

Dunmore Lakes Sand Project

INDEPENDENT ENVIRONMENTAL AUDIT

Prepared for Dunmore Sand & Soil Pty Ltd | November 2017







CONTENTS

| | | |
|-------|--|----|
| 1 | INTRODUCTION | 3 |
| 1.1 | Background | 3 |
| 1.2 | Scope | 3 |
| 1.3 | Objective | 4 |
| 1.4 | Review Team | 4 |
| 1.5 | Audit Criteria | 4 |
| 2 | AUDIT METHODOLOGY | 5 |
| 2.1 | Preliminary Background Review | 5 |
| 2.2 | Inception Meeting | 6 |
| 2.3 | Site Visit | 6 |
| 2.4 | Document Review | 6 |
| 2.5 | Reporting | 6 |
| 2.5.1 | Compliance Assessment Criteria | 6 |
| 2.5.2 | Compliance Tracking Spreadsheet | 8 |
| 2.5.3 | Audit Report | 8 |
| 3 | AUDIT FINDINGS | 9 |
| 3.1 | Consultation | 9 |
| 3.2 | Compliance with primary criteria | 9 |
| 3.2.1 | Non-compliant conditions | 9 |
| 3.2.2 | Administrative non-compliant conditions | 10 |
| 3.2.3 | Compliance not verified | 11 |
| 3.2.4 | Compliant and opportunities for improvement | 12 |
| 3.3 | Compliance with secondary criteria | 14 |
| 3.3.1 | Noise Monitoring Program | 14 |
| 3.3.2 | Air Quality Monitoring Program | 14 |
| 3.3.3 | Draft Water Management Plan | 15 |
| 3.3.4 | Waste Management Plan | 15 |
| 3.3.5 | Flora and Fauna Management Plan | 15 |
| 3.3.6 | Rehabilitation Management Plan, including Riparian Area Management Plan and Landscaping Plan | 16 |
| 3.3.7 | Long Term Management Strategy | 16 |
| 3.4 | Complaints, Incidents and Penalties | 16 |
| 4 | CONCLUSION | 18 |
| 4.1 | Limitations | 19 |
| 5 | INDEPENDENT AUDIT CERTIFICATION | 20 |

FIGURES

| | | |
|----------|--|---|
| Figure 1 | A simple process diagram of the systematic approach adopted for this compliance review | 5 |
|----------|--|---|

TABLES

| | | |
|---------|---------------------------------|---|
| Table 1 | Compliance assessment criteria | 7 |
| Table 2 | Risk levels for non-compliances | 7 |
| Table 3 | Non-compliant conditions | 9 |

| | |
|---|----|
| Table 4 Administrative non-compliant conditions | 10 |
| Table 5 Compliance not verified | 11 |
| Table 6 Compliant and opportunities for improvement | 12 |

APPENDICES

| | |
|---|----|
| Appendix A Project Management Documentation | 21 |
| Appendix B Compliance Tracking Spreadsheet | 22 |

1 INTRODUCTION

1.1 Background

The Dunmore Lakes Sand Extraction Project is located on the western side of the Princes Highway, approximately 12 kilometres north-west of Kiama in the Shellharbour Local Government Area. The site is adjacent to Boral's Dunmore Quarry and is operated by Dunmore Sand & Soil Pty Ltd (DSS), a wholly-owned subsidiary of Boral Resources (NSW) Pty Ltd. Dunmore Sand and Soil produces a range of sand and landscaping products through the process of sand dredging.

Operation of the quarry involves the sequential dredging and excavation of sand and soil from Stage 1, 2, 3 and 4. The method of extraction of these resources includes both sand and soil extraction by excavator and dredge sand extraction, followed by washing, processing and material blending. The final product is then stockpiled on site until transported to local and regional markets.

Stage 1 of the Dunmore Lakes project was approved in 1999 by the then Minister for Urban Affairs and Planning following a Commission of Inquiry, and commenced operation in 2000. Stage 1 operations have concluded, and rehabilitation of the extraction area was completed in 2013.

Under DA 195-8-2004, Stages 2, 3 and 4 of the project were approved by the then Minister for Infrastructure and Planning on 29 June 2005. The approved project involves:

- Extracting and processing approximately 8 million tonnes of sand and soil, using a combination of excavation and dredging methods;
- Producing up to 800,000 tonnes of extractive materials annually; and
- Progressively rehabilitating the site, including backfilling of excavated areas with virgin excavated natural material (VENM).

Dredging operations for Stage 2 have been concluded, with progressive rehabilitation of Stage 2 having commenced. DSS commenced with Stage 3 of the development in late 2016. The approved lifespan of the quarry is 25 years.

1.2 Scope

To comply with Schedule 5, Conditions 10 and 11 of their project approval, DSS require an Independent Environmental Audit to be conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary.

The scope of the independent environmental audit is stipulated below:

- Assess the environmental performance of the development and whether it is complying with the relevant requirements of DA 195-8-2004, Environment Protection Licence 11147 and/or Water Licence (including any assessment, plan or program required under these approvals);
- To determine the environmental compliance status for each condition of DA 195-8-2004, including:
 - undertaking a site visit to inform the determination of compliance;
 - reviewing available information to inform the determination of compliance; and
 - consulting with regulatory authorities and stakeholders.
- Recommend measures or actions to improve the environmental performance of the development, and/or any assessment, plan or program required under these approvals.

1.3 Objective

The objective of the independent environmental audit was to:

- review compliance of the development with DA 195-8-2004 and identify areas for improvement; and
- assess the overall environmental performance of the operations and implementation of the environmental management plans and controls.

1.4 Review Team

Element Environment Pty Ltd (Element) was engaged by DSS to undertake the independent environmental audit of their operations at Dunmore Lakes Sand Extraction Project. The audit team involved the following individuals:

- Neville Hattingh (Element Environment) – Project Director/Technical Reviewer; and
- Darren Green (Element Environment) – Lead Auditor.

The audit team listed above were endorsed by DP&E per correspondence dated 4 September 2017 (refer **Appendix A**).

1.5 Audit Criteria

The primary criteria used for the environmental audit of Dunmore Lakes Sand Extraction Project included the following approval instruments:

- DA 195-8-2004 for Dunmore Lakes Sand Extraction Project (Stages 2, 3 and 4); and
- DA 195-8-2004 MOD 1 for Dunmore Lakes Sand Extraction Project (Stages 2, 3 and 4).

The secondary criteria relating to the environmental performance of the development included the following strategies, plans or programs:

- Noise Monitoring Program, Revision 5 (27 February 2017);
- Air Quality Monitoring Program, Revision 5 (27 February 2017);
- Draft Water Management Plan, Revision 6 (3 March 2017);
- Waste Management Plan, Revision 2 (9 December 2016);
- Flora and Fauna Management Plan, Revision D (6 February 2017);
- Rehabilitation Management Plan, including Riparian Area Management Plan and Landscaping Plan, Revision E (17 March 2017); and
- Long Term Management Strategy, Revision D (22 March 2017).

It should be noted that the Draft Water Management Plan listed in the secondary criteria above was in draft format and still subject to approval by the Department of Planning & Environment (DP&E).

2 AUDIT METHODOLOGY

A systematic and documented process to undertaking the independent environmental audit was adopted and implemented. The adopted methodology is broadly based upon the principles of *Guidelines for auditing management systems* (ISO 19011:2011) and *Independent Audit Guideline* (DP&E, October 2015). **Figure 1** presents a simple process diagram to demonstrate the systematic approach undertaken.

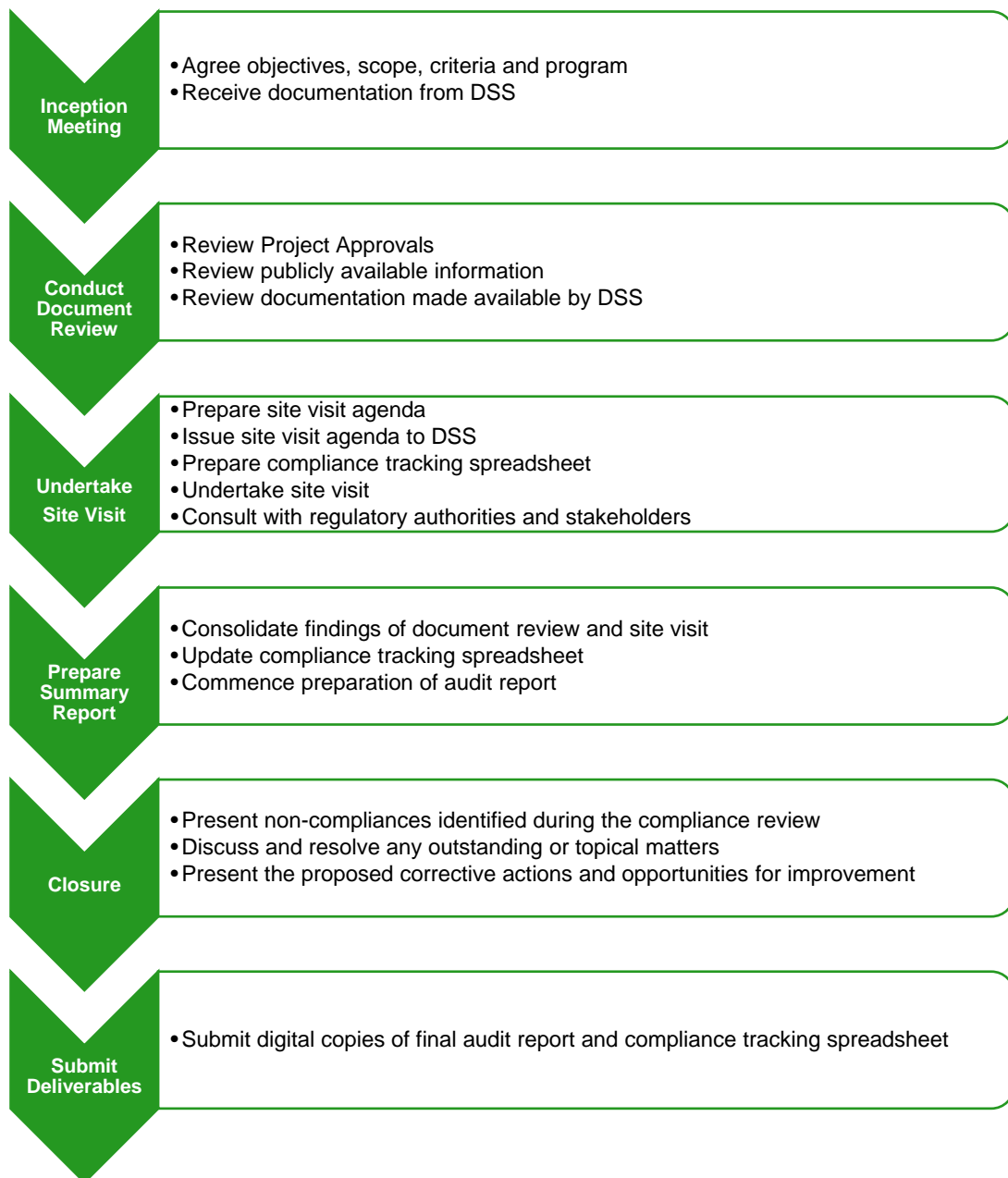


Figure 1 A simple process diagram of the systematic approach adopted for this independent environmental audit

2.1 Preliminary Background Review

Prior to the inception meeting and site visit, a Request for Information (RFI) in the form of a compliance tracking spreadsheet was drafted and issued on 4 October 2017. This spreadsheet included the primary criteria that would be assessed for compliance. DSS

progressively made available the information initially requested from 5 October 2017 to 11 October 2017.

2.2 Inception Meeting

An inception meeting was held at DSS site office at Tabbita Road, Dunmore, on 12 October 2017. Attendees of this meeting included Ellie Randall (DSS Environmental Co-ordinator), Brad Subotic (DSS Operations Manager) and Darren Green (Element Environment, Lead Auditor).

During this meeting the scope of work, objectives and compliance criteria of the independent environmental audit were agreed. The agreed outcomes of this meeting are generally reflected in **Sections 1 & 2** and a copy of the meeting agenda is included in **Appendix A**.

2.3 Site Visit

The site visit was also undertaken on 12 October 2017, following the inception meeting, and commenced at 10h00. Attendees included the following individuals:

- Darren Green (Element Environment) – Lead Auditor;
- Ellie Randall (DSS) – Environmental Co-ordinator; and
- Brad Subotic (DSS) – Operations Manager.

The site visit involved an inspection of the following areas/aspects:

- Project boundary;
- Storage and stockpiling areas;
- Southern, North-eastern and North-western Wetlands;
- Rocklow Creek;
- Vehicle entry and exit points;
- Sand extraction and backfilling areas;
- Plant maintenance area; and
- Water discharge points.

2.4 Document Review

During the document review the most pertinent and appropriate conditions from the primary criteria were discussed and documents or information which could be used to substantiate or demonstrate compliance were identified. Potential corrective actions, improvement opportunities and non-compliances were discussed and acknowledged. The outcomes of the site inspection and document review were captured in the compliance tracking spreadsheet, which was treated as a “living” document during the audit and has been used to capture and record details of compliance against the compliance review criteria (detailed further in **Section 2.5.2**).

A copy of the compliance tracking spreadsheet for the site is included in **Appendix B**.

2.5 Reporting

2.5.1 Compliance Assessment Criteria

The compliance assessment criteria and risk levels set out in the *Independent Audit Guideline* (DP&E, October 2015) have been applied during the audit. The assessment criteria are set

out in **Table 1** and risk levels in **Table 2**. The terms “partial compliance” or “partial non-compliance” or similar have not been used.

