and the results compared with the predicted model results. The model may be recalibrated to allow noise levels for the remaining scenarios to be more accurately predicted.</li> </ul>	Prior to commencement of Sector 8.	Delete Superseded by Schedule 3 Condition 6
<b>8.3.14 Aboriginal Heritage</b>			
a)	An Aboriginal Cultural Heritage Management Plan (ACHMP) has been developed in consultation with the relevant Aboriginal stakeholders and BCD prior to the commencement of the Project. The ACHMP	Prior to commencement of project	Delete Superseded by Schedule 3 Condition 32

Item	Action	Trigger/ Timing	Proposed Change to Commitment
	addresses the following matters: <ul style="list-style-type: none"> <li>A protocol for managing any archaeological material exposed during the course of operations.</li> <li>Recommendations for the ongoing management of the study area.</li> </ul>		
b)	<ul style="list-style-type: none"> <li>All staff and contractors will undergo site induction incorporating Aboriginal cultural awareness and be made aware of statutory legislation protecting sites and places of significance.</li> </ul>	Ongoing	Delete Superseded by Schedule 3 Condition 32
c)	<ul style="list-style-type: none"> <li>Management of any artefacts will be undertaken in consultation with Aboriginal stakeholder groups in accordance with the ACHMP.</li> </ul>	Ongoing	Delete Superseded by Schedule 3 Condition 32
<b>8.3.15 Historical Heritage</b>			
a)	<ul style="list-style-type: none"> <li>Footings associated with the former World War II radar station will be subject to photographic archival recording of footings and survey of its location prior to disturbance by a qualified archaeologist.</li> </ul>	Prior to disturbance of footings – expected within Sector 1A or 2.	Delete Superseded by Schedule 3 Condition 31
b)	<ul style="list-style-type: none"> <li>Should unexpected heritage items be discovered during the Project and are likely to be disturbed by the Project, all works in the immediate area will cease and a qualified archaeologist or heritage consultant will provide an assessment and, if necessary, the Heritage Branch, Department of Planning will be notified.</li> </ul>	On disturbance of unexpected heritage item.	Delete Superseded by Schedule 3 Condition 32, 33
<b>8.3.16 Visual Amenity</b>			
a)	<ul style="list-style-type: none"> <li>All structures with the potential to be visible from off site will be finished in non-reflective natural tones which blend with natural vegetation.</li> </ul>	During construction	Nil
b)	<ul style="list-style-type: none"> <li>Any required lighting will be directed downwards in accordance with relevant Australian Standards (AS 4282- Control of Obtrusive Effects of Outdoor Lighting).</li> </ul>	During construction	Nil
c)	<ul style="list-style-type: none"> <li>Maintain a 20 m vegetated buffer along the southern boundary of the operation between the resource area and Cabbage Tree Road.</li> </ul>	During removal of Sector 9	Delete Superseded by Schedule 3, Condition 42a
d)	<ul style="list-style-type: none"> <li>Exclude resource extraction, thus maintaining a vegetated screen, for the first 75m of the access road from Cabbage Tree Road, as shown by Response to Submissions Figure 3.</li> </ul>	During construction	Delete Superseded by Schedule 3, Condition 42b

Item	Action	Trigger/ Timing	Proposed Change to Commitment
e)	<ul style="list-style-type: none"> <li>Areas of disturbance are kept to the minimum practicable at any one point.</li> </ul>	Ongoing	Nil
f)	<ul style="list-style-type: none"> <li>Undertake rehabilitation of disturbed areas as soon as practicable.</li> </ul>	Ongoing	Delete Superseded by Schedule 3, Condition 36
<b>8.3.17 Bushfire and Hazard</b>			
a)	<ul style="list-style-type: none"> <li>Consultation with the Rural Fire Service on fire management controls.</li> </ul>	Prior to construction	Delete Superseded by Schedule 3, Condition 49
b)	<ul style="list-style-type: none"> <li>Review bushfire danger ratings and when total fire bans are in place prior to undertaking clearing activities or other hot works onsite. Postpone activity where feasible or increase preparedness through having a fire tanker on standby.</li> </ul>	Prior to undertaking clearing activities.	Nil
c)	<ul style="list-style-type: none"> <li>All mobile machinery and fixed plant to include on-board fire extinguishers.</li> </ul>	At all times.	Nil
d)	<ul style="list-style-type: none"> <li>Maintain a 40 m asset protection zone (APZ) around the office and workshop area.</li> </ul>	At all times.	Nil
