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Cleary Bros

Gerroa Sand Resource Site
Independent Environmental Audit

July 2010



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Abbreviations

AEMR	Annual Environmental Monitoring Report
AHMP	Aboriginal Heritage Management Plan
CCC	Community Consultation Committee
Cleary Bros	Cleary Bros (Bombo) Pty Ltd
DA	Development Application
ESCP	Erosion and Sediment Control Plan
DECCW	Department of Environment, Climate Change and Water (formerly Department of Environment and Climate Change)
EPL	Environmental Protection Licence
JSA	Job Safety Analysis
QEMP	Quarry Environmental Management Plan



1. Introduction

GHD was engaged by Cleary Bros (Bombo) Pty Ltd (Cleary Bros) to prepare an independent environmental audit report for the Gerroa Sand Resource Site. The engagement was undertaken with the concurrence of the NSW Department of Planning.

1.1 Planning Framework

The Land and Environment Court ordered approval for the extension and continuation of the Gerroa Sand Resource Site on 2 September 2008 (the Approval). Condition 5 of Schedule 5 requires an Independent Environmental audit to be undertaken within twelve months of the date of the commencement of the project, and every three years thereafter, unless the Director-General directs otherwise.

1.2 Scope of the audit

Condition 5 of Schedule 5 of the Approval constitutes the audit scope, which states:

“Within 12 months of the date of the commencement of the project, and every 3 years thereafter, unless the Director-General directs otherwise, the Proponent shall commission and pay the full costs of an Independent Environmental Audit of the project. This audit must:

- a) be conducted by a suitably qualified, experienced, and independent person(s) whose appointment has been approved by the Director-General;
- b) include consultation with the Relevant Agencies;
- c) assess the environmental performance of the project, and its effects on the surrounding environment;
- d) assess whether the project is complying with the relevant standards, performance measures, and statutory requirements;
- e) review the adequacy of any strategy/plan/program required under this approval; and, if necessary,
- f) recommend measures or actions to improve the environmental performance of the project, and/or any strategy/plan/program required under this approval.

Note: The person(s) conducting the audit must have expertise in flora and fauna assessment as well as quarry rehabilitation.

The flora and fauna component of the audit was completed by Kevin Mills and Associates in December 2009. Hence the audit focused more broadly on the surrounding environment as referred to in Condition 5 above and excluded the ecological requirements of the court ordered approval.

1.3 Structure of the report

This report is set out in the following sections:

- ▶ The introduction (Section 1) including audit requirements;
- ▶ Background information, including a description of the key features of the Gerroa Sand Resource Site (Section 2);



- ▶ Summary of the results of the compliance audit (Section 3);
- ▶ Consultation with the relevant agencies (Section 4);
- ▶ Review of the adequacy of environmental management at the site including implementation of the Quarry Environmental Management Plan (Section 5); and
- ▶ Conclusions, including a summary of the issues and recommendations (Section 6).

1.4 Audit Methodology

As part of this audit, GHD assessed compliance of Cleary Bros against the following statutory instruments:

- ▶ The Court Approval ordered on 2 September 2008; and
- ▶ Environmental Protection Licence number 4146.

A review was undertaken of documentation supplied by Cleary Bros as being relevant to the Gerroa Sand Resource site. Documentation included the environmental protection licence, the Annual Environmental Management Report (period 1 July 2008 to 30 June 2009) and a copy of the Quarry Environmental Management Plan.

An Environmental Audit Protocol was developed for the Gerroa Sand Resource site based on the information provided by Cleary Bros during the document review stage. A summary of the observations and results of the audit have been incorporated into the environmental audit protocol and is included as Appendix A for reference to this report.

An environmental compliance audit was undertaken on 10 May 2010 at the Gerroa Sand Resource site by GHD, accompanied by Cleary Bros staff. The audit included interviews of key site personnel, inspection of relevant records and a site inspection of the key facilities and processes on site.

This audit covers the period from April 2009 to April 2010, to the extent permissible by the site inspection on 10 May 2010 and records maintained by Cleary Bros.

1.5 Auditor

The audit was conducted by Lucy Moore of GHD who is a RABQSA International certified Principal Environmental Auditor (Registration Number 020309).

1.6 Audit Limitations

This report has been prepared for Cleary Bros. The purpose of the report is to provide an independent review of environmental compliance and management at the subject site, being the Gerroa Sand Resource, to satisfy Condition 5 of Schedule 5 of the Approval.

It is not the intention of the review process to cover every element of a process or system at the site, nor all aspects of those elements, but rather that a representative selection of the operation be assessed to provide a basis for the report.

The findings of the review represent the issues apparent at the date and time of the site inspection and the operations being undertaken at that time. It is the nature of these investigations that all variations in site conditions and operations cannot be inspected and all uncertainty concerning the conditions and operations at the site cannot be eliminated. Professional judgment must be exercised in the investigation



and interpretation of observations. Moreover, aspects of this report rely on the interpretation of conditions at the site provided by site staff. Where available, GHD reviewed documentary evidence to demonstrate historical consistency with the observations made on-site during the site inspection.

In conducting this audit and preparing the report, the Conditions of the Court ordered Approval were referred to, along with client-provided environmental plans. This work has been conducted in good faith with GHD's understanding of the client's brief and generally accepted consulting practice.

No other warranty, expressed or implied is made as to the information and professional advice included in this report. It is not intended for other parties or other uses.



2. Background to the Audit

2.1 Gerroa Sand Resource Site project summary

The Gerroa Sand Resource site is located at the intersection of Berry Beach and Crooked River Roads, south of Gerroa on the New South Wales south coast (the Site). The property is owned by Bridon Pty Ltd, a member of the Cleary Bros group of companies.

Sand has been extracted from the Site for approximately fifty years, authorised by a succession of development approvals. Sand extraction by dredging on the Site is licensed by the Department of Environment, Climate Change and Water (DECCW) (QEMP – Perram & Partners, May 2009).

2.2 Documentation Review

The following environmental documentation was provided to GHD as supporting information relating to monitoring and management of the site and processes at the Gerroa Sand Resource:

- ▶ Cleary Bros correspondence to the Department of Planning dated 2 March 2009 Re: Gerroa Sand Resource LEC Approval No. 10801 of 2007: Surrender of Consent;
- ▶ Cleary Bros correspondence to the Department of Planning dated 6 February 2009 Re: Cleary Bros Gerroa Sand Resource Extension Community Consultative Committee;
- ▶ Cleary Bros correspondence to the Department of Planning dated 15 December 2009 Re: Gerroa Sand Resource LEC Approval No. 10801 of 2007 (Ref: GEN0912-07);
- ▶ Cleary Bros correspondence to the Department of Planning dated 21 July 2009 Re: Gerroa Sand Resource LEC Approval No. 10801 of 2007: Commencement Date (Ref: GEN0907-11);
- ▶ Cleary Bros Concrete & Quarrying Customer Complaint & Feedback Register (Complaint dated 20 January 2005);
- ▶ Cleary Bros correspondence to the Department of Planning dated 17 June 2009 Re: Gerroa Sand Resource LEC Approval No. 10801 of 2007: Borehole Log Information (Ref: GEN0906-04);
- ▶ Cleary Bros Memo from Wayde Peterson to Steve Crandell dated 14 January 2010 Re: Gerroa Sand Resource – Non Severance of East West Link;
- ▶ Cleary Bros correspondence to the Shoalhaven City Council dated 10 September 2009 Re: Cleary Bros Gerroa Sand Resource Issue of 2008 – 2009 AEMR (Ref: GEN0909-05);
- ▶ Cleary Bros correspondence to the Kiama Municipal Council dated 10 September 2009 Re: Cleary Bros Gerroa Sand Resource Issue of 2008 – 2009 AEMR (Ref: GEN0909-04);
- ▶ Cleary Bros correspondence to the Department of Environment and Climate Change dated 10 September 2009 Re: Cleary Bros Gerroa Sand Resource Issue of 2008 – 2009 AEMR (Ref: GEN0909-10);
- ▶ Department of Planning correspondence to Cleary Bros dated 13 February 2009 Re: Cleary Bros Gerroa Sand Resource Extension Community Consultative Committee;
- ▶ Department of Planning correspondence to Cleary Bros dated 2 December 2009 Re: Gerroa Sand Resource (LEC Approval No. 10801 of 2007);



- ▶ Department of Planning correspondence to Cleary Bros dated 25 May 2009 Re: Gerroa Sand Resource LEC Approval No. 10801 of 2007: Surrender of Consent (confirming the surrender of the consents stated as taking effect on 16 March 2009);
- ▶ Douglas Partners correspondence to Cleary Bros dated 4 May 2009 Re: Installation of Standpipe Piezometers Gerroa Sand Quarry, Beach Road, Gerroa;
- ▶ Environmental Protection Licence 4146;
- ▶ Kevin Mills & Associates, December 2009. *First Annual Report, Environmental Management, Monitoring Reporting and Auditing Section: Flora and Fauna, Gerroa Sand Quarry, Municipality of Kiama*;
- ▶ Gerroa Sand Resource Work Instruction for Site Management No. WIGSR11 (Rev 1, dated 03/05/10);
- ▶ Gerroa Sand Resource Return for Extractive Materials to the Department of Industry and Investment: Year Ended 30 June 2009 (dated 4 February 2010);
- ▶ Gerroa Sand Resource Annual Return to DECCW for the Reporting Period 1 February 2007 to 31 January 2008 (dated 25 March 2008);
- ▶ Gerroa Sand Resource Annual Return to DECCW for the Reporting Period 1 February 2008 to 31 January 2009 (dated 5 March 2009);
- ▶ Gerroa Sand Resource Annual Environmental Management Report for the period 01 July 2008 to 30 June 2009 (Reference GEN0908-02), dated August 2009;
- ▶ Gerroa Sand Resource – Community Consultative Committee Meeting Number GER-CCC-01, meeting date 20 July 2009;
- ▶ Gerroa Sand Resource – Community Consultative Committee Meeting Number GER-CCC-02, meeting date 07 December 2009;
- ▶ Gerroa Sand Resource work Instruction for Emergency Procedures No: WIGSR07 (Rev 2, dated 24/10/06);
- ▶ Perram & Partners, May 2009. Gerroa Sand Resource Quarry Environmental Management Plan; and
- ▶ Renzo Tonin & Associates, 27 April 2009. *Cleary Bros Sand Extraction, Gerroa Noise Compliance Monitoring & Modelling*.

2.3 Site Inspection

A site inspection of the key facilities and processes on site was conducted on 10 May 2010 to observe the control measures in place, any potential hazards or aspects that may affect the operations and any potential areas of environmental improvement.



The site visit included an inspection of:

- ▶ Some site rehabilitation areas;
- ▶ Some fences around the Aboriginal Heritage Conservation areas;
- ▶ The locations of some monitoring wells;
- ▶ The location of the meteorological station;
- ▶ The dredge pond; and
- ▶ Site office, lunch room and machinery shed.

2.4 Interviews with Relevant personnel

During the audit, the following Cleary Bros personnel were interviewed:

- ▶ Wayde Peterson (Environmental Officer); and
- ▶ Edwin Watts (Site Manager).

2.5 Observations

The audit was conducted in accordance with the Audit Protocol developed for the site. The audit included interviews of key site personnel, inspection of relevant records and a site inspection.

Observations were made of practices related to site ownership, use and history, facilities and process requirements and overall environmental management of the site. Full details of the Audit Protocol are included within Appendix A.



3. Audit Results

Detailed findings against the specific requirements of these instruments are presented in Appendix A. Appendix A lists each requirement, an assessment of compliance and comments relating to each condition. Comments are made on the basis upon which compliance was assessed, and where relevant, a reference to the documentation sighted that provided the basis for verification of compliance.

The assessment of compliance in Appendix A is referred to as follows:

Yes	Compliance was observed during the site inspection or demonstrated through records maintained by Cleary Bros.
Partial	Compliance demonstrated with one or more elements of a condition or there was evidence that minor breaches had occurred in the past.
No	Evidence of non-compliance was observed during the site inspection or through lack of records maintained by Cleary Bros.
Not Applicable	Compliance requirements may not have been invoked.
Not Determined	Sufficient information to assess compliance was not available.

The audit period is from April 2009 to April 2010.

3.1 Compliance with Approval Conditions

A detailed description of the Gerroa Sand Resource site's performance against the relevant Conditions in the Court ordered Approval is provided in Table 1 of Appendix A. An assessment of the site's performance against the relevant Conditions in the Court ordered Approval found there were a total of one (1) non-compliance recorded and fourteen (14) partial compliances.

The non-compliance relating to the Approval Conditions is as follows:

Schedule 5

- ▶ Condition 1 f) – A reference to the specific management of cumulative impacts could not be found in the QEMP.

The partial compliances relating to the Approval Conditions are as follows:

Schedule 2

- ▶ Condition 1 – There was no evidence provided of formal training on the Gerroa Sand Resource Quarry Environmental Management Plan (QEMP) or instruction on the boundary markers present on site.
- ▶ Condition 2 – Refer to Table 1 provided in Appendix A.
- ▶ Condition 7 – The Proponent did not surrender the existing development consents within 3 months of the date of the approval.
- ▶ Condition 9 – Shoalhaven City Council advised in an email dated 28 May 2010 that "The Finance Section and the S94 Planner advise; Council has not received a payment for contributions since May



2007. The current rate for this project index in 2009/10 is 31 cents. The index rate after 1 July 2010 is proposed to be: 32 cents. This matter has been referred for follow up of any outstanding payments.” A response to an email sent on 17 May 2010 had not been received from Kiama Municipal Council at the time the audit report was issued, however Cleary Bros provided correspondence to Kiama Municipal Council and Shoalhaven City Council dated 17 June 2010 submitting the payment for Section 94 contributions for the year ending December 2009.

