



Report

Independent Third Party Compliance Audit

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1 INTRODUCTION

1.1 General

URS Australia Pty Ltd (URS) was commissioned by Hanson Construction Materials Pty Ltd (Hanson) to undertake an environmental compliance audit of the Tweed Sand facility, located in Cudgen, New South Wales.

URS understands that Hanson requires an independent third party audit that satisfies the conditions of the site Development Consent DA152-6-2005 (dated 31 July 2006) to the satisfaction of the NSW Department of Planning (DoP).

Specifically Condition 6, Schedule 5 (Environmental Management, Monitoring, auditing and Reporting), which states:

Within 2 years of the date of consent, and 4 years thereafter, unless the Director-General directs otherwise, the Applicant shall commission and pay the full cost of an Independent Environmental Audit of the development. The audit must:

- Be conducted by suitably qualified, experienced and independent experts whose appointment has been endorsed by the Director-General
- Assess the environmental performance of the development and its effects on the surrounding environment
- Assess whether the development is complying with the relevant standards, performance measures and statutory requirements
- Review the adequacy of the Applicants Environmental Management Strategy and environmental management strategies/plans/programs; and if necessary
- Recommend measures or actions to improve the environmental performance of the development, and or the environmental management and monitoring systems.

The purpose of this audit is to comply with the requirements of this condition (audit findings are presented in Appendix A).

In preparation of this audit, Hanson has applied to the DoP for endorsement of the URS audit team. This endorsement was provided by the DoP (to Hanson) on 30 October 2013, thus complying with part a of Condition 6, Schedule 5 of the Development Consent. A copy of this endorsement is provided in Appendix B along with CVs of the audit team.

URS established a highly experienced and qualified audit team to undertake the work. The auditor was led by Rob Storrs, a qualified RABQSA Environmental Auditor and carried out by David Curwen. Audit team details are provided in Table 1-1.

Table 1-1 Audit team details and experience

Personnel	Qualifications	Role	Experience (years)
Rob Storrs	BEnvSc (Hons), RABQSA certified	Project Director Lead Auditor	19
David Curwen	BSc(Hons), MSc	Project Manager Environmental Auditor	18

1.2 Objectives

The objectives of the audit were to:

- Assess the conformance of the facility with Development Consent DA152-6-2005
- Assess the conformance of the facility with Environmental Protection Licence 11453 (EPL)
- Assess the conformance of the facility with the other environmental permits and licences
- Provide recommendations, where applicable, for achieving compliance with the permits and licences listed above.

It is noted that whilst the EPL 11453 licensee is Hanson Construction Materials Pty Ltd., the applicant for DA 152-6-2005 is listed as P Guinane Pty Ltd.

SCOPE

The scope of work undertaken by URS as part of the environmental compliance audit of the site included the following:

- Review of the DC, EPL and other permits and licences
- Site inspection to observe the conditions and current activities on the site
- Interviews with key personnel with environmental management responsibilities
- Review of selected documentation
- Preparation of a report presenting the findings of the audit.

As outlined in Condition 6, Schedule 5 of the Development Consent (parts b – e), the audit must:

- b) Assess the environmental performance of the development and its effects on the surrounding environment
- c) Assess whether the development is complying with the relevant standards, performance measures and statutory requirements
- d) Review the adequacy of the Applicants Environmental Management Strategy and environmental management strategies/plans/programs; and if necessary
- e) Recommend measures or actions to improve the environmental performance of the development, and or the environmental management and monitoring systems.

The requirement for part e, was dependent on the findings from parts b – d.

3 METHODOLOGY

3.1 Approach

The audit was conducted in accordance with the requirements of AS/NZS ISO 19011:2003 Guidelines for quality and/or environmental management systems auditing.

The audit approach was developed to systematically determine applicable conditions based on quarrying activities undertaken by Hanson at the Altona Rad, Cudgen site.

The applicability and compliance of the permit conditions has then been assessed through document review, interviews and a site visits an assigned a level of compliance as defined below:

- Compliant: Evidence provided documenting that all aspects of the condition and sub-conditions have been met by Hanson and/or its subcontractors¹
- Partial compliance: A condition containing applicable multiple sub-conditions that have not all been met by Hanson and/or its subcontractors
- Non-compliant: The condition as a whole has not been met, either through evidence showing discrepancy or inability to provide objective evidence by Hanson and/or its subcontractors
- Not Applicable: Conditions that either:
 - did not require some progress towards completion and compliance at the time of the audit (e.g. where a requirement is due after three years)
 - where the activities specified in the condition are not carried out by Hanson² (i.e. blasting)
 - works had not commenced at the time of the audit
 - conditions that require no action from Hanson (e.g. statements, recommendations or where action is required by regulatory bodies).

3.2 Site Visit

A site inspection was carried out on 12 February 2014 by David Curwen of the URS Brisbane office accompanied by John McQueen of Hanson.

3.3 Site Description

The Hanson Tweed Sand site is located approximately one kilometre west of the village of Cudgen, at the southern end of the Gold Coast, in northern NSW. Surrounding land use is predominantly agricultural, with scattered residential properties. A municipal waste water treatment works is situated approximately 150 metres north of the site.

Operations at the site comprise dredge extraction of sand and onsite processing, stockpiling and dispatch. Upon commencement of sand extraction within a new area/phase, an excavator

¹ In some cases, evidence required is sufficiently old to exceed the expectations for data retention. In these cases, where evidence is not available for audit, it is assumed that the site is compliant.

² Note: where a condition requires an action from a third party to initiate it (e.g. receipt of a complaint), this is an applicable condition however, the actions required in response to a complaint may be not applicable if no complaints have been received.

or loader is used to strip vegetation and topsoil from the area in which material will be extracted. Typically, stripped topsoil is then used to construct containment bunds or is stockpiled onsite for future use. Clearing of expansion areas is conducted in a staged nature to minimise harm to the environment.

All extraction of materials from below the water table is conducted via dredge. Following extraction, materials are pumped to the processing plant which consists of a single deck wash screen with density tank and two cyclones for separation of fines. Following processing, finished products are stored in identifiable stockpiles in allocated areas within the Quarry. Ancillary operations include fuel and oil storage, equipment maintenance and operation of a small compressor.

3.4 Environmental Permits

Conformance with the following environmental permits and licences held by the site was assessed during the audit³:

- Development Consent DA152-6-2005 - issued by NSW Department of Planning July 2006
- Environmental Protection Licence 11453 - issued by NSW Environment Protection Authority July 2007, due for review July 2009.

Copies of these permits are provided in Appendices C and D.

3.5 Audit checklist

Prior to the audit, a checklist was prepared detailing the information to be collated against each conditions of the permits to be audited. The checklist headings are:

- Section (of the permit)
- Reference (of the specific condition)
- Condition (wording from the permit)
- Evaluation (assessment during the audit)
- Evidence (reference for evidence provided)
- Compliance (rating applied to findings (see Section 3.1))
- Comment (additional comment where applicable).

The completed checklists for the two Hanson permits are provided in Appendix A and a summary of the findings is provided in Section 4.0.

³ Conformance with conditions relating to the adequacy of design or construction standards or specifications was not assessed

4 AUDIT RESULTS

4.1 Development Consent DA152-6-2005

4.1.1 *Audit findings overview*

The audit found that of the 74 conditions, 10 (13.5%) were not applicable. Of the applicable conditions, 79.7% were compliant. Further details are provided on non-compliant conditions in Section 4.2.2.

Table 4-1 provides a summary of the compliance rating identified during the audit.

Table 4-1 Development Consent DA 152-6-2005 compliance summary

Condition Rating	Audit Finding
Not Applicable (N/A)	10
Compliant	51
Non-compliant	6
Partial	7
Total number of conditions	74

4.1.2 *Summary of non-compliances*

Details of the non-compliant conditions identified during the audit are provided in Table 4-2.

