

14 October 2021

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Planning & Assessment – Compliance  
Department of Planning, Industry and Environment  
PO Box 3145  
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**SUBJECT: SSD 6125 - CABBAGE TREE SAND QUARRY – AUDIT ACTION PLAN**

Dear Ann,

Please find enclosed the Audit Action Plan in response to the Independent Environmental Audit completed by IEMA.

Should you require any clarification regarding these action please contact me 0499 770 848, or our Environmental Advisor, Jonathan Berry on 0421 440 139.

Regards,

Sean Pennell  
General Manager

Attached:  
*Audit Action Plan*

*Non Compliances recorded by IEMA, with responses and proposed implementation*

| Schedule and Condition Number      | Condition  | Compliance Status    | Recommendations   | Proposed Implementation by Newcastle Sand  |
|------------------------------------|--|----------------------|---|--|
| <b>Project Approval (SSD 6125)</b> |  |                      |   |  |
| Sch 2 Cond 12                      | The Applicant must review and update the Maximum Extraction Depth Report, in consultation with Hunter Water and DPIE - Water:<br>(a) every two years from the date of approval of the Maximum Extraction Depth Report; and<br>(b) if any groundwater is encountered during quarrying operations or if directed by the Secretary. | Admin Non Compliance | NC REC 1: Site to update the Maximum Extraction Depth Report for currency as it is more than two years old.   | <b>Consultant has been endorsed by the Secretary and engaged to undertake required review. Completion expected by 30 November 2021.</b>  |
| Sch 2 Cond 18                      | The Applicant must:<br>(a) from the commencement of quarrying operations provide calendar year annual quarry production data to DRG using the standard form for that purpose; and<br>(b) include a copy of this data in the Annual Review.   | Admin Non Compliance | NC REC 2: Ensure that the production data reporting covers the RR requirement and Annual Review requirements.   | <b>Newcastle Sand are currently seeking advice from the Resource Regulator on the current submission format, noting the 2019-20 appears to have changed.</b><br><br>The data from the 2019-20 form is included in the Annual Review. The form also currently notes the inclusion of full financial information this is commercially sensitive information and cannot be made publicly available. |
| Sch 3 Cond 7                       | <b>Air Quality Impact Assessment Criteria</b><br>The Applicant must ensure that all reasonable and feasible avoidance and mitigation measures are employed so that particulate matter emissions generated by the development do not cause exceedances of the criteria in Table 3 at any residence on privately-owned land.       | Low Non Compliance   | NC REC 3: Site to include information about how 'incremental impact' is determined in the AQMP. Reporting is required if the site has gone above the criteria (noting the notes below the criteria) in relation to cumulative impacts, extraordinary events and incremental impacts). | <b>The consent requires plans to be reviewed within 3 months of an audit and submitted 6 weeks after the review (or 18 weeks after audit). This amendment will be made to the AQMP and submitted to DPIE by 28 February 2022.</b>  |
| Sch 3 Cond 8                       | <b>Operating Conditions</b><br>The Applicant must:<br>(a) implement best practice management to minimise the dust emissions of the development;  | Low Non Compliance   | NC REC 4: Site to record changed operations based on real time air quality triggers (as per the Air Quality Management Plan).   | <b>Improved logging of responses to air quality management will be made to enable management improvements. AQMP will be</b>  |