Schedule 3

- ▶ Condition 1 b) – The survey plan was not submitted within 3 months of the date of the conditions of approval.
- ▶ Condition 1 c) – Some of the surveyed boundaries around the limit of extraction were observed during the site inspection. The fence delineating Aboriginal conservation areas comprised star pickets and wire (considered to be permanent). Other boundaries were marked with timber survey pegs and tape. These are not considered to be permanent.
- ▶ Condition 4 – The Noise Monitoring Program was not submitted within 3 months of the date of the conditions of approval.
- ▶ Condition 7 – The Air Quality Monitoring Program was not submitted within 3 months of the date of the conditions of approval.
- ▶ Condition 10 – The water quality objectives in Table 3 for water in the dredge pond and in ground water adjacent to the dredge pond are not always met.
- ▶ Condition 11 – The Water Management Plan was not submitted within 3 months of the date of the conditions of approval.
- ▶ Condition 30 a) – The Proponent did not submit the AHMP within 3 months of the date of the approval.

Schedule 5

- ▶ Condition 2A – The Proponent did not nominate an Environmental Officer within 3 months of the date of the conditions of the approval.
- ▶ Condition 8 – The Proponent did not establish a CCC within 3 months of the date of the conditions of approval.
- ▶ Condition 11 – A summary of the monitoring results was available on the Cleary Bros website, however they were not at the quarry at the time of the inspection.

3.2 Compliance with Environment Protection Licence (EPL)

A detailed description of the Gerroa Sand Resource site's performance against the relevant Conditions of the EPL is provided in Table 2 of Appendix A. There were a total of four (4) non-compliances recorded and one (1) partial compliance.

The non-compliances relating to the EPL are as follows:

- ▶ Condition M1.3
 - b) The time at which the samples were collected was not included in the records provided.
 - d) The name of the person who collected the sample was not included in the records provided.



- ▶ Condition M4.2 – The customer feedback form and customer complaint and feedback register do not provide for the following:
 - b) the method by which the complaint was made;
 - c) any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect;
 - e) The action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; or If no action was taken by the licensee, the reasons why no action was taken.
- ▶ Condition M5.1 – a reference to a specific telephone complaints line could not be found.
- ▶ Condition M5.2 – Cleary Bros stated that public notification of this telephone line took place in April 2006 through a mass letter drop in the area. However, this could not be verified and reference to a telephone complaints line could not be found.

The partial compliance relating to the EPL is as follows:

- ▶ Condition M1.3
 - a) A site diary reportedly maintained by a member of staff (absent during the site inspection) contains information relating to site sampling undertaken by Cleary Bros (including BOD, TSS and pH). Monitoring results from laboratories were provided that included the date of the sample. The monitoring results maintained by the Environmental Officer are not kept at the Gerroa Sand Resource site.



4. Consultation with the relevant agencies

In accordance with Approval condition 5 b) of schedule 5, the audit included consultation with relevant agencies. The definitions provided with the conditions of approval defined 'Relevant Agencies' as DECC, Shoalhaven Council and Kiama Council. The following lists the comments and/or verification provided by the relevant agencies.

Table 4-1 Comments provided by the Relevant Agencies

Summarised Issue	Relevant Approval Condition
Department of Environment, Climate Change and Water (DECCW)	
Consultation during the preparation of the EMP DECCW advised the auditor as well as Cleary Bros that they do not review management plans.	Schedule 3 Conditions 4 b), 7 b), 11 b) and 30 b) Schedule 5 Condition 1 b)
Annual Reporting DECCW advised that they have received the Annual Return for the 2008-2009 reporting period.	EPL 4246, R1.1
DECCW advised that they undertake regular inspections of the site.	-
Shoalhaven City Council	
Section 94 contributions Shoalhaven City Council advised in an email dated 28 May 2010 that "Council has not received a payment for contributions since May 2007. The current rate for this project index in 2009/10 is 31 cents. The index rate after 1 July 2010 is proposed to be: 32 cents. This matter has been referred for follow up of any outstanding payments."	Schedule 2 Condition 9
Consultation during the preparation of the EMP Council advised that they were invited to comment on the Quarry EMP.	Schedule 5, Condition 1 b)
Haul Road Shoalhaven City Council advised that the road works have been inspected and are not complete. A schedule of requirements has been conveyed by email to the applicant (Aaron Baumeister) on 17 May 2010.	Schedule 3, Condition 33
Annual Reporting No comment provided.	Schedule 5, Condition 4
Kiama Municipal Council	
Section 94 contributions A response to an email sent on 17 May 2010 had not been received from Kiama Municipal Council at the time the audit report was issued.	Schedule 2 Condition 9
Consultation during the preparation of the EMP	Schedule 5, Condition 1 b)



Summarised Issue	Relevant Approval Condition
A response to an email sent on 17 May 2010 had not been received from Kiama Municipal Council at the time the audit report was issued.	
Annual reporting	Schedule 5, Condition 4
A response to an email sent on 17 May 2010 had not been received from Kiama Municipal Council at the time the audit report was issued.	



5. Adequacy of environmental management

5.1 QEMP implementation

The requirements included in the QEMP were reviewed to ascertain the level of implementation on site and overall effectiveness of the environmental management of the development.

A sample of the site staff training plan/records for the site were provided. These indicated that staff had not been trained in the requirements of the QEMP, including an instruction on the boundary markers present on site. However, from observations made during the site inspection environmental management at the site appeared to be largely in accordance with the QEMP requirements.

The following summarises the findings that relate to those issues where environmental management at the site could be improved:

- ▶ Employees should be inducted in the requirements of the QEMP (including instruction on the boundary markers present on site).
- ▶ A Job Safety Analysis (JSA) was provided for some site activities; however, the JSAs did not include the identification of environmental risks or hazards.



6. Recommendations

Following a review of the audit findings, eleven (11) recommendations have been made as follows:

- R1. Induct all employees (including current employees) in the requirements of the QEMP (including instruction on the boundary markers present on site) and document for verification purposes in accordance with Schedule 2 Condition 1 and the EMP (refer to Table 3.1 of the QEMP).
- R2. Follow up with Shoalhaven City Council and Kiama Municipal Council that they have received the Section 94 contributions in accordance with Schedule 2 Condition 9.
- R3. Permanently mark the boundaries of the quarry area in accordance with Schedule 3 Condition 1 c.
- R4. Update the QEMP to include the management of cumulative impacts in accordance with Schedule 5 Condition 1 f.
- R5. Update the summary of the monitoring results on the Cleary Bros website and at the quarry regularly in accordance with Schedule 5 condition 11 b.
- R6. Operate a telephone complaints line during operating hours in accordance with the EPL.
- R7. Notify the public of the complaints line telephone number and the fact that it is a complaints line in accordance with the EPL and the QEMP (section 7.2).
- R8. Update the JSA form to include the identification of environmental risks and hazards.
- R9. Update the customer feedback form and customer complaint and feedback register to include the following (in accordance with the EPL):
 - The method by which the complaint was made;
 - Any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect;
 - The actions taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; or
 - If no action was taken by the licensee, the reasons why no action was taken.
- R10. Maintain records of the monitoring samples collected that include the following (in accordance with the EPL):
 - The date(s) on which the sample was taken;
 - The time(s) at which the sample was collected;
 - The point at which the samples was taken; and
 - The name of the person who collected the sample.



Appendix A
Audit Protocol



Table 1 Gerroa Sand Resource Site Audit

Consolidated conditions of approval by the Land and Environment Court (LEC) on 2 September 2008.

Requirement	Compliance	Comment
Schedule 2		
Obligation to Minimise Harm to the Environment		
1	The proponent shall implement all practicable measures to prevent or minimise any harm to the environment that may result from the construction, operation, or rehabilitation of the project.	Partial A Cleary Bros document transmittal dated 29 June 2009 issued the <i>Gerroa Sand Resource Quarry Environmental Management Plan</i> (QEMP) to the Gerroa Sand Resource Site with the instruction to thoroughly read and store at the office. However, a sample of the site staff training plan/records were provided for the Relief Dredge Operator, Plant Operator/ Trainee Production Manager, Plant Operator and a Plant Operator/ Labourer. The training listed did not include training on the QEMP or instruction on the boundary markers present on site; however, it did include handling of hazardous substances and dangerous goods. Cleary Bros advised that this is covered in the Safe Work Method Statements, however these weren't provided during the audit.
Terms of Approval		
2	The Proponent shall carry out the project in accordance with the: a) Environmental Assessment (Perram & Partners 2006); b) Statement of Commitments; and c) Conditions of this approval.	Partial Refer to Table 1.
4	The Proponent shall comply with any reasonable requirement/s of the Director-General arising from the Department's assessment of: a) Any reports, plans, programs or correspondence that are submitted in accordance with this approval; and b) The implementation of any actions or measures contained in these reports, plans, programs of correspondence.	Yes Correspondence from Department of Planning to Cleary Bros dated 29 May 2009 Re: Gerroa Sand Quarry – Environmental Management Plan, approving the QEMP dated 21 May 2009 following revision of the EMP in May 2009 (Department of Planning ref: W92/00173) was provided.



Requirement		Compliance	Comment
Limits of Approval			
5	Extraction and processing are permitted to continue within the approved area until 31 July 2023.	Yes	A site inspection was conducted. The current extraction and processing operations appeared to be within the approved area.
5A	Under this approval, the Proponent is required to rehabilitate the site to the satisfaction of the Director-General. Consequently this approval will continue to apply in all other respects other than the right to conduct extraction and processing operations until the site has been rehabilitated to a satisfactory standard. Inter alia, to avoid doubt, the site has not been rehabilitated to a satisfactory standard unless Conditions 16 and 17 of this approval have been complied with.	Not Applicable	Conditions 16 to 28 of this approval were not assessed. The flora and fauna management on site, including rehabilitation was assessed by Kevin Mills and Associates in the report titled <i>First Annual Report Environmental Management, Monitoring, Reporting and Auditing Section: Flora and Fauna Gerroa Sand Quarry Municipality of Kiama</i> and dated December 2009.
6	The Proponent shall not transport more than 80,000 tonnes of product from the site in a year. Noted: This condition applies to the combined production of quarry products from the existing quarry and the quarry extension, and does not include the ancillary extractive material that would be imported onto the site and dispatched with the quarry's products.	Yes	The total site production provided in the Annual Return to the Department of Industry and Investment for extractive materials year ended 30 June 2009 was 33,172 tonnes. There is no weighbridge at the Gerroa Sand Resource site and the weight of product transported from the site is reportedly undertaken from scales (calibrated) on the loader. This measurement is reportedly confirmed when the product arrives at the Albion Park Quarry which has a weighbridge.



Requirement	Compliance	Comment
Surrender of Consents		
<p>7 Within 3 months of the date of this approval, the Proponent shall surrender all existing development consents associated with the Gerroa Sand Quarry, in accordance with clause 97 of the EP&A Regulation.</p> <p>Note: This approval will apply to all phases and components of the quarry from the date of this approval.</p>	Partial	<p>The Proponent did not surrender the existing development consents within 3 months of the date of the approval.</p> <p>The Court ordered Approval on 2 September 2008. Correspondence from Cleary Bros to the Department of Planning to surrender Development Consent DA 264/01, lodged with Kiama Municipal Council on 18 July 2001 and DA 01/2536 lodged with Shoalhaven City Council on 18 July 2001; approved by Minister for Infrastructure and Planning under section 88A of the Environmental <i>Planning and Assessment Act 1979</i> on 4 September 2003 was dated 2 March 2009.</p> <p>Correspondence received from the Department of Planning confirming the surrender of the consents was stated as taking effect on 16 March 2009.</p>
Operation of Plant and Equipment		
<p>8 The proponent shall ensure that all plant and equipment used at the site is:</p> <p>a) maintained in a proper and efficient condition; and</p>	Yes	<p>The Plant Maintenance procedure (WIGSR09) was provided. Evidence of staff training in this procedure was not provided, however, repair requests were sighted in a folder on site.</p> <p>Loader pre-start checklists were observed and repair requests were observed in a folder in the lunch room titled <i>Repair Request Completed and Blank Sheets</i>. The Site Manager described the process whereby the repair request is lodged over the phone to the Port Kembla operations and recorded on the form at the Gerroa Site.</p> <p>Site observations indicated that plant and equipment were maintained.</p>
<p>b) Operated in a proper and efficient condition.</p>	Yes	<p>A sample of the site staff training plan/records were provided for the Relief Dredge Operator, Plant Operator/ Trainee Production Manager, Plant Operator and a Plant Operator/ Labourer. The training listed included operation of plant.</p>



Requirement		Compliance	Comment
Section 94 Contributions			
9	<p>The Proponent shall pay a contribution of :</p> <p>a) 30 cents per tonne of material hauled from the site to Shoalhaven City Council; and</p> <p>b) 20 cents per tonne of material hauled from the site to Kiama Council.</p> <p>For the maintenance/repair of public roads in accordance with the Shoalhaven City Council's Section 94 Contributions Plan 1993 – Amendment No.71 Berry, to the satisfaction of the Director-General.</p> <p>Noted: These contribution rates shall be paid and indexed in accordance with the applicable Contributions Plan</p>	Partial	<p>Evidence of Section 94 contributions made to Shoalhaven and Kiama Councils was provided for 2008.</p> <p>However, Shoalhaven City Council advised in an email dated 28 May 2010 that "The Finance Section and the S94 Planner advise; Council has not received a payment for contributions since May 2007. The current rate for this project index in 2009/10 is 31 cents. The index rate after 1 July 2010 is proposed to be: 32 cents.</p> <p>This matter has been referred for follow up of any outstanding payments."</p> <p>A response to an email sent on 17 May 2010 had not been received from Kiama Municipal Council at the time the audit report was issued, however Cleary Bros provided correspondence to Kiama Municipal Council and Shoalhaven City Council dated 17 June 2010 submitting the payment for Section 94 contributions for the year ending December 2009.</p>
Schedule 3			
GENERAL EXTRACTION AND PROCESSING PROVISIONS			
Identification of Boundaries			
1	<p>Within 3 months of the date of the conditions of approval, or as otherwise agreed by the Director-General, the Proponent shall:</p> <p>a) Engage an independent registered surveyor to survey the boundaries of the approved limit of extraction;</p>	Yes	<p>The survey plan from K.F Williams & Associates Pty Ltd Consulting Surveyors, Civil and Structural Engineers & Planners was provided, with the final revision to the plan dated 25 August 2008.</p>
	<p>b) Submit a survey plan of these boundaries to the Director-General</p>	Partial	<p>The survey plan was not submitted within 3 months of the date of the conditions of approval. Correspondence was provided from Perram & Partners to the Department of Planning dated 5 February 2009 Re: submitting the survey plan.</p>
	<p>c) Ensure that these boundaries are clearly marked at all times in a permanent manner that allows</p>	Partial	<p>Some of the surveyed boundaries around the limit of extraction were</p>