Table 4-2 Summary of non-compliance identified during the audit

Condition	Category	Further information	Observation
Schedule 3, Condition 1	Identification of Boundaries	Appendix A, Page 1	Limits of approved extraction were not identifiable during the site visit
Schedule 3, Condition 6	Operating Hours	Appendix A, Page 2	Quarry Manager advised that movements of pre-loaded vehicles occasionally occur prior

Condition	Category	Further information	Observation
			to 07:00
Schedule 3, Condition 30	Long Term Management Strategy	Appendix A, Page 4	A Long Term Management Strategy was not located for review.
Schedule 3, Condition 41	Dangerous Goods	Appendix A, Page 5	3,500 litre diesel tank bund rear wall does not appear to be impervious and the 1,600 litre diesel tank looked badly corroded and the drainage point to the lake was open.
Schedule 5, Condition 6	Independent Environmental Audit	Appendix A, Page 7	Third party audit required by August 2013 (4 years from previous audit).
Schedule 5, Condition 7	Independent Environmental Audit	Appendix A, Page 7	No evidence of submission of the 2009 audit report.

4.2 Environmental Protection Licence 11453

4.2.1 Audit findings overview

The audit found that of the 57 conditions, 21 (36.6%) were not applicable. Of the applicable conditions, 86.1% were compliant. Further details are provided on non-compliant conditions in Section 4.2.2.

Table 4-3 provides a summary of the compliance rating identified during the audit.

Table 4-3 Environment Protection Licence 11453 compliance summary

Condition Rating	Audit Finding
Not Applicable (N/A)	21
Compliant	31
Non-compliant	2
Partial	3
Total number of conditions	57

4.2.2 Summary of non-compliances

Details of the non-compliant conditions identified during the audit are provided in Table 4-4.

Table 4-4 Summary of non-compliance identified during the audit

Condition	Category	Further information	Observation
O1.2	Operating	Appendix A, Page 9	Quarry Manager advised that movements of pre-loaded vehicles occasionally occur prior to 07:00
R1.8	Reporting	Appendix A, Page 10	The Statement of Compliance (within the Annual Return) is not certified.

4.3 Environmental Management

During the site visit carried as part of the audit, it was clear that the site management take a great deal of pride in the site. The efforts in grounds management and the presentation of the site were apparent and no evidence of environmental harm was noted during the site visit.

As part of the desktop assessment and management plan review, it is clear that the potential impacts from the operation are limited to the water environment and that through support from external suppliers, Hanson has implemented a fit for purpose environmental management plan. The link between the management plans and the permit requirements would benefit from review, as would the permits⁴. It is noted that DA 152-6-2005 is still in the name of P Guinane Pty. Ltd (a ti tree grower).

⁴ It is noted that EPL 11453 is due for review in July 2014.

5 CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

A number of common conclusions were identified during the audit, namely:

- There are inconsistencies between the DA and EPL (i.e. operating hours, production limits and noise levels)
- Due to the age of the permits, some of the requirements require evidence which is in excess of standard data retention times (i.e. over 7 years), improved record keeping would have improved the findings of this audit
- Whilst evidence was not available against some conditions (and therefore considered non-compliant), the auditor felt that it was likely that the requirements had been met at the time
- During the site visit, the attention to site management was noted as being high. The grounds and surrounds were very well presented
- The Development Consent (DA 152-6-2005) is in the name of a different company and should be transferred to Hanson as soon as possible.

5.2 Recommendations

Table 5-1 Recommendations identified

Condition reference	Recommendation
DA: Schedule 3, Condition 1	The boundaries of extraction should be clearly marked out by a registered surveyor, these markings should be permanently retained and a survey plan of the boundaries provided to the Director General.
DA: Schedule 3, Condition 6	Operations should not commence prior to 07:00 without approval. This includes movement off-site of pre-loaded vehicles.
DA: Schedule 3, Condition 18	The water balance included in the Soil and Water Management Plan should include details of waters extracted, transferred and discharged by the quarry (e.g. irrigation and dust suppression). The water balance should also include consideration of water minimisation measures (recognising there is minimal water demand on site).
DA: Schedule 3, Condition 21	The Surface Water Monitoring Program included in the Soil and Water Management Plan should include a program to monitor bank and bed stability of the dredged area.

Condition reference	Recommendation
DA: Schedule 3, Condition 22	The Ground Water Monitoring Program included in the Soil and Water Management Plan should include a protocol for the investigation, notification and mitigation of identified exceedances of the groundwater impact assessment criteria.
DA: Schedule 3, Condition 39	Waste arisings across the site should be monitored to identify trends and opportunities for waste minimisation.
DA: Schedule 3, Condition 41	Review diesel tank storage and bunding arrangements in line with AS 1940, specifically (but not limited to) the integrity of the 1,600 litre tank and the bund rear wall of the 4,500 litre tank.
DA: Schedule 5, Condition 5	Future annual reports (under DA 152-6-2005) should include an assessment of monitoring results (from that period) against the predictions in the EIS.
DA: Schedule 5, Condition 6	Ensure the next audit in response to this condition is carried out prior to 12 February 2018 and that Director General approval is provided. This should be recorded as evidence for future audits.
DA: Schedule 1, Condition 1	Ensure audits reports are provided to the Director General in a timely fashion. It is noted that URS were commissioned for this audit over two months prior to performing the audit, meaning it was not possible to comply with this requirement during the 2014 audit. Should Hanson be discussing updates to the licence, it is recommended that this wording in this condition is changed to "Within three months of <i>completing</i> ..."
DA: Schedule 5, Condition 9	It is recommended that Hanson seek Director General approval for the appointment of Dr John Griffin as independent chair of the Community Consultative Committee.
DA: Schedule 5, Condition 11	It is recommended that approved management plans are provided to Community Consultative Committee members immediately following Director General approval. Alternatively, seek amendment of the licence to accord with dissemination of the reports through the Community Consultative Committee.
EPL 11453, O1.2	See DA: Schedule 3, Condition 6
EPL 11453, M1.3	Sample recording should include the time the sample was taken

Condition reference	Recommendation
	and the name of the person collecting the sample.
EPL 11453, M4.2	Complaints recording should include the time the complaint was made, the method by which the complaint was received and the details of the complainant. The requirements of this condition are replicated in the front of the complaints log; it is recommended the complaints log is reformatted into a tabular form with a column for each condition requirement to aid data gathering.
EPL 11453, R1.1	Future annual reports (under the EPL) should include Statement of Compliance.
EPL 11453, R1.8	Statement of Compliance must be certified and the Monitoring and Complaints Summary must be signed by the licence holder or a person approved by the licensing authority to sign on behalf of the licence holder.

LIMITATIONS

URS Australia Pty Ltd (URS) has prepared this report in accordance with the usual care and thoroughness of the consulting profession for the use of Hanson Construction Materials Pty Ltd. and only those third parties who have been authorised in writing by URS to rely on this Report.

It is based on generally accepted practices and standards at the time it was prepared. No other warranty, expressed or implied, is made as to the professional advice included in this Report.

It is prepared in accordance with the scope of work and for the purpose outlined in the contract dated 5 December 2013.

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It is the responsibility of third parties to independently make inquiries or seek advice in relation to their particular requirements and proposed use of the site.

Any estimates of potential costs which have been provided are presented as estimates only as at the date of the Report. Any cost estimates that have been provided may therefore vary from actual costs at the time of expenditure.