| Schedule and Condition Number | Condition   | Compliance Status  | Recommendations  | Proposed Implementation by Newcastle Sand  |
|-------------------------------|---|--------------------|--|--|
|                               | <p>(b) regularly assess meteorological and air quality monitoring data and relocate, modify and/or stop operations on site to ensure compliance with the air quality criteria in this consent;</p> <p>(c) minimise the air quality impacts of the development during adverse meteorological conditions and extraordinary events (see note c under Table 3);</p> <p>(d) monitor and report on compliance with the relevant air quality conditions in this consent; and</p> <p>(e) minimise the area of surface disturbance and undertake progressive rehabilitation of the site, to the satisfaction of the Secretary.</p>   |                    |  | <p><b>amended to provide more flexible approach aimed at reducing air emissions irrespective of the activities onsite.</b></p> |
| Sch 3 Cond 9                  | <p><b>Air Quality Management Plan</b><br/>The Applicant must prepare an Air Quality Management Plan for the development to the satisfaction of the Secretary. This plan must:</p> <p>(a) be prepared in consultation with the EPA;</p> <p>(b) be submitted to the Secretary for approval prior to commencing ground disturbing activities on the site, unless otherwise agree by the Secretary;</p> <p>(c) describe the measures to be implemented to ensure:</p> <ul style="list-style-type: none"> <li>• compliance with the air quality criteria and operating conditions of this consent;</li> <li>• best practice management is being employed; and</li> <li>• the air quality impacts of the development are minimised during adverse meteorological conditions and extraordinary events;</li> </ul> <p>(d) describe the proposed air quality management system;</p> <p>(e) include an air quality monitoring program that:</p> <ul style="list-style-type: none"> <li>• is capable of evaluating the performance of the development;</li> <li>• includes at least two real-time particulate monitors;</li> <li>• includes risk-based monitoring to demonstrate compliance with the criteria in Table 3;</li> <li>• includes a Trigger Action Response Plan (TARP), including appropriate trigger levels, and a protocol to be implemented when trigger levels are exceeded;</li> <li>• includes a protocol for determining any exceedances of the relevant conditions of consent;</li> <li>• effectively supports the air quality management system; and</li> <li>• evaluates and reports on the adequacy of the air quality management system.</li> </ul> <p>The Applicant must not commence ground disturbing activities until the Air Quality Management Plan is approved by the Secretary.</p> <p>The Applicant must implement the Air Quality Management Plan as approved from time to time by the Secretary.</p> | Low Non Compliance | <p>NC REC 5: Improve air quality action recording when there has been a trigger based on short term PM10 criteria.</p> <p>NC REC 6: Look at including a figure in Annual Reviews showing two different monitors and potential contributions depending on wind direction.</p> | <p><b>As above for REC 4.</b></p> <p><b>Noted. Will be included in Annual Review.</b></p>                                      |

| Schedule and Condition Number | Condition  | Compliance Status     | Recommendations   | Proposed Implementation by Newcastle Sand                       |
|-------------------------------|--|-----------------------|---|---|
| Sch 3 Cond 37                 | <p><b>Biodiversity and Rehabilitation Management Plan</b></p> <p>The Applicant must prepare a Biodiversity and Rehabilitation Management Plan for the development to the satisfaction of the Secretary. This plan must:</p> <ul style="list-style-type: none"> <li>(a) be prepared by a suitably qualified expert;</li> <li>(b) be prepared in consultation with BCD and Council;</li> <li>(c) be submitted to the Secretary for approval prior to commencing quarrying operations, unless the Secretary agrees otherwise;</li> <li>(d) provide details of the conceptual final landform and associated land uses for the site;</li> <li>(e) describe how the implementation of the on-site Biodiversity Offset Strategy will be integrated with the overall rehabilitation of the site;</li> <li>(f) include detailed performance and completion criteria for evaluating the performance of the progressive and final rehabilitation of the site, including triggers for any necessary remedial action;</li> <li>(g) describe the short, medium and long-term measures to be implemented to: <ul style="list-style-type: none"> <li>• manage remnant vegetation and habitat on site, including within the on-site Biodiversity Offset Strategy area; and</li> <li>• ensure compliance with the rehabilitation objectives and progressive rehabilitation obligations in this consent;</li> </ul> </li> <li>(h) include a detailed description of the measures described in paragraph (g) to be implemented over the next 3 years (to be later updated for each 3-year period following initial approval of the plan) including the procedures to be implemented for: <ul style="list-style-type: none"> <li>• maximising the salvage of environmental resources within the approved disturbance area, including tree hollows, vegetative and soil resources, for beneficial reuse in the enhancement of the offset area or site rehabilitation;</li> <li>• restoring and enhancing the quality of native vegetation and fauna habitat in the rehabilitation areas through assisted natural regeneration, targeted vegetation establishment and the introduction of fauna habitat features; protecting vegetation and fauna habitat outside the approved disturbance area on-site;</li> <li>• minimising the impacts on native fauna, including undertaking pre-clearance surveys;</li> <li>• minimising the potential for Koalas to come into contact with development-related vehicles on the site and on public roads:</li> <li>• establishing and/or retaining vegetation screening to minimise the visual impacts of the site on surrounding receivers;</li> <li>• minimising impacts on threatened species, populations and their habitats, particularly Koalas;</li> <li>• providing relevant biosecurity control measures, including measures to prevent and/or control the establishment or spread of Myrtle Rust, Root Rot Fungus and Chytrid Fungus on the site;</li> <li>• collecting and propagating native seed;</li> </ul> </li> </ul> | Medium Non Compliance | NC REC 7: Ensure practices are in place to be compliant with clearing and ecological requirements for the site. Site to track and report against these key biodiversity requirements in the Annual Review and/or ecological monitoring reports. | <b>Noted, following Annual Review reporting to be improved.</b> |