Requirement	Compliance	Comment														
<p>operation staff and inspecting officers to clearly identify these limits. Noted: The limit of extraction is shown conceptually on the plan in Appendix 1.</p>		<p>observed during the site inspection. The fence delineating Aboriginal conservation areas comprised star pickets and wire (considered to be permanent). Other boundaries were marked with timber survey pegs and tape. GHD do not consider these to be permanent.</p>														
<p>NOISE Impact Assessment Criteria</p>																
<p>2 The Proponent shall ensure that the noise generated by the project does not exceed the noise impact assessment criteria in Table 1.</p> <table border="1" data-bbox="286 635 797 967"> <thead> <tr> <th data-bbox="286 635 667 708">Location</th> <th data-bbox="667 635 797 708">L_{Aeq(15 min)} (dB(A))</th> </tr> </thead> <tbody> <tr> <td data-bbox="286 708 667 751">670 Beach Road</td> <td data-bbox="667 708 797 751">41</td> </tr> <tr> <td data-bbox="286 751 667 794">11 Bangarra Street</td> <td data-bbox="667 751 797 794">40</td> </tr> <tr> <td data-bbox="286 794 667 837">Seven Mile Beach Holiday Park</td> <td data-bbox="667 794 797 837">36</td> </tr> <tr> <td data-bbox="286 837 667 880">Coralea Property</td> <td data-bbox="667 837 797 880">43</td> </tr> <tr> <td data-bbox="286 880 667 924">Picnic Area 1</td> <td data-bbox="667 880 797 924">46</td> </tr> <tr> <td data-bbox="286 924 667 967">Picnic Area 2</td> <td data-bbox="667 924 797 967">43</td> </tr> </tbody> </table>	Location	L _{Aeq(15 min)} (dB(A))	670 Beach Road	41	11 Bangarra Street	40	Seven Mile Beach Holiday Park	36	Coralea Property	43	Picnic Area 1	46	Picnic Area 2	43	<p>Yes</p>	<p>A Noise Assessment undertaken by Renzo Tonin & Associates dated 27 April 2009 and titled <i>Cleary Bros Sand Extraction, Gerroa Noise Compliance Monitoring and Modelling</i> stated that "Noise impact from the site activities upon the potentially most affected noise sensitive residential and recreational receivers, is expected to comply with Conditions 2 and 4 of Schedule 3 of the Conditions of Approval,and the noise guidelines set by DECC for industrial noise. Compliance with the guideline is expected under both calm isothermal and adverse wind conditions.....No noise mitigation measures for on site activities were deemed necessary for the proposed expansion."</p> <p>In addition it was stated that no noise related complaints have been received, however, the complaints register was not held on site and could not be reviewed at the time of the site inspection.</p> <p>Note: The <i>Gerroa Sand Resource Annual Environmental Management Report</i> for the period 01 July 2008 to 30 June 2009 incorrectly lists the noise impact criteria at Picnic Area 2 as 46 L_{Aeq(15 min)} dB(A).</p>
Location	L _{Aeq(15 min)} (dB(A))															
670 Beach Road	41															
11 Bangarra Street	40															
Seven Mile Beach Holiday Park	36															
Coralea Property	43															
Picnic Area 1	46															
Picnic Area 2	43															
<p>▶ To determine compliance with these noise limits, noise from the project is to be measured at the most affected point within the residential boundary, or at the most affected point within 30 metres of the dwelling where the dwelling is more than 30 metres from the boundary. Where it can be demonstrated that direct measurement of noise from the project is impractical, the DECCW may accept alternative means of determining compliance (see Chapter 11 of the NSW Industrial Noise</p>	<p>Yes</p>	<p>The Noise Assessment undertaken by Renzo Tonin & Associates dated 27 April 2009 and titled <i>Cleary Bros Sand Extraction, Gerroa Noise Compliance Monitoring and Modelling</i> stated that 'It was noticed during a site inspection that any noise from the Gerroa sand mine quarry site was inaudible and immeasurable at all receiver locations. Therefore, noise</p>														



Requirement		Compliance	Comment
	Policy). The modification factors in Section 4 of the NSW Industrial Noise Policy shall also be applied to measure the noise level where applicable.		emissions from the operation for each scenario were modelled to the nominated nearby receivers using the Environmental Noise Model (ENM) computer program. The noise model accounts for the noise sources; receiver locations; distance and topographical features between source and receiver. ENM calculates the contribution of each noise source at nominated receivers and allows for the calculation of the total noise from a site. The computer program is endorsed by the DECC and its environmental noise predictions have been verified on many past occasions in the field.'
	<ul style="list-style-type: none"> ▶ The noise limits apply under meteorological conditions of wind speed up to 3 m/s at 10 metres above ground level. 	Yes	The Noise Assessment undertaken by Renzo Tonin & Associates dated 27 April 2009 included a consideration of noise limits under 3m/s wind velocity at 10m from ground level.
	<ul style="list-style-type: none"> ▶ The noise limits do not apply if the Proponent has an agreement with the relevant owner/s of these residences/land to generate higher noise levels, and the Proponent has advised the Department in writing of the terms of this agreement. 	Not Applicable	Clear Bros do not have agreements with any of the landowners to generate higher noise levels.
Hours of Operation			
3	<p>The project shall only operate:</p> <ul style="list-style-type: none"> a) Between 7.00 am to 6.00 pm Monday to Friday; b) Between 7.00 to 1.00 pm Saturdays; c) At no time on Sundays or public holidays. 	Yes	<p>This requirement is included in the QEMP and also displayed on signage at the entrance to the site from Beach Road.</p> <p>In addition it was stated that no complaints have been received, however, the complaints register was not held on site and could not be reviewed at the time of the site inspection.</p>



Requirement	Compliance	Comment	
Noise Monitoring			
4	<p>The Proponent shall prepare and implement a Noise Monitoring Program for the project to the satisfaction of the Director-General. This program must:</p> <p>a) Be submitted to the Director-General within 3 months of the date of this approval;</p>	Partial	<p>The Noise Monitoring Program was not submitted within 3 months of the date of the conditions of approval. The Noise Monitoring Program is included as Section 8.3 of the QEMP, dated May 2009. Correspondence from the Department of Planning to Cleary Bros dated 29 May 2009 Re: Gerroa Sand Quarry – Environmental Management Plan, approving the QEMP dated 21 May 2009 following revision of the EMP in May 2009 (Department of Planning ref: W92/00173) was provided. It is therefore assumed that approval was given for the QEMP as a whole and not separately for the Noise Monitoring Program.</p>
	<p>b) Be prepared in consultation with the DECCW; and</p>	Not Applicable	<p>DECCW advised the auditor as well as Cleary Bros that they do not review management plans.</p>
	<p>c) Include details of how the noise performance of the project would be monitored, and include a noise monitoring protocol for evaluating compliance with the relevant noise limits in this approval</p>	Yes	<p>Provided as Section 8.3 of the QEMP. The reason for the choice of the three monitoring locations was unknown.</p>



Requirement	Compliance	Comment								
AIR QUALITY Impact Assessment Criteria										
5 The Proponent shall ensure that dust generated by the project does not cause additional exceedances of the criteria listed in Table 2 at any residence on privately owned land, or on more than 25 percent of any privately owned land. <table border="1" data-bbox="277 507 1057 740"> <thead> <tr> <th data-bbox="277 507 472 683">Pollutant</th> <th data-bbox="472 507 674 683">Averaging period</th> <th data-bbox="674 507 864 683">Maximum increase in deposited dust level</th> <th data-bbox="864 507 1057 683">Maximum total deposited dust level</th> </tr> </thead> <tbody> <tr> <td data-bbox="277 683 472 740">Deposited dust</td> <td data-bbox="472 683 674 740">Annual</td> <td data-bbox="674 683 864 740">2 g/m²/month</td> <td data-bbox="864 683 1057 740">2 g/m²/month</td> </tr> </tbody> </table> Table 2: Long Term Impact Assessment Criteria for Deposited Dust Note: Deposited dust is assessed as insoluble solids as defined by <i>Standards Australia, 1991, ASNZS 3580.10.5-2003: Methods for Sampling and Analysis of Ambient Air – Determination of Particulates – Deposited Matter – Gravimetric Method.</i>	Pollutant	Averaging period	Maximum increase in deposited dust level	Maximum total deposited dust level	Deposited dust	Annual	2 g/m ² /month	2 g/m ² /month	Yes	Air Quality Monitoring Program included as Section 8.4 of the QEMP. Results reported in the <i>Gerroa Sand Resource Annual Environmental Management Report</i> for the Period 01 July 2008 to 30 June 2009 provides air quality testing results and reports that the site is compliant with these requirements. A water cart is present on site and is reportedly used as required. The internal roads had been dampened the morning of the site inspection. Section 3.8 of the Work Instruction for Environmental Monitoring and Control (WIGSR03) is titled <i>Erosion and Sediment Control</i> . This instruction states: “3.8.3 Internal roadways and the loading area are to be kept moist when in use to minimise erosion and dust initiated by vehicles.” However, evidence of staff training in this instruction was not provided.
Pollutant	Averaging period	Maximum increase in deposited dust level	Maximum total deposited dust level							
Deposited dust	Annual	2 g/m ² /month	2 g/m ² /month							
Operating Conditions										
6 The Proponent shall ensure any visible air pollution generated by the project is assessed regularly and that quarrying operations are relocated, modified, and/or stopped as required to minimise air quality impacts on privately owned land.	Yes	The Site Manager stated that assessments of visible air pollution were undertaken daily, however, no evidence was sighted. A water cart is present on site and is reportedly used as required. The internal roads had been dampened the morning of the site inspection. Section 6.3.3 of the QEMP provides: “(vi) Continually watch for any visible air pollution and if necessary, minimise dust generation by modifying operations, such as closing the site for loading and transport in extreme weather conditions.” However, evidence of staff training in the QEMP was not provided.								



Requirement	Compliance	Comment
Air Quality Monitoring		
7 The Proponent shall prepare and implement an Air Quality Monitoring Program for the project to the satisfaction of the Director-General. This program must: a) Be submitted to the Director-General within 3 months of the date of this approval;	Partial	The Air Quality Monitoring Program was not submitted within 3 months of the date of the conditions of approval. The Air Quality Monitoring Program included as Section 8.4 of the QEMP dated May 2009. Correspondence from the Department of Planning to Cleary Bros dated 29 May 2009 Re: Gerroa Sand Quarry – Environmental Management Plan, approving the QEMP dated 21 May 2009 following revision of the EMP in May 2009 (Department of Planning ref: W92/00173) was provided. It is therefore assumed that approval was given for the QEMP as a whole and not separately for the Air Quality Monitoring Program.
b) Be prepared in consultation with the DECCW; and	Not Applicable	DECCW advised the auditor as well as Cleary Bros that they do not review management plans.
c) Include details of how the air quality performance of the project would be monitored, and include protocols for evaluating compliance with the relevant air quality limits in this approval	Yes	Provided as Section 8.4 of the QEMP.
METEOROLOGICAL MONITORING		
8 During the project, the Proponent shall maintain a suitable meteorological station on (or in close proximity to) the site to the satisfaction of the DECC and the Director-General. This station must satisfy the requirements in the <i>Approved Methods for Sampling Air Pollutants in New South Wales</i> publication.	Yes	The Meteorological station was observed and the readings recorded were also provided. It was advised by Cleary Bros that the station has been in operation since 2003. The QEMP provides for this requirement.
SURFACE AND GROUND WATER		
Discharges		
9 The Proponent shall not discharge any water from the quarry or its associated operations except for the purpose of restoring normal pond level after significant rain. Any such discharge shall be in accordance with an EPL.	Yes	The site operates under Environment Protection Licence No. 4146. The dredge pond is bunded with an overflow located on its western edge. It is stated that the water level in the dredge pond has remained relatively constant and that it moves with the level of the ground water. Hence, no discharges of water have been reported.