APPENDIX A AUDIT FINDINGS CHECKLIST

Section	Ref	Condition (Development Consent DA 152-6-2005)	Evaluation	Evidence	Compliant
Schedule 2	1	The Applicant shall implement all practicable measures to prevent and/or minimise any harm to the environment that may result from the construction, operation, or rehabilitation of the development	Compliant. Assessment made from interview with Quarry Manager, site tour and review of complaints and incidents logs carried out	Interview with Quarry Manager, site tour and review of complaints and incidents logs carried out	Y
	2	The Applicant shall carry out the development generally in accordance with: a) DA No. 152-6-2005; b) EIS titled Proposed Expansion of Sand Quarry at Crescent Street Cudgen, dated June 2005; and c) conditions of this consent	Audit findings show the development to be generally in compliance with the approvals in place and the EIS addressing the expansion into areas 3 and 4.	Audit findings, interview with Quarry Manager and site tour	Y
	3	If there is any inconsistency between the above, the conditions of this consent shall prevail to the extent of the inconsistency	Noted.	N/A	N/A
	4	The Applicant shall comply with any reasonable requirements of the Director-General arising from the Department's assessment of: a) any reports, plans or correspondence that are submitted in accordance with this consent; and b) the implementation of any actions or measures contained in these reports, plans or correspondence	Noted.	N/A	N/A
	5	Within 18 months of this consent, or as otherwise approved by the Director-General, the Applicant shall surrender all previous development consents for the quarry and recreational fishing facility, to the satisfaction of the Director-General	Evidence of surrender sighted (letter from NSW Government).	Letter: Surrender of Development Consents 0041/2001DA and T4/2562 - Tweed Sand Quarry, 19/5/09 (ref DA1460/325 Pt1 0041/2001DA & T4/2562) from Lindsay McGavin, Manager Development Assessment.	Y
	6	This consent shall lapse on 1 July 2036	Noted.	N/A	N/A
	7	This consent is granted for Phases 3 and 4 of the quarry extension only, as described in the EIS, and shown conceptually on the plan in Appendix 1	Noted. Areas under development align to EIS.	Site inspection and interview with Quarry Manager.	Y
	8	The Applicant shall not produce or transport more than 150,000 cubic metres of sand products per year from the site	Using DoP previously agreed density figure (1.9te/m ³ - see 2009 audit report) shows 150,000m ³ equates to 285,000te. Recent product exports for 2013 and 2012 are within this mass.	Annual returns to NSW Govt (Trade and Investment Resources and Energy).	Y
	9	The Applicant shall ensure that heavy vehicle movements (in and out) associated with the development do not exceed: a) 20 per hour (peak); b) 200 per day (peak); and c) 80 per day (rolling quarterly average).	No evidence to demonstrate compliance. However anecdotal evidence based on loading times for a single loader indicated that it is not possible to exceed these movement limits with a single loader.	Site inspection and interview with Quarry Manager.	Y
	10	The Applicant shall ensure that any new buildings and structures, and any alterations or additions to existing buildings and structures, are constructed in accordance with the relevant requirements of the BCA.	No buildings added by current owners	Site inspection and interview with Quarry Manager.	Y
	11	The Applicant shall ensure that all demolition work is carried out in accordance with AS 2601-2001: <i>The Demolition of Structures</i> , or its latest version	N/A	N/A	N/A
	12	The Applicant shall ensure that all plant and equipment at the site, or used in connection with the development, are: a) maintained in a proper and efficient condition; and b) operated in a proper and efficient manner	All plant appeared to be in a proper and efficient condition. Light vehicles serviced off-site (local Toyota dealer), heavy equipment services every 250 hours by external contractor. Also annual plant inspection report and 5-yearly external assessment	Annual plant inspection sighted (2/12/13) and follow-up on findings noted. 5-yearly report also sighted (Dutton and Hede, Aug 2013, Ref: HA366).	Y
	13	Prior to carrying out any development, or as otherwise agreed by Council, the Applicant shall pay Council \$5,046.30 in accordance with Council's <i>Tweed Road Contributions Plan</i>	No evidence of payment. Permit in name of previous owner (P Guinane Pty Ltd). Assumed payment made prior to ownership. However previous audits carried out by third parties claim to have sighted evidence of payment.	No requirement to retain records for this length of time. Response from Erin Holt states receipt was sighted during an audit shortly after payment was made.	Y
Schedule 3	1	Within 1 month of the date of approval of the Rehabilitation and Landscape Management Plan (see condition 24 below), the Applicant shall: a) engage a registered surveyor to mark out the boundaries of the approved limits of extraction; b) submit a survey plan of these boundaries to the Director-General; and c) ensure that these boundaries are clearly marked at all times in a permanent manner that allows operating staff and inspecting officers to clearly identify those limits	a) Land surveyed but not marked out (markers not identified during site visit). b) No evidence of submission c) no identified during site visit.	None available.	N
	2	The Applicant shall maintain a minimum buffer of 10 metres to the boundaries of the site. No extraction shall occur within this buffer. The buffer may be used for minor drainage works, access, bunds and landscaping only	Buffer noted during site tour.	Site inspection and interview with Quarry Manager.	Y

Section	Ref	Condition (Development Consent DA 152-6-2005)	Evaluation	Evidence	Compliant
	3	The Applicant shall vary the buffer distance to the site boundary to achieve a stable, natural-looking final lake design with curved lake boundaries, to the satisfaction of the Director-General	Noted. Satellite mapping shows northern excavated areas to have curved natural boundaries. No evidence of Director-General review.	Satellite mapping (confirmed using internet mapping, 17/3/14).	Y
	4	The Applicant shall ensure that noise generated by the development does not exceed the criteria specified in Table 1.	No noise complaints noted in the last 5 years.	Complaints register sighted.	Y
	5	The Applicant shall take all reasonable and feasible measures to ensure that the noise generated by the development combined with the noise generated by other industrial development does not exceed the following amenity criteria on any privately owned land, to the satisfaction of the Director-General: <ul style="list-style-type: none"> • LAeq(11 hour) 50 dB(A) - Day; • LAeq(4 hour) 45 dB(A) - Evening; and • LAeq(9 hour) 40 dB(A) - Nigh 	Minimal noise noted during site visit. Water treatment plant on site boundary noted - limited noise and considered limited potential for cumulative noise impacts.	Site visit and complaints register sighted.	Y
	6	The Applicant shall comply with the operating hours in Table 2.	Quarry Manager noted occasionally, pre-loaded vehicles are allowed to exit the site prior to 07:00.	Site inspection and interview with Quarry Manager.	N
	7	The following activities may be carried out at the premises outside the hours specified in Table 2: a) the delivery of materials as requested by Police or other authorities for safety reasons; and b) emergency work to avoid the loss of lives, property and/or to prevent environmental harm. In such circumstances the Applicant shall notify DEC and affected residents prior to undertaking the works, or within a reasonable period in the case of emergency	Noted.	N/A	N/A
	8	Within 3 months from the date of this consent, the Applicant shall prepare (and following approval implement) a Noise Monitoring Program for the development. In consultation with DEC, and to the satisfaction of the Director-General. This program must include a combination of attended and unattended noise monitoring, and a noise monitoring protocol for evaluating compliance with the noise impact assessment criteria in this consent	No evidence of approval of NMP. NMP submitted in 2010 and rejected pending amendment. No evidence provided relating to resubmission.	None available. No requirement to retain records for this length of time.	Y
	9	The Applicant shall ensure that dust generated by the development does not cause additional exceedances of the criteria listed in Tables 3 to 5 at any residence on, or on more than 25 percent of, any privately owned land	No dust complaints noted in the last 5 years.	Complaints register sighted.	Y
	10	Within 3 months from the date of this consent, the Applicant shall prepare (and following approval implement) an Air Quality Monitoring Program for the development, in consultation with DEC, and to the satisfaction of the Director-General. This program must include an air monitoring protocol for evaluating compliance with the air quality impact assessment criteria in this consent	No evidence of approval of AQMP. Permit in name of previous owner (P Guinane Pty Ltd). Assumed submission and approval made prior to ownership. AQMP submitted and approved in 2010.	None available. No requirement to retain records for this length of time.	Y
	11	4The Applicant shall not discharge any surface water from active dredge and fines return ponds. The Applicant must ensure that any pond subject to dredging, or containing turbid water due to recent dredging, is maintained and operated to prevent discharges of any surface water from these ponds	Discharges are not made from the dredge (or fines return) pond.	Audit findings, interview with Quarry Manager and site tour	Y
	12	The Applicant shall aim to meet the water quality objectives in Table 6 for water in the dredge ponds and in (shallow) groundwater surrounding the dredge ponds, unless otherwise approved or directed by the Director-General	Review of monitoring data carried out. All compliant except salinity which was missing.	G&S, October 2013 (ref 10026-Sept 13-WQR_KBIF.doc)	Y
	13	The Applicant shall ensure that all excavated potential acid sulfate soil fines material is returned back to below the water table as soon as possible to prevent oxidation. No potential acid sulfate soil shall be removed from the site, unless adequately neutralised in accordance with methods approved under the Soil and Water Management Plan (see condition 17 below).	All fines/rejects are returned to the lake immediately.	Visual inspection of operations.	Y
	14	The Applicant shall ensure that all potential acid sulfate soil fines material is discharged into the pond at a depth of no less than 3 metres from the water surface, and that all fines are deposited to a final depth of at least 8 metres from the water surface, unless an alternative method(s) is approved by the DNR and the Director-General	Hydrographical surveys of the lake are carried out annually to assess where the fines can be returned to. Regular visual inspections are carried out as well as weekly perimeter checks.	Visual inspection of operations and interview with Quarry Manager.	Y
	15	The Applicant shall cease dredging and processing activities not less than 24 hours prior to the commencement of overflow from any dredge pond. No dredging or processing shall occur when the dredge ponds are overflowing	During flood scenarios, it is considered unsafe to operate and all dredging activities cease. During 2013 flood event, dredging cease >24 hours before overflow commenced.		Y
	16	The Applicant shall ensure that the flood storage capacity of the site is no less than the pre-existing flood storage capacity at all stages of the development. Details of the available flood storage capacity shall be reported in the AEMR	Excavation does not reduce flood storage of site.	Site visit and interview with Quarry Manager.	Y
	17	Within 6 months of the date of this consent, the Applicant shall prepare (and following approval implement) a Soil and Water Management Plan for the development, in consultation with the DEC, DNR and Council, and to the satisfaction of the Director-General. This plan must be prepared by a qualified hydrologist / hydrogeologist and include: a) a Water Balance; b) a Soil and Water Management Plan; c) a Blue-Green Algae Management Plan; d) a Surface Water Monitoring Program; and e) a Ground Water Monitoring Program	Compliant (letter from NSW Government, 15/2/11) confirming Management Plan is fit for purpose (file ref 10/12604, letter ref 11/01509).	Soil and Water Management Plan, G&S, February 2010 (ref: GJ0063_SWMP_REH10F.doc)	Y