e)	<ul style="list-style-type: none"> <li>Maintain access roads and mapping of tracks consistent with their required purpose.</li> </ul>	At all times.	Nil
f)	<ul style="list-style-type: none"> <li>All dangerous goods will be stored in accordance with dangerous goods storage requirements and relevant Australian Standards.</li> </ul>	Ongoing	Delete Superseded by Schedule 3, Condition 45
g)	<ul style="list-style-type: none"> <li>Procedures for refuelling and servicing of all plant and equipment will be undertaken in a manner to prevent spills and protect drinking water catchment from potential contamination. These procedures will be detailed in the EMS to be prepared for the site operations.</li> </ul>	Ongoing	Delete Superseded by Schedule 3, Conditions 15-21
<b>8.3.18 Ecology and Rehabilitation Management</b>			
a)	<p><b><u>Seed Collection</u></b></p> <ul style="list-style-type: none"> <li>Seed will be collected by appropriately qualified contractor in advance of clearing activities for species determined likely to require direct seeding or propagation, and</li> </ul>	Annually, during appropriate season for target species	Delete Superseded by Schedule 3, Condition 37

Item	Action	Trigger/ Timing	Proposed Change to Commitment
	determined to be required for direct seeding and propagation based on monitoring results.		
b)	<ul style="list-style-type: none"> <li>Seed will be stored under appropriate conditions.</li> </ul>	At all times	Delete Superseded by Schedule 3, Condition 37
c)	<p><b><u>Pre-clearing surveys</u></b></p> <ul style="list-style-type: none"> <li>Confirmation of resource boundaries and extent of clearing.</li> <li>Habitat trees (containing hollows or nests) within the clearing area will be clearly marked using flagging tape or spray paint. Habitat trees are to be felled using the procedure outlined in Rehabilitation Plan.</li> <li>Habitat trees (containing hollows or nests) within 3 m of the resource boundary will be marked for avoidance, including the delineation of the tree drip line to limit compaction and excavation that may affect the tree.</li> <li>Areas of noxious weeds or environmental weeds will be marked to avoid mixing of weed containing soil with weed-free topsoil (refer to 8.3.5 Weed Control).</li> <li>The following surveys will be conducted within the area proposed for removal within a one day period:               <ul style="list-style-type: none"> <li>Nocturnal surveys will be conducted the night before clearing, and diurnal surveys will be conducted the morning of clearing, prior to commencement; and</li> <li>The procedure for when a Koala is identified within the clearing area is outlined below.</li> <li>All clearing will be supervised by a suitable qualified ecologist.</li> </ul> </li> <li>Any occupied trees will be clearly marked and will be left during clearing and managed according to the habitat tree removal protocol. Where a</li> <li>Koala is identified in a tree, the procedure outlined below will be followed.</li> </ul>	Prior to clearing each sector	Delete Superseded by Schedule 3, Condition 37
d)	<p><b><u>Koala Management Protocol</u></b></p> <p>The following procedure will be used if a Koala is identified as occupying a tree within the proposed clearing area. The aim of this capture and relocation procedure is to ensure that no Koalas</p>	During clearing, if a Koala is identified	Delete Superseded by Schedule 3, Condition 37  Unnecessary handling of wildlife is considered

Item	Action	Trigger/ Timing	Proposed Change to Commitment
	<p>are harmed during the vegetation clearing activities within the extraction area:</p> <ul style="list-style-type: none"> <li>The individual will be captured prior to the commencement of clearing.</li> <li>The individual will be given a veterinary check for any disease or illness and a monitoring device will be attached (remote tracker).</li> <li>Any Koalas captured will be relocated into an area of retained vegetation adjacent to where it was originally located.</li> <li>All individuals will be monitored for a three-month period post relocation.</li> <li>Where any Koalas are identified and captured for re-location, the following will be reported on: <ul style="list-style-type: none"> <li>Location identified within the disturbance area, and location of relocation;</li> <li>Movement of the Koala will be mapped for the three-month period;</li> <li>Any instances where the Koala enters areas proposed for future clearing will be identified, and the need for further monitoring/action determined. If there is the potential for the individual to occur within areas of future vegetation clearing, a plan to ensure the individual is not impacted will be developed; and</li> </ul> </li> <li>The health of the individual will be checked at the end of the three-month period and any impacts (i.e. dog attacks, vehicle strikes, bushfire impacts, or disease) will be identified.