Requirement	Compliance	Comment																														
Water Quality objectives																																
10	<p>Unless otherwise approved by the Director-General, the Applicant shall aim to meet the water quality objectives in Table 3 for water in the dredge pond and in ground water adjacent to the dredge pond.</p> <table border="1" data-bbox="264 435 1010 890"> <thead> <tr> <th>Analyte</th> <th>Units</th> <th>Objective</th> </tr> </thead> <tbody> <tr> <td>Turbidity*</td> <td>NTU</td> <td>5-20</td> </tr> <tr> <td>pH</td> <td>pH</td> <td>6.0-8.5</td> </tr> <tr> <td>Salinity</td> <td>µS/cm</td> <td><1,500</td> </tr> <tr> <td>Dissolved oxygen*</td> <td>mg/L (saturation)</td> <td>>6 (>80-90%)</td> </tr> <tr> <td>Total phosphorus</td> <td>µg/L</td> <td><30</td> </tr> <tr> <td>Total nitrogen</td> <td>µg/L</td> <td><350</td> </tr> <tr> <td>Chlorophyll-a</td> <td>µg/L</td> <td><5</td> </tr> <tr> <td>Faecal coliforms</td> <td>Median No./100 mL</td> <td><1000</td> </tr> <tr> <td>Enterococci</td> <td>Median No./100 mL</td> <td><230</td> </tr> </tbody> </table>	Analyte	Units	Objective	Turbidity*	NTU	5-20	pH	pH	6.0-8.5	Salinity	µS/cm	<1,500	Dissolved oxygen*	mg/L (saturation)	>6 (>80-90%)	Total phosphorus	µg/L	<30	Total nitrogen	µg/L	<350	Chlorophyll-a	µg/L	<5	Faecal coliforms	Median No./100 mL	<1000	Enterococci	Median No./100 mL	<230	<p>Partial</p> <p>The water quality objectives are included as Section 6.4 of the QEMP. In addition, water quality results contained in the <i>Gerroa Environmental Monitoring Folder</i> (by month) was provided.-</p> <p>Surface Water</p> <p>The analytical results reported in the 2008-2009 AEMR were low, indicating high water quality. Total nitrogen, total phosphorus and chlorophyll-A objectives were exceeded, with the criteria for total nitrogen consistently exceeded for results presented in the 2008-2009 AEMR.</p> <p>Ground Water</p> <p>The 2008-2009 AEMR indicated that an update to the groundwater monitoring program is required to make adjustments in groundwater objective levels to reflect non-compliant historical trends in relation to pH, total phosphorus, total nitrogen, chlorophyll a, chloride ion and soluble iron ion.</p> <p>However, site data for both surface and ground water is still being gathered to assist in determining the appropriate background levels for this site.</p>
Analyte	Units	Objective																														
Turbidity*	NTU	5-20																														
pH	pH	6.0-8.5																														
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Enterococci	Median No./100 mL	<230																														



Requirement				Compliance	Comment
	Algae and blue-green algae*	No. cells/mL	<15,000		
	Sodium	mg/L	<400		
	Potassium ion	mg/L	<50		
	Magnesium ion	mg/L	<50		
	Chloride ion	mg/L	<300		
	Sulphate ion	mg/L	<250		
	Bicarbonate ion	mg/L	<750		
	Soluble Iron ion	mg/L	<6		
	Ammonium ion	mg/L	<20		
<p>* objectives relevant to dredge pond water only.</p> <p>Table 3: Water Quality Objectives (source: QEMP)</p> <p>Notes:</p> <ul style="list-style-type: none"> ▶ The objectives for dissolved oxygen, turbidity and algae are relevant to surface water only; ▶ The Department acknowledges that short term exceedances of these objectives may occur during natural events such as heavy rainfall or tidal saline water inflow. 					
Management and Monitoring					
11	<p>The Proponent shall prepare and implement a Water Management Plan for the project to the satisfaction of the Director-General. This plan must:</p> <p>a) Be submitted to the Director-General within 3 months of the date of this approval;</p>			Partial	<p>The Water Management Plan was not submitted within 3 months of the date of the conditions of approval. The Water Management Plan is included as Section 6.4 of the QEMP dated May 2009. Correspondence from the Department of Planning to Cleary Bros dated 29 May 2009 Re: Gerroa Sand Quarry – Environmental Management Plan, approving the QEMP dated 21 May 2009 following revision of the EMP in May 2009 (Department of Planning ref: W92/00173) was provided. It is therefore assumed that approval was given for the QEMP as a whole and not separately for the Water Management Plan.</p>



Requirement	Compliance	Comment
b) Be prepared in consultation with the DECCW; and	Not Applicable	DECCW advised the auditor as well as Cleary Bros that they do not review management plans.
c) Include a: <ul style="list-style-type: none"> <li data-bbox="248 432 674 456">– Erosion and Sediment Control Plan; 	Yes	Included as Appendix C of the QEMP.
<ul style="list-style-type: none"> <li data-bbox="248 477 674 501">– Surface Water Monitoring Program; 	Yes	Included as Section 8.5 of the QEMP.
<ul style="list-style-type: none"> <li data-bbox="248 520 707 544">– Ground Water Monitoring Program; and 	Yes	Included as Section 8.6 of the QEMP.
<ul style="list-style-type: none"> <li data-bbox="248 563 685 587">– Acid Sulfate Soils Management Plan; 	Yes	Included as Appendix F of the QEMP.
d) Include a strategy for the placement of high hydraulic conductivity material progressively during the works. High conductivity material is to be placed at intervals along the length of the pond extension. This material is to be of a hydraulic conductivity, and placed at such intervals and in such places, that will maintain comparable typical groundwater flow through to the Swamp Sclerophyll Forest as existed prior to the proposed excavation. The existing and comparable typical groundwater flow is to be determined in accordance with the calculation based on the existing typical hydraulic gradient and the hydraulic conductivity of the <i>in situ</i> strata provided for the conditions 14(c) below.	Yes	Included as Section 6.5 (Groundwater Management) of the QEMP. Correspondence from Cleary Bros to the Department of Planning dated 21 July 2009 advised that Cleary Bros commenced works on the first 20m strip of approved operations area on 6 March 2009. The ground water monitoring in the QEMP provides that “The target for groundwater level is that the level in any bore should not move outside the range of two standard deviations from its mean level for more than six months, except when following a trend attributable to climatic effects, as evident in other monitoring bores.” Cleary Bros advised that the level in the bores has not moved outside the range of two standard deviations from its mean level for more than six months and hence the placement of high conductivity material has not been required to date.
12 The ESCP prepared shall:		
a) Be consistent with the requirements of <i>Managing Urban Stormwater: Soils and Construction, Volume 1, 4th Edition, 2004</i> (Landcom);	Yes	The ESCP does not make reference to this guideline; however, it is comparatively consistent with the guideline. For example, the Landcom guideline provides for a maximum of 2.5 metre spacings between the star pickets for a sediment fence whilst the figure provided in the ESCP allows a maximum of 3 metre spacings.



Requirement		Compliance	Comment
	b) Identify activities that could cause soil erosion and generate sediment;	Yes	Risk activities are provided in the ESCP.
	c) Describe measures to minimise soil erosion and the potential for the transport of sediment to downstream waters;	Yes	Measures are provided in Sections 2 and 3 of the ESCP.
	d) Describe the location, function, and capacity of erosion and sediment control structures; and	Yes	These are described in the ESCP.
	e) Describe what measures would be implemented to maintain (and if necessary decommission) the structures over time.	Yes	Maintenance of areas at risk of erosion and the removal of silt stop fencing included in the ESCP.
13	The Surface Water Monitoring Program shall include:		
	a) Detailed baseline data on surface water quality in the main channel in Foys Swamp;	Yes	A baseline water study is attached as Appendix E to the QEMP.
	b) Surface water impact assessment criteria;	Yes	Included as Section 6.4.1 of the QEMP.
	c) A program to monitor surface water quality;	Yes	Included in Section 8.5 of the QEMP.
	d) A program to monitor bank and bed stability of the dredge pond;	Yes	Included in Section 8.5 of the QEMP.
	e) A protocol for the investigation, notification and mitigation of identified exceedances of the surface water impact assessment criteria; and	Yes	Included in Section 8.5 of the QEMP.
	f) A program to monitor the effectiveness of the Erosion and Sediment Control Plan.	Yes	Included in Sections 6.4.3 and 8.5 of the QEMP and Section 3.3 of the Erosion and Sediment Control Plan (Appendix C of the QEMP). In addition, quarterly records for erosion monitoring were sighted in the <i>Gerroa Environmental Monitoring</i> File.
14	The Ground Water Monitoring Program shall include:		
	a) A statistical analysis of baseline ground water level and water quality data;	Yes	A baseline water study is attached as Appendix E to the QEMP.
	b) Ground water impact assessment criteria, including criteria for assessing any impacts on ground water dependent ecosystems and vegetation;	Yes	Included as Section 8.6 (Performance Targets) of the QEMP.
	c) A program to monitor: <ul style="list-style-type: none"> – Hydraulic conductivity - upon the completion of the landscaping of each 20 metre wide extraction zone, tests shall be conducted to ensure that the hydraulic conductivity following 	Yes	Included as Section 8.6 of the QEMP.



Requirement	Compliance	Comment
the placement of material is similar to the conditions prevailing prior to the excavation commencing;		
– Impacts on groundwater dependent ecosystems and vegetation (from at least 6 boreholes at the edge of the dredge pond);	Yes	Included as Section 8.6 of the QEMP.
– Water levels (at no less than monthly intervals and taken on the same day) in the dredge pond, the drain at the flood gates, monitoring bores WM1, WM1A, WM2A, WM3A, WM4, WM5, 1/Aug07, 2/Aug07, 3/Aug07, 4/Aug07, 5/Aug07 and 6/Aug07 (locations shown on Drawing 6198/208bh Revision A prepared by KF Williams & Associates, 15/2/08), and any additional bores installed at the edge of the dredge pond;	Yes	Included as Section 8.6 of the QEMP. Monitoring results were sighted from March 2010. A result from monitoring bore 6/Aug07 was noted to be missing from the March 2010 results.
– The in situ strata at the perimeter of the dredge pond for its current hydraulic conductivity	Yes	This is provided in Section 8.6 of the QEMP.
– Groundwater levels under the SSF (Swamp Sclerophyll Forest)	Yes	Correspondence from Douglas Partners to Cleary Bros dated 4 May 2009 regarding the installation of standpipe piezometers for measurement of groundwater levels and to provide a source for water sampling as part of the environmental management of the sand quarrying within the northern extension of the resource area. The letter states that these locations were selected taking into consideration the minimisation of damage to the SSF assemblage.
d) Monthly reviews of results by the Environmental Officer	Yes	The QEMP states that the Environmental Officer is to review all monitoring, auditing and environmental reporting records for compliance. Records of review were shown to be filed in the <i>Gerroa Environmental Folder</i> provided.
e) A protocol for the investigation, notification and mitigation of any identified exceedances of the ground water impact assessment criteria. The protocol shall include the following measures to be undertaken in the event that the water level in any bore lies outside the range of two standard deviations from the mean for more than 6 months and does not follow a trend that can be	Yes	This is provided in Section 8.6 (Responsibility and corrective action) of the QEMP. Groundwater levels reported in the 2008-2009 AEMR were stable with only boreholes MW05(07) and MW06(07) showing any significant spikes.



Requirement	Compliance	Comment
<p>attributed to climatic effects, as evident in other monitoring bores, undertake the following actions:</p> <ul style="list-style-type: none"> – Sand extraction halted immediately while further investigations and any necessary remedial actions are undertaken; 		<p>These spikes were attributed by Cleary Bros to incorrect interpretation of data.</p>
<ul style="list-style-type: none"> – Additional water level measurements in temporary bores in the vicinity of the affected bore to confirm the groundwater levels in that locality; 	Yes	<p>This is included in the protocol referred to in 14 e) above.</p>
<ul style="list-style-type: none"> – A qualified hydrogeologist shall be engaged to assess the significance of the variance from the expected groundwater behaviour; 	Yes	<p>This is included in the protocol referred to in 14 e) above.</p>
<ul style="list-style-type: none"> – If the review of the hydrogeologist considers that action is necessary to maintain the pre-existing ground water regime in the vicinity of the SSF, he/she shall be requested to recommend an appropriate remedial action plan. This plan may include adjustment to the placement strategy for panels of high hydraulic conductivity material required by Condition 11(d) 	Yes	<p>This is included in the protocol referred to in 14 e) above.</p>
<ul style="list-style-type: none"> – The recommended remedial action plan shall be submitted for the Director-General's approval and subsequently implemented by the Proponent. 	Yes	<p>This is included in the protocol referred to in 14 e) above. A remedial action plan has not been recommended to date.</p>
<p>f) Include mitigation, remediation and/or compensation measures for any identified ground water impacts</p>	Yes	<p>This is provided in Section 8.6 of the QEMP.</p>
<p>15 The Acid Sulfate Soils Management Plan shall:</p>		
<p>a) Be prepared in accordance with the <i>Acid Sulphate Soils Assessment and Management Guidelines</i>;</p>	Yes	<p>The Acid Sulfate Soils Management Plan, included as Appendix F of the QEMP, references these guidelines. Management is also included as Section 6.6 of the QEMP.</p>
<p>b) Describe the measures to manage acid sulphate soils;</p>	Yes	<p>Included in Section 6.6.3 of the QEMP.</p>
<p>c) Include an acid sulphate soils sampling and monitoring program.</p>	Yes	<p>Included in Section 8.7 of the QEMP.</p>



Requirement		Compliance	Comment
LANDSCAPE MANAGEMENT			
Planning Agreement			
16	Within 3 months of the date of this approval, the Proponent shall:		
	a) Enter into a Planning Agreement with the Minister under section 93F of the EP&A Act. This Agreement must be generally consistent with commitments in the terms of the offer made by the Proponent to the Minister on 1 May 2007, and must specifically provide for the:	Not Applicable	Refer to Condition 5A of Schedule 1 above.
	i. implementation of the Compensatory Planting shown in the plan in Appendix 3	Not Applicable	Refer to Condition 5A of Schedule 1 above.
	ii. protection of the vegetation in the area shown in Appendix 4 (Conservation Area)	Not Applicable	Refer to Condition 5A of Schedule 1 above.
	iii. identification by survey plan of the Conservation Area shown in the plan titled Vegetation Conservation Area (shown conceptually in Appendix 4)	Not Applicable	Refer to Condition 5A of Schedule 1 above.
	iv. implementation of the Landscape and Rehabilitation Management Plan for the site	Not Applicable	Refer to Condition 5A of Schedule 1 above.
	v. insurance of the Conservation Area against the impact of fire or vandalism;	Not Applicable	Refer to Condition 5A of Schedule 1 above.
	b) register the Planning Agreement on the title of the land in accordance with the Real Property Act 1900	Not Applicable	Refer to Condition 5A of Schedule 1 above.
Landscaping and Rehabilitation			
17	The Proponent shall:		
	a) progressively rehabilitate the site in a manner that is generally consistent with the rehabilitation objectives in Chapter 3.8 of the EA (see Appendix 5);	Not Applicable	Refer to Condition 5A of Schedule 1 above.
	b) Ensure that within 4 years of the date of this approval, the additional plantings in the Northern Corridor and Southern Rehabilitation Area are comprised of at least 60% of the plant species recorded for the representative plant communities in the quarry extension area, such as	Not Applicable	Refer to Condition 5A of Schedule 1 above.