Section	Ref	Condition (Development Consent DA 152-6-2005)	Evaluation	Evidence	Compliant
	18	The Water Balance shall include: a) details of all water extracted, transferred, used and/or discharged by the quarry; b) the source of all water collected or stored on the site, including rainfall, stormwater and groundwater; and c) measures to minimise water use by the development	a) Non-compliant. Water used on-site for irrigation and dust suppression is not monitored. b) Compliant. Direct rainfall and run-off included in water balance c) Non-compliant. Water use on site is minimal. Water extracted with dredging is returned to the lake with the fines and screenings sump however measures to minimise water use were not noted in the water balance.	Soil and Water Management Plan, G&S, February 2010 (ref: GJ0063_SWMP_REH10F.doc)	Partial
	19	The Soil and Water Management Plan shall: a) be consistent with the requirements of the Department of Housing's Managing Urban Stormwater: Soils and Construction manual, the NSW Acid Sulfate Soil Advisory Committee's Acid Sulfate Soil Manual, and Council's codes including its Code of Practice for Soil and Water Management on Construction Sites; b) describe the location, function, and capacity of soil and water management and control structures during construction, stabilisation and operational stages; c) identify construction and operational activities that could cause soil erosion, sedimentation or generation of acid sulfate soils; d) describe measures to minimise soil erosion and the potential for the transport of sediment to downstream waters; e) define procedures for managing the potential acid sulfate soils on the site; f) define procedures for managing water releases from the site; and g) define procedures for the maintenance of soil and water management structures over time	Compliant (letter from NSW Government, 15/2/11) confirming Management Plan is fit for purpose (file ref 10/12604, letter ref 11/01509). The auditor reviewed the S&WMP and noted: a) Compliant. Report states compliance with manual b) Compliant. c) Compliant (s4.8 erosion control discusses areas in Implementation Strategy, 4.12 makes reference to sand extraction and processing operations. d) Compliant (s4.8) e) Compliant (s4.10) f) Compliant (s4.13) g) Compliant (s4.15)	Soil and Water Management Plan, G&S, February 2010 (ref: GJ0063_SWMP_REH10F.doc)	Y
	20	The Blue-Green Algae Management Plan shall: a) be prepared by a suitably qualified blue-green algae expert, whose appointment has been approved by the Director-General; b) be consistent with extant guidelines for blue-green algae management including the NHMRC's Guidelines for Managing Risks in Recreational Water; c) include a detailed recovery plan that aims to reduce algae levels to meet the water quality objectives in Table 6 within a reasonable timeframe; d) describe the measures that would be implemented to prevent and control the sources of algal blooms over the short, medium and long term include reasonable and feasible measures to reduce nutrient levels in the pond/s over the short, medium and long term, and include interim water quality targets for nutrients based on continual improvement and established water quality objectives for the Tweed catchment; and f) define procedures for the management and notification of identified algal blooms	The auditor reviewed the Blue Green Algae Management Plan and noted: a) Compliant (by virtue of letter from NSW Government, 15/2/11) confirming Management Plan is fit for purpose (file ref 10/12604, letter ref 11/01509) b) Compliant. Stated (pg. 1) c) Compliant (s7) d) Compliant (s7) e) Compliant (pg. 40) f) Compliant (s4.13) g) Compliant (documented and highly visible around site).	Letter from NSW Government, 15/2/11) confirming Management Plan is fit for purpose (file ref 10/12604, letter ref 11/01509)	Y
	21	The Surface Water Monitoring Program shall include: a) detailed baseline data on surface water flows and quality in water bodies that could potentially be impacted by the quarry; b) surface water impact assessment criteria; c) a program to monitor surface water flows and quality; d) a program to manage water releases from the site; e) a program to monitor bank and bed stability; and f) a protocol for the investigation, notification and mitigation of identified exceedances of the surface water impact assessment criteria.	The auditor reviewed the Soil and Water Management Plan and noted: a) Compliant (S4.13) b) Compliant (S4.13) c) Compliant (S4.13) d) N/A e) Non-compliant f) Compliant (S4.13)	Soil and Water Management Plan, G&S, February 2010 (ref: GJ0063_SWMP_REH10F.doc)	Partial
	22	The Ground Water Monitoring Program shall include: a) detailed baseline data on ground water levels and quality, based on statistical analysis; b) ground water impact assessment criteria; c) a program to monitor ground water levels and quality; d) a program to monitor ground water level effects on vegetation, and on ground water supply to adjoining properties; and e) a protocol for the investigation, notification and mitigation of identified exceedances of the groundwater impact assessment criteria	The auditor reviewed the Soil and Water Management Plan and noted: a) Compliant (Appendix 2) b) Compliant (S4.16) c) Compliant (S4.16) d) Compliant (S4.16) e) Non-compliant	Soil and Water Management Plan, G&S, February 2010 (ref: GJ0063_SWMP_REH10F.doc)	Partial
	23	The Applicant shall progressively rehabilitate the site to the satisfaction of the Director-General	Rehabilitation underway. Rehabilitation Concept Plan submitted in Annual Report (2012/13). Recent award received for rehabilitation works.	Site visit and Annual Report (2012/13)	Y