Table 1 Compliance assessment criteria

| ASSESSMENT | CRITERIA |
|-------------------------------|---|
| Compliant | Where the auditor has collected sufficient verifiable evidence to demonstrate that the intent and all elements of the requirement of the regulatory approval have been complied with within the scope of the audit. |
| Not verified | Where the auditor has not been able to collect sufficient verifiable evidence to demonstrate that the intent and all elements of the requirement of the regulatory approval have been complied with within the scope of the audit. In the absence of sufficient verification the auditor may in some instances be able to verify by other means (visual inspection, personal communication, etc.) that a requirement has been met. In such a situation, the requirement should still be assessed as not verified. However, the auditor could note in the report that they have no reasons to believe that the operation is non-compliant with that requirement. |
| Non-compliant | Where the auditor has collected sufficient verifiable evidence to demonstrate that the intent of one or more specific elements of the regulatory approval have not been complied with within the scope of the audit. |
| Administrative non-compliance | A technical non-compliance with a regulatory approval that would not impact on performance and that is considered minor in nature (e.g. report submitted but not on the due date, failed monitor or late monitoring session). This would not apply to performance-related aspects (e.g. exceedance of a noise limit) or where a requirement had not been met at all (e.g. noise management plan not prepared and submitted for approval). |
| Not triggered | A regulatory approval requirement has an activation or timing trigger that had not been met at the time of the audit inspection, therefore a determination of compliance could not be made. |
| Observation | Observations are recorded where the audit identified issues of concern which do not strictly relate to the scope of the audit or assessment of compliance. Further observations are considered to be indicators of potential non-compliances or areas where performance may be improved. |
| Note | A statement or fact, where no assessment of compliance is required. |

Table 2 Risk levels for non-compliances

| RISK LEVEL | COLOUR | DESCRIPTION |
|------------|--------|--|
| High | | Non-compliance with potential for significant environmental consequences, regardless of the likelihood of occurrence |
| Medium | | Non-compliance with: <ul style="list-style-type: none"> ▪ potential for serious environmental consequences, but is unlikely to occur; or ▪ potential for moderate environmental consequences, but is likely to occur |

| | | |
|-------------------------------|--|--|
| Low | | Non-compliance with: <ul style="list-style-type: none"> ▪ potential for moderate environmental consequences, but is unlikely to occur; or ▪ potential for low environmental consequences, but is likely to occur |
| Administrative non-compliance | | Only to be applied where the non-compliance does not result in any risk of environmental harm (e.g. submitting a report to government later than required under approval conditions) |

2.5.2 Compliance Tracking Spreadsheet

During the site visit on 12 October 2017 the compliance tracking spreadsheet was utilised to record responses and feedback from site representatives and other members of the review team. Gaps in information or matters requiring further clarification were recorded and additional information requested.

Following the site visit, an updated version of the compliance tracking spreadsheet was issued to DSS on 31 October 2017. The updated spreadsheet addressed the following:

- preliminary findings/details of compliance where sufficient information had been presented to determine a compliance status against the review criteria;
- preliminary corrective actions for not validated or non-compliant criteria; and
- highlighted criteria where additional information or clarification was required to determine the criteria's compliance status.

2.5.3 Audit Report

The purpose of this Report is to document the audit's scope, objectives, audit team, audit criteria, audit methodology, findings of the audit and recommendations for improvement.

A draft version of this report is to be provided to DSS for review to discuss the review findings and recommendations for improvement.

DSS may provide additional clarifying information. Thereafter, a final version of the report is to be provided to DSS who is responsible for submitting to DP&E.

3 AUDIT FINDINGS

3.1 Consultation

The Lead Auditor wrote to several government authorities deemed relevant to this audit. The purpose of this correspondence was to request any feedback, or identify any key environmental issues, with regards to the development. A summary of the correspondence is listed below with full details included in **Appendix A**:

- Ms Georgia Dragicevic (Senior Compliance Officer), Department of Planning and Environment, 24 October 2017;
- Mr Colin Phillips (Team Leader), Planning Services: Resources Assessments, Department of Planning and Environment, 24 October 2017;
- Mr Jeremy Morice (Water Regulation Officer), Department of Primary Industries: Water, 23 October 2017;
- Mr Matthew Fuller (Regional Operations Officer), Environment Protection Authority, 23 October 2017.

To date, no significant issues with the development were raised by the above authorities.

The Lead Auditor also placed a telephone call with the Chairman of the Community Consultative Committee, Mr James Bailey. A summary of the outcomes of this telephone call are listed below:

- The operation generally has a low environmental risk;
- DSS has been responsive to community concerns and their impact on the environment in general;
- Flooding on site is influenced to some degree by the Princes Highway, east of the DSS operation;
- DSS has exhibited a willingness to work with neighbours and interested and affected parties; and
- There have been no significant community issues brought to the attention of the CCC.

3.2 Compliance with primary criteria

Audit findings in this section are summarised by exception only, e.g. non-compliant or not verified criteria are reported. For full details regarding the compliance status of each audit criterion please refer to **Appendix B**.

3.2.1 Non-compliant conditions

Table 3 Non-compliant conditions

| CONDITION | DETAILS | RISK LEVEL |
|---|--|------------|
| SCHEDULE 4, CONDITION 1 Non-compliant | Requirement As soon as practicable after obtaining monitoring results showing: a) an exceedance of any relevant criteria in Schedule 3, the Applicant must notify the affected landowners in writing of the exceedance, and provide regular monitoring results to each affected landowner until the development is again complying with the relevant criteria; and b) an exceedance of any relevant air quality criteria in Schedule 3, the Applicant must send a copy of the NSW Health fact sheet entitled "Mine Dust and You" (as may be updated from time to time) | LOW |

| CONDITION | DETAILS | RISK LEVEL |
|-----------|--|------------|
| | <p>to the affected landowners and current tenants of the land (including the tenants of land which is not privately-owned).</p> <p>Audit findings It is not evident whether the <i>Response to Impact Assessment Criteria or Objective Exceedance Protocol</i> was implemented following the receipt of monthly data indicating exceedances to dust deposition monitoring during the periods 2015-2016 and 2016-2017.</p> <p>It is however noted that this specific condition was only created following determination of MOD 1 in June 2016. Nevertheless, exceedances have been registered during monthly sampling after the determination of MOD 1 and evidence of notifying landowners is not available.</p> <p>Actions (1) Brief the operations personnel on the triggers for the Response to Impact Assessment Criteria or Objective Exceedance Protocol document. (2) Have the Response to Impact Assessment Criteria or Objective Exceedance Protocol readily available.</p> | |

3.2.2 Administrative non-compliant conditions

Table 4 Administrative non-compliant conditions

| CONDITION | DETAILS | RISK LEVEL |
|---|--|---|
| <p>SCHEDULE 5, CONDITION 12</p> <p>Administrative non-compliance</p> | <p>Requirement By 30 November 2016, unless otherwise agreed by the Secretary, the Applicant must:</p> <p>a) make the following information publicly available on its website:</p> <ul style="list-style-type: none"> ▪ the documents listed in condition 2(a) of Schedule 2; ▪ current statutory approvals for the development; ▪ approved strategies, plans or programs; ▪ a summary of the monitoring results of the development, which have been reported in accordance with the various plans and programs approved under the conditions of this consent; ▪ a complaint register, which is to be updated on a quarterly basis; ▪ the Annual Reviews (over the last 5 years); ▪ any independent environmental audit, and the Applicant's response to the recommendations in any audit; ▪ any other matter required by the Secretary; and <p>b) keep this information up-to-date, to the satisfaction of the Secretary.</p> <p>Audit findings Environmental management plans and annual reviews were not available on the company's website.</p> <p>Actions (1) Upload approved management plans.</p> | <p>ADMINISTRATIVE NON-COMPLIANCE</p> |

| CONDITION | DETAILS | RISK LEVEL |
|-----------|--|------------|
| | (2) Upload Annual Reviews. (3) Upload audit when available. | |

3.2.3 Compliance not verified

Table 5 Compliance not verified

| CONDITION | DETAILS | RISK LEVEL |
|---|--|------------|
| SCHEDULE 2, CONDITION 9 Not verified | <p>Requirement The Applicant must: a) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by the development; and b) relocate, or pay the full costs associated with relocating any public infrastructure that needs to be relocated as a result of the development.</p> <p>Audit findings It could not be confirmed during the site inspection or during the subsequent document review whether public infrastructure has been damaged or relocated, however it has been assumed DSS would pay the full costs if these scenarios have eventuated.</p> <p>Actions (1) Prepare a plan which identifies all utilities and public infrastructure that are within the boundaries of the site.</p> | LOW |
| SCHEDULE 3, CONDITION 27 Not verified | <p>Requirement The Applicant must ensure that the flood storage capacity of the site is no less than the pre-existing flood storage capacity at all stages of the development. Details of the available flood storage capacity must be reported in the Annual Review.</p> <p>Audit findings The EIS and draft Water Management Plan state that topographic surveys would be conducted periodically and that these could be used to demonstrate the flood storage capacity of the site (versus the pre-existing storage capacity). The Annual Review discusses the flooding characteristics of the site and identifies how the site has reduced its flood risk, but the Annual Review doesn't present the results of recent topographic surveys or demonstrate (quantitatively) what the current flood storage capacity of the site is versus the pre-existing storage capacity.</p> <p>Actions (1) Prepare a quantitative analysis to demonstrate that the flood storage capacity of the site is no less than the pre-existing flood storage capacity per the draft WMP.</p> | LOW |

3.2.4 Compliant and opportunities for improvement

Table 6 Compliant and opportunities for improvement

| CONDITION | DETAILS | RISK LEVEL |
|---|---|------------|
| <p>SCHEDULE 3, CONDITION 14</p> <p>Compliant</p> | <p>Requirement The Applicant must comply with the operating hours in Table 2.</p> <p>Audit findings It was confirmed during an interview that the site operates within the approved operating hours. It is noted that there have been no recorded complaints for works occurring outside standard work hours by members of the public or any other regulating agency.</p> <p>Improvement opportunity (1) EPL 11147 does not distinguish between the different operating time categories for delivery and distribution via Shellharbour Road as stipulated in Table 2 of DA 195-8-2004. Consider varying the EPL to reflect the operating time categorisation of DA 195-8-2004 to avoid confusion and potential non-compliance.</p> | N/A |
| <p>SCHEDULE 3, CONDITION 19</p> <p>Compliant</p> | <p>Requirement The Applicant must ensure that dust generated by the development does not cause additional exceedances of the criteria listed in Tables 3 to 5 at any residence on, or on more than 25 percent of, any privately-owned land.</p> <p>Audit findings Results from monitoring the PM₁₀ long-term impact assessment criteria for particulate matter were below the threshold during the 2015-2016 and 2016-2017 reporting period and are therefore deemed compliant.</p> <p>Results from monitoring the PM₁₀ short-term impact assessment criteria for particulate matter were below the threshold, except for one instance (30 January 2017) when adverse weather conditions were being experienced. It's noted that this is the only exception in recent years.</p> <p>The annual average maximum total deposited dust level for monitoring locations DD8 and DD9 for the 2015-2016 period (corrected for damaged equipment and site contamination) exceeded the long-term impact assessment criteria for deposited dust.</p> <p>The annual average maximum total deposited dust level for all monitoring locations for the 2016-2017 period were compliant with the long-term impact assessment criteria for deposited dust.</p> <p>Actions (1) Update AQMP to reflect PM₁₀ monitoring reported in the 2017 Annual Review and remove DD-7a and DD-9 monitoring locations if these are no longer applicable.</p> | N/A |
| SCHEDULE 3, | Requirement | N/A |

| CONDITION | DETAILS | RISK LEVEL |
|---|--|------------|
| <p>CONDITION 22</p> <p>Compliant</p> | <p>Except as may be expressly provided by an Environment Protection Licence, the Applicant must comply with section 120 of the Protection of the Environment Operations Act 1997 during the carrying out of the development.</p> <p>Audit findings Water quality monitoring results reported in the Annual Review 2015-2016 and Annual Review 2016-2017 state:</p> <ul style="list-style-type: none"> ▪ During 2015-2016 an exceedance of TSS at point DW20a (EPL9) was recorded in Dec-15, however the site was not discharging at this time (i.e. ambient water quality). Having inspected the site, it is likely external factors (e.g. motorway adjacent agricultural practices) could have contributed to an exceedance. ▪ During 2016-2017 water was discharged via point DW20a (EPL9) and no exceedances were recorded. An exceedance of TSS was recorded in Dec-16 (52mg/L) and Feb-17 (53mg/L) at point DW18 (EPL13) but the site was not discharging from this point (i.e. ambient water quality). <p>Improvement opportunity (1) Sampling is currently being taken at the point of discharge and this may not be reflecting the downstream ambient conditions. Consider sampling downstream of discharge points to better understand ambient conditions so you're able to determine whether the pollution of waters is occurring. (2) Table 2 of the Annual Review is to be updated to reflect the new Water Access Licence number. (3) Consider reducing the redundant surface water monitoring locations from management plans.</p> | |
| <p>SCHEDULE 3, CONDITION 24</p> <p>Compliant</p> | <p>Requirement The Applicant must ensure that water quality in the dredge ponds and in groundwater comply with the water quality objectives in Table 7, or other such level as approved by the Secretary.</p> <p>Audit findings Sampling and analysis of groundwater and surface water for the purposes of monitoring compliance with the water quality objectives is occurring, however interpretation of the monitoring results and determination of compliance with the objectives is not reported in the Annual Review as required by the draft Water Management Plan.</p> <p>Actions (1) Sampling and analysis of groundwater and surface water for the purposes of monitoring compliance with the water quality objectives is occurring, however the interpretation (and compliance) of these results have not been reported in the Annual Review. DSS are to include these results in future Annual Reviews submitted to DP&E.</p> | N/A |
| <p>SCHEDULE 5, CONDITION 6</p> <p>Compliant</p> | <p>Requirement The Applicant must operate a Community Consultative Committee (CCC) for the development, to the satisfaction of the Secretary. This CCC must be operated in general</p> | N/A |

| CONDITION | DETAILS | RISK LEVEL |
|-----------|---|------------|
| | <p>accordance with the Guidelines for Establishing and Operating Community Consultative Committees for Mining Projects (Department of Planning, 2007, or its latest version).</p> <p>Audit findings A CCC has been established and meets every year. The last meeting was held on 16 August 2017, with the next meeting scheduled for 14 February 2018. The CCC is independently chaired by Mr James Bailey. Minutes of the meeting are distributed to DP&E and Council.</p> <p>Actions (1) Update the DP&E distribution details to remove Lauren Evans and include Colin Phillips (Team Leader, Resource Assessments, (02) 9274 6483, Colin.Phillips@planning.nsw.gov.au).</p> | |

3.3 Compliance with secondary criteria

The site was observed to generally be implementing the measures stipulated in the various management plans approved for the site and the Lead Auditor considers the site to be following the requirements of the management plans.

Consultation with authorities indicated the site is considered a low environmental risk, and following the site inspection the Lead Auditor agrees with this opinion.

3.3.1 Noise Monitoring Program

The Noise Monitoring Program (Rev 5) was reviewed and updated in late 2016 to address additional requirements stated in MOD 1 and approved by DP&E on 22 May 2017.

Annual Compliance Noise Monitoring 2017 prepared by SLR Consulting (dated 28 July 2017) concluded that noise generated by the development was compliant with the noise limits stipulated in condition 14, schedule 3 (and which are replicated in L3.1 of EPL 11147) and submitted to the EPA and DP&E on 31 July 2017.

3.3.2 Air Quality Monitoring Program

The Air Quality Monitoring Program (Rev 5) was reviewed and updated in late 2016 to address additional requirements stated in MOD 1 and approved by DP&E on 22 May 2017.