Requirement		Compliance	Comment
	Bangalay Sand Forest and Littoral Rainforest		
	c) Implement the Compensatory Planting in a manner that is consistent with the Landscape and Rehabilitation Management Plan referred to in Condition 21, including the:	Not Applicable	Refer to Condition 5A of Schedule 1 above.
	▶ Establishment, conservation and maintenance of approximately 23.99 hectares of native vegetation;	Not Applicable	Refer to Condition 5A of Schedule 1 above.
	▶ Enhance 5.25 hectares of Area 4 and 5 vegetation;	Not Applicable	Refer to Condition 5A of Schedule 1 above.
	▶ Conservation and maintenance of approximately 46.25 hectares of the remnant vegetation on the site (shown conceptually in Appendix 3); and the best practice guidelines set out in (to the satisfaction of the Director-General): <ul style="list-style-type: none"> – Bringing the bush back to Western Sydney: Best practice guidelines for bush regeneration on the Cumberland Plain, DIPNR 2003 – Recovering bushland on the Cumberland Plains: Best practice guidelines for the management and restoration of bushland, DEC 2005. 	Not Applicable	Refer to Condition 5A of Schedule 1 above.
18	Within 12 months of the date of this approval, the Proponent shall densely plant <i>Banksia integrifolia</i> along the five metre setback zone to the Littoral Rainforest and these areas shall thereafter be planted with species as may be specified in the Landscape and Rehabilitation Management Plan.	Not Applicable	Refer to Condition 5A of Schedule 1 above.
19	The Proponent shall		
	a) clearly identify the boundary of the extension area in consultation with a suitably qualified ecologist prior to the commencement of any construction works to ensure that an adequate buffer distance is maintained from the dredging activities/quarry operations to the Conservation Area and SSF	Not Applicable	Refer to Condition 5A of Schedule 1 above.
	b) ensure that all dredging activities and associated quarry operations remain within the defined boundary of the Project Area (shown on the plan in Appendix 1)	Not Applicable	Refer to Condition 5A of Schedule 1 above.
	c) develop a monitoring program and document it in the EMP to demonstrate that the boundary of	Not	Refer to Condition 5A of Schedule 1 above.



Requirement		Compliance	Comment
	the quarry extension area is maintained and not compromised during operations	Applicable	
	d) revegetate the buffer area with appropriate native species and be subject to the Landscape and Rehabilitation Management Plan for inclusion in the EMP for its long term restoration and management and be not less than 5 metres wide.	Not Applicable	Refer to Condition 5A of Schedule 1 above.
20	The Proponent shall: a) commence the Compensatory Planting and the visual screen along the Crooked River Road frontage north of the east-west link (as shown conceptually in Appendix 3), within 12 months of the date of this approval or when sufficient propagation material has been collected.	Not Applicable	Refer to Condition 5A of Schedule 1 above.
	b) not sever the east-west link until it is demonstrated to the satisfaction of the Director-General that established communities in the Northern Corridor comprise at least 60% of the species as set out in Appendix 6 and the Northern Corridor is successful according to the criteria in Condition 25. In this Condition, "not sever" means that no works of clearing, tree removal or other habitat removal shall take place which will reduce or impede the function of the East-West Corridor to provide connectivity to the National Park from Zone 1.1 as measure by Condition 25(b).	Not Applicable	Refer to Condition 5A of Schedule 1 above.
Restriction on clearing of certain land			
20A	Within the area marked "X" on Appendix 1, a person shall not clear any of the land of vegetation or trees without the consent of the Director-General.	Not Applicable	Refer to Condition 5A of Schedule 1 above.
Landscape and Rehabilitation management Plan			
21	The Proponent shall prepare and implement a Landscape and Rehabilitation Management Plan for the project to the satisfaction of the Director-General. This plan must:	Not Applicable	Refer to Condition 5A of Schedule 1 above.
	a) Be submitted to the Director-General within 3 months of the date of this approval	Not Applicable	Refer to Condition 5A of Schedule 1 above.
	b) Be generally in accordance with the draft LRMP, dated 20 August 2008 prepared by Kevin Mills & Associates, and accepted by the Land and Environment Court as appropriate	Not Applicable	Refer to Condition 5A of Schedule 1 above.



Requirement	Compliance	Comment
c) Be prepared in consultation with the DECC by suitable qualified expert's approved by the Director-General	Not Applicable	Refer to Condition 5A of Schedule 1 above.
d) Clearly identify the biological purpose of the linkage and describe how its design, dimensions and management will achieve this purpose	Not Applicable	Refer to Condition 5A of Schedule 1 above.
e) Collect baseline data for the Project Area including flora species, fauna species and ecological function parameters	Not Applicable	Refer to Condition 5A of Schedule 1 above.
f) Include a figure showing location, extent and size of planted/regenerated areas for each community to be impacted;	Not Applicable	Refer to Condition 5A of Schedule 1 above.
g) Identify strategies to use the natural resources of the impacted areas to their full potential, including:	Not Applicable	Refer to Condition 5A of Schedule 1 above.
<ul style="list-style-type: none"> ▶ All plant material to be used as a primary source for restoration and rehabilitation should be collected and propagated from relevant communities prior to clearing 	Not Applicable	Refer to Condition 5A of Schedule 1 above.
<ul style="list-style-type: none"> ▶ All areas proposed for replanting should be assessed initially for their regeneration potential appropriate restoration strategies should follow best practice guidelines as described in DIPNR (2003) and DEC (2005) 	Not Applicable	Refer to Condition 5A of Schedule 1 above.
h) Describe in general the short, medium and long-term measures that would be implemented to:		
<ul style="list-style-type: none"> ▶ Rehabilitate the site ▶ Implement the Compensatory Plantings shown in Appendix 3 ▶ Manage the remnant vegetation and habitat on site, including the areas of Bangalay Sand Forest to be retained (shown conceptually in Appendix 3) ▶ Landscape the site (including the bunds) to mitigate visual impacts of the project ▶ Upgrade and protect the remaining area of Littoral Rainforest on the eastern side of the pond extension 	Not Applicable	Refer to Condition 5A of Schedule 1 above.
i) Describe in detail the measures that would be implemented over the first 5 years and every subsequent 5 year period, to rehabilitate and manage the landscape and vegetation on the site,	Not Applicable	Refer to Condition 5A of Schedule 1 above.



Requirement		Compliance	Comment
	including:		
	<ul style="list-style-type: none"> ▶ Setting clear targets to the satisfaction of the Director-General to determine the level of success and make timely changes to management strategies, as necessary 	Not Applicable	Refer to Condition 5A of Schedule 1 above.
	<ul style="list-style-type: none"> ▶ Monitoring each vegetation type separately 	Not Applicable	Refer to Condition 5A of Schedule 1 above.
	j) Set the completion criteria for the rehabilitation of the site (ie when plantings are self-sustaining)	Not Applicable	Refer to Condition 5A of Schedule 1 above.
	k) Describe how the performance of the measures would be monitored over time; and	Not Applicable	Refer to Condition 5A of Schedule 1 above.
	l) Include a Long Term management Plan	Not Applicable	Refer to Condition 5A of Schedule 1 above.
21A	The Proponent shall engage a qualified ecologist, bush regeneration or providence nursery group who will develop a program consistent with the objectives and procedures set out in the draft Landscape and Rehabilitation Management Plan and this program will address the following issues:	Not Applicable	Refer to Condition 5A of Schedule 1 above.
	a) Soil testing;	Not Applicable	Refer to Condition 5A of Schedule 1 above.
	b) On site collection of seed and other propagation material	Not Applicable	Refer to Condition 5A of Schedule 1 above.
	c) An assessment of the need to develop plants on the site	Not Applicable	Refer to Condition 5A of Schedule 1 above.
	d) A program of successional planting and management that will achieve the agreed purposes of the planting	Not Applicable	Refer to Condition 5A of Schedule 1 above.
	e) Target for short term, medium term and long term planting and management	Not Applicable	Refer to Condition 5A of Schedule 1 above.
	f) Monitoring requirements	Not	Refer to Condition 5A of Schedule 1 above.



Requirement		Compliance	Comment
		Applicable	
	g) Reporting frequency and methodology	Not Applicable	Refer to Condition 5A of Schedule 1 above.
	h) Consultation with the relevant government agencies	Not Applicable	Refer to Condition 5A of Schedule 1 above.
	i) Water quality monitoring; and	Not Applicable	Refer to Condition 5A of Schedule 1 above.
	j) Quantitative vegetation monitoring Unless otherwise incorporated in the draft Landscape and Rehabilitation Management Plan.	Not Applicable	Refer to Condition 5A of Schedule 1 above.
22	The Landscape and Rehabilitation Management Plan must include:		
	a) The objectives for the rehabilitation of the site and implementation of the Compensatory Planting and the vegetation screen along the Crooked River Road frontage north of the east-west link;	Not Applicable	Refer to Condition 5A of Schedule 1 above.
	b) A description of how the proposed works would be integrated with the surrounding vegetation to provide a comprehensive strategic framework for the restoration and enhancement of the landscape over time;	Not Applicable	Refer to Condition 5A of Schedule 1 above.
	c) A description of the short, medium and long-term measures that would be implemented to: <ul style="list-style-type: none"> ▶ Rehabilitate the site; ▶ Implement the Compensatory Planting; ▶ Manage the remnant vegetation and habitat on the site; and ▶ Landscape the site (including the bunds) to mitigate visual impacts of the project. 	Not Applicable	Refer to Condition 5A of Schedule 1 above.
	d) A detailed description of the performance and completion criteria for the rehabilitation of the site and implementation of the proposed works	Not Applicable	Refer to Condition 5A of Schedule 1 above.
	e) A detailed description of what measures would be implemented over the next 5 years to rehabilitate the site, and implement both the Compensatory Planting and the vegetation screen along the Crooked River Road frontage, including the procedures for:	Not Applicable	Refer to Condition 5A of Schedule 1 above.



Requirement	Compliance	Comment
<ul style="list-style-type: none"> ▶ Undertaking pre-clearance surveys; ▶ Conserving and reusing topsoil ▶ Collecting and propagating seed for rehabilitation works ▶ Salvaging and reusing material from the site for habitat enhancement, particularly tree hollows ▶ Controlling weeds and feral pests ▶ Controlling access ▶ Bushfire management ▶ Managing any potential conflicts between the proposed rehabilitation for the site and implementation of the Compensatory Planting and any Aboriginal cultural heritage values in those areas ▶ Progressively rehabilitate the areas disturbed by sand extraction ▶ Implementing revegetation and regeneration within the disturbed and compensatory planting areas, including the establishment of canopy, sub-canopy (if relevant), understorey and ground cover vegetation ▶ Reducing the visual impacts of the project; and ▶ Protecting areas outside the disturbance areas 		
f) A detailed program to monitor the performance of the rehabilitation of the site and implementation of the Compensatory Planting and the vegetation screen along the Crooked River Road frontage against the relevant objectives and performance and completion criteria (see above)	Not Applicable	Refer to Condition 5A of Schedule 1 above.
g) A description of the potential risks to successful rehabilitation an/or revegetation, and a description of the contingency measures that would be implemented to mitigate these risks	Not Applicable	Refer to Condition 5A of Schedule 1 above.
h) Details of who is responsible for monitoring, reviewing, and implementing the plan.	Not Applicable	Refer to Condition 5A of Schedule 1 above.



Requirement		Compliance	Comment
23	Successful establishment of the Northern Corridor shall be measure by the following criteria:		
	a) presence of native flora species;	Not Applicable	Refer to Condition 5A of Schedule 1 above.
	b) a majority of the flora species recorded from the removed forest occur in the area; (e.g. 60% of flora species recorded in removed forest are present);	Not Applicable	Refer to Condition 5A of Schedule 1 above.
	c) species from all four layers have been planted and at least 50% of the projected cover has been achieved for each of the shrub and ground cover layers;	Not Applicable	Refer to Condition 5A of Schedule 1 above.
	d) self-sustaining native plant populations (e.g regeneration of a second generation);	Not Applicable	Refer to Condition 5A of Schedule 1 above.
	e) no dominance by single flora species (e.g Bracken);	Not Applicable	Refer to Condition 5A of Schedule 1 above.
	f) weeds are not significantly impacting on the native vegetation;	Not Applicable	Refer to Condition 5A of Schedule 1 above.
	g) weeds do not represent a majority of the flora species or a higher percentage cover than the native flora species; and	Not Applicable	Refer to Condition 5A of Schedule 1 above.
	h) impacts such as grazing are excluded from the area.	Not Applicable	Refer to Condition 5A of Schedule 1 above.
24	Successful establishment of fauna habitat in the Northern Corridor would be measured by:		
	a) presence of species;	Not Applicable	Refer to Condition 5A of Schedule 1 above.
	b) a majority of the resident species recorded from the removed forest occur in the area	Not Applicable	Refer to Condition 5A of Schedule 1 above.
	c) fauna populations are resident in the area	Not Applicable	Refer to Condition 5A of Schedule 1 above.



Requirement		Compliance	Comment
	d) pest animals are controlled and not impacting upon the fauna or its habitat	Not Applicable	Refer to Condition 5A of Schedule 1 above.
	e) impacts such as grazing are excluded from the area	Not Applicable	Refer to Condition 5A of Schedule 1 above.
25	Verification that the Northern Corridor is functional as a replacement corridor between the Conservation Area and the National Park:		
	a) determine the presence of species in both the eastwest link and northern corridor by conducting standard animal survey techniques at least twice in the first year (eg. Eliot trapping for small mammals, pitfall trapping for reptiles, observational surveys for frogs and birds, and spotlighting transects for arboreal animals);	Not Applicable	Refer to Condition 5A of Schedule 1 above.
	b) determine whether a majority of animal species (particularly those determined to be likely to be impacted by fragmentation) utilising the corridor in the east-west link are present in the conservation area and the northern corridor and the re-created link at the northern boundary; and	Not Applicable	Refer to Condition 5A of Schedule 1 above.
	c) conduct genetic analysis for a number of key species for whom genetic markers have already been developed (e.g. Brown Antechinus, Bush Rat and at least two skink species) to establish that genetic relatedness exists between individuals within the two corridors, the Conservation Area and National Park). If genetic relatedness exists between individuals in the northern corridor, Conservation Area and the National Park, but not in the east-west link, then this demonstrates that the east-west link is not functional, but the northern corridor is and therefore, the east-west link can be severed without creating additional fragmentation to animal populations. If genetic relatedness exists between individuals in the Conservation Area, the east-west link and the National Park, but not the northern corridor, then this demonstrates that the northern corridor is not functional and the east-west link cannot be severed until there is compliance with Conditions 23 and 24.	Not Applicable	Refer to Condition 5A of Schedule 1 above.
26	The Long Term Management Strategy must be prepared in consultation with Shoalhaven Council,	Not	Refer to Condition 5A of Schedule 1 above.