Section	Ref	Condition (Development Consent DA 152-6-2005)	Evaluation	Evidence	Compliant
	24	Within 6 months of the date of this consent, the Applicant shall prepare (and following approval implement) a Rehabilitation and Landscape Management Plan for the development to the satisfaction of the Director-General. This plan must: a) include a detailed final landform concept plan; b) describe in general the short, medium, and long-term measures that would be implemented to rehabilitate and stabilise the site; c) describe in detail the measures that would be implemented over the next 5 years to rehabilitate and stabilise the site; d) describe how the performance of these measures would be monitored over time; e) set completion criteria for the rehabilitation and stabilisation of the site (including appropriate water quality criteria); and f) include a Vegetation Clearing Protocol, Landscape Plants and a Pest and Weed Management Plan.	Rehabilitation and Landscape Management Plan reviewed by auditor a) Compliant (Figure 9, Appendix 4) b) Compliant (Appendix 4) c) Compliant (S3.3.3) d) Compliant (S3.3.6) e) Compliant (S3.3.7) f) Compliant (by virtue of letter from NSW Government, 15/2/11) confirming Management Plan is fit for purpose (file ref 10/12604, letter ref 11/01509)	Rehabilitation Management Plan (January 2010)	Y
	25	The Rehabilitation and Landscape Management Plan must be prepared: a) in consultation with Council, DNR, DEC, DPI-Fisheries and the CCC; b) by suitably qualified consultants, including a specialist hydrologist, coastal engineer, wetlands ecologist and landscape architect; and c) in accordance with extant guidelines including the DNR's Constructed Wetlands Manual, Volumes 1 & 2, to the satisfaction of the Director-General	Rehabilitation Management Plan reviewed by auditor a) Compliant (S3.1) b) Compliant (by virtue of letter from NSW Government, 15/2/11) confirming Management Plan is fit for purpose (file ref 10/12604, letter ref 11/01509) c) Compliant (referred to in Plan)	Rehabilitation and Landscape Management Plan (January 2010)	Y
	26	The Landscape Plans shall include: a) concept design plans for the final landform; and b) detailed design plans for the areas to be rehabilitated in the next 5 years	Landscape plan reviewed by auditor a) Compliant - plan sighted b) Compliant - plans sighted	Rehabilitation and Landscape Management Plan, January 2010 (ref AM/03074/Rw10)	Y
	27	The Pest and Weed Management Plan shall: a) identify potential terrestrial and aquatic pests and weeds that may be expected on the site describe the measures that would be implemented to prevent and eradicate the occurrence of pests and weeds on the site; and c) describe how the performance of these measures would be monitored over time	The Pest and Weed Management Plan was reviewed by the auditor. a) Compliant S2, Appendix 3 b) Compliant S3, Appendix 3 c) Compliant S4, Appendix 3	Weed and Pest Management Plan (Appendix 3 of the Rehabilitation and Landscape Management Plan)	Y
	28	Within 12 months of the date of this consent, the Applicant shall lodge a rehabilitation bond for the development with the Director-General. The sum of the bond shall be calculated at:a) \$2.50/m2 for the total area to be disturbed in each 5 year review period (see condition 29 below); and b) \$1.50/m2 for the total area of land previously disturbed and/or rehabilitated by the development(including the Phase 1 and 2 area), to the satisfaction of the Director-General	No evidence available.	No evidence available.	Y
	29	Within 6 months of each Independent Environmental Audit (see condition 6 of schedule 5) excluding the inaugural audit, unless the Director-General directs otherwise, the Applicant shall review, and if necessary revise, the sum of the rehabilitation bond to the satisfaction of the Director-General. This review must consider: a) the effects of inflation; b) any changes to the total area of disturbance; and c) the performance of the rehabilitation to date.	No evidence available.	No evidence available.	Y
	30	Within 12 months of the date of this consent the Applicant shall prepare a Long Term Management Strategy for the site, in consultation with Council, DPI-Fisheries and the CCC, and to the satisfaction of the Director-General. The strategy must: a) define the objectives and criteria for quarry closure and post-extraction management; b) investigate options for the future use of the site, including the recreational fishing facility; c) describe the measures that would be implemented to minimise or manage the ongoing environmental effects of the development; and d) describe how the performance of these measures would be monitored over time	No evidence available. A Long Term Management Strategy should be current and in place.	No evidence available.	N
	31	The Applicant shall ensure that all heavy vehicle access to and from the site is via the Tweed Coast Road/Crescent Road/Altona Road route. No heavy vehicles shall travel via Crescent Street through Cudgen Village, except for local deliveries to Cudgen Village	This is the only route used	Site tour and interview with Quarry Manager.	Y
	32	The Applicant shall ensure that all loaded vehicles entering or leaving the site are covered	Vehicles sighted entering and leaving site. Site policy is no cover, no load.	Site tour and interview with Quarry Manager.	Y
	33	The Applicant shall ensure all loaded vehicles leaving the site are cleaned of materials that may fall on the road before they are allowed to leave the site	Sand only loaded on site. Shaker grids installed to remove loose material prior to leaving site.	Site tour and interview with Quarry Manager.	Y
	34	The Applicant shall provide sufficient parking on-site for all development related traffic and visitors, in accordance with Council's parking codes, and to the satisfaction of the Director-General. No on-street parking shall be undertaken	Sufficient parking for all staff on site and visitors parking also provided.	Site tour	Y

Section	Ref	Condition (Development Consent DA 152-6-2005)	Evaluation	Evidence	Compliant
	35	The Applicant shall ensure that on-site parking and pedestrian facilities are adequately signposted and located so as to prevent conflict between quarry and recreational fishing facility operations	No changes made from previous owners layout. Visitors parking signposted	Site tour	Y
	36	The Applicant shall minimise the visual impacts of the development to the satisfaction of the Director General	No changes made from previous owners layout. Site shrouded by trees and no complaints received regarding visual impact.	Site tour	Y
	37	Within 12 months from the date of this consent, the Applicant shall establish and subsequently maintain a tree screen along the southern boundary of the site	Tree screen noted.	Site tour	Y
	38	Any external lighting associated with the development shall comply with <i>Australian Standard AS4282 (NT) 1995- Control of Obtrusive Effects of Outdoor Lighting</i>	External electrical contractor used. Additional lights added recently for safety reasons.	Site tour and interview with Quarry Manager.	Y
	39	The Applicant shall: a) monitor the amount of waste generated by the development; b) investigate ways to minimise waste generated by the development; c) implement reasonable and feasible measures to minimise waste generated by the development; and d) report on waste management and minimisation in the AEMR. to the satisfaction of the Director-General	a) Non-compliant. No waste monitoring carried out. Minor volumes. Bin emptied (size 2) every two months (approximately) when requested. b) Compliant - addressed in IEMS document c) Non-compliant. No evidence presented d) Compliant - waste streams and flow diagram provided.	Site tour, review of AEMR and interview with Quarry Manager.	Partial
	40	The Applicant shall install and manage any on-site sewage treatment facility to the satisfaction of Council and DEC. The facility must comply with the requirements of the <i>Environment and Health Protection Guidelines - On-site Sewage Management for Single Households (1998)</i> .	Biocycle unit operated on site. Serviced every 6 months. Service record for 16/10/13 sighted.	Interview with Quarry Manager and review of biocycle service documentation.	Y
	41	The Applicant shall ensure that the storage, handling, and transport of dangerous goods is conducted in accordance with the relevant Australian Standards, particularly AS1940 and AS1596, and the <i>Dangerous Goods Code</i>	Main issue is diesel storage. The bund wall surrounding the 4500 litre diesel tank is not impermeable and the valve on the 1600 litre diesel tank bund was open connecting the bund to the lake. No incidents relating to diesel storage have occurred to the auditor's knowledge.	Site tour and interview with Quarry Manager.	N
	42	The Applicant shall secure the development to ensure public safety to the satisfaction of the Director General	The site is fully fenced with locked gates and clear signage.	Site tour and interview with Quarry Manager.	Y
	43	The Applicant shall: a) provide annual production data to the DPI using the standard form for that purpose; and b) include a copy of this data in the AEMR	a) Forms from 2011/12 and 2012/13 sighted. b) AEMR sighted. Production figures on DPI form differ to those on the AEMR (S2).	Review of DPI forms and AEMR	Y
Schedule 4	1	If the results of monitoring required in schedule 3 identify that Impacts generated by the development are greater than the relevant impact assessment criteria in schedule 3, then the Applicant shall notify the Director-General and the affected landowners and/or existing or future tenants accordingly, and provide quarterly monitoring results to each of these parties until the results show that the development is complying with the criteria in schedule 3	No breaches identified	Review of dust monitoring data provided.	Y
	2	If a landowner considers that the operations of the development are exceeding the impact assessment criteria in schedule 3, then he/she may ask the Applicant in writing for an independent review of the impacts of the development on his/her land If the Director-General is satisfied that an independent review is warranted, the Applicant shall within 3 months of the Director-General advising that an independent review is warranted: a) consult with the landowner to determine his/her concerns; 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 development is complying with the relevant criteria in schedule 3, and identify the source/s and scale of any impact on the land, and the development's contribution to this impact; and c) give the Director-General and landowner a copy of the independent review.	No request for Independent Assessment has been made.	Interview with Quarry Manager and Complaints Register	N/A
	3	If the independent review determines that the operations are complying with the relevant criteria in schedule 3, then the Applicant may discontinue the independent review with the approval of the Director-General	N/A	N/A	N/A
	4	If the independent review determines that the operations are not complying with the relevant criteria in schedule 3, and that the development is primarily responsible for this non-compliance, then the Applicant shall: a) take all practicable measures, in consultation with the landowner, to ensure that the development complies with the relevant criteria; and b) conduct further monitoring to determine whether these measures ensure compliance; or 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	N/A	N/A	N/A