</li> </ul>		<p>problematic. Preferred measure is to incorporate a suitable buffer during clearing following any siting and allow for self-relocation.</p> <p>During Mod 3 consultation the TRRA and KKEPS supported the removal of this commitment and the emergency contacts be updated in the BRMP to include the Port Stephens Koala Hospital.</p>
e)	<p><b><u>Vegetation Clearing</u></b></p> <ul style="list-style-type: none"> <li>A fully qualified, experienced and licenced ecologist will supervise clearing and encourage movement of any displaced animals into adjoining vegetation.</li> </ul>	During clearing	<p>Amend</p> <p>Include the following: “Clearing for the purpose of this condition is vegetation with a stem diameter at breast height greater than 5cm.</p> <p>The TRRA raised concerns in the removal of this commitment during Mod3, as noted below the change is considered justified.</p> <p>The intent of this proposed changed is to improve the</p>

Item	Action	Trigger/ Timing	Proposed Change to Commitment
			<p>definition of 'vegetation clearing' within the statement of commitments. Currently, without an appropriate definition, even the mowing/mulching or regularly maintained grassy verges would require an ecologist to be present. Limiting ecologist present to the clearing of vegetation with a stem DBH of 5cm or more is to preclude the presence of an ecologist for routine maintenance such as mulching of perimeter clearing areas and incidental maintenance of branches and shrubs along tracks.</p>
f)	<ul style="list-style-type: none"> <li>• Clearing will be undertaken predominantly by bulldozer and may be conducted in conjunction with topsoil removal.</li> <li>• Vegetation should be cleared in a way that maintains habitat linkages and allows fauna living in or near the clearing site to move safely from the site to adjacent areas:               <ul style="list-style-type: none"> <li>○ Clearing should occur towards connecting vegetation.</li> <li>○ The direction of clearing should also ensure that fauna are directed away from Cabbage Tree Road and the quarry spine road.</li> <li>○ Sequential clearing should not create an 'island' of habitat that is isolated from adjoining habitat by roads or cleared and disturbed areas.</li> </ul> </li> <li>• Habitat trees will be left to stand for a period of two nights (also refer to Koala Protocol).</li> <li>• Habitat trees will be left to stand for a period of two nights (also refer to Koala Protocol and Habitat Tree Removal) and "soft-felled" under supervision of a suitably experienced fauna ecologist.</li> <li>• No clearing should occur during the early evening or at night (when fauna species are most likely to be on the move and are more vulnerable to injury).</li> <li>• Plants that are suitable for brush matting (and may be vulnerable to dropping seed</li> </ul>	<p>During clearing</p>	<p>Delete Superseded by Schedule 3, Condition 37</p>

Item	Action	Trigger/ Timing	Proposed Change to Commitment
	<p>during clearing) will be cut ahead of the quarry face and stockpiled on weed-matting or similar to ensure seed is not “lost” during clearing and can then be spread over topsoiled areas.</p> <ul style="list-style-type: none"> <li>• Large organic debris, and where possible, other vegetation cleared from the operational area will be stockpiled and spread on rehabilitated areas immediately after re-distribution of topsoil.</li> <li>• Vegetation stockpiling should maintain a minimum 10 m cleared asset protection zone around the stockpile to minimise fire risk in adjoining vegetation.</li> </ul>		