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|-------------------------------|---|----------------------|---|---|
|                               | <ul style="list-style-type: none"> <li>controlling weeds and feral pests;</li> <li>controlling erosion; and</li> <li>managing bushfire risk;</li> </ul> <p>(i) include a program to monitor and report on the effectiveness of these measures, and progress against the performance and completion criteria; and</p> <p>(j) include details of who is responsible for monitoring, reviewing, and implementing the plan.</p> <p>The Applicant must not commence quarrying operations until the Biodiversity and Rehabilitation Management Plan is approved by the Secretary.</p> <p>The Applicant must implement the Biodiversity and Rehabilitation Management Plan as approved from time to time by the Secretary.</p>   |                      |   |   |
| Sch 5 Cond 4                  | <p><b>Revision of Strategies, Plans &amp; Programs</b></p> <p>Within 3 months of the submission of an:</p> <p>(a) incident report under condition 9 below;</p> <p>(b) Annual Review under condition 11 below;</p> <p>(c) audit report under condition 12 below; and</p> <p>(d) any modifications to this consent,</p> <p>the Applicant must review the strategies, plans and programs required under this consent, to the satisfaction of the Secretary. The applicant must notify the Department in writing of any such review being undertaken. Where this review leads to revisions in any such document, then within 6 weeks of the review the revised document must be submitted for the approval of the Secretary.</p> <p>Note: The purpose of this condition is to ensure that strategies, plans and programs are regularly updated to incorporate any measures recommended to improve environmental performance of the development.</p>   | Admin Non Compliance | NC REC 8: Update the management plans to reflect current approvals.   | <b>The consent requires plans to be reviewed within 3 months of an audit and submitted 6 weeks after the review (or 18 weeks after audit). All plans will be submitted to DPIE by 28 February 2022.</b> |
| Sch 5 Cond 11                 | <p><b>Annual Review</b></p> <p>By the end of March each year, or other timing as may be agreed by the Secretary, the Applicant must submit a review to the Department reviewing the environmental performance of the development to the satisfaction of the Secretary. This review must:</p> <p>(a) describe the development (including any progressive rehabilitation) that was carried out in the previous calendar year, and the development that is proposed to be carried out over the current calendar year;</p> <p>(b) include a comprehensive review of the monitoring results and complaints records of the development over the previous calendar year, which includes a comparison of these results against the:</p> <ul style="list-style-type: none"> <li>relevant statutory requirements, limits or performance measures/criteria;</li> <li>requirements of any plan or program required under this consent;</li> <li>monitoring results of previous years; and</li> <li>relevant predictions in the documents listed in condition 2(d) of Schedule 2;</li> </ul> | Admin Non Compliance | <p>NC REC 9: To comply with the 2015 Annual Review Guidelines, the document should also include a section on "Actions required from previous Annual Review".</p> <p>NC REC 10: Ensure that future EPL non-compliances are reported as non-compliances in the Annual Review.</p> | <p><b>Noted 2021 Annual Review to include actions from previous Annual Review.</b></p> <p><b>Noted.</b></p>   |

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|---------------------------------|--|----------------------|---|---|
|                                 | (c) identify any non-compliance over the past calendar year, and describe what actions were (or are being) taken to ensure compliance;<br>(d) identify any trends in the monitoring data over the life of the development;<br>(e) identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and<br>(f) describe what measures will be implemented over the current calendar year to improve the environmental performance of the development.<br>The Applicant must ensure that copies of the Annual Review are submitted to Council and are available to the Community Consultative Committee (see condition 7 above) and any interested person upon request. |                      |   |   |
| <b>Statement of Commitments</b> |  |                      |   |   |
| SoC 8.3.2 (h)                   | Website to include: <ul style="list-style-type: none"> <li>• Contact numbers.</li> <li>• Copies of community newsletters.</li> <li>• Details of annual open days.</li> <li>• Copies of minutes from Community Consultative Committee.</li> <li>• Copies of approvals.</li> <li>• Copies of licences.</li> </ul>  | Admin Non Compliance | NC REC 11: Include information on the Community Open Days on the website, or seek to have this commitment removed via consultation with DPIE.   | <b>This commitment is proposed to be removed in consultation with DPIE.</b>   |
| SoC 8.3.8 (f)                   | 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.   | Admin Non Compliance | NC REC 12: Consultation is required with DPI Water with regards to the locations of and construction of proposed groundwater monitoring points. The evidence of this consultation was not sighted. It is recommended that this information be included in the Annual Review for 2021. | <b>DPI Water were consulted in the development of the SWMP, as included within the Appendix. No comment was received. No further inclusion of consultation is considered necessary.</b> |
| SoC 8.3.12 (b)                  | Bitumen seal access road through to the boundary for the southern boundary of the northern resource area.  | Low Non-Compliance   | NC REC 13: Ensure the bitumen seal access road is constructed through to the boundary for the southern boundary of the northern resource area.  | <b>Noted and agreed.</b>  |
| SoC 8.3.12 (g)                  | 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   | Low Non-Compliance   | NC REC 14: Until Newcastle Sands consults with DPIE and EPA, they need to implement and   | <b>Noted, amendment to the SOC and the AQMP. As the SOC notes, the triggers are</b>   |