Section	Ref	Condition (Development Consent DA 152-6-2005)	Evaluation	Evidence	Compliant
	5	<p>If the independent review determines that the operations are not complying with the relevant criteria in schedule 3, but that several developments are responsible for this non-compliance, then the Applicant shall, with the agreement of the landowner and other development/s, prepare and implement a Cumulative Impact Management Plan to the satisfaction of the Director-General. This plan must provide details of the joint approach to be adopted by the Applicant and other development/s to manage cumulative impacts at the landowner's dwelling.</p> <p>If the Applicant is unable to finalise an agreement with the landowner and/or other development/s, and/or prepare a Cumulative Impact Management Plan, then the Applicant or landowner may refer the matter to the Director-General for resolution.</p> <p>If the matter cannot be resolved within 21 days, the Director-General shall refer the matter to an Independent Dispute Resolution Process (see Appendix 2).</p>	N/A	N/A	N/A
	6	<p>If the landowner disputes the results of the independent review, either the Applicant 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 2).</p>	N/A	N/A	N/A
Schedule 5	1	<p>Within 6 months of the date of this consent, the Applicant shall prepare, and subsequently implement, an Environmental Management Strategy for the development to the satisfaction of the Director-General. This strategy must:</p> <ol style="list-style-type: none"> provide the strategic context for environmental management of the development; identify the statutory requirements that apply to the development; describe in general how the environmental performance of the development would be monitored and managed during the development; describe the procedures that would be implemented to: <ul style="list-style-type: none"> keep the local community and relevant agencies informed about the operation and environmental performance of the development; receive, handle, respond to, and record complaints; resolve any disputes that may arise during the course of the development; respond to any non-compliance; manage cumulative impacts; and respond to emergencies; and describe the role, responsibility, authority, and accountability of all the key personnel involved in environmental management of the development; and be updated within 3 months of the completion of each Independent Environmental Audit (see below). 	Environmental Management Strategy reviewed by auditor and found to be compliant in all areas (a-f).	Document sighted and reviewed during audit. Document reference not noted during audit.	Y
	2	<p>Within 3 months of the date of this consent, the Applicant shall prepare an Environmental Monitoring Program for the development, to the satisfaction of the Director-General. This program must consolidate the various monitoring requirements in schedule 3 of this consent into a single document</p>	Environmental Monitoring Program sighted. No evidence of preparation within 3 months of approval (i.e. 2006) however there is no requirement to retain documented for this length of time.	Environmental Monitoring Program (GJ0623_EMP_RKS4F.doc)	Y
	3	<p>Within 3 months of the completion of each Independent Environmental Audit (see below), the Applicant shall review, and if necessary update, the Environmental Monitoring Program to the satisfaction of the Director-General</p>	Revision history indicates Environmental Monitoring Program updated (29/9/09) within 3 months of completion of previous audit in 2009 (10/8/09).	See Schedule 1, Condition 1, Part f).	Y
	4	<p>Within 7 days of detecting an exceedance of the limits/performance criteria in this consent or an incident causing, or threatening to cause, material harm to the environment; the Applicant shall report the exceedance/incident to the Department, and any relevant agency. The report must:</p> <ol 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; and describe the proposed measures to address the exceedance/incident. 	No exceedances or environmental harm noted.	Site tour and interview with Quarry Manager.	Y

Section	Ref	Condition (Development Consent DA 152-6-2005)	Evaluation	Evidence	Compliant
	5	Each year, following the date of this consent, the Applicant shall prepare and submit an AEMR to the Director-General and the relevant agencies. This report must: a) identify the standards and performance measures that apply to the development; b) describe the works carried out in the last 12 months; c) describe the works that will be carried out in the next 12 months; d) include a summary of the complaints received during the past year, and compare this to the complaints received in previous years; e) include a summary of the monitoring results for the development during the past year; f) include an analysis of these monitoring results against the relevant: impact assessment criteria; • monitoring results from previous years; and • predictions in the EIS; g) identify any trends in the monitoring results over the life of the development; h) identify any non-compliance during the previous year; and i) describe what actions were, or are being taken to ensure compliance	Review of the 2012/13 AEMR noted a) Compliant b) Compliant c) Compliant d) Compliant e) Compliant f) Non-compliant (S4.4 reviewed, analysis against EIS prediction data not present. g) Compliant h) N/A i) N/A	Review of AEMR (2012/13)	Partial
	6	Within 2 years of the date of this consent, and every 4 years thereafter, unless the Director-General directs otherwise, the Applicant shall commission and pay the full cost of an Independent Environmental Audit of the development. This audit must: a) be conducted by suitably qualified, experienced, and independent expert/s whose appointment has been endorsed by the Director-General; b) assess the environmental performance of the development, and its effects on the surrounding environment; c) assess whether the development is complying with the relevant standards, performance measures, and statutory requirements; d) review the adequacy of the Applicant's Environmental Management Strategy and environmental management strategies/plans/programs; and, if necessary, e) recommend measures or actions to improve the environmental performance of the development. and/or the environmental management and monitoring systems.	Non-compliant - the previous audit was completed 10 August 2009, this audit was not commissioned until 10 December 2013. With respect to the parts of condition: a) Compliant. The previous auditor is considered suitably qualified and experienced however evidence of approval by the DG was not available. b) Compliant c) Compliant d) Compliant e) Compliant	Hanson Tweed Sands Environmental Compliance Audit (URS, August 2009), ref: 42626408/01/01	N
	7	Within 3 months of commissioning the Independent Environmental Audit, the Applicant shall submit a copy of the audit report to the Director-General, with a response to the recommendations contained in the audit report	No evidence provided.	No evidence provided.	N
	8	Within 6 months of each Independent Environmental Audit, the Applicant shall review and if necessary revise each of the environmental management and monitoring strategies/plans/programs in schedules 3 and 5, to the satisfaction of the Director-General	Environmental Monitoring Program updated following previous independent audit and submitted to regulator. Minor amendment requested for noise levels in Noise and Environmental Management Plans (no evidence of amendment of resubmission).	Letter from NSW Government, 15/2/11) confirming submission of Management Plans (file ref 10/12604, letter ref 11/01509) and requesting updated of noise levels in Noise and Environmental Management Plans	Y
	9	Within 6 months of the date of this consent, the Applicant shall establish a Community Consultative Committee to oversee the environmental performance of the development. The CCC shall: a) be comprised of at least: • 2 representatives from the Applicant, including the person responsible for environmental management at the quarry; • 1 representative from Council (if available); and • 2 representatives from the local community, whose appointment has been approved by the Director-General in consultation with the Council; b) be chaired by an independent chairperson, whose appointment has been endorsed by the Director-General; c) meet at least twice a year; d) undertake regular inspections of the operations; e) review and provide comment on the environmental performance of the development, including any construction or environmental management plans, monitoring results, audit reports, or complaints; and f) be operated in accordance with any guidelines the Department may publish in regard to the operation of CCC for mining/quarrying projects	Discussions with Quarry Manager and review of CCC documentation carried out concluded: a) Compliant. CCC established (minutes sighted). Attendee list demonstrated compliance. b) Non-compliant. Independent chair appointed (Dr. John Griffin). No evidence of DG approval c) Compliant. 2013 minutes sighted (11/7/13 and 6/11/13). d) Compliant (2013 minutes state site tours carried out). e) Compliant. Agenda and Minutes of meeting detail review of performance and monitoring data. f) Compliant. Minutes copied in to DG.	Interview with Quarry Manager and review of CCC meeting minutes and agenda.	Partial