Results of dust monitoring are reported in the Annual Review. Following a review of the information presented in the Annual Review 2015-2016 and Annual Review 2016-2017:

1. Results from monitoring the PM₁₀ long-term impact assessment criteria for particulate matter were below the threshold during the 2015-2016 and 2016-2017 reporting period and are therefore deemed compliant;
2. Results from monitoring the PM₁₀ short-term impact assessment criteria for particulate matter were below the threshold, except for one instance (30 January 2017) when adverse weather conditions were being experienced. It's noted that this is the only exception in recent years;
3. The annual average maximum total deposited dust level for monitoring locations DD8 and DD9 for the 2015-2016 period (corrected for damaged equipment and site contamination) exceeded the long-term impact assessment criteria for deposited dust; and

4. The annual average maximum total deposited dust level for all monitoring locations for the 2016-2017 period were compliant with the long-term impact assessment criteria for deposited dust.

The site was not odorous during the site inspection. No odour complaints have been received.

3.3.3 Draft Water Management Plan

The Water Management Plan was originally included within an all-encompassing Environmental Management Plan (EMP) which was approved in 2006. The Water Management plan has subsequently been separated from the EMP and is in the process of being updated to address additional requirements stated in MOD 1. Submission and approval of this updated plan is anticipated in the near future.

The site currently maintains the following active licences and approvals:

- Water access licence: WAL24477 (Status: current);
- Water supply approval: 10-WA-106714 (Status: current); and
- Controlled activity licence: 10 ERM2010/1116 (Status: current).

Water quality monitoring results are reported in the Annual Review. Following a review of the information presented in the Annual Review 2015-2016 and Annual Review 2016-2017:

1. During 2015-2016 an exceedance of TSS at point DW20a (EPL9) was recorded in Dec-15, however the site was not discharging at this time (i.e. result indicated ambient water quality). Having inspected the site, it is possible external factors (e.g. motorway adjacent agricultural practices) could have contributed to an exceedance in this instance.
2. During 2016-2017 water was discharged via point DW20a (EPL9) and no exceedances were recorded. An exceedance of TSS was recorded in Dec-16 (52mg/L) and Feb-17 (53mg/L) at point DW18 (EPL13) but the site was not discharging from this point (i.e. result indicated ambient water quality).

During the site inspection sand extraction was being undertaken and no discharge of turbid water was witnessed. Water discharges via licensed discharge points have not exceeded the water discharge pollution limits.

Backfilling was not being undertaken at the time of the site inspection. Groundwater monitoring results from the past several years indicate the operation is not impacting groundwater levels and has not changed groundwater characteristics.

Sampling and analysis of groundwater and surface water for the purposes of monitoring compliance with the water quality objectives is occurring, however interpretation of the monitoring results and determination of compliance with the objectives is not reported in the Annual Review as required by the draft Water Management Plan.

3.3.4 Waste Management Plan

The Waste Management Plan was updated in Dec-16 to address additional requirements stated in MOD 1 and approved by DP&E on 25 January 2017.

The Waste Management Plan addresses the verification, acceptance and disposal of VENM on site. No backfilling was occurring at the time of the site inspection, however it was verbally confirmed that VENM was being used for backfilling and that VENM verification records are kept on site.

3.3.5 Flora and Fauna Management Plan

The Flora and Fauna Management Plan (Rev D) was reviewed and updated in late 2016 to address additional requirements stated in MOD 1 and approved by DP&E on 22 May 2017.

Progressive rehabilitation was observed during the site inspection. Rehabilitation recently completed is consistent with that documented in the Rehabilitation Management Plan and as reported in the most recent Annual Review. Stage 1 has been rehabilitated and is currently being maintained until hand-over to the community. Visual screening for Stage 2 and later stages has been completed.

3.3.6 Rehabilitation Management Plan, including Riparian Area Management Plan and Landscaping Plan

The Rehabilitation Management Plan (including Riparian Area Management Plan and Landscaping Plan) (Rev E) was reviewed and updated in March 2017 to address additional requirements stated in MOD 1 and approved by DP&E on 22 May 2017.

As stated in Section 3.3.5, progressive rehabilitation was observed during the site inspection and is consistent with the Rehabilitation Management Plan.

Correspondence dated 7 June 2016 from DP&E approved the recalculation of the Rehabilitation and Conservation Bond following the determination of Stage 2, 3 and 4 on 2 June 2016.

3.3.7 Long Term Management Strategy

The Long-Term Management Strategy (Rev D) was reviewed and updated in late 2016 to address additional requirements stated in MOD 1 and approved by DP&E on 22 May 2017.

Per correspondence dated 5 August 2016 from DP&E to Boral Property Group, DP&E approved Boral's request for a bank guarantee in lieu of establishing a Long-Term Management Trust. Subsequent correspondence dated 12 September 2016 from Boral Property Group to DP&E enclosed the bank guarantee.

3.4 Complaints, Incidents and Penalties

A complaints register was provided for review. This register included two complaints, dated 4 August 2015 and 7 September 2016. Both complaints pertained to visual observations of "dirty" water by members of the public. In both instances DSS gathered water samples and provided the analysis results of these samples to the EPA. DSS thereafter installed additional sediment controls.

On 15 May 2017 a pollution incident was recorded by site personnel. The pollution incident involved the sinking of the dredge in Stage 3 which resulted in diesel oil spilling into pond 3. At the time it was recorded that no water was entering or exiting pond 3. The notification process stated in the Pollution Incident Response Management Plan (PIRMP) was triggered and DSS accordingly notified the relevant authorities of the incident. DSS used booms to limit the spread of the diesel and undertook daily water sampling of potentially affected waterways to confirm that impacts were confined to the dredge pond only.

In response to the pollution incident on 15 May 2017, the EPA considered it appropriate to issue DSS with an Official Caution on 30 August 2017 for the alleged breach of condition O2.1 of their EPL. In arriving at this decision, EPA made the following observations:

- DSS immediately acted to contain any environmental impacts from the diesel, engine oil and hydraulic oil contained in the dredge, ensuring that the dredge pond water was isolated, preventing impacts to other processes in the operation;
- DSS immediately notified the EPA of the incident and activated the PIRMP for the premises;
- DSS arranged a contractor to attend the site and collect and remove the diesel/water mixture from the surface of the dredge pond for appropriate disposal/treatment;

- DSS undertook daily water monitoring of surrounding waterways to identify any potential water quality impacts. Harm to the environment appeared to be limited to the dredge pond water;
- Following the incident several preventative actions were identified, most of which had been completed or will be soon; and
- DSS's compliance history is generally good.

4 CONCLUSION

The audit of Dunmore Lakes Sand Extraction Project against the criteria stipulated in **Section 1.5** demonstrated the site is generally compliant with DA 195-8-2004 and the operation's environmental management plans. It's noted that feedback from regulating authorities and the chairman of the CCC is that the operation presents a relatively low environmental risk as currently operated and managed.

Nonetheless, two (2) non-compliant criteria (one of which is an administrative non-compliance) were identified and corrective actions have been identified. The compliance status of two (2) criteria could not be verified during the site inspection or in the subsequent document review and therefore have corrective actions identified. It is acknowledged that these non-compliant and not verified criteria are not believed to be resulting in material harm to the environment, however the corrective actions need to be implemented immediately to safeguard the compliance status of the operation.

The corrective actions which have been identified in **Table 3**, **Table 4** and **Table 5** are summarised below:

1. Brief the operations personnel on the triggers for the *Response to Impact Assessment Criteria or Objective Exceedance Protocol* document;
2. Have the *Response to Impact Assessment Criteria or Objective Exceedance Protocol* readily available;
3. Upload approved management plans to DSS's website;
4. Upload Annual Reviews to DSS's website;
5. Upload this Internal Environmental Audit to DSS's website (once complete and accepted by DP&E);
6. Prepare a plan which identifies all utilities and public infrastructure that are within the boundaries of the site; and
7. Prepare a quantitative analysis of the flood storage capacity of the site per the draft WMP.

Several improvement opportunities were identified during the audit to minimise potential future non-compliance and ensure ongoing environmental performance. These opportunities which have been identified in **Table 6** are summarised below:

1. EPL 11147 does not distinguish between the different operating time categories for delivery and distribution via Shellharbour Road as stipulated in Table 2 of DA 195-8-2004. Consider varying the EPL to reflect the operating time categorisation of DA 195-8-2004 to avoid confusion and potential non-compliance;
2. Update AQMP to reflect PM₁₀ monitoring reported in the 2017 Annual Review and remove DD-7a and DD-9 monitoring locations if these are no longer applicable;
3. Sampling is currently being taken at the point of discharge and this may not be reflecting the downstream ambient conditions. Consider sampling downstream of discharge points to better understand ambient conditions so you're able to determine whether the pollution of waters is occurring;
4. Table 2 of the Annual Review is to be updated to reflect the new Water Access Licence number;
5. Consider reducing the redundant surface water monitoring locations from management plans;
6. Sampling and analysis of groundwater and surface water for the purposes of monitoring compliance with the water quality objectives is occurring, however the interpretation (and compliance) of these results have not been reported in the Annual Review. DSS are to include these results in future Annual Reviews submitted to DP&E; and
7. Update the DP&E distribution details in the CCC minutes to remove Lauren Evans and include Colin Phillips (Team Leader, Resource Assessments, (02) 9274 6483, Colin.Phillips@planning.nsw.gov.au).

In summary, the opinion of the Lead Auditor is that the site is generally compliant with its primary and secondary criteria and that the environmental performance of the site is

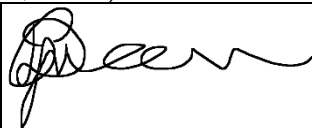
satisfactory given the information provided during the audit and following an inspection of the site. The Lead Auditor agrees with the opinion that the operation presents a low environmental risk, and the data provided during the audit supports this opinion.

4.1 Limitations

The findings of this audit are based upon visual observations of the site and its vicinity, interviews with site personnel and our interpretation of documentation made available by DSS. Opinions presented herein apply to the site as observed at the times of the inspections and from information provided by DSS personnel. Any changes to this information of which Element is not aware and has not had the opportunity to evaluate therefore cannot be considered in this Report.

Element have taken due care to consider all reasonably available information provided during the undertaking of this audit and have taken this information to represent a fair and reasonable characterisation of the environmental status of the site, but recognise that any site assessment program is necessarily limited in scope and true site conditions may differ from those inferred from the available data.

5 INDEPENDENT AUDIT CERTIFICATION

| | |
|--|--|
| Development Name | Dunmore Lakes Sand Extraction Project |
| Development Consent No. | DA 195-8-2004 |
| Description of Development | The Dunmore Lakes Sand Extraction Project is located on the western side of the Princes Highway, approximately 12 kilometres north-west of Kiama in the Shellharbour Local Government Area. The site is adjacent to Boral's Dunmore Quarry and is operated by Dunmore Sand & Soil Pty Ltd (DSS), a wholly-owned subsidiary of Boral Resources (NSW) Pty Ltd. Dunmore Sand and Soil produces a range of sand and landscaping products through the process of sand dredging. Operation of the quarry involves the sequential dredging and excavation of sand and soil from Stage 1, 2, 3 and 4. The method of extraction of these resources includes both sand and soil extraction by excavator and dredge sand extraction, followed by washing, processing and material blending. The final product is then stockpiled on site until transported to local and regional markets. |
| Development Address | 38 Tabbita Road, Dunmore |
| Operator | Dunmore Sand and Soil Pty Limited |
| Operator Address | 38 Tabbita Road, Dunmore |
| Title of Audit | Dunmore Lakes Sand Independent Environmental Audit, November 2017 |
| <p>I certify that I have undertaken the independent audit and prepared the contents of the attached independent audit report to the best of my knowledge:</p> <ul style="list-style-type: none"> ▪ The audit has been undertaken in accordance with relevant approval condition(s) and in accordance with the auditing standard AS/NZS ISO 19011:2014 and Post Approval Guidelines – Independent Audits; ▪ The findings of the audit are reported truthfully, accurately and completely; ▪ I have exercised due diligence and professional judgement in conducting the audit; ▪ I have acted professionally, in an unbiased manner and did not allow undue influence to limit or over-ride objectivity in conducting the audit; ▪ I am not related to any owner or operator of the development as an employer, business partner, employee, sharing a common employer, having a contractual arrangement outside the audit, spouse, partner, sibling, parent, or child; ▪ I do not have any pecuniary interest in the audited development, including where there is a reasonable likelihood or expectation of financial gain or loss to me or to a person to whom I am closely related (i.e. immediate family); ▪ Neither I nor my employer have provided consultancy services for the audited development that were subject to this audit except as otherwise declared to the lead regulator prior to the audit; and ▪ I have not accepted, nor intend to accept any inducement, commission, gift or any other benefit (apart from fair payment) from any owner or operator of the development, their employees or any interested party. I have not knowingly allowed, nor intend to allow my colleagues to do so. <p><i>Note.</i></p> <ul style="list-style-type: none"> ▪ <i>The Independent Audit is an 'environmental audit' for the purposes of section 122B(2) of the Environmental Planning and Assessment Act 1979. Section 122E provides that a person must not include false or misleading information (or provide information for inclusion in) an audit report produced to the Minister in connection with an environmental audit if the person knows that the information is false or misleading in a material respect. The maximum penalty is, in the case of a corporation, \$1 million and for an individual, \$250,000.</i> ▪ <i>The Crimes Act 1900 contains other offences relating to false and misleading information: section 192G (Intention to defraud by false or misleading statement-maximum penalty 5 years imprisonment); sections 307A, 307B and 307C (False or misleading applications/information/documents-maximum penalty 2 years imprisonment or \$22,000, or both).</i> | |
| Signature |  |
| Name of Lead Auditor | Darren Green |
| Address | Level 1, 63 Ridley Street, Charlestown, NSW, 2290 |
| Email Address | darren@elementenvironment.com.au |
| Date | 9 November 2017 |

APPENDIX A

PROJECT MANAGEMENT DOCUMENTATION



Contact: Georgia Dragicevic
Phone: 4224 9477
Fax: 4224 9470
Email: Georgia.Dragicevic@planning.nsw.gov.au

Ms Ellie Randall
Environmental Coordinator
Boral Resources (NSW) Pty Ltd
38 Tabitta Road
DUNMORE NSW 2529

Dear Ms Randall

**Dunmore Lakes Sand Extraction Project (DA 195-8-2004)
Independent Environmental Audit 2017**

I refer to your letter dated 18 August 2017 seeking approval of the audit team for the upcoming Dunmore Lakes Sand Extraction Project Independent Environmental Audit, in accordance with condition 10 of Schedule 5 of the development consent DA 195-8-2004 (the consent).

Having considered the qualifications and experience of the Element Environment Pty Ltd audit team, namely;

- Auditor/Project Manager Darren Green; and
- Project Director/Technical Reviewer Neville Hattingh,

the Secretary endorses the appointment of this team to undertake the audit in accordance with condition 10 of Schedule 5 of the consent. This approval is conditional on the audit team being independent of the development.