| Schedule and Condition Number           | Condition  | Compliance Status    | Recommendations  | Proposed Implementation by Newcastle Sand   |
|---|--|----------------------|--|---|
|   | <p>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>1. No topsoil stripping or dozer push to occur where:               <ol style="list-style-type: none"> <li>a) Wind is directed toward surrounding residences; AND</li> <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> </ol> </li> <li>2. If levels continue to increase after two hours, suspend sand extraction and processing (loading trucks only) where:               <ol 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> </ol> </li> <li>3. If levels continue to increase after two hours, suspend loading trucks (no machinery operating) where:               <ol 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> </ol> </li> </ol> |                      | record the real time triggers for air quality.   | <b>intended to be adapted and refined.</b>  |
| <b>Environmental Protection Licence</b> |  |                      |  |   |
| O3.8                                    | <p>The Licensee must cease all topsoil stripping and dozer operations when the following occurs:</p> <ol style="list-style-type: none"> <li>a) Wind is directed towards surrounding residences, and</li> <li>b) Rolling PM10 24 hr average exceeds 35 micrograms per cubic metre.</li> </ol>   | Low Non-Compliance   | NC REC 14: Until Newcastle Sands consults with DPIE and EPA, they need to implement and record the real time triggers for air quality.                   | <b>Noted. With amendment of the SOC and AQMP a variation to the EPL will be sought.</b>     |
| M1.3                                    | <p>The following records must be kept in respect of any samples required to be collected for the purposes of this licence:</p> <ol style="list-style-type: none"> <li>a) the date(s) on which the sample was taken;</li> <li>b) the time(s) at which the sample was collected;</li> <li>c) the point at which the sample was taken; and</li> <li>d) the name of the person who collected the sample.</li> </ol>  | Admin Non-Compliance | NC REC 15: Future noise and air quality monitoring reports to note the name of the person completing the monitoring in accordance with EPL requirements. | <b>Noted. All sampling personnel instructed to ensure all monitoring records are noted.</b> |
| M2.2                                    | <b>Air Monitoring Requirements</b>   | Low Non-Compliance   | NC REC 10: Ensure that future EPL non-compliances are reported as  | <b>Noted. 2022 Annual Review will include EPL non-compliance.</b>                           |

| Schedule and Condition Number | Condition   | Compliance Status  | Recommendations   | Proposed Implementation by Newcastle Sand  |
|-------------------------------|---|--------------------|---|--|
|                               |   |                    | non-compliances in the Annual Review.   |  |
| M8.1                          | <p>To assess compliance with the noise limits section of this licence, attended noise monitoring must be undertaken in accordance with the noise conditions and:</p> <p>a) at a location representative of the most affected residences in the noise limit conditions and;</p> <p>b) occur quarterly in a reporting period;</p> <p>c) occur each day and shoulder period as defined in the NSW Industrial Noise Policy for a minimum of:</p> <ul style="list-style-type: none"> <li>• 1.5 hours during the day; and</li> <li>• 30 minutes during the shoulder period.</li> </ul> <p>d) occur for three consecutive operating days.</p> <p>Note: It is the intention of the EPA to review the noise monitoring results required under this condition after a period of (3) years to assess the suitability of the required monitoring. "</p> | Low Non-Compliance | NC REC 10: Ensure that future EPL non-compliances are reported as non-compliances in the Annual Review.   | <b>Noted. 2022 Annual Review will include EPL non-compliance.</b>  |
| R4                            | <p><b>Noise Monitoring Report</b></p> <p>A noise compliance assessment report must be submitted to the EPA within 30 days of the completion of the quarterly monitoring. The assessment must be prepared by a suitably qualified and experienced acoustical consultant and include:</p> <p>a) an assessment of compliance with the noise limits as detailed in this licence; and</p> <p>b) an outline of any management actions taken within the monitoring period to address any exceedances of the limits detailed in this licence.</p>   | Low Non-Compliance | NC REC 16: Site to complete a noise compliance assessment and submit within 30 days of the completion of quarterly monitoring as per EPL Condition R4 requirements. | <b>Noted. Noise compliance reports will now be submitted quarterly on completion to <a href="mailto:hunter.region@epa.nsw.gov.au">hunter.region@epa.nsw.gov.au</a></b> |