Section	Ref	Condition (Development Consent DA 152-6-2005)	Evaluation	Evidence	Compliant
	10	The Applicant shall, at its own expense: a) ensure that 2 of its representatives attend the Committee's meetings; b) provide the Committee with regular information on the environmental performance and management of the development; c) provide meeting facilities for the Committee; d) arrange site inspections for the Committee, if necessary; e) take minutes of the Committee's meetings; f) make these minutes available to the public; g) respond to any advice or recommendations the Committee may have in relation to the environmental management or performance of the development; and h) forward a copy of the minutes of each Committee meeting, and any responses to the Committee's recommendations, to the Director-General within a month of the Committee meeting	Discussions with Quarry Manager and review of CCC documentation carried out concluded: a) Compliant. 2013 minutes sighted. b) Compliant. Agenda/minutes show review of performance data and site tours. c) Compliant. 2013 minutes show meeting location on site. d) Compliant. 2013 minutes state site tours carried out. e) Compliant. Minutes sighted. f) Compliant. Minutes available on request. g) Compliant. Meetings are an open forum for discussion. h) Compliant. Minutes show DG copied in.	Interview with Quarry Manager and review of CCC meeting minutes and agenda.	Y
	11	Within 1 month of the approval of any management plan/strategy or monitoring program required under this consent (or any subsequent revision of these management plans/strategies or monitoring programs), the completion of the independent audits required under this consent, or the completion of the AEMR, the Applicant shall: a) provide a copy of the relevant document/s to the Council, relevant agencies and the CCC; b) ensure that a copy of the relevant documents is made publicly available at the site; to the satisfaction of the Director-General	a) Non-compliant. Documents are not provided to CCC members within 1 month but are reviewed during meetings. b) Compliant. All documents are available on site (on request).	Interview with Quarry Manager and review of CCC meeting minutes and agenda.	Partial
	12	During the life of the development, the Applicant shall: a) make a summary of the results of all monitoring required under this consent publicly available at the site; and b) update these results on a regular basis (at least every 3 months), to the satisfaction of the Director-General	a) Compliant. All data is available on request at the site. b) Compliant. Current data available on request on site.	Interview with Quarry Manager and review of CCC meeting minutes and agenda.	Y

Section	Ref	Condition (Environment Protection Licence 11453)	Evaluation	Evidence	Compliant
1 Administrative					
A1	A1.1	N/A			
	A1.2	This licence authorises the carrying out of the scheduled activities listed below at the premises specified in A2. The activities are listed according to their scheduled activity classification, fee- based activity classification and the scale of the operation Unless otherwise further restricted by a condition of this licence, the scale at which the activity is carried out must not exceed the maximum scale specified in this condition.	Limit in DA conflicts with higher limit in this approval however, based on previously agreed density figure of 1.9t/m ³ (see DA, condition 8, Schedule 2), the 2012 and 2013 exports are within the 100,000m ³ limit.		Y
	A1.3	N/A	N/A	N/A	N/A
A2	A2.1	The licence applies to the following premises: HANSON CONSTRUCTION MATERIALS PTY LOT CRESCENT STREET, NSW, 2487, Lot 2 DP777905	Noted	Site visit.	Y
A3	A3.1	This licence applies to all other activities carried on at the premises, including: Extractive industries	Noted	Site visit.	Y
A4	A4.1	Works and activities must be carried out in accordance with the proposal contained in the licence application, except as expressly provided by a condition of this licence. In this condition the reference to "the licence application" includes a reference to: (a) the applications for any licences (including former pollution control approvals) which this licence replaces under the Protection of the Environment Operations (Savings and Transitional) Regulation 1998; and (b) the licence information form provided by the licensee to the EPA to assist the EPA in connection with the issuing of this licence.	Noted	Site visit.	Y
2 Discharges					
P1	P1.1	N/A	N/A	N/A	N/A
	P1.2	N/A	N/A	N/A	N/A
	P1.3	N/A	N/A	N/A	N/A
3 Limits					
L1	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.	S120 prohibits the pollution of waters. No pollution of waters was noted during the audit	Interview with Quarry Manager, review of water quality monitoring data and site tour.	Y
L2	L2.1	N/A	N/A	N/A	N/A
	L2.2	N/A	N/A	N/A	N/A
L3	L3.1	N/A	N/A	N/A	N/A
	L3.2	N/A	N/A	N/A	N/A
	L3.3	N/A	N/A	N/A	N/A
L4	L4.1	N/A	N/A	N/A	N/A
L5	L5.1	N/A	N/A	N/A	N/A
L6	L6.1	Noise from the premises must not exceed an LA10 (15 minute) noise emission criterion of 40 dB(A), except as expressly provided by this licence.	No noise complaints received in the last 5 years.	Complaints register reviewed.	Y

Section	Ref	Condition (Environment Protection Licence 11453)	Evaluation	Evidence	Compliant
	L6.2	The noise emission limits identified in L6.1 apply for prevailing meteorological conditions (winds up to 3m/s), except under conditions of temperature inversions. Noise impacts that may be enhanced by temperature inversions must be addressed by: (a) Documenting noise complaints received to identify any higher level of impacts or patterns of temperature inversions. (b) Where levels of noise complaints indicate a higher level of impact then actions to quantify and ameliorate any enhanced impacts under temperature inversions conditions should be developed and implemented.	No noise complaints received in the last 5 years.	Complaints register reviewed.	Y
	L6.3	Noise from the premises is to be measured at any effected residence to determine compliance with this condition	No noise complaints received in the last 5 years.	Complaints register reviewed.	Y
4 Operating					
O1	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; and (b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.	Site tour carried out to assess operations: a) Compliant. Dredging, product storage and material storage sighted during site visit. b) Compliant. Fines/screening handling and waste storage sighted during site visit. Waste	Site tour and interview with Quarry Manager	Y
	O1.2	Unless otherwise agreed to in writing by the EPA, works covered by this Licence must only be carried out between the hours of 0700 and 1800 Monday to Friday, and 0700 and 1300 Saturday, and at no time on Sundays and Public Holidays. For the purpose of this licence, the term "works" refers to all dredging operations, maintenance, deliveries, barge movements, fuelling and associated heavy transport.	Generally, all activities are carried out after 07:00 however, occasionally, pre-loaded delivery vehicles leave the site prior to this time.	Interview with Quarry Manager	N
O2	O2.1	All plant and equipment installed at the premises or used in connection with the licensed activity: (a) must be maintained in a proper and efficient condition; and (b) must be operated in a proper and efficient manner.	Site tour carried out to assess operations: a) Compliant. Plant and equipment sighted during site visit. Maintenance regimes and evidence provided. b) Compliant. Dredging/ fines/ screening handling and sighted during site visit.	Site tour and interview with Quarry Manager	Y
O3	O3	Trucks transporting material from the premises must be covered immediately after loading to prevent wind-blown emissions and spillage. The covering must be maintained until immediately before unloading the trucks.	Site operates a "no cover, no load" policy. Trucks entering site all noted to have covers and loaded truck leaving site noted to have cover closed.	Site tour and interview with Quarry Manager	Y
5 Monitoring and Recording					
M1	M1.1	The results of any monitoring required to be conducted by this licence or a load calculation protocol must be recorded and retained as set out in this condition	Monitoring data presented in AEMR and sighted on site. All documents available on request.	Review of monitoring data, AEMR and interview with Quarry Manager	Y
	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; (b) kept for at least 4 years after the monitoring or event to which they relate took place; and (c) produced in a legible form to any authorised officer of the EPA who asks to see them	During the site visit, records were all legible and were retained in excess of 4 years. Records are available on site on request.	Review of pre-2010 documentation and interview with Quarry Manager	Y
	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; (b) the time(s) at which the sample was collected; (c) the point at which the sample was taken; and (d) the name of the person who collected the sample	Sample records reviewed on site: a) Compliant b) Non-compliant (time not noted on sample record). c) Compliant. D) Non-compliant. No names available.	Review of monitoring / sampling data / results	Partial
M2	M2.1	N/A	N/A	N/A	N/A
M3	M3.1	N/A	N/A	N/A	N/A
	M3.2	N/A	N/A	N/A	N/A
M4	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	Compliant. Complaints logged in hard copy.	Complaints log	Y
	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; and (f) if no action was taken by the licensee, the reasons why no action was taken	Complaints log reviewed: a) Non-compliant (date logged but not time) b) Non-compliant (method not logged) c) Non-compliant (personal details not logged) d) Compliant (nature of complaint logged) e) Compliant (actions taken logged) f) N/A	Complaints log	Partial
	M4.3	The record of a complaint must be kept for at least 4 years after the complaint was made	Complaints log dates back to 2002	Complaints log	Y
	M4.4	The record must be produced to any authorised officer of the EPA who asks to see them	Complaints log available on request	Interview with Quarry Manager and Complaints log	Y