The audit is to be conducted in accordance with AS/NZS ISO 19011 Australian/New Zealand Standard: Guidelines for quality and/or environmental management systems auditing and in accordance with the Independent Audit Guideline dated October 2015. A copy of this guideline can be located at <http://www.planning.nsw.gov.au/Policy-and-Legislation/Mining-and-Resources/Integrated-Mining-Policy>.

The audit report is to include the following:

- a compliance table indicating the compliance status of each condition of approval and any relevant EPL;
- not use the term "partial compliance";
- recommend actions in response to non-compliances;
- review the adequacy of plans and programs required under this consent; and
- identify opportunities for improved environmental management and performance.

Within six weeks of completing the audit, or otherwise as agreed by the Secretary, Boral is to submit a copy of the audit report to the Secretary together with its response to any recommendations contained in the audit report and a timetable to implement the recommendations.

Prior to submitting the audit report to the Secretary, it is recommended that Boral review the report to ensure it complies with the relevant consent condition.

Should you have any enquiries in relation to this matter, please contact Georgia Dragicevic, Senior Compliance Officer, on telephone number (02) 4224 9477 or by email to Georgia.Dragicevic@planning.nsw.gov.au

Yours sincerely



Katrina O'Reilly
Team Leader Compliance
as nominee of the Secretary

AUDIT AGENDA

| Issued | Pages | Status |
|------------------|-------|--------------|
| 11/10/2017 12:44 | 1 | CONFIDENTIAL |

| Issued by | Attendees |
|--------------|---------------------------------------|
| Darren Green | Darren Green (DG), Ellie Randall (ER) |

| Subject |
|--|
| Independent environmental audit of Dunmore Sand & Soil |

| Date | Time |
|-----------------|---------------|
| 12 October 2017 | 10h00 - 12h00 |

| Location |
|---|
| Dunmore Lakes Sand Quarry, Tabbitta Road, Dunmore NSW |

| Item | Description |
|---------------|--|
| <i>Start</i> | <i>10h00</i> |
| 1. | Introductions (10min) |
| 2. | Scope of Audit (5min) <ul style="list-style-type: none"> ▪ Objective <ul style="list-style-type: none"> - Environmental compliance of DSS operations with DA 195-8-2004, EPL 11147 and other permits/licences as applicable. ▪ Audit Criteria <ul style="list-style-type: none"> - Project Approval (DA 195-8-2004) and plans approved thereunder; - EPL 11147. |
| 3. | Issues or incidents (10min) <ul style="list-style-type: none"> ▪ Pollution incident - sinking of sand dredge in dredge pond; and ▪ Identify any other key issues or incidents that have occurred during the reporting period. |
| 4. | Site visit (90min) <ul style="list-style-type: none"> ▪ View project boundary (Sch3cl1-2, Sch3cl58-61, Sch3cl71); ▪ Observe storage and stockpiling areas (Sch3cl70, Sch3cl3); ▪ Observe Southern, North-eastern and North-western Wetlands (Sch3cl7-9); ▪ Observe Rocklow Creek (Sch3cl11); ▪ Observe vehicle movements entering and existing site (Sch3cl54-56); ▪ Observe sand extraction and backfilling process (Sch3cl65-67); ▪ View plant maintenance logs (Sch2cl10); and ▪ View water discharge points. |
| 5. | Closure (5min) |
| <i>Finish</i> | <i>12h00</i> |



24 October 2017

Att: Ms Georgia Dragicevic
Senior Compliance Officer
Department of Planning & Environment
Level 2, 84 Crown Street
Wollongong
NSW 2500

m 0404 252 265
e info@elementenvironment.com.au
w www.elementenvironment.com.au
PO Box 1563, Warriewood, NSW, 2102
ABN 45 162 835 083

Att: Colin Phillips
Team Leader
Planning Services, Resources Assessments
Department of Planning & Environment
Level 22, 320 Pitt Street
Sydney
NSW 2000

Email: georgia.dragicevic@planning.nsw.gov.au; colin.phillips@planning.nsw.gov.au

Dear Georgia, Colin

DUNMORE LAKES SAND EXTRACTION PROJECT (DA 195-8-2004) – REGULATORS FEEDBACK

With reference to condition 10, Schedule 5 of DA 195-8-2004, Element Environment Pty Ltd (Element) is currently undertaking an independent environmental audit of the Dunmore Lakes Sand Extraction development. A requirement of this condition is to undertake consultation with relevant government agencies and the development's Community Consultative Committee.

Element is therefore contacting the Department of Planning and Environment (DP&E) to request any feedback, or the identification of any key environmental issues, with regards to this development.

Please could comments be forwarded before 31 October 2017 (via email is acceptable). Any comments received will be recorded and reported in the audit report and any specific issues investigated as part of the audit.

Please do not hesitate to contact me should you have any questions or queries.

Kind regards,

A handwritten signature in black ink, appearing to read 'Darren Green', written in a cursive style.

Darren Green
Associate
Element Environment Pty Ltd



23 October 2017

Mr Jeremy Morice
Water Regulation Officer
NSW Department of Primary Industries - Water
Level 0, 84 Crown Street
Wollongong
NSW 2500

m 0404 252 265
e info@elementenvironment.com.au
w www.elementenvironment.com.au
PO Box 1563, Warriewood, NSW, 2102
ABN 45 162 835 083

Email: jeremy.morice@dpi.nsw.gov.au

Dear Jeremy

DUNMORE LAKES SAND EXTRACTION PROJECT – REGULATORS FEEDBACK

With reference to condition 10, Schedule 5 of DA 195-8-2004, Element Environment Pty Ltd (Element) is currently undertaking an independent environmental audit of the Dunmore Lakes Sand Extraction Project. A requirement of condition 10 is to undertake consultation with relevant government agencies and the development's Community Consultative Committee.

Element is therefore contacting the NSW Department of Primary Industries - Water to request any feedback, or the identification of any key environmental issues, with regards to this development.

Please could comments be forwarded before 31 October 2017. Any comments received will be recorded and reported in the audit report and any specific issues investigated as part of the audit.

Please do not hesitate to contact me should you have any questions or queries.

Kind regards,

A handwritten signature in black ink, appearing to read 'Darren Green', written over a light blue horizontal line.

Darren Green
Associate
Element Environment Pty Ltd



23 October 2017

Mr Matthew Fuller
Regional Operations Officer
NSW Environment Protection Authority
Level 3, 84 Crown Street
Wollongong
NSW 2500

m 0404 252 265
e info@elementenvironment.com.au
w www.elementenvironment.com.au
PO Box 1563, Warriewood, NSW, 2102
ABN 45 162 835 083

Email: matthew.fuller@epa.nsw.gov.au

Dear Matthew

DUNMORE LAKES SAND QUARRY (EPL 11147) – REGULATORS FEEDBACK

With reference to condition 10, Schedule 5 of DA 195-8-2004, Element Environment Pty Ltd (Element) is currently undertaking an independent environmental audit of the Dunmore Lakes Sand Quarry. Element understands that Environment Protection Licence 11147 pertains to this development and therefore forms part of the scope of the independent environmental audit.

A requirement of condition 10 is to undertake consultation with relevant government agencies and the development's Community Consultative Committee.

Element is therefore contacting the Environment Protection Authority (EPA) to request any feedback, or the identification of any key environmental issues, with regards to this development.

Please could comments be forwarded before 31 October 2017. Any comments received will be recorded and reported in the audit report and any specific issues investigated as part of the audit.

Please do not hesitate to contact me should you have any questions or queries.

Kind regards,

A handwritten signature in black ink, appearing to read 'Darren Green', written in a cursive style.

Darren Green
Associate
Element Environment Pty Ltd

APPENDIX B

COMPLIANCE TRACKING SPREADSHEET



| | |
|------------------|--------------------------------------|
| Site Name | Dunmore Lakes Sand Extraction |
| City | Dunmore NSW |
| Co-ordinates | -34.608755, 150.834192 |

| | |
|-------------------------|--------------|
| Document Control | |
| Issued | 10-Nov-17 |
| Issued by | Darren Green |
| Status | Final |

| Approval Type | Traffic Light | Schedule | Schedule Title | Clause | Condition/Commitment/Mitigation Measure | Status | Details of Compliance | Compliant | Risk Level | Actions Required |
|----------------------------------|---------------|----------|--|--------|---|--------|---|--------------|------------|---|
| Project Approval (DA 195-8-2004) | OK | 2 | Obligation to Minimise Harm to the Environment | 1 | The Applicant must implement all practicable measures to prevent and/or minimise any harm to the environment that may result from the construction, operation, or rehabilitation of the development. | Open | All practicable measures are being implemented. EPA issued an official caution on 30-Aug-17 for a pollution incident that occurred on 15-May-17. EPA concluded that DSS took immediate action to contain impacts of the incident and prevent impacts to other processes, immediately notified the EPA of the incident and activated the sites PIRMP accordingly. EPA noted the compliance history of DSS as being "generally good". | Compliant | | |
| Project Approval (DA 195-8-2004) | OK | 2 | Terms of Approval | 2 | The Applicant must carry out the development: a) generally in accordance with the EIS, EA (MOD 1) and the Development Layout Plan; and b) in accordance with the conditions of this consent. Note: The Development Layout Plan is included in Appendix 1. | Open | Based upon the findings of this independent audit, it is believed the development is generally being carried out in accordance with the conditions of approval and all relevant environment assessment documents. | Compliant | | |
| Project Approval (DA 195-8-2004) | OK | 2 | Terms of Approval | 3 | If there is any inconsistency between the documents identified in condition 2(a), the more recent document shall prevail to the extent of the inconsistency. The conditions of this consent shall prevail to the extent of any inconsistency with the documents identified in condition 2(a). | Open | No inconsistencies have been identified during this independent audit. | Compliant | | |
| Project Approval (DA 195-8-2004) | OK | 2 | Terms of Approval | 4 | The Applicant must comply with any reasonable requirement/s of the Secretary arising from the Department's assessment of: a) any strategies, plans, programs, reviews, audits, reports or correspondence that are submitted in accordance with this consent (including any stages of these documents); b) any reviews, reports or audits commissioned by the Department regarding compliance with this consent; c) the implementation of any actions or measures contained in these documents. | Open | DSS has to date complied with all requirements of the Secretary received to date. Correspondence from DP&E on 23-Jun-16 requested a review of all management plans and instruction to re-submit to DP&E for approval. The reviewed management plans, with the exception of the Water Management Plan, were approved on 22-May-17. | Compliant | | |
| Project Approval (DA 195-8-2004) | OK | 2 | Limits on Approval | 5 | This consent shall lapse 25 years after the date it commences. Note: On-going use of the site for processing and blending activities after this time shall be the subject of a separate application. | Open | It is noted that the date of consent is: 29/06/2005. | Compliant | | |
| Project Approval (DA 195-8-2004) | OK | 2 | Limits on Approval | 6 | The Applicant must not produce or transport more than 800,000 tonnes of product per year from the site | Open | Sand dredging has been undertaken in Stage 2 and 3. During the period 2015-2016, DSS produced 386,444 tonnes and transported 306,842 tonnes. Of the 306,842 tonnes transported, 203,236 tonnes (~66%) was via road and 103,606 tonnes (~44%) via rail. The produced and transported tonnage are both below the threshold of this consent. During the period 2016-2017, DSS produced 434,240 tonnes and transported 347,999 tonnes. Of the 347,999 tonnes transported, 203,900 tonnes (~59%) was via road and 144,099 tonnes (~41%) via rail. The produced and transported tonnage are both below the threshold of this consent. | Compliant | | |
| Project Approval (DA 195-8-2004) | OK | 2 | Structural Adequacy | 7 | The Applicant must ensure that any new buildings and structures, and any alterations or additions to existing buildings and structures, are constructed in accordance with the relevant requirements of the BCA. Notes: • Under Part 4A of the EP&A Act, the Applicant is required to obtain construction and occupation certificates for any building works. • Part 8 of the EP&A Regulation sets out the detailed requirements for the certification of development. | Open | No permanent buildings have been constructed. Offices consist of temporary buildings. | Compliant | | |
| Project Approval (DA 195-8-2004) | OK | 2 | Demolition | 8 | The Applicant must ensure that all demolition work is carried out in accordance with AS 2601-2001: The Demolition of Structures, or its latest version. | Open | No demolition of structures has taken place. | Compliant | | |
| Project Approval (DA 195-8-2004) | Action | 2 | Protection of Public Infrastructure | 9 | The Applicant must: a) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by the development; and b) relocate, or pay the full costs associated with relocating any public infrastructure that needs to be relocated as a result of the development. | Open | It could not be confirmed during the site inspection or during the subsequent document review whether public infrastructure has been damaged or relocated, however it has been assumed DSS would pay the full costs if these scenarios have eventuated. | Not verified | Low | Actions: (1) Prepare a plan which identifies all utilities and public infrastructure that are within the boundaries of the site. |
| Project Approval (DA 195-8-2004) | OK | 2 | Operation of Plant and Equipment | 10 | The Applicant must ensure that all plant and equipment at the site, or used in connection with the development, are: a) maintained in a proper and efficient condition; and b) operated in a proper and efficient manner | Open | Maintenance log viewed during site inspection. Plant and equipment undergo daily pre-start inspections and regular maintenance. | Compliant | | |