g)	<p><b><u>Fauna Displacement Protocol</u></b></p> <ul style="list-style-type: none"> <li>• Displacement of fauna may occur as part of the clearing process. All clearing will be supervised by a suitable qualified, experienced and licenced ecologist, the following protocol should be followed in case of an injured animal:</li> <li>• If possible any fauna fleeing the clearing area should be captured and relocated or directed to a safe area outside the extraction zone during the tree removal process.</li> <li>• All fauna are to be handled in such a way as to prevent injury to the animal or the handler.</li> <li>• Once the animal is safely handled it should be relocated or caged in a hessian bag or box and released at an appropriate time of day.</li> <li>• Any microbats or other nocturnal species captured during the tree removal process should be held in cotton or hessian bags and released at dusk on the same day as capture if possible.</li> <li>• If any animal is injured during the construction process, a veterinarian should be contacted immediately for professional advice on the best course of action.</li> <li>• If any native animal is injured during other operational/ construction processes while an ecologist, environmental representative or animal handler is not present, they must be contacted immediately.</li> </ul>	During clearing	Delete Superseded by Schedule 3, Condition 37
h)	<p><b><u>Habitat Tree Removal</u></b></p> <p>Habitat trees will be removed according to the following protocol:</p> <ul style="list-style-type: none"> <li>• Hollow bearing trees will be left standing for two nights after the surrounding vegetation</li> </ul>	During clearing of habitat trees	Delete Superseded by Schedule 3, Condition 3

Item	Action	Trigger/ Timing	Proposed Change to Commitment
	<p>has been cleared to encourage any native fauna species utilising the habitat hollows to self-relocate. The actual felling of any habitat trees will be attended by a suitably experienced fauna ecologist in order to ensure the safety of any fauna found to be in the hollows.</p> <ul style="list-style-type: none"> <li>• On all occasions, trees having potential habitat hollows will be 'soft felled' by an experienced machine operator. The recommended soft felling procedure is as follows:               <ul style="list-style-type: none"> <li>○ The hollow-bearing tree is given several moderate nudges with an excavator to give a warning to any occupying native fauna.</li> <li>○ The hollow-bearing tree is then surveyed and native fauna given an opportunity to self-relocate before the tree is actually felled.</li> <li>○ The hollow-bearing tree is soft felled with the rate of the tree's fall controlled by the machinery operator to minimise impact.</li> <li>○ All hollows will be inspected for fauna and if any are found, the animal should be relocated at an appropriate time of day (i.e. dusk for nocturnal species). If the animal is injured, it will be taken to a local veterinarian.</li> <li>○ Suitable medium and large hollows should be cut from the tree at least one metre beyond the deepest point of the hollow and then stored in a dry safe place in size related categories for replacement in rehabilitated areas.</li> </ul> </li> <li>• The number and size of hollows within each habitat tree will be recorded after each habitat is felled. This information will inform the nest box installation works that will occur post extraction.</li> </ul>		
i)	<p><b><u>Topsoil Stripping and Placement</u></b>            Areas of 'weed contaminated' topsoil:</p> <ul style="list-style-type: none"> <li>• Refer to Weed Control (Section 8.3.5).</li> </ul>	Before and during topsoil removal and respreading of topsoil.	Delete Duplicated by SOC 8.3.5
j)	<p>Areas of 'clean' topsoil:</p> <ul style="list-style-type: none"> <li>• Topsoil is to be transferred and respread directly over the previously quarried area as soon as it is mined out and no longer required for access (exhausted area).</li> <li>• Once an area is exhausted and becomes available for rehabilitation the floor of the quarried area will be ripped, if it is hard and impenetrable, prior to redistribution of topsoil.</li> </ul>	During topsoil removal and redistribution	Nil

Item	Action	Trigger/ Timing	Proposed Change to Commitment
	<ul style="list-style-type: none"> <li>Direct topsoil transfer from an area ahead of the mining face, to the recently exhausted area, will be utilised to facilitate the natural regeneration of plant species and limit the degradation of soil microbes.</li> </ul>		
k)	<ul style="list-style-type: none"> <li>Strip topsoil to 100 mm minimum depth (having regard to final landform floor levels of the quarried area needing to meet the required 1 m above groundwater).</li> </ul>	During topsoil removal and redistribution	Nil
l)	<ul style="list-style-type: none"> <li>Where topsoil is stripped at more than 150 mm thickness, topsoil to be stripped in two paths and re-laid in correct order.</li> </ul>		Delete Practically stripping multiple thin layers within sand is not readily achievable.