*Recommended improvements by IEMA, with responses and proposed implementation*

| Aspect        | Condition Reference       | Improvement REC Number | Recommendation  | Proposed Implementation by Newcastle Sand  |
|---------------|---------------------------|------------------------|---|--|
| Surface Water | SSD-6125<br>Sch 3 Cond 15 | IMP REC 1              | Additional detail should be included in the next Annual Review about water quality results rather than referring to the appendix. This should also include details about if triggers have been reached any action/reporting requirements. | <b>Noted. Agreed.</b>  |
| Surface Water | SSD-6125<br>Sch 3 Cond 15 | IMP REC 2              | Additional detail should be put in the next Annual Review regarding the surface water management system, including the rubber liner below the haul road, tables drains, water storage and the recycling of surface water.                 | <b>Noted. Agreed.</b>  |
| Groundwater   | SSD-6125<br>Sch 3 Cond 16 | IMP REC 3              | A neutral or beneficial effect on the water quality of the Tomago Sandbeds Special Area is required from the Applicant. While this is described in the Soil   | <b>The Annual Review will include a statement with respect to neutral or beneficial effects. The process of reporting water quality monitoring data from across the site, in the context of adopted trigger values and meeting</b> |



| Aspect                 | Condition Reference       | Improvement REC Number | Recommendation   | Proposed Implementation by Newcastle Sand   |
|------------------------|---------------------------|------------------------|--|---|
|                        |                           |                        | and Water Management Plan there is no evidence of the implementation. It is recommended that this be documented in the Annual Review.  | <b>the Consent requirements for other aspects inherently provide evidence of a neutral or beneficial effect on the sand beds. Any further evidence is considered by Newcastle Sands to be unnecessary.</b>  |
| Groundwater            | SSD-6125<br>Sch 3 Cond 20 | IMP REC 4              | Additional detail should be included in the next Annual Review regarding the location of moved infrastructure at the site (infrastructure area is proposed to move north). The new infrastructure area should include long-term design for maintenance of machinery and vehicles and storage of hydrocarbons. All works need to be consistent with the EIS, modifications and the Project Approval.  | <b>Noted. The intention will be the construction of a permanent bunding under cover outside the Tomago Sand Beds by June 2022.<br/>Within the sand beds area, bunded areas will be available for refuelling and overnight parking of tracked equipment.</b> |
| Administrative         | SSD-6125<br>Sch 5 Cond 3  | IMP REC 5              | Separate out of the separate requirements of the "all management plans" condition and include a section references in all management plans.  | <b>Noted, revisions of the management plans will include more detail in the break down of how this condition is satisfied.</b>  |
| Groundwater            | SoC 8.3.8 (h)             | IMP REC 6              | There is a requirement that data loggers will be installed in monitoring wells to continuously monitor and provide additional data for input to the groundwater model. While the Maximum Extraction Depth Management Plan (2019) recommends that 5 bores have dataloggers installed, there is no reporting of this data. The datalogger data needs to be included in the quarterly monitoring and annual review as a confirmation of monitoring during the year. | <b>Kleinfelder, the contractor currently engaged to complete water monitoring has been instructed to include this data within the quarterly reports. This can then be included in the Annual Review.</b>  |
| Groundwater            | SoC 8.3.8 (k)             | IMP REC 7              | A groundwater model and quarry floor height will be reviewed every two years following the commencement of activities. The activities commenced in August 2019; therefore, these updates are due in August 2021.   | <b>Newcastle Sand consider the consent condition relating to review of the Maximum Extraction Depth Report to supercede this commitment. No additional review will be completed.</b>  |
| Lighting               | SoC 8.3.16 (b)            | IMP REC 8              | When the site office and infrastructure move further north ensure lighting has been installed and managed as per the Australian Standards.   | <b>Noted.</b>   |
| Rehabilitation         | SoC 8.3.18 (l) and (n)    | IMP REC 9              | Records of topsoil stripping and depth (including stripping in two paths) should be kept on site.  | <b>Noted.</b>   |
| Hydrocarbon management | EPL 21264<br>Cond O5.2    | IMP REC 10             | Recommendation for long term concrete bunding in the workshop in the fuel area.  | <b>Planned for completion by June 2022.</b>   |
| Complaints             | EPL 21264<br>Cond M5.1    | IMP REC 11             | Don't include residents names in the complaints register in the Annual Review. Best practice to just refer to them as resident A, resident B, etc.   | <b>Noted.</b>   |