| Approval Type | Traffic Light | Schedule | Schedule Title | Clause | Condition/Commitment/Mitigation Measure | Status | Details of Compliance | Compliant | Risk Level | Actions Required |
|----------------------------------|---------------|----------|--|--------|---|--------|--|---------------|------------|------------------|
| Project Approval (DA 195-8-2004) | OK | 3 | Identification of Boundaries | 1 | <p>Within 6 months of the date of this consent, the Applicant must:</p> <p>a) engage a registered surveyor to mark out the boundaries of the approved limits of extraction;</p> <p>b) submit a survey plan of these boundaries to the Secretary; and</p> <p>c) ensure that these boundaries are clearly marked at all times in a permanent manner that allows operating staff and inspecting officers to clearly identify those limits.</p> <p>Note: The limit of extraction includes the area described in the documents listed in condition 2 of schedule 2 (and shown conceptually on the plan in Appendix 1), as amended by the conditions below.</p> | Open | <p>Per correspondence dated 5 March 2007 from Boral Resources to Department of Planning, it's understood a survey plan was first submitted to DP&E on 24 February 2006 and an updated plan on 5 March 2007 showing the approved extraction limit boundaries. This survey was completed by Bruce E Smith (Registered Surveyor) of Craven Elliston & Hayes.</p> <p>The boundaries of limits of extraction were observed during site inspection (delineated by clearly visible white posts) and there is no reason to believe the operation is non-compliant with this requirement.</p> | Compliant | | |
| Project Approval (DA 195-8-2004) | OK | 3 | General Limits on Extraction and Processing | 2 | The Applicant must not undertake extraction within 3 metres of the project site boundary. Batter slopes from this extraction limit must be no steeper than 1:3 (V:H). | Open | During the site inspection, extraction was not being undertaken within 3m of the project site boundary. Historically, there is also no obvious visible indication of extraction having been undertaken within 3m of the project site boundary. | Compliant | | |
| Project Approval (DA 195-8-2004) | OK | 3 | General Limits on Extraction and Processing | 3 | The Applicant must not undertake any stockpiling of material in the area marked 'Potential Future Stockpiling Area' on Figure 2.2 of the EIS. | Open | No stockpiling in this area was observed during the site inspection. | Compliant | | |
| Project Approval (DA 195-8-2004) | OK | 3 | Stage 4 – Tabbita Road Corridor | 4 | <p>The Applicant must not undertake any extraction in Stage 4 without the prior approval of the Secretary. An application to undertake extraction in Stage 4 must be accompanied by an extraction management plan that must:</p> <p>a) detail the proposed realignment and rehabilitation of Tabbita Road and associated infrastructure;</p> <p>b) assess the environmental impacts of the proposed realignment; and</p> <p>c) include appropriate agreements with affected parties, to the satisfaction of the Secretary.</p> | Open | | Not triggered | | |
| Project Approval (DA 195-8-2004) | OK | 3 | Western, Northern and Eastern Tributaries | 5 | <p>Note: The Applicant is required to obtain a Controlled Activity Approval from DPI Water under the Water Management Act 2000 prior to undertaking any works within 40 metres of Rocklow Creek or the Western, Northern and Eastern Tributaries, or any water feature connected to these protected waters.</p> <p>The Applicant must not undertake extraction within 3 metres of the bank of the Eastern Tributary. Batter slopes from this extraction limit must be no steeper than 1:3 (V:H).</p> | Open | <p>Controlled Activity Approval (ref.: 10ERM2010/1116) was issued 14/12/2015.</p> <p>An application for an additional Controlled Activity Approval for future works within 40 metres of Rocklow Creek has been submitted and is pending approval with DPI (Water). Extraction was not within 3 metres of the bank of the Eastern Tributary.</p> | Compliant | | |
| Project Approval (DA 195-8-2004) | OK | 3 | Western, Northern and Eastern Tributaries | 6 | The Applicant must maintain the integrity of the Northern and Western Tributaries for as long as practicable. In this regard, the Applicant must only extract sand within 3 metres of the bank of the tributaries in accordance with an approved Riparian Area Management Plan (see condition 45). Batter slopes from this extraction limit must be no steeper than 1:2 (V:H). | Open | A Riparian Area Management Plan is included with the approved Rehabilitation Management Plan (Rev E) and extraction has been in accordance with this approved plan. | Compliant | | |
| Project Approval (DA 195-8-2004) | OK | 3 | Southern, North-eastern and North-western Wetlands | 7 | The Applicant must not undertake extraction within 10 metres of the bank of the southern or north-eastern wetlands. Batter slopes from this extraction limit must be no steeper than 1:2 (V:H). | Open | <p>Extraction near the southern wetland is not yet occurring and well outside the 10m buffer.</p> <p>Extraction near the north-eastern wetland is complete. A buffer of greater than 10m exists between the extraction limit and the wetland delineated in the Rehabilitation Management Plan. Batter slopes are not observably steeper than 1:2.</p> | Compliant | | |
| Project Approval (DA 195-8-2004) | OK | 3 | Southern, North-eastern and North-western Wetlands | 8 | <p>The Applicant must commission a suitably qualified ecologist, whose appointment has been endorsed by the Secretary, to mark out the extraction limit to the southern and north-eastern wetlands.</p> <p>Note: The southern and north-eastern wetlands are defined as the area that constitutes Freshwater Wetlands on Coastal Floodplains, an endangered ecological community under the Threatened Species Conservation Act 1995.</p> | Open | <p>Extraction has been within the limits permitted by Appendix 1 of the development consent.</p> <p>Per correspondence dated 5 March 2007 from Boral Resources to DP&E, it's stated that Dr David Robertson of Cumberland Ecology marked out the extraction limits from the north-eastern and southern wetlands during the preparation of the Flora, Fauna and Rehabilitation Management Plan which was submitted to DP&E in June 2006. The amended survey plan submitted with this correspondence dated 5 March 2007 therefore addressed this requirement.</p> | Compliant | | |
| Project Approval (DA 195-8-2004) | OK | 3 | Southern, North-eastern and North-western Wetlands | 9 | The Applicant must ensure that extraction within 40m of the southern, north-eastern and north-western wetlands occurs towards the end of dredging when the dredge pond water volume is maximised, and in accordance with an approved Riparian Area Management Plan (see condition 45). The plan must include an assessment by a suitably qualified hydrogeologist justifying the extraction limit referred to in condition 7, based on data obtained from the site. | Open | <p>Staging appears to have been in sequence with the staging approved in the development consent.</p> <p>Extraction near the southern wetland is not yet occurring.</p> <p>Extraction near the north-eastern wetland is complete.</p> <p>Extraction near the north-western wetland is complete.</p> | Compliant | | |
| Project Approval (DA 195-8-2004) | OK | 3 | Rocklow Creek Realignment | 10 | Prior to the commencement of extraction in Sub-Stage 3C1 (see Appendix 1), the Applicant must complete the realignment and rehabilitation of Rocklow Creek, to the satisfaction of the Secretary. The realignment must be undertaken in accordance with an approved Riparian Area Management Plan (see condition 45). The realigned channel must be designed so as to safely convey, without bed or bank erosion, the 1 in 20 year ARI peak flow. | Open | | Not triggered | | |
| Project Approval (DA 195-8-2004) | OK | 3 | Rocklow Creek Realignment | 11 | The Applicant must not undertake extraction within 3 metres of the bank of the realigned Rocklow Creek. Batter slopes from this extraction limit must be no steeper than 1:2 (V:H). | Open | | Not triggered | | |
| Project Approval (DA 195-8-2004) | OK | 3 | Rocklow Creek Realignment | 12 | The Applicant must provide for the ultimate redirection of the realigned Rocklow creek into the lake in Stage 3, unless otherwise approved by the Secretary. The redirection must be undertaken in accordance with an approved Riparian Area Management Plan (see condition 45). | Open | | Not triggered | | |

| Approval Type | Traffic Light | Schedule | Schedule Title | Clause | Condition/Commitment/Mitigation Measure | Status | Details of Compliance | Compliant | Risk Level | Actions Required |
|----------------------------------|---------------|----------|------------------------------------|--------|--|--------|---|-----------|------------|---|
| Project Approval (DA 195-8-2004) | OK | 3 | Noise Limits | 13 | The Applicant must ensure that the noise generated by the development does not exceed the criteria specified in Table 1 . Notes: a) The criteria above apply to noise emissions under the following weather conditions: • wind speeds up to 3 m/s (at a height of 10m); and • Temperature inversions of up to 60C/100m and wind speeds up to 2 m/s (at a height of 10m). b) The criteria do not apply where the Applicant and the affected landowner have reached a negotiated agreement in regard to noise, and a copy of the agreement has been forwarded to the Secretary and EPA. c) Noise from the development is to be measured at the most affected point or within the residential boundary, or at the most affected point within 30 metres of a dwelling (rural situations) where the dwelling is more than 30 metres from the boundary, to determine compliance with the LAeq(15 minute) noise limits in the above table. Where it can be demonstrated that direct measurement of noise from the development is impractical, EPA may accept alternative means of determining compliance (see Chapter 11 of the NSW Industrial Noise Policy). The modification factors in Section 4 of the NSW Industrial Noise Policy must also be applied to the measured noise levels where applicable. | Open | Annual Compliance Noise Monitoring 2017 prepared by SLR Consulting (dated 28 July 2017) concluded that noise generated by the development was compliant with the noise limits stipulated in condition 14 (and which are replicated in L3.1 of EPL 11147). It is noted in discussions with DSS staff that the operation typically does not operate during the evening and night. It is further noted that no noise complaints have been recorded in the Complaints Register. | Compliant | | |
| Project Approval (DA 195-8-2004) | OK | 3 | Noise Limits | 14 | The Applicant must comply with the operating hours in Table 2 : | Open | It was confirmed during interview that the site operates within the approved operating hours. It is noted that there have been no recorded complaints for works occurring outside standard work hours by members of the public or any other regulating agency. | Compliant | | Improvement Opportunity: (1) EPL 11147 does not distinguish between the different operating time categories for delivery and distribution via Shellharbour Road as stipulated in Table 2 of DA 195-8-2004. Consider varying the EPL to reflect the operating time categorisation of DA 195-8-2004 to avoid confusion and potential non-compliance. |
| Project Approval (DA 195-8-2004) | OK | 3 | Noise Limits | 15 | The following activities may be carried out at the premises outside the hours specified in Table 2 : a) the delivery of materials as requested by Police or other authorities for safety reasons; and b) emergency work to avoid the loss of lives, property and/or to prevent environmental harm. In such circumstances the Applicant must notify EPA and affected residents prior to undertaking the works, or within a reasonable period in the case of emergency. | Open | No deliveries have occurred outside standard operating hours for safety reasons. No deliveries have occurred outside standard operating hours to avoid loss of lives, property or to prevent environmental harm. | Compliant | | |
| Project Approval (DA 195-8-2004) | OK | 3 | Noise Monitoring Program | 16 | Within 3 months of the date of this consent, the Applicant must prepare a Noise Monitoring Program for the development, in consultation with EPA, and to the satisfaction of the Secretary. This program must include a noise monitoring protocol for evaluating compliance with the noise impact assessment criteria in this consent. The Applicant must implement the approved monitoring program as approved from time to time by the Secretary. | Open | The Noise Monitoring Program (Rev 5) was reviewed and updated in late 2016 to address additional requirements stated in MOD 1 and approved by DP&E on 22 May 2017. | Compliant | | |
| Project Approval (DA 195-8-2004) | OK | 3 | Noise Compliance Assessment Report | 17 | Within 2 months of the date of commencement of extraction of production sand, and annually thereafter unless directed otherwise by the Secretary, the Applicant must: a) commission a suitably qualified person to assess whether the development is complying with the noise impact assessment criteria in Table 1 , in general accordance with the NSW Industrial Noise Policy and Australian Standard (AS) 1055-1997: Description and Measurement of Environmental Noise; and b) provide the results of this assessment to EPA and Secretary within a month of commissioning the assessment. | Open | Annual Compliance Noise Monitoring 2017 prepared by SLR Consulting (dated 28 July 2017) concluded that noise generated by the development was compliant with the noise limits stipulated in condition 14 (and which are replicated in L3.1 of EPL 11147). Noise Compliance Assessment Reports were submitted to the EPA and DP&E on 31 July 2017, which is within 1 month threshold stipulated by (b) of this condition. | Compliant | | |
| Project Approval (DA 195-8-2004) | OK | 3 | Noise Limit Exceedance Report | 18 | Within 7 days of detecting any exceedance of the noise limits in Table 1 , the Applicant must report the exceedance to EPA and the Secretary. This report must include details of the date and time of the exceedance, the operational cause of the exceedance, the response initiated, and the measures proposed to ensure ongoing compliance with the noise limits. | Open | No exceedances to the noise limits were detected in the Noise Compliance Assessment Report. | Compliant | | |
| Project Approval (DA 195-8-2004) | OK | 3 | Impact Assessment Criteria | 19 | The Applicant must ensure that dust generated by the development does not cause additional exceedances of the criteria listed in Tables 3 to 5 at any residence on, or on more than 25 percent of, any privately-owned land. | Open | Results of dust monitoring are reported in the Annual Review. Following a review of the information presented in the Annual Review 2015-2016 and Annual Review 2016-2017: 1. Results from monitoring the PM10 long-term impact assessment criteria for particulate matter were below the threshold during the 2015-2016 and 2016-2017 reporting period and are therefore deemed compliant; 2. Results from monitoring the PM10 short-term impact assessment criteria for particulate matter were below the threshold, except for one instance (30 January 2017) when adverse weather conditions were being experienced. It's noted that this is the only exception in recent years; 3. The annual average maximum total deposited dust level for monitoring locations DD8 and DD9 for the 2015-2016 period (corrected for damaged equipment and site contamination) exceeded the long-term impact assessment criteria for deposited dust; and 4. The annual average maximum total deposited dust level for all monitoring locations for the 2016-2017 period were compliant with the long-term impact assessment criteria for deposited dust. | Compliant | | Improvement Opportunity: (1) Update AQMP to reflect PM10 monitoring reported in the 2017 Annual Review and remove DD-7a and DD-9 monitoring locations if these are no longer applicable. Observation: (1) It is not evident whether the Response to Impact Assessment Criteria or Objective Exceedance Protocol was implemented following the receipt of monthly data indicating exceedances to dust deposition monitoring. Note: (1) EPL 11147 does not include dust/air quality limits; it only requires the licensee to monitor three specific pollutants. |
| Project Approval (DA 195-8-2004) | OK | 3 | Air Quality Monitoring Program | 20 | Within 3 months of the date of this consent, the Applicant must prepare an Air Quality Monitoring Program for the development, in consultation with EPA, and to the satisfaction of the Secretary. This program must include an air monitoring protocol for evaluating compliance with the air quality criteria in this consent. The Applicant must implement the approved monitoring program as approved from time to time by the Secretary. Note: Initially, this program should concentrate on monitoring the dust deposition impacts of the development. However, in time, it may be expanded to include other pollutants. | Open | The Air Quality Monitoring Program (Rev 5) was reviewed and updated in late 2016 to address additional requirements stated in MOD 1 and approved by DP&E on 22 May 2017. | Compliant | | |