Requirement		Compliance	Comment
	Kiama Council, DECC, DPI-Fisheries and the CCC, and must:	Applicable	
	a) define the objectives and criteria for quarry closure and post-extraction management	Not Applicable	Refer to Condition 5A of Schedule 1 above.
	b) investigate options for the future use of the site	Not Applicable	Refer to Condition 5A of Schedule 1 above.
	c) describe the measure that would be implemented to minimise or manage the ongoing environmental effects of the development	Not Applicable	Refer to Condition 5A of Schedule 1 above.
	d) describe how the performance of these measures would be monitored over time Note: The Department accepts that the initial Long Term management Strategy may not contain detailed information on post-extraction management.	Not Applicable	Refer to Condition 5A of Schedule 1 above.
Landscape and Rehabilitation Bond			
27	Within 6 months of the date of this approval, Cleary Bros shall lodge a rehabilitation bond for the project with the Director-General. The sum of the bond shall be calculated at: a) \$2.50/m ² for the total area to be disturbed by the proposed dredge pond as shown in Appendix 1 b) \$1.00/m ² for the total area of land to be rehabilitated consisting of Zones 2A.1, 2A.2, 2A.3, 2B.1, 2B.2, 2C.1, 2C.2, 2D and 2E of Appendix 3	Not Applicable	Refer to Condition 5A of Schedule 1 above.
28A	The rehabilitation bond shall continue to be retained after completion of the Compensatory Planting to ensure that there shall be a continuation of the Planning Agreement	Not Applicable	Refer to Condition 5A of Schedule 1 above.
28B	The Director-General may at his or her discretion and on advice from an independent environmental auditor release or vary the rehabilitation bond where conditions permit. If the rehabilitation is not completed to the satisfaction of the Director-General, the Director-General will call in all or part of the rehabilitation bond, and arrange for the satisfactory completion of the relevant works.	Not Applicable	Refer to Condition 5A of Schedule 1 above.
28C	The bond may be in the form of a Bank Guarantee or as directed by the Director-General.	Not Applicable	Refer to Condition 5A of Schedule 1 above.



Requirement	Compliance	Comment	
ABORIGINAL HERITAGE			
Aboriginal Site Conservation			
29	The Proponent shall protect and conserve Area A, as described in the EA (as shown on the plan in Appendix B) to the satisfaction of the Director-General	Yes	Area A was fenced at the time of the site inspection and appeared to be conserved in accordance with this requirement.
Aboriginal Heritage Management Plan			
30	The Proponent shall prepare and implement a AHMP to the satisfaction of the Director-General. The plan must:		
	a) Be submitted to the Director-General within 3 months of the date of approval conditions, and prior to disturbance of any identified Aboriginal objects	Partial	The Proponent did not submit the AHMP within 3 months of the date of the approval. The Court ordered Approval on 2 September 2008. The Aboriginal Heritage Management Plan was included as Appendix G of the QEMP. Correspondence from Perram & Partners to the Department of Planning dated 5 February 2009 regarding the submission of the QEMP including the AHMP was provided.
	b) Be prepared in consultation with the DECC and relevant Aboriginal communities	Yes	Consultation is included as Section 4 and Appendix 1 of the AHMP (Appendix G of the QEMP). DECCW advised the auditor as well as Cleary Bros that they do not review management plans.
	c) Include a:		
	<ul style="list-style-type: none"> ▶ Description of the measures that would be implemented to protect Area A and the part of Area B proposed to be conserved, as described in the EA (as shown on the plan in Appendix B); 	Yes	Included as Section 6.11 of the QEMP and Sections 6 and 7 of the AHMP (Appendix G of the QEMP).
	<ul style="list-style-type: none"> ▶ Description of the measures that would be implemented for the mapping and salvage or relocation of the archaeological relics on the site, including the shell midden in the south-western corner of the Extraction Area (as shown on the plan in Appendix B); 	Yes	
	<ul style="list-style-type: none"> ▶ Description of the measures that would be implemented if any new Aboriginal objects or relics are discovered during the project 	Yes	
<ul style="list-style-type: none"> ▶ Protocol for the ongoing consultation and involvement of the Aboriginal communities in the 	Yes		



Requirement		Compliance	Comment
	conservation and management of Aboriginal cultural heritage on the site.		
TRAFFIC AND TRANSPORT			
Transport Routes			
31	The Proponent shall ensure that all truck movements travelling to or originating from areas:		
	a) South of the site use the Princes Highway, via Beach Road (except as provided for by condition 32 below)	Yes	The 2008-2009 AEMR indicated that staff have been made aware via Work Instructions, provided regularly. This was reiterated during the interview with the Site Manager. However, evidence of staff training was not provided. In addition, Cleary Bros reportedly use a GPS tracking system on their trucks. This system, 'C-track', reportedly monitors individual trucks and routes are displayed on a central screen that is reviewed by management.
	b) North of the site use the Princes Highway, via Beach Road, Crooked River Road, Fern Street and Belinda Street	Yes	Refer to 31 a) above.
32	The Proponent shall ensure that no trucks associated with the project use Gerroa Road, except where the destination lies along or adjacent to that road.	Yes	Refer to 31 a) above.



Requirement		Compliance	Comment
Haul Road			
33	<p>Within 3 months of the date of this approval, the Proponent shall upgrade the internal haul road and Beach Road intersection should be upgraded to a sealed Type BAL left turn and sealed Type BAR right turn configuration within 3 months of the date of this approval, in accordance with the RTA's <i>Road Design Guide</i>.</p>	Partial	<p>The Proponent did not upgrade the internal haul road and Beach Road intersection within 3 months of the date of the approval. The Court ordered Approval on 2 September 2008. Correspondence from the RTA to Cleary Bros dated 5 March 2009 Re: Shoalhaven City Council – 05_0099 – Berry Beach Road, Extension of Gerroa Sand Quarry, Gerroa. In this letter the RTA advised that the junction of the site access and Berry Beach Road remains a local road under the care and control of Shoalhaven Council and that the RTA is satisfied that should Council agree that the junction treatments meets minimum Council requirements for the BAL/BAR treatment then the RTA requires no further involvement in the subject proposal.</p> <p>Correspondence from K.F Williams & Associates to Cleary Bros dated 2 March 2009 stated that they 'confirm that the intersection layout shown on K.F Williams & Associates Pty Ltd Plans 105594/C06 and C07 comply to the geometric layout of a BAR/BAL RTA type intersection.' The author had inspected the constructed works and confirmed that they are in compliance with the K.F Williams Plans and RTA specifications.</p> <p>Shoalhaven City Council advised in an email dated 28 May 2010 that further works required.</p> <p>Correspondence from Shoalhaven City Council to Cleary Bros dated 16 June 2010 confirmed that "the outstanding works, including the line marking and signage that has recently been undertaken in accordance with the approvals, were inspected and passed on 15 June 2010.</p>
Road Haulage			
34	The Proponent shall ensure that:		
	a) All loaded vehicles entering or leaving the site are covered; and	Yes	Gerroa Sand Resource Work Instruction for Site Management (ref



Requirement		Compliance	Comment
			WIGSR11) provides that 'All vehicles entering or leaving the site are to have their loads covered'. The use of automatic covers was observed during the site inspection.
	b) All loaded vehicles leaving the site are cleaned of materials that may fall on the road, before they leave the site.	Yes	Gerroa Sand Resource Work Instruction for Site Management (ref WIGSR11) provides that 'All vehicles leaving the site must be cleaned of materials that may fall on the road'. The trucks observed leaving the site during the site inspection appeared to be clean.
VISUAL			
Visual Amenity			
35	The Proponent shall minimise the visual impacts of the project to the satisfaction of the Director-General	Yes	Visual screen plantings required in the QEMP and Statement of Commitments have been undertaken. In addition it was stated that no visual related complaints have been received, however, the complaints register was not held on site and could not be reviewed at the time of the site inspection.
Lighting Emissions			
36	The Proponent shall:		
	a) Take all practicable measures to mitigate off-site lighting impacts from the project;	Yes	The site is not powered. A generator is used for the daily operations when required.
	b) Ensure that all external lighting associated with the project complies with AS4282 (INT) 1995 to the satisfaction of the Director-General.	Yes	There is no external lighting except on plant and equipment. The site is not powered and there is no security lighting.
Advertising			
37	The Proponent shall not erect or display any advertising structure(s) or signs on the site without the written approval of the Director-General. Note: This does not include traffic management and safety or environmental signs.	Yes	The signage on site appears to have been erected prior to the Court ordered approval on 2 September 2008.



Requirement	Compliance	Comment
WASTE MANAGEMENT		
Waste Minimisation		
38	The Proponent shall minimise the amount of waste generated by the project to the satisfaction of the Director-General.	Yes The waste generated for offsite disposal by the project includes oil and onsite rubbish from the lunch room. These are reportedly transported to a licenced facility by a Cleary Bros truck.
EMERGENCY AND HAZARDS MANAGEMENT		
Dangerous Goods		
39	The Proponent shall ensure that the storage, handling and transport of dangerous goods are to be in accordance with the relevant Australian Standards, particularly AS1940 and AS1596 and the <i>Dangerous Goods Code</i> .	Yes There is no fuel storage on site. Refuelling of plant is reportedly undertaken via a tanker delivered to site. Small quantities of oils and other liquids are stored in a concrete bund in the machinery shed.
Safety		
40	The Proponent shall secure the project to ensure public safety to the satisfaction of the Director-General	Yes The site boundary is fenced. Inspections of the boundary fence are reportedly undertaken however, documentation to verify this was not provided.
Bushfire Management		
41	The Proponent shall: a) Ensure the project is suitably equipped to respond to any fires on-site; b) Assist the rural fire service and emergency services as much as possible if there is a fire on-site.	Yes There was a water truck present on site at the time of the inspection. Gerroa Sand Resource Work Instruction for Emergency Procedures (Ref WIGSR07) provides for bushfire which requires personnel to assist the rural fire service and emergency services as much as possible. A sample of the site staff training plan/records were provided for the Relief Dredge Operator, Plant Operator/ Trainee Production Manager, Plant Operator and a Plant Operator/ Labourer. The training listed included fire fighting.
PRODUCTION DATA		
42	The Proponent shall:	Yes The Annual Return for the 2008 – 2009 period to the Department of



Requirement		Compliance	Comment
	a) Provide annual production data to the DPI using the standard form for that purpose b) Include a copy of this data in the AEMR		Industry and Investment for extractive materials was provided. This data was not included in the AEMR provided, however, this has since been amended.
Schedule 4			
Notification of Landowners			
1	If the results of monitoring required in Schedule 3 identify the impacts generated by the project are greater than the relevant impact assessment criteria, then the Proponent shall notify the Director-General and the affected landowners and/or existing or future tenants (including tenants of quarry owned properties) accordingly, and provide quarterly monitoring results to each of these parties until the results show that the project is complying with the relevant criteria.	Not Applicable	There have been no reported exceedances to the Director-General.
Independent review			
2	If a landowner of privately owned land considers that the operations of the quarry are exceeding the impact assessment criteria in Schedule 3, then he/she may ask the Proponent in writing for an independent review of the impacts of the project on his/her land. If the Director-General is satisfied that an independent review is warranted, the Proponent shall within 3 months of the Director-General advising that an independent review is warranted:	Not Determined	Correspondence from Department of Planning to Cleary Bros dated 2 December 2009 stated that 'The Department has received an enquiry suggesting the company is not complying with condition 20(b) of schedule 3 of the project approval for the quarry, and has started to sever the vegetation corridor.' The Department is currently investigating this enquiry.
	a) Consult with the landowner to determine his/her concerns	Not Applicable	Cleary Bros have not been notified by the Department that an independent review is warranted.
	b) Commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Director-General, to conduct monitoring on the land, to determine whether the project is complying with the relevant criteria in Schedule 3, and identify the source(s) and scale of any impact on the land, and the project's contribution to this impact	Not Applicable	
	c) Give the Director-General and landowner a copy of the independent review	Not Applicable	



Requirement	Compliance	Comment
3 If the independent review determines that the quarrying operations are complying with the relevant criteria in Schedule 3, then the Proponent may discontinue the independent review with the approval of the Director-General.	Not Applicable	Refer to condition 2 a) of schedule 4 above.
4 If the independent review determines that the quarrying operations are not complying with the relevant criteria in Schedule 3, and that the quarry is primarily responsible for this on-compliance, then the Proponent shall:	Not Applicable	Refer to condition 2 a) of schedule 4 above.
a) Implement all reasonable and feasible measures, in consultation with the landowner, to ensure that the project complies with the relevant criteria	Not Applicable	Refer to condition 2 a) of schedule 4 above.
b) Conduct further monitoring to determine whether these measures ensure compliance	Not Applicable	Refer to condition 2 a) of schedule 4 above.
c) Secure a written agreement with the landowner to allow exceedances of the relevant criteria in Schedule 3 to the satisfaction of the Director-General. If the additional monitoring referred to above subsequently determines that the quarrying operations are complying with the relevant criteria in Schedule 3, then the Proponent may discontinue the independent review with the approval of the Director-General. If the Proponent is unable to finalise an agreement with the landowner, then the Proponent or landowner may refer the matter to the Director-General for resolution. If the matter cannot be resolved within 21 days, the Director-General shall refer the matter to an Independent Dispute Resolution Process (see Appendix 9).	Not Applicable	Refer to condition 2 a) of schedule 4 above.
5 If the landowner disputes the results of the independent review, either the Proponent or the landowner may refer the matter to the Director-General for resolution. If the matter cannot be resolved within 21 days, the Director-General shall refer the matter to an Independent Dispute Resolution Process (see Appendix 9).	Not Applicable	Refer to condition 2 a) of schedule 4 above.