m)	<ul style="list-style-type: none"> <li>Avoiding stockpiling topsoil enabling direct transfer to rehabilitation areas where feasible.</li> </ul>		Nil
n)	<ul style="list-style-type: none"> <li>Minimising stripping depths to avoid seed burial, and taking two strips where possible ensuring respreading is sequential.</li> </ul>		Delete Practically stripping multiple thin layers within sand is not readily achievable.
o)	<ul style="list-style-type: none"> <li>If a hard or indurated layer is present on the floor of the quarried area, the floor will be ripped prior to topsoil respreading.</li> </ul>	Prior to topsoil placement	Nil
p)	<ul style="list-style-type: none"> <li>Respread topsoil to a minimum thickness of 100 mm, noting the need to achieve a final land form of 1 m above groundwater).</li> </ul>	During topsoil placement	Nil
q)	<p><b><u>Operational Levels and Final Landform</u></b></p> <ul style="list-style-type: none"> <li>Quarry floor levels to be established on weekly basis.</li> </ul>	Weekly	Delete Superseded by Schedule 2, Condition 11
r)	<ul style="list-style-type: none"> <li>Quarry floor levels to be reviewed on completion of quarrying to confirm required topsoil strip depth.</li> </ul>	On completion of sector	Delete Superseded by Schedule 3, Condition 35
s)	<ul style="list-style-type: none"> <li>Independent registered surveyor to undertake audit</li> </ul>	3 months	Delete Superseded by Schedule 2, Condition 11
t)	<ul style="list-style-type: none"> <li>Operational floor of quarry to be no less than 0.7 m above highest predicted groundwater level. Level relative to thickness of topsoil removal, i.e. if topsoil stripping is less than 0.3 m than the operational floor level must be increased accordingly such that replacement of topsoil achieves final landform requirement of 1 m above highest predicted groundwater level.</li> </ul>	At all times	Delete Superseded by Schedule 2, Condition 6

Item	Action	Trigger/ Timing	Proposed Change to Commitment
u)	<ul style="list-style-type: none"> <li>Final landform, including topsoil to be not less than 1 m above highest predicted groundwater level.</li> </ul>	Upon completion of final landform shaping	Delete Superseded by Schedule 3, Condition 35
v)	<p><b><u>Nest Box Installations</u></b></p> <ul style="list-style-type: none"> <li>Hollows will be replaced with nest boxes at a ratio of 1:1 within the rehabilitation area.</li> <li>Nest box design will be selected to replace the natural size of removed hollows. The number and type of nest boxes to be installed will be determined for surveys of hollow-bearing trees felled during clearing.</li> <li>Nest boxes will be installed on wooden poles at an approximate height of 3 m within the rehabilitation area.</li> </ul>	As required	Delete Superseded by Schedule 3, Condition 37
w)	<p><b><u>Placement of woody debris and brush matting</u></b></p> <p>Where possible individual plant species (especially <i>Leptospermum</i>, <i>Melaleuca</i> and <i>Eucalyptus</i> species) will be harvested when they are bearing mature seed rather than immediately prior to clearing. Bradysporous (seed retaining) species are best harvested and spread in autumn whereas geosporous (seed shedding) species are best harvested immediately prior to annual seed release in late spring.</p> <ul style="list-style-type: none"> <li>Experienced and qualified contractors to coordinate seed collection.</li> </ul>	Annually in autumn and late spring.	Delete Superseded by Schedule 3, Condition 37