| Approval Type | Traffic Light | Schedule | Schedule Title | Clause | Condition/Commitment/Mitigation Measure | Status | Details of Compliance | Compliant | Risk Level | Actions Required |
|----------------------------------|---------------|----------|--------------------------|--------|---|--------|---|---------------|------------|--|
| Project Approval (DA 195-8-2004) | OK | 3 | Odour | 21 | The Applicant must not cause or permit the emission of offensive odour beyond the boundary of the site. Note: 'Offensive odour' is defined in the Protection of the Environment Operations Act 1997. | Open | The site was not odorous during the site inspection. No odour complaints have been received. | Compliant | | |
| Project Approval (DA 195-8-2004) | OK | 3 | Pollution of Waters | 22 | Note: Under the Water Act 1912 and/or the Water Management Act 2000, the Applicant is required to obtain the necessary water licences for the development. Except as may be expressly provided by an Environment Protection Licence, the Applicant must comply with section 120 of the Protection of the Environment Operations Act 1997 during the carrying out of the development. | Open | Water access licence: WAL24477 (Status: current) Water supply approval: 10-WA-106714 (Status: current) Controlled activity licence: 10 ERM2010/1116 (Status: current) Water quality monitoring results are reported in the Annual Review. Following a review of the information presented in the Annual Review 2015-2016 and Annual Review 2016-2017: (1) During 2015-2016 an exceedance of TSS at point DW20a (EPL9) was recorded in Dec-15, however the site was not discharging at this time (i.e. ambient water quality). Having inspected the site, it is likely external factors (e.g. motorway adjacent agricultural practices) could have contributed to an exceedance. (2) During 2016-2017 water was discharged via point DW20a (EPL9) and no exceedances were recorded. An exceedance of TSS was recorded in Dec-16 (52mg/L) and Feb-17 (53mg/L) at point DW18 (EPL13) but the site was not discharging from this point (i.e. ambient water quality). | Compliant | | Improvement opportunity: (1) Sampling is currently being taken at the point of discharge and this may not be reflecting the downstream ambient conditions. Consider sampling downstream of discharge points to better understand ambient conditions so you're able to determine whether the pollution of waters is occurring. (2) Table 2 of Annual Review to be updated to reflect Water Access Licence number. (3) Consider reducing the redundant surface water monitoring locations from management plans. |
| Project Approval (DA 195-8-2004) | OK | 3 | Water Discharge Limit | 23 | Except as may be expressly provided by an Environmental Protection Licence, the Applicant must ensure that the discharges from any licenced discharge point/s do not cause additional exceedances of the criteria in Table 6: | Open | Water discharges via licensed discharge points have not exceeded the requirements in Table 6. | Compliant | | |
| Project Approval (DA 195-8-2004) | OK | 3 | Water Quality Objectives | 24 | The Applicant must ensure that water quality in the dredge ponds and in groundwater comply with the water quality objectives in Table 7 , or other such level as approved by the Secretary. | Open | Sampling and analysis of groundwater and surface water for the purposes of monitoring compliance with the water quality objectives is occurring, however interpretation of the monitoring results and determination of compliance with the objectives is not reported in the Annual Review as required by the draft Water Management Plan. | Compliant | | Improvement opportunity: (1) Sampling and analysis of groundwater and surface water for the purposes of monitoring compliance with the water quality objectives is occurring, however the interpretation (and compliance) of these results have not been reported in the Annual Review. DSS are to include these results in future Annual Reviews submitted to DP&E. |
| Project Approval (DA 195-8-2004) | OK | 3 | Stormwater Management | 25 | The Applicant must ensure that any pond subject to dredging or backfilling, or containing turbid water due to recent dredging or backfilling, must be maintained and operated to prevent discharges of any turbid water (as defined in Tables 6 and 7) from these ponds. | Open | During the site inspection sand extraction was being undertaken and no discharge of turbid water was witnessed. | Compliant | | |
| Project Approval (DA 195-8-2004) | OK | 3 | Stormwater Management | 26 | The Applicant must cease backfilling activities not less than 12 hours prior to the commencement of overflow from any dredge pond. No backfilling must occur when the dredge ponds are overflowing. | Open | | Note | | |
| Project Approval (DA 195-8-2004) | Action | 3 | Flood Management | 27 | The Applicant must ensure that the flood storage capacity of the site is no less than the pre-existing flood storage capacity at all stages of the development. Details of the available flood storage capacity must be reported in the Annual Review. | Open | The EIS and draft Water Management Plan state that topographic surveys would be conducted periodically and that these could be used to demonstrate the flood storage capacity of the site (versus the pre-existing storage capacity). The Annual Review discusses the flooding characteristics of the site and identifies how the site has reduced its flood risk, but the Annual review doesn't present the results of recent topographic surveys or demonstrate (quantitatively) what the current flood storage capacity is of the site versus the pre-existing storage capacity. | Not verified | Low | Actions: (1) Prepare a quantitative analysis of the flood storage capacity of the site per the draft WMP. |
| Project Approval (DA 195-8-2004) | OK | 3 | Flood Management | 28 | The access road entrance off Tabbita Road, processing and stockpile area, and the fines return pond(s) must be constructed and maintained so as to prevent inundation by floodwaters caused by the 1 in 100 year ARI flood level. Prior to the commissioning of the processing area, the Applicant must provide certification to the Secretary that this condition has been complied with. | Open | Per correspondence dated 4 April 2007 from Boral Quarries to DP&E (including survey plan with spot heights), it was stated that the processing and stockpile areas had been constructed above the 100 year ARI (i.e. 3.6m AHD), the majority of the access road off Tabbita Road is above 3.6m AHD, however, the ramp abutting Tabbita Road was constructed below 3.6m AHD due to the presence of overhead powerlines and potential safety risks to heavy vehicles. During the site inspection it was stated that the bunds on site were generally above 3.7m AHD to further minimise flood inundation risks. This correspondence further stated that the enclosed plan addressed the last condition preceding the commissioning of the processing area, which was intended to be commissioned on 10 April 2007. | Compliant | | |
| Project Approval (DA 195-8-2004) | OK | 3 | Flood Management | 29 | Following the cessation of dredging and backfilling operations, the Applicant must commission a suitably qualified hydrologist to define the flood-related limits of the final landform. The flood study must be undertaken in consultation with the Department and Shellharbour Council, and to the satisfaction of the Secretary. | Open | | Not triggered | | |

| Approval Type | Traffic Light | Schedule | Schedule Title | Clause | Condition/Commitment/Mitigation Measure | Status | Details of Compliance | Compliant | Risk Level | Actions Required |
|----------------------------------|---------------|----------|--|--------|---|--------|--|-----------|------------|---|
| Project Approval (DA 195-8-2004) | OK | 3 | Monitoring and Management | 30 | <p>Within 3 months of the date of this consent, the Applicant must prepare a Water Management Plan for the development, in consultation with DPI Water and the Department, and to the satisfaction of the Secretary. This plan must be prepared by a qualified hydrogeologist/hydrologist and include:</p> <p>a) a Water Balance; b) an Erosion and Sediment Control Plan; c) a Surface Water Monitoring Program; d) a Ground Water Monitoring Program; and e) a Surface and Ground Water Response Plan, to address any potential adverse impacts associated with the development.</p> <p>The Applicant must implement the approved management plan as approved from time to time by the Secretary.</p> | Open | Date of consent is 29 June 2005 and a water management plan was approved in September 2005, within 3 months of consent. The water management plan was thereafter included within an all encompassing Environmental Management Plan (EMP) which was finally approved in 2006. The Water Management plan has subsequently been separated from the EMP and is in the process of being updated to address additional requirements stated in MOD 1. Submission and approval of this updated Plan is anticipated in the near future. Until such time as the updated Plan is approved, the site continues to manage its operations in accordance with the current Plan. | Compliant | | |
| Project Approval (DA 195-8-2004) | OK | 3 | Monitoring and Management | 31 | <p>The Water Balance must:</p> <p>a) include details of all water extracted and used by the development; and b) provide for the reporting of annual water extraction and maximum instantaneous pumping rates to the Department in accordance with the licence under the Water Act 1912.</p> | Open | Compliance with this requirement to be determined by DP&E when they review the updated WMP. | Note | | Note: WAL transitioned from Water Act 1921 to Water Management Act 2000. |
| Project Approval (DA 195-8-2004) | OK | 3 | Monitoring and Management | 32 | <p>The Erosion and Sediment Control Plan must:</p> <p>a) be consistent with the requirements of the Department of Housing's Managing Urban Stormwater: Soils and Construction manual; b) identify activities that could cause soil erosion and generate sediment; c) describe measures to minimise soil erosion and the potential for the transport of sediment to downstream waters; d) describe the location, function, and capacity of erosion and sediment control structures; and e) describe what measures would be implemented to maintain the structures over time.</p> | Open | Compliance with this requirement to be determined by DP&E when they review the updated WMP. | Note | | |
| Project Approval (DA 195-8-2004) | OK | 3 | Monitoring and Management | 33 | <p>The Surface Water Monitoring Program must include:</p> <p>a) detailed baseline data on surface water flows and quality in all waterbodies and wetlands within the site; b) surface water impact assessment criteria; c) a program to monitor surface water flows and quality; d) a program to monitor bank and bed stability; e) a protocol for the investigation, notification and mitigation of identified exceedances of the surface water impact assessment criteria; and f) a program to monitor the effectiveness of the Erosion and Sediment Control Plan.</p> | Open | Compliance with this requirement to be determined by DP&E when they review the updated WMP. | Note | | |
| Project Approval (DA 195-8-2004) | OK | 3 | Monitoring and Management | 34 | <p>The Ground Water Monitoring Program must include:</p> <p>a) detailed baseline data on ground water levels, flows and quality, based on statistical analysis; b) ground water impact assessment criteria; c) a program to monitor regional ground water levels and quality; d) a program to monitor ground water level effects on adjacent wetlands, vegetation, and on ground water supply to adjoining properties; and e) a protocol for the investigation, notification and mitigation of identified exceedances of the groundwater impact assessment criteria.</p> | Open | Compliance with this requirement to be determined by DP&E when they review the updated WMP. | Note | | |
| Project Approval (DA 195-8-2004) | OK | 3 | Reporting | 35 | <p>Each year, the Applicant must:</p> <p>a) review the Water Management Plan; b) update each sub-plan; and c) report the results of this review in the Annual Review, including: d) the results of monitoring; e) details of the review for each sub-plan; f) amendments to the sub-plans; and g) details of the measures undertaken/proposed to address any identified issues.</p> | Open | The WMP is currently being updated in consultation with DP&E and DPI Water. | Compliant | | |
| Project Approval (DA 195-8-2004) | OK | 3 | Weather Monitoring | 36 | <p>The Applicant must establish a rainfall monitoring gauge at a location approved by EPA, using the units of measure, averaging period, frequency and sampling method specified in Table 8.</p> | Open | A rainfall gauge has been established and the results are reported in the Annual Review. | Compliant | | |
| Project Approval (DA 195-8-2004) | OK | 3 | Endangered Ecological Community Compensatory Habitat | 37 | <p>The Applicant must establish, conserve and maintain at least:</p> <p>a) 6 ha of Freshwater Wetlands on Coastal Floodplains (which may include areas of associated wetland pondage); and b) 3 ha of Swamp Oak Floodplain Forest; in rehabilitation and visual screening plantings on the site, in a manner that integrates the compensatory habitats with existing similar habitats on and near the site.</p> | Open | Progressive rehabilitation is underway. Stage 1 has been rehabilitated and is currently being maintained until hand-over to the community. Visual screening for Stage 2 and later stages has been undertaken. | Compliant | | |
| Project Approval (DA 195-8-2004) | OK | 3 | Flora and Fauna Management Plan | 38 | <p>Within 12 months of the date of this consent the Applicant must prepare a Flora and Fauna Management Plan for the development to the satisfaction of the Secretary. This plan must be prepared by a suitably qualified ecologist and include:</p> <p>a) a Vegetation Clearing Protocol; b) a Compensatory Habitat Management Plan; and c) a Pest and Weed Management Plan.</p> <p>The Applicant must implement the approved management plan as approved from time to time by the Secretary.</p> | Open | The Flora and Fauna Management Plan (Rev D) was reviewed and updated in late 2016 to address additional requirements stated in MOD 1 and approved by DP&E on 22 May 2017. The FFMP is being implemented on site. | Compliant | | |
| Project Approval (DA 195-8-2004) | OK | 3 | Flora and Fauna Management Plan | 39 | <p>The Vegetation Clearing Protocol must be prepared prior to the commencement of any vegetation clearing works, and must:</p> <p>a) delineate the areas of vegetation to be cleared; and b) describe the procedures that would be implemented for:</p> <ul style="list-style-type: none"> • pre-clearance surveys; • progressive clearing; • fauna management; • conserving and reusing topsoil; • collecting seed from the site; • salvaging and reusing material from the site; • managing waste vegetation; and • controlling weeds. | Open | DP&E approval of the plan in May 2017 assumes this requirement was satisfactorily addressed. | Compliant | | |