Requirement	Compliance	Comment	
Schedule 5 ENVIRONMENTAL MANAGEMENT, MONITORING, REPORTING & AUDITING			
Environmental Management Plan			
1	The Proponent shall prepare and implement an Environmental Management Plan for the project to the satisfaction of the Director-General. This plan must:	Yes	Correspondence from Department of Planning to Cleary Bros dated 29 May 2009 Re: Gerroa Sand Quarry – Environmental Management Plan, approving the QEMP dated 21 May 2009 following revision of the EMP in May 2009 (Department of Planning ref: W92/00173) was provided.
	a) be submitted to the Director-General within 6 months of the date of this approval;	Yes	Correspondence from Perram & Partners to Department of Planning, submitting the QEMP dated 5 February 2009 within 6 months of the date of the approval.
	b) be prepared in consultation with the Relevant Agencies;	Yes	DECCW advised the auditor as well as Cleary Bros that they do not review management plans, but were invited to comment on the QEMP. Shoalhaven City Council advised that they were invited to comment on the Quarry EMP. A response was not received from Kiama Municipal Council.
	c) provide the strategic context for environmental management of the project;	Yes	Provided as Section 1 of the QEMP.
	d) identify the statutory requirements that apply to the project;	Yes	Provided as Section 1.6 of the QEMP.
	e) describe in general how the environmental performance of the project would be monitored and managed;	Yes	Provided as Sections 6 and 8 of the QEMP.
	f) describe the procedures that would be implemented to:		
	<ul style="list-style-type: none"> ▶ keep the local community and relevant agencies informed about the construction, operation and environmental performance of the project; 	Yes	Provided as Section 10 of the QEMP.
	<ul style="list-style-type: none"> ▶ receive, handle, respond to, and record complaints; 	Yes	Provided as Section 7 of the QEMP.
	<ul style="list-style-type: none"> ▶ resolve any disputes that may arise during the life of the project; 	Yes	Provided as Section 10.5 of the QEMP.
	<ul style="list-style-type: none"> ▶ respond to any non-compliance; 	Yes	Provided in Section 8 of the QEMP.



Requirement		Compliance	Comment
	<ul style="list-style-type: none"> ▸ manage cumulative impacts; and 	No	A reference to the specific management of cumulative impacts could not be found in the QEMP.
	<ul style="list-style-type: none"> ▸ respond to emergencies; and 	Yes	Provided in Sections 3, 6.16, 6.17 and 6.18 of the QEMP.
	<ul style="list-style-type: none"> g) describe the role, responsibility, authority, and accountability of the key personnel involved in the environmental management of the project. 	Yes	Provided in Section 3 of the QEMP.
Environmental Monitoring Program			
2	The Proponent shall prepare an Environmental Monitoring Program for the project to the satisfaction of the Director-General. This program must be submitted to the Director-General within 6 months of the date of this approval, and consolidate the various monitoring requirements in Schedule 3 of this approval into a single document.	Yes	This program is included in the QEMP. Correspondence from Perram & Partners to Department of Planning, submitting the QEMP dated 5 February 2009 within 6 months of the date of the approval. Correspondence from Department of Planning to Cleary Bros dated 29 May 2009 Re: Gerroa Sand Quarry – Environmental Management Plan, approving the QEMP dated 21 May 2009 following revision of the EMP in May 2009 (Department of Planning ref: W92/00173) was provided.
2A	Within 3 months of the date of this approval, the Proponent shall nominate a suitably qualified and experienced Environmental Officer(s) to perform environmental management duties. The Environmental Officer(s) shall be:	Partial	The Proponent did not nominate an Environmental Officer within 3 months of the date of the conditions of approval. The Court ordered Approval on 2 September 2008. Correspondence from Perram & Partners to the Department of Planning dated 5 February 2009 nominating the name and contact details of the Environmental Officer were provided.
	<ul style="list-style-type: none"> a) responsible for reviewing the monitoring programs required under this consent 	Yes	Provided for in Section 3 of the QEMP. A review of the records maintained by the Environmental Officer also verified this requirement.
	<ul style="list-style-type: none"> b) responsible for considering and advising on matters specified in the conditions of this consent, 	Yes	Provided for in Section 3 of the QEMP.
	<ul style="list-style-type: none"> c) and all other licences and approvals related to the environmental performance and impacts of the development 	Yes	Provided for in Section 3 of the QEMP.
	The Proponent shall notify the Director-General, and Relevant Agencies of the name and contact	Yes	Refer to condition 2 of schedule 5 above.



Requirement		Compliance	Comment
	<p>details of the Environmental Officer, and any changes to that appointment that may occur from time to time.</p> <p>Note: the Environmental Officer(s) duties need not necessarily be limited to environmental management and may be an existing employee with appropriate qualifications.</p>		The Environmental Officer has been employed by Cleary Bros for approximately six years. No changes to this appointment have been made since the initial correspondence with the Department.
Incident Reporting			
3	<p>Within 7 days of detecting an exceedance of the goals/limits/performance criteria in this approval or an incident causing (or threatening to cause) material harm to the environment, the Proponent shall report the exceedance/incident to the Department and any Relevant Agencies. This report must:</p> <ul style="list-style-type: none"> ▶ describe the date, time and nature of the exceedance/incident; ▶ identify the cause or likely cause of the exceedance/incident; ▶ describe what action has been taken to date; ▶ describe the proposed measures to address the exceedance/incident. 	Not Applicable	There have been no reported exceedances.
Annual Reporting			
4	<p>Within 12 months of the date of this approval, and annually thereafter, the Proponent shall submit an AEMR to the Director-General, Relevant Agencies and CCC. This report must:</p>	Yes	<p>The AEMR was provided for the period 1 July 2008 – 30 June 2009. Correspondence from Cleary Bros to the Department (dated 27 August 2009) Re: <i>Gerroa Sand Resource LEC Approval No. 10801 of 2007</i> was provided for the submission of the AEMR (for period to 30 June 2009). Receipt of the AEMR from the Department by email (dated 1 September 2009) was also provided.</p> <p>In addition, correspondence from Cleary Bros to DECCW and Shoalhaven and Kiama Councils providing a copy of the AEMR dated 10 September 2009 was provided.</p>
	a) identify the standards and performance measures that apply to the project	Yes	Performance measures were provided for each of the areas to be monitored in Section 4 of the AEMR.
	b) describe the works carried out in the last 12 months	Yes	Provided in Section 3.3 of the AEMR.
	c) describe the works that will be carried out in the next 12 months	Yes	Provided in Section 3.4 of the AEMR.



Requirement		Compliance	Comment
	d) include a summary of the complaints received during the past year, and compare this to the complaints received in previous years	Yes	Provided in Section 4.5 of the AEMR.
	e) include a summary of the monitoring results for the project during the past year	Yes	Provided as Sections 4 and 5 of the AEMR.
	f) include an analysis of these monitoring results against the relevant <ul style="list-style-type: none"> ▶ impact assessment criteria or limits ▶ monitoring results from previous years ▶ predictions in the environmental assessment (EA) 	Yes	Provided as Section 4 of the AEMR.
	g) include an evaluation of the effectiveness of the environmental protection requirements and procedures	Yes	Provided as Section 4 of the AEMR.
	h) identify any trends in the monitoring results over the life of the project	Yes	Provided as Section 4 of the AEMR.
	i) identify any non-compliance during the previous year	Yes	Provided as Sections 4 and 5 of the AEMR.
	j) describe what actions were, or are being, taken to ensure compliance	Yes	Provided as Sections 4 and 5 of the AEMR.
5	Within 12 months of the date of the commencement of the project, and every 3 years thereafter, unless the Director-General directs otherwise, the Proponent shall commission and pay the full costs of an Independent Environmental Audit of the project. This audit must:	Yes	Works commenced at the site on 6 March 2009. The Independent Environmental Audit was due by March 2010, when GHD was engaged.
	a) be conducted by a suitably qualified, experienced, and independent person(s) whose appointment has been approved by the Director-General	Yes	Approval of L. Moore by the Director-General (ref. Email correspondence from Cleary Bros to L. Moore dated 9 March 2010).
	b) include consultation with the Relevant Agencies	Yes	Included as Section 4 of this audit report.
	c) assess the environmental performance of the project, and its effects on the surrounding environment	Yes	Included as Section 5 of this audit report.
	d) assess whether the project is complying with the relevant standards, performance measures, and statutory requirements	Yes	Compliance with the Conditions of Approval.
	e) review the adequacy of any strategy/plan/program required under this approval	Yes	Covered in Table 1 for individual plans/ programs.
	f) If necessary, recommend measures or actions to improve the environmental performance of the	Yes	Included as Section 6 of this audit report.



Requirement		Compliance	Comment
	<p>project, and/or any strategy/plan/program required under this approval</p> <p>Note: The person(s) conducting the audit must have expertise in flora and fauna assessment as well as quarry rehabilitation.</p>		
6	<p>Within 1 month of completion of each Independent Environmental Audit, the Proponent shall submit a copy of the audit report to the Director-General, Relevant Agencies and CCC, with a response to any of the recommendations in the audit report.</p>	Not Applicable	This requirement is not yet applicable.
7	<p>Within three months of submitting a copy of the audit report to the Director-General, the Proponent shall review and if necessary revise:</p>	Not Applicable	This requirement is not yet applicable.
	<p>a) Each of the environmental management and monitoring strategies/plans/programs in Schedules 3 and 5</p>	Not Applicable	
	<p>b) The sum of the Landscape and Rehabilitation Bond (see Schedule 3). This review must consider:</p> <ul style="list-style-type: none"> ▶ The effects of inflation ▶ Any changes to the total area of disturbance ▶ The performance of the rehabilitation against the completion criteria of the Landscape and Rehabilitation Management Plan <p>to the satisfaction of the Director-General.</p>	Not Applicable	
Community Consultation Committee			
8	<p>Within 3 months of the date of this approval, the Proponent shall establish a Community Consultation Committee (CCC) for the project. The CCC shall:</p>	Partial	<p>The Proponent did not establish a CCC within 3 months of the date of the conditions of approval. Correspondence was sighted from Cleary Bros to the Department dated 6 February 2009 nominating a list of persons for approval for the CCC.</p> <p>Correspondence from the Department to Cleary Bros dated 13 February 2009 approved the nominations for the establishment of the CCC.</p>
	<p>a) Be comprised of:</p> <ul style="list-style-type: none"> ▶ 2 representatives from the Proponent, one of which will be the Environmental Officer nominated under Condition 2A of Schedule 5 	Yes	<p>Two Cleary Bros representatives (including the Environmental Officer) are on the CCC.</p> <p>Representatives from both Kiama and Shoalhaven Councils are on the</p>



Requirement	Compliance	Comment
<ul style="list-style-type: none"> ▶ Representatives of both Kiama Council and Shoalhaven Council (if available) ▶ 1 representative of the Gerroa Environment Protection Society (if available) ▶ At least 2 representatives from the local community 		<p>CCC.</p> <p>The Gerroa Environmental Protection Society is represented on the CCC as well as three local community representatives.</p>
<p>b) Be chaired by an independent chairperson, whose appointment has been approved by the Director-General</p>	Yes	<p>The CCC is chaired by an independent person. Correspondence from the Department to Cleary Bros dated 13 February 2009 approved the nominations for the establishment of the CCC. Approval for his specific appointment was not provided, however, from correspondence to the Department from Cleary Bros, it is understood that the chairperson was on the previous Gerroa consultative committee.</p>
<p>c) Meet at least twice a year, including one meeting shortly after submission of the AEMR under Condition 4 of Schedule 5</p>	Yes	<p>In 2009 the CCC met twice, once on 20 July and again on 7 December. The AEMR was submitted to the relevant authorities on 10 September 2009.</p>
<p>d) Review the proponent's performance with respect to environmental management and community relations</p>	Yes	<p>Minutes from the CCC meeting on 7 December 2009.</p>
<p>e) Undertake regular inspection of the quarry operations</p>	Yes	<p>A site inspection was undertaken following the CCC meeting on 7 December 2009 and is recorded in the minutes.</p>
<p>f) Review community concerns or complaints about the quarry operations, and the Proponent's complaints handling procedures</p>	Yes	<p>Minutes from the CCC meeting on 20 July 2009.</p>
<p>g) Provide advice to:</p> <ul style="list-style-type: none"> ▶ The Proponent on improved environmental management and community relations, including the provision of information to the community and the identification of community initiatives to which the Proponent could contribute ▶ The Department regarding the conditions of this approval ▶ The general community on the performance of the quarry with respect to environmental management and community relations. 	Yes	<p>Minutes from CCC meetings on 20 July and 7 December 2009.</p>



Requirement		Compliance	Comment
	<p>Notes:</p> <ul style="list-style-type: none"> ▶ The CCC is an advisory committee. The Department and other Relevant Agencies are responsible for ensuring that the Proponent complies with this approval ▶ The membership of the CCC should be reviewed on a regular bases (every 3 years) ▶ If possible, an alternate member should be appointed for each of the representatives from the local community 		
9	At its own expense, the Proponent shall:		
	a) ensure that two of its representatives attend CCC meetings	Yes	Cleary Bros representatives were noted as attendees at both CCC meetings held in 2009. There has not been a meeting held in 2010 to date.
	b) provide the CCC with regular information on the environmental performance of the project, including a copy of the AEMR	Yes	It was noted in the December 2009 meeting minutes that CCC representatives had received copies of the AEMR.
	c) Provide meeting facilities for the CCC	Yes	Meetings to date have been held at the Gerroa Boat Fishermans Club. However it was noted that this venue is no longer available. Alternatives had been suggested.
	d) Arrange site inspections for the CCC (if necessary)	Yes	Refer to condition 8 e) of schedule 5 above.
	e) Respond to any advice or recommendations that CCC may have in relation to the environmental management or community relations	Not Applicable	It is understood that advice or recommendations from the CCC has not been received by Cleary Bros. The Cleary Bros representatives provide responses to questions raised at the CCC meetings (refer to meeting minutes on 20 July and 7 December 2009), however, it is further understood that the CCC has not yet endorsed either meeting minutes to date.
	f) Take minutes of the CCC meetings	Yes	Minutes were provided from both meetings held in 2009.
	g) Forward a copy of these minutes to the Director-General, and put a copy of these minutes on its website	Yes	Correspondence from Cleary Bros to Department of Planning dated 20 August 2009, submitting the CCC meeting minutes that took place on 20 July 2009.