x)	<ul style="list-style-type: none"> <li>Distribution of all stockpiled vegetation will occur following the respreading of topsoil up to a maximum of 20% ground cover by woody debris (greater than 10 cm diameter). The re-laid vegetation will comprise branches and timber of all sizes including leaves and stems of shrubs and grasses.</li> <li>The placement of large timber should have regard to its orientation for the purpose of the capture of wind-blown sand and delay of runoff. Generally, this means an orientation along the north-east to south-west vectors, perpendicular to dominant onshore and off-shore winds.</li> </ul>	During placement of woody debris and brush matting.	Delete Superseded by Schedule 3, Condition 37
y)	<p><b><u>Direct Seeding</u></b></p> <ul style="list-style-type: none"> <li>Common pioneer species (i.e. <i>Acacia</i> species and <i>Actinotus helianthi</i>) and others will usually regenerate from topsoil or brush matting and direct seeding is not required. Where monitoring shows a deficiency in a particular species they will be introduced through direct seeding.</li> </ul>	Where monitoring shows failure of species to regenerate by topsoil or brush matting.	Delete Superseded by Schedule 3, Condition 37

Item	Action	Trigger/ Timing	Proposed Change to Commitment
z)	<ul style="list-style-type: none"> <li>Locally sourced seed will be used, and will be sown in the soil rather than broadcast. Harvesting of mature seed and direct sowing into re-topsoiled areas at the most appropriate time of year (usually autumn or spring) will be undertaken for species that typically do not readily regenerate from the soil seedbank, such as <i>Eucalyptus</i>, <i>Angophora</i>, <i>Banksia</i> and <i>Xanthorrhoea</i>.</li> </ul>	Annually in autumn and late spring as required.	Delete Superseded by Schedule 3, Condition 37
aa)	<p><b><u>Propagation and Replanting</u></b></p> <p>The focus of propagation is to:</p> <ul style="list-style-type: none"> <li>Introduce to the rehabilitation the dominant structural species that have difficulty establishing from topsoil, brush matting, or direct seeding or recalcitrant species.</li> <li>Provide advanced species that are desired for establishment in strategic locations or densities to achieve the revegetation objectives.</li> <li>Propagation will be undertaken by a local wholesale nursery.</li> </ul>	Where monitoring shows failure of species to regenerate by direct seeding or other means.	Delete Superseded by Schedule 3, Condition 37
bb)	<ul style="list-style-type: none"> <li>Where targeted species do not regenerate through the topsoil seedbank or direct seeding, tubestock will be planted within the rehabilitation. Planted tubestock will be watered to ensure for initial establishment.</li> </ul>	In autumn (for optimum success), as required	Delete Superseded by Schedule 3, Condition 37
cc)	<p><b><u>Transplanting</u></b></p> <ul style="list-style-type: none"> <li>Transplanting will be used as a method of revegetation for certain species.</li> <li>The plants will be excavated with a front-end loader (or similar) retaining as much soil around the roots as possible</li> <li>The plant will then be moved to a prepared hole, water in where possible.</li> <li>For mature <i>Xanthorrhoea</i> species (Grass Trees), these will be burnt (where weather and conditions permit). Burning the shirt of dead leaves and some of the lower green leaves is important to stimulate new growth and flowering.</li> </ul>	As required, during rehabilitation	Delete Superseded by Schedule 3, Condition 37