| Approval Type | Traffic Light | Schedule | Schedule Title | Clause | Condition/Commitment/Mitigation Measure | Status | Details of Compliance | Compliant | Risk Level | Actions Required |
|----------------------------------|---------------|----------|--------------------------------------|--------|--|--------|--|-----------|------------|------------------|
| Project Approval (DA 195-8-2004) | OK | 3 | Flora and Fauna Management Plan | 40 | The Compensatory Habitat Management Plan must: a) describe the compensatory habitat proposal; b) justify why the proposed area(s) is suitable for the compensatory habitat proposal, including how the area will integrate with existing habitat areas on and near the site; c) establish baseline data for the existing habitat in the proposed area(s); d) describe how the compensatory habitat proposal would be implemented; e) set completion criteria for the compensatory habitat proposal; and f) describe how the performance of the compensatory habitat proposal would be monitored over time. | Open | DP&E approval of the plan in May 2017 assumes this requirement was satisfactorily addressed. | Compliant | | |
| Project Approval (DA 195-8-2004) | OK | 3 | Flora and Fauna Management Plan | 41 | The Pest and Weed Management Plan must be prepared in consultation with Shellharbour Council, OEH and DPI Fisheries, and must: a) identify potential terrestrial and aquatic pests and weeds that may be expected on the site; b) describe the measures that would be implemented to prevent and eradicate the occurrence of pests and weeds on the site; and c) describe how the performance of these measures would be monitored over time. | Open | DP&E approval of the plan in May 2017 assumes this requirement was satisfactorily addressed. | Compliant | | |
| Project Approval (DA 195-8-2004) | OK | 3 | Rehabilitation | 42 | The Applicant must progressively rehabilitate the site to the satisfaction of the Secretary, in a manner that is generally consistent with the concept final landform in the EIS (see Appendix 2), and in accordance with the conditions of this consent. | Open | Progressive rehabilitation was observed during the site inspection. Rehabilitation recently completed is consistent with that documented in the Rehabilitation Management Plan and as reported in the most recent Annual Review. | Compliant | | |
| Project Approval (DA 195-8-2004) | OK | 3 | Rehabilitation Management Plan | 43 | Within 12 months of the date of this consent the Applicant must prepare a Rehabilitation Management Plan for the development to the satisfaction of the Secretary. This plan must: a) identify the disturbed area at the site; b) describe in general the short, medium, and long-term measures that would be implemented to rehabilitate the site; c) describe in detail the measures that would be implemented over the next 5 years to rehabilitate the site; d) define the final landform based on current backfill estimates; e) set completion criteria for the rehabilitation of the site; f) describe how the performance of these measures would be monitored over time; g) include Riparian Area Management Plan/s for those riparian areas to be disturbed/rehabilitated in the next 5 years; and h) include Landscaping Plan/s for the site. The Applicant must implement the approved management plan as approved from time to time by the Secretary. | Open | The Rehabilitation Management Plan (including Riparian Area Management Plan and Landscaping Plan) (Rev E) was reviewed and updated in Mar-17 to address additional requirements stated in MOD 1 and approved by DP&E on 22 May 2017. | Compliant | | |
| Project Approval (DA 195-8-2004) | OK | 3 | Rehabilitation Management Plan | 44 | The Rehabilitation Management Plan must be prepared: a) in consultation with Shellharbour Council, Kiama Council, OEH, DRE, the CCC, and the Department; b) by suitably qualified consultants, including a specialist hydrologist, wetlands ecologist and landscape architect, whose appointments have been approved by the Secretary; c) in accordance with extant guidelines including the Constructed Wetlands Manual, Volumes 1 & 2 and the Shellharbour Visual Management Plan User Manual, to the satisfaction of the Secretary. | Open | DP&E approval of the plan in May 2017 assumes this requirement was satisfactorily addressed. | Compliant | | |
| Project Approval (DA 195-8-2004) | OK | 3 | Rehabilitation Management Plan | 45 | The Riparian Area Management Plan/s must be prepared in consultation with OEH and the Department, and must: a) For works involving disturbance within 3m of an existing riparian area: • describe the broader extraction staging and justify the need for extraction in the riparian area at the proposed time; • describe in detail the methods and timing for extraction within the riparian area; • provide for construction and stabilisation of appropriate diversion channels to divert the waterbody around the disturbance area, unless otherwise approved by OEH and the Department; and • describe the methods for rehabilitation of the riparian area and diversion channels. b) For works involving construction/rehabilitation of riparian areas: • detail proposed channel/bed designs, including scour protection measures; • include hydraulic modeling supporting the proposed design; • where applicable, include measures to replicate pre-existing tidal-estuarine conditions; • include detailed plans for rehabilitation and revegetation of the riparian area using locally endemic species; • describe measures for the protection, enhancement and integration with adjacent threatened communities, including Freshwater Wetlands on Coastal Floodplains and Swamp Oak Floodplain Forest. | Open | DP&E approval of the plan in May 2017 assumes this requirement was satisfactorily addressed. | Compliant | | |
| Project Approval (DA 195-8-2004) | OK | 3 | Rehabilitation Management Plan | 46 | The Landscaping Plan/s must be prepared in consultation with Shellharbour Council and Kiama Council and must include: a) concept design plans for the final landform; and b) detailed design plans for the areas to be rehabilitated in the next 5 years. | Open | DP&E approval of the plan in May 2017 assumes this requirement was satisfactorily addressed. | Compliant | | |
| Project Approval (DA 195-8-2004) | OK | 3 | Rehabilitation Management Plan | 47 | Within 3 years of providing the Rehabilitation Management Plan to the Secretary, and every 4 years thereafter, the Applicant must review and update the Rehabilitation Management Plan in a manner similar to that described in condition 44, to the satisfaction of the Secretary. | Open | The Rehabilitation Management Plan was reviewed and updated in late 2016. The updated plan was subsequently approved by DP&E in May 2017. | Compliant | | |
| Project Approval (DA 195-8-2004) | OK | 3 | Rehabilitation and Conservation Bond | 48 | Within 12 months of the date of this consent, the Applicant must lodge a rehabilitation and conservation bond for the development with the Secretary. The sum of the bond must be calculated at: a) \$2.50/m2 for the total area to be disturbed in each 4 year review period (see condition 49); and b) \$1.00/m2 for the total area of land previously disturbed and/or rehabilitated by the development, or as otherwise directed by the Secretary. Notes: • If the rehabilitation is completed to the satisfaction of the Secretary, the Secretary will release the rehabilitation and conservation bond. • If the rehabilitation is not completed to the satisfaction of the Secretary, the Secretary will call in all or part of the rehabilitation and conservation bond, and arrange for the satisfactory completion of these works. | Open | Correspondence dated 7 June 2016 from DP&E approved the recalculation of the Rehabilitation and Conservation Bond following the determination of Stage 2,3 and 4 on 2 June 2016. | Compliant | | |

| Approval Type | Traffic Light | Schedule | Schedule Title | Clause | Condition/Commitment/Mitigation Measure | Status | Details of Compliance | Compliant | Risk Level | Actions Required |
|----------------------------------|---------------|----------|--------------------------------------|--------|---|--------|---|-----------|------------|------------------|
| Project Approval (DA 195-8-2004) | OK | 3 | Rehabilitation and Conservation Bond | 49 | Within 3 years of lodging the rehabilitation and conservation bond with the Secretary, and every 4 years thereafter, unless the Secretary directs otherwise, the Applicant must review, and if necessary revise, the sum of the rehabilitation bond to the satisfaction of the Secretary. This review must consider: a) the effects of inflation; b) any changes to the total area of disturbance; and c) the performance of the rehabilitation to date. | Open | A review of the bond was undertaken in 2016 and DP&E approved the recalculation. | Compliant | | |
| Project Approval (DA 195-8-2004) | OK | 3 | Long Term Management Strategy | 50 | Within 12 months of the date of this consent the Applicant must prepare a Long Term Management Strategy for the site, in consultation with Shellharbour Council, Kiama Council and the CCC, to the satisfaction of the Secretary. The strategy must: a) define the objectives and criteria for quarry closure and post-extraction management; b) investigate options for the future use of the site; c) describe the measures that would be implemented to minimise or manage the ongoing environmental effects of the development; and d) describe how the performance of these measures would be monitored over time. Note: The Long Term Management Strategy may be prepared as part of the Rehabilitation Management Plan. | Open | The Long Term Management Strategy (Rev D) was reviewed and updated in late 2016 to address additional requirements stated in MOD 1 and approved by DP&E on 22 May 2017. | Compliant | | |
| Project Approval (DA 195-8-2004) | OK | 3 | Long Term Management Strategy | 51 | Within 3 years of providing the Long Term Management Strategy to the Secretary, and every 4 years thereafter, the Applicant must review and update the strategy to the satisfaction of the Secretary. | Open | The Long Term Management Strategy (Rev D) was reviewed and updated in late 2016 to address additional requirements stated in MOD 1 and approved by DP&E on 22 May 2017. | Compliant | | |
| Project Approval (DA 195-8-2004) | OK | 3 | Long Term Management Trust | 52 | Within 4 years of the date of this consent the Applicant must establish a trust fund (or other mechanism as agreed by the Secretary), that has available by the end of year 20 a minimum of \$300,000 for the long term management of the site, to the satisfaction of the Secretary. Every 4 years following establishment of the trust, the Applicant must review, and if necessary revise, the trust sum to the satisfaction of the Secretary. This review must consider: a) the effects of inflation; b) any changes to the total area of disturbance; and c) the performance of the rehabilitation to date. | Open | Per correspondence dated 5 August 2016 from DP&E to Boral Property Group, DP&E approved Boral's request for a bank guarantee in lieu of establishing a Long Term Management Trust. Subsequent correspondence dated 12 September 2016 from Boral Property Group to DP&E enclosed the bank guarantee. | Compliant | | |
| Project Approval (DA 195-8-2004) | OK | 3 | North Kiama Bypass | 53 | The Applicant must not undertake any product despatch from the proposal until the completion of the 'Stage 2 – Kiama Bypass' by the RMS. Note: 'Stage 2' refers to the north bound traffic carriageway due for completion in late 2005. | Closed | The North Kiama Bypass project was completed in December 2005. This condition is therefore closed and no longer applicable. | Compliant | | |
| Project Approval (DA 195-8-2004) | OK | 3 | Parking | 54 | The Applicant must provide sufficient parking on-site for all quarry-related traffic, in accordance with Shellharbour Council's parking codes, and to the satisfaction of the Secretary. All vehicular and pedestrian facilities must be in accordance with the RMS's Guide to Traffic Generating Developments. | Open | Sufficient parking is available on-site. | Compliant | | |
| Project Approval (DA 195-8-2004) | OK | 3 | Road Haulage | 55 | The Applicant must ensure that all loaded vehicles entering or leaving the site are covered. | Open | All vehicles observed to be leaving site had covered loads. | Compliant | | |
| Project Approval (DA 195-8-2004) | OK | 3 | Road Haulage | 56 | The Applicant must ensure all loaded vehicles leaving the site are cleaned of materials that may fall on the road before they are allowed to leave the site. | Open | All vehicles existing the site are required to travel through a wheel wash. | Compliant | | |
| Project Approval (DA 195-8-2004) | OK | 3 | Rail Transport | 57 | The Applicant must maximise the use of rail transport for delivery/despatch outside the Illawarra Region, to the satisfaction of the Secretary. Details of transportation modes and measures to assess and encourage rail transport must be provided in the Annual Review. | Open | Approximately 38% of all product sold from 2015-2017 has been despatched via rail. Details of the volume of product despatched from site have been reported in the Annuals Reviews. | Compliant | | |
| Project Approval (DA 195-8-2004) | OK | 3 | Visual Impact | 58 | The Applicant must minimise the visual impacts of the development to the satisfaction of the Secretary. | Open | The Rehabilitation Management Plan approved in May 2017 was prepared in accordance with the Shellharbour Visual Management Plan User Manual. In addition, and where possible, the final landform has been designed to blend in with the surrounding landscape to reduce visual impact of the site. Along the eastern boundary and north eastern and south eastern corners of the site a tree screen has been established to screen the processing area and to restrict and soften views of the site activities. | Compliant | | |
| Project Approval (DA 195-8-2004) | OK | 3 | Tree Screens | 59 | Prior to the commencement of any works, the Applicant must establish and subsequently maintain a tree screen along the eastern boundary (and north-eastern and south-eastern boundaries), to the satisfaction of the Secretary. | Open | The tree screen was observed during the site inspection and does restrict and soften views of the site activities to some degree. | Compliant | | |
| Project Approval (DA 195-8-2004) | OK | 3 | Tree Screens | 60 | Within 2 months of completing construction of the processing area, the Applicant must establish and subsequently maintain a tree screen around the processing area to the satisfaction of the Secretary. | Closed | The processing area has been established and the tree screen is well developed. | Compliant | | |
| Project Approval (DA 195-8-2004) | OK | 3 | Landscaping Plan | 61 | The Applicant must establish the tree screens identified in conditions 59 and 60 in accordance with a Landscaping Plan that has been prepared in consultation with Shellharbour Council and Kiama Council, and to the satisfaction of the Secretary. The plan must be prepared by a suitably qualified ecologist/landscape architect and must: a) be prepared in accordance with the Shellharbour Visual Management Plan User Manual; b) comprise a full range of Swamp Oak Floodplain Forest species; c) provide for the planting of trees of sufficient maturity that will ensure the prompt screening of the site; d) provide for a sufficient planting width and density to ensure that the site will be effectively screened when viewed from the Princes Highway and residential areas. | Open | The Rehabilitation Management Plan (including Riparian Area Management Plan and Landscaping Plan) (Rev E) was reviewed and updated in Mar-17 to address additional requirements stated in MOD 1 and approved by DP&E on 22 May 2017. | Compliant | | |
| Project Approval (DA 195-8-2004) | OK | 3 | Lighting Emissions | 62 | The Applicant must take all practicable measures to prevent and/or minimise any off-site lighting impacts from the development. | Open | The site was not inspected during the night, however there have been not light spillage complaints to date. | Compliant | | |
| Project Approval (DA 195-8-2004) | OK | 3 | Lighting Emissions | 63 | All external lighting associated with the development must comply with Australian Standard AS4282 (INT) 1995 – Control of Obtrusive Effects of Outdoor Lighting. | Open | No complaints regarding light spillage have been recorded and the site does not typically operate during the evening and night periods. | Compliant | | |
| Project Approval (DA 195-8-2004) | OK | 3 | Waste Minimisation | 64 | The Applicant must minimise the amount of waste generated by the development to the satisfaction of the Secretary. | Open | An objective of the Waste Management Plan is to minimise the amount of waste generated by the site. Clearing and stripping of topsoil has been consistent with the areas identified for extraction, therefore minimising the amount of excess material generated by the site. | Compliant | | |