Requirement		Compliance	Comment
			Email correspondence from Cleary Bros to Department of Planning dated 18 January 2010, submitting the CCC meeting minutes that took place on 7 December 2009. Further, a copy of these minutes was located on the Cleary Bros website at: http://www.clearybros.com.au/page/projects/gerroa-sandmine-extension/ (dated accessed 22 June 2010).
Access to information			
10	<p>Within 1 month of the approval of any plan/strategy/program required under this approval (or any subsequent revision of these plans/strategies/programs), or the completion of the audits or AEMR required under this approval, the Proponent shall:</p> <ul style="list-style-type: none"> ▶ provide a copy of the relevant document/s to the Relevant Agencies and the CCC; ▶ ensure that a copy of the relevant document/s is made publicly available on its website and at the quarry 	Yes	<p>It is not known whether the Proponent fulfilled this requirement within the 1 month allowed. However, the QEMP and AEMR are available on the Cleary Bros website.</p> <p>The CCC received copies of the QEMP and the AEMR as noted in the meeting minutes.</p> <p>Refer also to condition 4 of schedule 5 above.</p>
11	<p>During the project, the Proponent shall</p> <p>a) make a summary of monitoring results required under this approval publicly available on its website and at the quarry</p>	Partial	<p>A summary of the monitoring results was available on the Cleary Bros website at: http://www.clearybros.com.au/page/projects/gerroa-sandmine-extension/ (dated accessed 22 June 2010). However, the results were not available at the quarry at the time of the inspection.</p>



Table 2 Environmental Protection Licence

Requirement		Compliance	Comment								
2 Discharges to air and water and applications to land											
P1 Location of monitoring/discharge points and areas											
P1.3	<p>The following utilisation areas referred to in the table below are identified in this licence for the purposes of the monitoring and/or the setting of limits for any application of solids or liquids to the utilisation area.</p> <p style="text-align: center;"><i>Water and land</i></p> <table border="1"> <thead> <tr> <th>EPA identification no.</th> <th>Type of monitoring point</th> <th>Type of discharge point</th> <th>Description of location</th> </tr> </thead> <tbody> <tr> <td>1</td> <td></td> <td>Discharge to waters</td> <td>Overflow pipe from the dredge pond as indicated on the site plan attached to the licence information form dated 7/1/2000.</td> </tr> </tbody> </table>	EPA identification no.	Type of monitoring point	Type of discharge point	Description of location	1		Discharge to waters	Overflow pipe from the dredge pond as indicated on the site plan attached to the licence information form dated 7/1/2000.	Yes	Observed.
EPA identification no.	Type of monitoring point	Type of discharge point	Description of location								
1		Discharge to waters	Overflow pipe from the dredge pond as indicated on the site plan attached to the licence information form dated 7/1/2000.								
3 Limit conditions											
L1 Pollution of waters											
L1.1	Except as may be expressly provided in any other condition of this licence, the licensee must comply with section 120 of the Protection of the Environment Operations Act 1997	Yes	Refer to condition M1.1 below.								



Requirement		Compliance	Comment
4 Operating conditions			
O1 Activities must be carried out in a competent manner			
O1.1	Licensed activities must be carried out in a competent manner. This includes:		
	a) the processing, handling, movement and storage of materials and substances used to carry out the activity	Yes	A sample of the site staff training plan/records were provided for the Relief Dredge Operator, Plant Operator/ Trainee Production Manager, Plant Operator and a Plant Operator/ Labourer. The training listed included operation of plant, handling of hazardous substances and dangerous goods. However, the Job Safety Analysis inspected for activities undertaken at the site did not include the identification of environmental risks whilst undertaking these tasks.
	b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.	Yes	The waste generated for offsite disposal by the project includes oil and onsite rubbish from the lunch room. Lunch refuse is stored in a small bin located at the lunch room and moved to a large skip bin located in a designated storage area on the site. There is no fuel storage on site. Refuelling of plant is reportedly undertaken via a tanker delivered to site. Small quantities of oils and other liquids are stored in a concrete bund in the machinery shed. All wastes are reportedly transported to a licenced facility by a Cleary Bros truck.
O2 Maintenance of plant and equipment			
O2.1	All plant and equipment installed at the premises or used in connection with the licenced activity:		
	a) must be maintained in a proper and efficient condition	Yes	Refer to condition 8 a) of schedule 2 of the Court ordered consent in Table 1 above.
	b) Must be operated in a proper and efficient manner	Yes	Refer to condition 8 b) of schedule 2 of the Court ordered consent in Table 1 above.



Requirement		Compliance	Comment
5 Monitoring and recording conditions			
M1 Monitoring records			
M1.1	The results of any monitoring required to be conducted by this licence or a load calculation protocol must be recorded and retained.	Not Applicable	Monitoring is required of the overflow pipe from the dredge pond when discharging. However, a discharge event has reportedly not happened to date.
M1.2	All records required to be kept by this licence must be:		
	a) in a legible form, or in a form that can readily be reduced to a legible form;	Yes	All records reviewed were in a legible form.
	b) kept for at least 4 years after the monitoring or event to which they relate took place; and	Yes	Works commenced at the site on 6 March 2009. Records sighted were inclusive of 2008, 2009 and 2010 and earlier.
	c) produced in a legible form to any authorised officer of the EPA who asks to see them.	Not Determined	The auditor did not assess this requirement.
M1.3	The following records must be kept in respect of any samples required to be collected for the purposes of this licence:		
	a) the date(s) on which the sample was taken;	Partial	Reportedly a site diary maintained by a member of staff (absent during the site inspection) contains information relating to site sampling undertaken by Cleary Bros (including BOD, TSS and pH). The site diary was not observed. Monitoring results from laboratories were provided that included the date of the sample. The monitoring results maintained by the Environmental Officer are not kept at the Gerroa Sand Resource site.
	b) the time(s) at which the sample was collected;	No	The time at which the samples were collected was not included in the records provided. Cleary Bros stated that ALS Environmental have been contracted to do the environmental testing for the Gerroa site and the time at which the samples are taken can be found on a chain of custody document. The chain of custody documents are reportedly kept by the



Requirement		Compliance	Comment
			environmental officer, however, records were not available during the initial site audit and follow up and hence this was unable to be verified.
	c) the point at which the sample was taken; and	Yes	Monitoring records refer to the point at which the sample was taken.
	d) the name of the person who collected the sample.	No	The name of the person who collected the sample was not included in the records provided. Cleary Bros stated that ALS Environmental have been contracted to do the environmental testing for the Gerroa site. The name of the person who took the samples can be found on a chain of custody document. The chain of custody documents are reportedly kept by the environmental officer, however, records were not available during the initial site audit and follow up and hence this was unable to be verified
M4 Recording of pollution complaints			
M4.1	The licensee must keep a legible record of all complaints made to the licensee or any employee or agent of the licensee in relation to pollution arising from any activity to which this licence applies.	Yes	It was stated that no complaints have been received; however, the complaints register was not held on site and could not be reviewed at the time of the site inspection. Following the site inspection a legible complaint record was provided. The complaint was made in 2005 and was in regards to stockpiled material near Beach Road.
M4.2	The record must include details of the following: a) the date and time of the complaint b) the method by which the complaint was made c) any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect d) the nature of the complaint e) the action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant f) if no action was taken by the licensee, the reasons why no action was taken	No	The customer feedback form and customer complaint and feedback register do not provide for the following: b) the method by which the complaint was made; c) any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect; e) The action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; or f) If no action was taken by the licensee, the reasons why no action



Requirement		Compliance	Comment
			was taken.
M4.3	The record of a complaint must be kept for at least 4 years after the complaint was made.	Yes	Refer to M4.1 above.
M4.4	The record must be produced to any authorised officer of the EPA when required.	Not Determined	The auditor did not assess this requirement.
M5 Telephone complaints line			
M5.1	The licensee must operate during its operating hours a telephone complaints line for the purpose of receiving any complaints from members of the public in relation to activities conducted at the premises or by the vehicle or mobile plant, unless otherwise specified in the licence.	No	Cleary Bros stated that is the number for the Cleary Bros main office. However, a reference to a specific telephone complaints line could not be found.
M5.2	The licensee must notify the public of the complaints line telephone number and the fact that it is a complaints line so that the impacted community knows how to make a complaint.	No	Cleary Bros stated that public notification of this telephone line took place in April 2006 through a mass letter drop in the area. However, this could not be verified and reference to a telephone complaints line could not be found.
6 Reporting conditions			
R1 Annual return documents			
R1.1	The licensee must complete and supply to the EPA an Annual Return in the approved form comprising: a) a Statement of Compliance; and b) a Monitoring and Complaints Summary. A copy of the form in which the Annual Return must be supplied to the EPA accompanies this licence. Before the end of each reporting period, the EPA will provide to the licensee a copy of the form that must be completed and returned to the EPA.	Yes	Annual Returns provided for the 2007 – 2008 and 2008 – 2009 reporting periods were in the correct format. DECCW advised that they have received the Annual Return for the 2008-2009 reporting period.
R1.2	An Annual Return must be prepared in respect of each reporting period, except as provided below. Note: the term “reporting period” is defined in the dictionary at the end of this licence. Do not complete the Annual Return until after the end of the reporting period.	Yes	The reporting period is up to 1 February each year. Annual Returns were provided for the 2007 - 2008 and 2008 - 2009 periods. The 2009 – 2010 Annual Return was received by DECCW 26 March 2010 (DECCW website, accessed 22 June 2010).



Requirement		Compliance	Comment
R1.3	<p>Where this licence is transferred from the licensee to a new licensee:</p> <p>a) the transferring licensee must prepare an Annual Return for the period commencing on the first day of the reporting period and ending on the date the application for the transfer of the licence to the new licensee is granted</p> <p>b) the new licensee must prepare an Annual Return for the period commencing on the date the application for the transfer of the licence is granted and ending on the last day of the reporting period.</p> <p>Note: An application to transfer a licence must be made in the approved form for this purpose.</p>	Not Applicable	The licence has not been transferred.
R1.4	<p>Where this licence is surrendered by the licensee or revoked by the EPA or Minister, the licensee must prepare an Annual Return in respect of the period commencing on the first day of the reporting period and ending on:</p> <p>a) in relation to the surrender of a licence - the date when notice in writing of approval of the surrender is given OR</p> <p>b) in relation to the revocation of the licence - the date from which notice revoking the licence operates.</p>	Not Applicable	The licence has not been surrendered or revoked by the EPA or Minister.
R1.5	The Annual Return for the reporting period must be supplied to the EPA by registered post not later than 60 days after the end of each reporting period or in the case of a transferring licence not later than 60 days after the date the transfer was granted (the 'due date').	Not Determined	Annual Returns were sighted for the 2007 – 2008 and 2008 – 2009 reporting periods, however, it was not determined whether these were provided to the EPA in accordance with this requirement.
R1.7	The licensee must retain a copy of the Annual Return supplied to the EPA for a period of at least 4 years after the Annual Return was due to be supplied to the EPA.	Yes	For the Annual Returns that have been prepared, a copy has been retained.
R1.8	<p>Within the Annual Return, the Statement of Compliance must be certified and the Monitoring and Complaints Summary must be signed by:</p> <p>a) the licence holder; or</p> <p>b) by a person approved in writing by the EPA to sign on behalf of the licence holder</p>	Yes	For the Annual Returns that have been prepared, they were signed by the licence holder.
<p>R2 Notification of environmental harm</p> <p>Note: The licensee or its employees must notify the EPA of incidents causing or threatening material harm to the environment as soon as practicable after the person becomes aware of the incident in</p>			



Requirement		Compliance	Comment
accordance with the requirements of Part 5.7 of the Act.			
R2.1	Notification must be made by telephoning the Environment Line service on 131 555.	Not Applicable	No known incidents have occurred.
R2.2	The licensee must provide written details of the notification to the EPA within 7 days of the date on which the incident occurred.	Not Applicable	No known incidents have occurred.
R3 Written report			
R3.1	Where an authorised officer of the EPA suspects on reasonable grounds that: <ul style="list-style-type: none"> a) where this licence applies to premises, an event has occurred at the premises b) where this licence applies to vehicles or mobile plant, an event has occurred in connection with the carrying out of the activities authorised by this licence, and the event has caused, is causing or is likely to cause material harm to the environment (whether the harm occurs on or off premises to which the licence applies), the authorised officer may request a written report of the event. 	Not Determined	The auditor did not assess this requirement.
R3.2	The licensee must make all reasonable inquiries in relation to the event and supply the report to the EPA within such time as may be specified in the request.	Not Determined	The auditor did not assess this requirement.
R3.3	The request may require a report which includes any or all of the following information: <ul style="list-style-type: none"> a) the cause, time and duration of the event b) the type, volume and concentration of every pollutant discharged as a result of the event c) the name, address and business hours telephone number of employees or agents of the licensee, or a specified class of them, who witnessed the event d) the name, address and business hours telephone number of every other person (of whom the licensee is aware) who witnessed the event, unless the licensee has been unable to obtain that information after making reasonable effort e) action taken by the licensee in relation to the event, including any follow-up contact with any complainants f) details of any measure taken or proposed to be taken to prevent or mitigate against a 	Not Determined	The auditor did not assess this requirement.



Requirement		Compliance	Comment
	recurrence of such an event g) any other relevant matters.		
R3.4	The EPA may make a written request for further details in relation to any of the above matters if it is not satisfied with the report provided by the licensee. The licensee must provide such further details to the EPA within the time specified in the request.	Not Determined	The auditor did not assess this requirement.
General Conditions			
G1 Copy of licence kept at the premises			
G1.1	A copy of this licence must be kept at the premises to which the licence applies.	Yes	A copy of the licence is kept as Appendix B in the QEMP.
G1.2	The licence must be produced to any authorised officer of the EPA who asks to see it.	Not Determined	The auditor did not assess this requirement.
G1.3	The licence must be available for inspection by any employee or agent of the licensee working at the premises.	Yes	Refer to G1.1 above.



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Document Status

Rev No.	Author	Reviewer		Approved for Issue		
		Name	Signature	Name	Signature	Date
DRAFT	L. Moore	S. Trahair		DRAFT		28.05.2010
1	L. Moore			DRAFT		22.06.2010
2	L. Moore	S. Trahair	<i>Sue Trahair</i>	S. Trahair	<i>Sue Trahair</i>	05.07.2010