dd)	<p><b><u>Species Composition and Structure</u></b></p> <ul style="list-style-type: none"> <li>Rehabilitation will aim to achieve the species composition and structure of the following communities: <ul style="list-style-type: none"> <li>Smooth-barked Apple – Blackbutt Forest and Coastal Sand Wallum Woodland-Heath. Canopy species of the adjoining Swamp Mahogany – Paperbark Swamp</li> </ul> </li> </ul>	When undertaking rehabilitation	Delete Superseded by Schedule 3, Condition 37

Item	Action	Trigger/ Timing	Proposed Change to Commitment
	<p>Forest will supplement rehabilitation in areas where this community adjoins the rehabilitation area.</p> <ul style="list-style-type: none"> <li>The composition of the rehabilitation will aim to meet the performance and ultimately the completion criteria specified in the Rehabilitation Plan.</li> </ul>		
ee)	<ul style="list-style-type: none"> <li>Landscaping Areas will include species composition and structure that will aim to establish native ground cover and shrub species that are consistent with requirements for fuel loads within Asset Protection Zones (e.g. maintained, minimal wood debris, discontinuous patches of the shrub layer, no canopy species within 10 m of building and where present do not have connected canopy with adjoining vegetation).</li> </ul>	For landscaped areas	Delete Superseded by Schedule 3, Condition 37
ff)	<p><b>Rehabilitation Monitoring</b></p> <ul style="list-style-type: none"> <li>Six monthly (bi-annual) monitoring of rehabilitation for the first three years and monitoring at years four, five and eight post-rehabilitation will be assessed against the performance criteria. The Eight year (or final) monitoring event will also be compared against the completion criteria, and where met will not require further monitoring.</li> </ul>	As specified.	Delete Superseded by Schedule 3, Condition 37
<b>8.3.19 Decommissioning and Closure</b>			
a)	<ul style="list-style-type: none"> <li>Prepare a final quarry closure plan to establish a safe, stable and non-polluting final landform.</li> </ul>	3 years prior to closure of quarry	Nil
b)	<ul style="list-style-type: none"> <li>Satisfy land owner lease conditions for relinquishment of bond.</li> </ul>	During decommission and rehabilitation.	Nil
c)	<p>Decommissioning will include:</p> <ul style="list-style-type: none"> <li>Removal of all plant and equipment (e.g. all fuel infrastructure, weigh bridges, site office and the workshop structure).</li> <li>Consultation with land owner to agree on residual infrastructure to be left onsite. Expected residual infrastructure / works includes: <ul style="list-style-type: none"> <li>Intersection and bitumen access road.</li> <li>Building pads.</li> <li>Electrical line work from Cabbage Tree Road to Office and Workshop area.</li> <li>Water mains pipe work though to Office</li> </ul> </li> </ul>	During decommissioning	Nil Potential for overlap with Schedule 3, Condition 35

Item	Action	Trigger/ Timing	Proposed Change to Commitment
	and Workshop area. <ul style="list-style-type: none"> <li>○ Building pads.</li> <li>• A 40 m wide asset protection zone (with inner and outer protection areas) around office and workshop compound.</li> </ul>		
d)	<ul style="list-style-type: none"> <li>• Meet rehabilitation completion criteria, or at a minimum establish that the rehabilitated lands are on trajectory to meet the completion criteria without additional input.</li> </ul>	During decommissioning	Nil Potential for overlap with Schedule 3, Condition 35
<b>8.3.20 Offsets</b>			
a)	<ul style="list-style-type: none"> <li>• Sufficient biodiversity offsets will be secured to satisfaction of BCD and DPE prior to the commencement of construction.</li> </ul>	Prior to commencement	Delete Superseded by Schedule 3, Condition 34