| Approval Type | Traffic Light | Schedule | Schedule Title | Clause | Condition/Commitment/Mitigation Measure | Status | Details of Compliance | Compliant | Risk Level | Actions Required |
|----------------------------------|---------------|----------|----------------------------|--------|---|--------|---|---------------|------------|--|
| Project Approval (DA 195-8-2004) | OK | 3 | Backfilling Material | 65 | The Applicant must only use VENM for the purpose of void backfilling. Note: The definition of VENM may include soil that has been assessed by a certified practicing soil scientist in accordance with the Acid Sulfate Soil Management Advisory Council guidelines and determined to be Potential Acid Sulfate Soil (PASS) and which satisfies all of the requirements for classification as VENM, except that it contains sulfidic soils, that has been approved by EPA for disposal on the site, and that is managed in accordance with the procedures in the Environmental Protection Licence for the development. | Open | The Waste Management Plan updated in Dec-16 addresses the verification, acceptance and disposal of VENM on site. No backfilling was occurring at the time of the site inspection, however it was confirmed that VENM was being used for backfilling. | Note | | |
| Project Approval (DA 195-8-2004) | OK | 3 | Backfilling Material | 66 | Backfilling of the voids must be undertaken in a manner, and with material with suitable physical characteristics, so that it does not significantly affect the direction or rate of groundwater flow from the site. | Open | Backfilling was not being undertaken at the time of the site inspection. Groundwater monitoring results from the past several years indicate the operation is not impacting groundwater levels and has not changed groundwater characteristics. | Compliant | | |
| Project Approval (DA 195-8-2004) | OK | 3 | Backfilling Material | 67 | All fines separated from the dredged sand must be placed below the permanent water table within 12 hours of processing the dredged sand. | Open | | Note | | |
| Project Approval (DA 195-8-2004) | OK | 3 | Waste Management Plan | 68 | Within 12 months of the date of this consent the Applicant must prepare and subsequently implement a Waste Management Plan for the development, in consultation with EPA, and to the satisfaction of the Secretary. The plan must include: a) VENM receipt and acceptance procedures; b) procedures for the management of fines from the processing plant; c) procedures for managing potential acid sulfate soils; and d) procedures for minimising and managing other wastes generated by the development. The Applicant must implement the approved management plan as approved from time to time by the Secretary. | Open | The Waste Management Plan was updated in Dec-16 to address additional requirements stated in MOD 1 and approved by DP&E on 25 January 2017. DSS are implementing the approved plan. | Compliant | | |
| Project Approval (DA 195-8-2004) | OK | 3 | Wastewater Treatment | 69 | Any on-site wastewater treatment system must comply with the requirements of the Environment and Health Protection Guidelines – On-site Sewage Management for Single Households (1998). | Open | | Not triggered | | |
| Project Approval (DA 195-8-2004) | OK | 3 | Dangerous Goods | 70 | The Applicant must ensure that the storage, handling, and transport of dangerous goods is conducted in accordance with the relevant Australian Standards, particularly AS1940 and AS1596, and the Dangerous Goods Code. | Open | No dangerous goods are stored on site; all dangerous goods are stored on the Dunmore Quarry site. | Compliant | | |
| Project Approval (DA 195-8-2004) | OK | 3 | Safety | 71 | The Applicant must secure the development to ensure public safety to the satisfaction of the Secretary. | Open | The site is fenced, has access control and is not readily accessible to the public. | Compliant | | |
| Project Approval (DA 195-8-2004) | OK | 3 | Production Data | 72 | The Applicant must: a) provide annual production data to the DPI using the standard form for that purpose; and b) include a copy of this data in the Annual Review. | Open | Production data is included in the Annual Reviews. | Compliant | | |
| Project Approval (DA 195-8-2004) | Action | 4 | Notification of Landowners | 1 | As soon as practicable after obtaining monitoring results showing: a) an exceedance of any relevant criteria in Schedule 3, the Applicant must notify the affected landowners in writing of the exceedance, and provide regular monitoring results to each affected landowner until the development is again complying with the relevant criteria; and b) an exceedance of any relevant air quality criteria in Schedule 3, the Applicant must send a copy of the NSW Health fact sheet entitled "Mine Dust and You" (as may be updated from time to time) to the affected landowners and current tenants of the land (including the tenants of land which is not privately-owned). | Open | It is not evident whether the Response to Impact Assessment Criteria or Objective Exceedance Protocol was implemented following the receipt of monthly data indicating exceedances to dust deposition monitoring during the periods 2015-2016 and 2016-2017. It is however noted that this specific condition was only created following determination of MOD 1 in June 2016. Nevertheless, exceedances have been registered during monthly sampling after the determination of MOD 1 and evidence of notifying landowners is not available. | Non-compliant | Low | Actions: (1) Brief the operations personnel on the triggers for the Response to Impact Assessment Criteria or Objective Exceedance Protocol document. (2) Have the Response to Impact Assessment Criteria or Objective Exceedance Protocol readily available. |
| Project Approval (DA 195-8-2004) | OK | 4 | Independent Review | 2 | If an owner of privately-owned land considers the development to be exceeding the relevant criteria in Schedule 3, then he/she may ask the Secretary in writing for an independent review of the impacts of the development on his/her land. | Open | | Not triggered | | |
| Project Approval (DA 195-8-2004) | OK | 4 | Independent Review | 3 | If the Secretary is satisfied that an independent review is warranted, then within 2 months of the Secretary's decision the Applicant must: a) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Secretary, to: • consult with the landowner to determine his/her concerns; • conduct monitoring to determine whether the development is complying with the relevant criteria in Schedule 3; and • if the development is not complying with these criteria then identify measures that could be implemented to ensure compliance with the relevant criteria; and b) give the Secretary and landowner a copy of the independent review. | Open | | Not triggered | | |

| Approval Type | Traffic Light | Schedule | Schedule Title | Clause | Condition/Commitment/Mitigation Measure | Status | Details of Compliance | Compliant | Risk Level | Actions Required |
|----------------------------------|---------------|----------|--|--------|--|--------|---|---------------|------------|------------------|
| Project Approval (DA 195-8-2004) | OK | 5 | Environmental Management Strategy | 1 | <p>If the Secretary requires, the Applicant must prepare an Environmental Management Strategy for the development to the satisfaction of the Secretary. This strategy must:</p> <p>a) be submitted to the Secretary for approval within 6 months of the Secretary requiring preparation of the strategy by notice to the Applicant;</p> <p>b) provide the strategic framework for the environmental management of the development;</p> <p>c) identify the statutory approvals that apply to the development;</p> <p>d) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development;</p> <p>e) describe the procedures that would be implemented to:</p> <ul style="list-style-type: none"> • keep the local community and relevant agencies informed about the operation and environmental performance of the development; • receive, handle, respond to, and record complaints; • resolve any disputes that may arise during the course of the development; • respond to any non-compliance; and • respond to emergencies; and <p>f) include:</p> <ul style="list-style-type: none"> • copies of any strategies, plans and programs approved under the conditions of this development consent; and • a clear plan depicting all the monitoring required to be carried out under the conditions of this consent. <p>The Applicant must implement any Environmental Management Strategy as approved from time to time by the Secretary.</p> | Open | | Not triggered | | |
| Project Approval (DA 195-8-2004) | OK | 5 | Management Plan Requirements | 2 | <p>The Applicant must ensure that the Management Plans required under this consent are prepared in accordance with any relevant guidelines, and include:</p> <p>a) detailed baseline data;</p> <p>b) a description of:</p> <ul style="list-style-type: none"> • the relevant statutory requirements (including any relevant approval, licence or lease conditions); • any relevant limits or performance measures/criteria; and • the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures; <p>c) a description of the measures that would be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria;</p> <p>d) a program to monitor and report on the:</p> <ul style="list-style-type: none"> • impacts and environmental performance of the development; and • effectiveness of any management measures (see (c) above); <p>e) a contingency plan to manage any unpredicted impacts and their consequences;</p> <p>f) a program to investigate and implement ways to improve the environmental performance of the development over time;</p> <p>g) a protocol for managing and reporting any:</p> <ul style="list-style-type: none"> • incidents; • complaints; • non-compliances with statutory requirements; and • exceedances of the impact assessment criteria and/or performance criteria; and <p>h) a protocol for periodic review of the plan.</p> <p>Note: The Secretary may waive some of these requirements if they are unnecessary or unwarranted for particular management plans.</p> | Open | | Note | | |
| Project Approval (DA 195-8-2004) | OK | 5 | Updating & Staging Submission of Strategies, Plans or Programs | 3 | <p>To ensure the strategies, plans or programs under this consent are updated on a regular basis, and that they incorporate any appropriate mitigation measures to improve the environmental performance of the development, the Applicant may at any time submit revised strategies, plans or programs to the Secretary for approval. With the agreement of the Secretary, the Applicant may also submit any strategy, plan or program required by this consent on a staged basis.</p> <p>With the agreement of the Secretary, the Applicant may revise any strategy, plan or program approved under this consent without consulting with all the parties nominated under the applicable conditions of consent.</p> <p>Notes:</p> <ul style="list-style-type: none"> • While any strategy, plan or program may be submitted on a progressive basis, the Applicant will need to ensure that the existing operations on site are covered by suitable strategies, plans or programs at all times. • If the submission of any strategy, plan or program is to be staged, then the relevant strategy, plan or program must clearly describe the specific stage to which the strategy, plan or program applies, the relationship of this stage to any future stages, and the trigger for updating the strategy, plan or program. | Open | Management plans were reviewed and updated in late 2016. With the exception of the Water Management Plan which is being finalise following DPI Water comments, the management plans were approved by DP&E in January 2017 and May 2017. | Compliant | | |
| Project Approval (DA 195-8-2004) | OK | 5 | Revision of Strategies, Plans & Programs | 4 | <p>Within 3 months of the submission of an:</p> <p>a) incident report under condition 7 below;</p> <p>b) Annual Review under condition 9 below;</p> <p>c) audit report under condition 10 below; and</p> <p>d) any modifications to this consent,</p> <p>the Applicant must review, and if necessary revise, the strategies, plans, and programs required under this consent, to the satisfaction of the Secretary.</p> <p>Note: This is to ensure the strategies, plans and programs are updated on a regular basis, and incorporate any recommended measures to improve the environmental performance of the development.</p> | Open | Management plans were reviewed and updated in late 2016 following the determination of MOD 1 in June 2016. | Compliant | | |

| Approval Type | Traffic Light | Schedule | Schedule Title | Clause | Condition/Commitment/Mitigation Measure | Status | Details of Compliance | Compliant | Risk Level | Actions Required |
|----------------------------------|---------------|----------|----------------------------------|--------|---|--------|---|-----------|------------|--|
| Project Approval (DA 195-8-2004) | OK | 5 | Adaptive Management | 5 | The Applicant must assess and manage development-related risks to ensure that there are no exceedances of the criteria and/or performance measures in Schedule 3. Any exceedance of these criteria and/or performance measures constitutes a breach of this consent and may be subject to penalty or offence provisions under the EP&A Act or EP&A Regulation. Where any exceedance of these criteria and/or performance measures has occurred, the Applicant must, at the earliest opportunity: a) take all reasonable and feasible measures to ensure that the exceedance ceases and does not recur; b) consider all reasonable and feasible options for remediation (where relevant) and submit a report to the Department describing those options and any preferred remediation measures or other course of action; and c) implement remediation measures as directed by the Secretary, to the satisfaction of the Secretary. | Open | | Note | | |
| Project Approval (DA 195-8-2004) | OK | 5 | Community Consultative Committee | 6 | The Applicant must operate a Community Consultative Committee (CCC) for the development, to the satisfaction of the Secretary. This CCC must be operated in general accordance with the Guidelines for Establishing and Operating Community Consultative Committees for Mining Projects (Department of Planning, 2007, or its latest version). Notes: • The CCC is an advisory committee. The Department and other relevant agencies are responsible for ensuring that the Applicant complies with this consent. • In accordance with the guideline, the committee should be comprised of an independent chair and appropriate representation from the Applicant, Council, and the local community. • The requirement for this CCC may be fulfilled by a regional CCC for any two or more of Boral's quarrying operations in the South Coast area. | Open | A CCC has been established and meets every year. The last meeting was held on 16 August 2017, with the next meeting scheduled for 14 February 2018. The CCC is independently chaired by Mr James Bailey. Minutes of the meeting are distributed to DP&E and Council. | Compliant | | Improvement opportunity: (1) Update the DP&E distribution details to remove Lauren Evans and include Colin Phillips (Team Leader, Resource Assessments, (02) 9274 6483, Colin.Phillips@planning.nsw.gov.au). |
| Project Approval (DA 195-8-2004) | OK | 5 | Incident Reporting | 7 | The Applicant must notify, at the earliest opportunity, the Secretary and any other relevant agencies of any incident that has caused, or threatens to cause, material harm to the environment. For any other incident associated with the development, the Applicant must notify the Secretary and any other relevant agencies as soon as practicable after the Applicant becomes aware of the incident. Within 7 days of the date of the incident, the Applicant must provide the Secretary and any relevant agencies with a detailed report on the incident, and such further reports as may be requested. | Open | A Pollution Incident was recorded on 15 May 2017 with regards to the sinking of a sand dredge. The Pollution Incident Response Management Plan was implemented and the appropriate authorities notified (including notification of DP&E). DSS was issued with an Official Caution from the EPA. | Compliant | | |
| Project Approval (DA 195-8-2004) | OK | 5 | Regular Reporting | 8 | The Applicant must provide regular reporting on the environmental performance of the development on its website, in accordance with the reporting arrangements in any plans or programs approved under the conditions of this consent. | Open | DSS regularly posts its environmental monitoring data to its website: http://www.boral.com.au/article/nsw_poela_environmental_reporting.asp | Compliant | | |
| Project Approval (DA 195-8-2004) | OK | 5 | Annual Review | 9 | By the end of September each year, or other timing as may be agreed by the Secretary, the Applicant must review the environmental performance of the development to the satisfaction of the Secretary. This review must: a) describe the development (including rehabilitation) that was carried out in the previous financial year, and the development that is proposed to be carried out over the current financial year; b) include a comprehensive review of the monitoring results and complaints records of the development over the previous financial year, which includes a comparison of these results against: • the relevant statutory requirements, limits or performance measures/criteria; • requirements of any plan or program required under this consent; • the monitoring results of previous years; and • the relevant predictions in the documents listed in condition 2(a) of Schedule 2; c) identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance; d) identify any trends in the monitoring data over the life of the development; e) identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and f) describe what measures will be implemented over the current financial year to improve the environmental performance of the development. The Applicant must ensure that copies of the Annual Review are submitted to Council and are available to the Community Consultative Committee (see condition 6 of Schedule 5) and any interested person upon request. | Open | An Annual Review for the period 2016-2017 was submitted to DP&E. DP&E considers the Annual Review to generally satisfy this condition. | Compliant | | |
| Project Approval (DA 195-8-2004) | OK | 5 | Independent Environmental Audit | 10 | By 30 September 2017, and every 3 years thereafter, unless the Secretary directs otherwise, the Applicant must commission and pay the full cost of an Independent Environmental Audit of the development. This audit must: a) be conducted by suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary; b) include consultation with the relevant agencies and the CCC; c) assess the environmental performance of the development and whether it is complying with the relevant requirements in this consent and any relevant EPL and/or Water Licence (including any assessment, plan or program required under these approvals); d) review the adequacy of any approved strategy, plan or program required under the these approvals; and e) recommend measures or actions to improve the environmental performance of the development, and/or any assessment, plan or program required under these approvals. Note: This audit team must be led by a suitably qualified auditor and include experts in any fields specified by the Secretary. | Open | Independent environmental audit is underway. | Compliant | | |
| Project Approval (DA 195-8-2004) | OK | 5 | Independent Environmental Audit | 11 | Within 6 weeks of commissioning this audit, or as otherwise agreed by the Secretary, the Applicant must submit a copy of the audit report to the Secretary, Council, EPA and any other NSW agency that requests it, together with its response to any recommendations contained in the audit report. | Open | | Note | | |

| Approval Type | Traffic Light | Schedule | Schedule Title | Clause | Condition/Commitment/Mitigation Measure | Status | Details of Compliance | Compliant | Risk Level | Actions Required |
|----------------------------------|---------------|----------|-----------------------|--------|--|--------|--|-------------------------------|-------------------------------|--|
| Project Approval (DA 195-8-2004) | Action | 5 | Access to information | 12 | By 30 November 2016, unless otherwise agreed by the Secretary, the Applicant must: a) make the following information publicly available on its website: • the documents listed in condition 2(a) of Schedule 2; • current statutory approvals for the development; • approved strategies, plans or programs; • a summary of the monitoring results of the development, which have been reported in accordance with the various plans and programs approved under the conditions of this consent; • a complaints register, which is to be updated on a quarterly basis; • the Annual Reviews (over the last 5 years); • any independent environmental audit, and the Applicant's response to the recommendations in any audit; • any other matter required by the Secretary; and b) keep this information up-to-date, to the satisfaction of the Secretary. | Open | Consent - available EIS - available Management Plans - not available, only Dunmore Quarry management plans PIRMP - available Monitoring results - available Complaints register - available Annual reviews - not available | Administrative non-compliance | Administrative non-compliance | Actions: (1) Upload approved management plans; (2) Upload Annual Reviews; (3) Upload audit when available. |