Section	Ref	Condition (Environment Protection Licence 11453)	Evaluation	Evidence	Compliant
M5	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.	Condition does not require a dedicated complaints telephone line. Members of the public can use the normal site telephone number.	Interview with Quarry Manager	Y
	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.	Site telephone number is available on the notice board at the site entrance and on Hanson vehicles. Numbers of complaints are very low - only three in the last 11 years.	Interview with Quarry Manager	Y
	M5.3	Conditions M5.1 and M5.2 do not apply until 3 months after: (a) the date of the issue of this licence or (b) if this licence is a replacement licence within the meaning of the Protection of the Environment Operations (Savings and Transitional) Regulation 1998, the date on which a copy of the licence was served on the licensee under clause 10 of that regulation	Noted.	N/A	N/A
M6	M6.1	N/A	N/A	N/A	N/A
6 Reporting					
R1	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.	a) Non-compliant. No evidence of statement of compliance sighted. b) Compliant (no complaints recorded)	2012/13 Annual Report.	Partial
	R1.2	An Annual Return must be prepared in respect of each reporting period, except as provided below	Annual return sighted.	2012/13 Annual Report.	Y
	R1.3	Where this licence is transferred from the licensee to a new licensee: (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; and (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.	a) N/A (responsibility of previous licensee) b) Compliant. Transfer of licence occurred in 2006 (no requirement to retain documents for this length of time) therefore assumed to be compliant. Annual reporting for the EPL is in line with the anniversary date of the approval.	2012/13 Annual Report.	Y
	R1.4	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: (a) in relation to the surrender of a licence - the date when notice in writing of approval of the surrender is given; or (b) in relation to the revocation of the licence- the date from which notice revoking the licence operates	N/A	N/A	N/A
	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').	Compliance demonstrated through use of registered post submissions to NSW Govt. with dates matching and within the required window.	Recorded delivery paperwork from submissions to NSW Government sighted by auditor.	Y
	R1.6	N/A	N/A	N/A	N/A
	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.	Annual returns sighted for 2009/10.	2009/10 Annual return.	Y
	R1.8	Within the Annual Return, the Statement of Compliance must be certified and the Monitoring and Complaints Summary must be signed by: (a) the licence holder; or (b) by a person approved in writing by the EPA to sign on behalf of the licence holder	a) Non-compliant. No evidence of statement of compliance sighted. b) Non-compliant. No evidence of statement of compliance sighted.		N
	R1.9	A person who has been given written approval to certify a certificate of compliance under a licence issued under the Pollution Control Act 1970 is taken to be approved for the purpose of this condition until the date of first review of this licence	Noted.	N/A	N/A
R2	R2.1	Notifications must be made by telephoning the Environment Line service on 131 555.	Not required to date however this will be used.	Interview with Quarry Manager.	Y
	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 required to date however this will be used.	Interview with Quarry Manager.	Y
R3	R3.1	Where an authorised officer of the EPA suspects on reasonable grounds that: (a) where this licence applies to premises, an event has occurred at the premises; or (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 required to date however this will be used.	Interview with Quarry Manager.	Y
	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 required to date however this will be used.	Interview with Quarry Manager.	Y

Section	Ref	Condition (Environment Protection Licence 11453)	Evaluation	Evidence	Compliant
	R3.3	The request may require a report which includes any or all of the following information: (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 recurrence of such an event; and (g) any other relevant matters	Not required to date however this will be used.	Interview with Quarry Manager.	Y
	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 required to date however this will be used.	Interview with Quarry Manager.	Y
General Conditions					
G1	G1.1	A copy of this licence must be kept at the premises to which the licence applies	Copy of EPL sighted.	EPL11453	Y
	G1.2	The licence must be produced to any authorised officer of the EPA who asks to see it.	EPL available on request.	Interview with Quarry Manager.	Y
	G1.3	The licence must be available for inspection by any employee or agent of the licensee working at the premises	EPL available on request.	Interview with Quarry Manager.	Y
Pollution Studies	N/A	N/A	N/A	N/A	N/A
Special Conditions	N/A	N/A	N/A	N/A	N/A



APPENDIX B AUDITORS' CURRICULA VITAE AND GOVERNMENT APPROVAL

Curriculum Vitae



Qualifications

Bachelor of Environmental Science (Land Resources)
Honours: First Class University of Wollongong NSW, Australia 1995.

Rob Storrs

Principal Environmental Scientist

Areas of Experience

- Environmental Project Management
- Environmental Auditing
- Approvals

Career Summary

Rob Storrs is a Principal Environmental Scientist with over 17 years experience in managing and investigating environmental issues and project managing environmental approvals processes. He has worked with the mining, petrochemical and chemical industry across Australia, Pacific Islands and the UK for the past ten years. Rob is a qualified RABQSA Environmental Auditor (environmental management systems, report verification and contaminated land) and has highly developed project management and auditing skills. Rob has extensive experience managing projects through the EIA process and sound knowledge on all of the EIA and wider components.

Career Details

URS Australia Pty Ltd

Project Director for LNG project Compliance Audit (pipeline, gasfield and plant) (Australia Pacific LNG)

Rob as a certified environmental auditor was the project director for the Australia Pacific LNG environmental authority compliance audits. These audits covered the entire project (pipeline, CSG gasfield and LNG plant) and addressed the state and federal approval conditions.

Project Director for Micro LNG Facility Environmental Approvals Application. (BOC)

Rob was the Project Director for a micro LNG facility to be located in the Condamine Region. The project included the development of an EM Plan, EA conditions and financial assurance information to support a Petroleum Licence application. The facility will utilise CSG sourced from close to the facility.

Contaminated site phase 1 auditing for Department of Defence 2009/10

Rob was the Project Manager and auditor for a phase 1 environmental assessment of the Oakey air base in southern Queensland. The site dates from pre WWII and the project included desktop assessments, site inspections and report writing.

Xstrata Copper sustainability auditing 2009

As part of their corporate sustainable development procedures, Xstrata have developed a Sustainable Development Charter which is routinely audited at selected sites. Xstrata Copper Mount Isa is a large mine and smelting operation

Rob Storrs.*Principal Environmental Scientist*

in central Queensland and Rob was one of five auditors who were based on site for a week undertaking the assessment.

Phase 1 auditor at over 100 petroleum sites in Australia, UK and the Pacific Islands.

In his time at URS Rob has undertaken a large number of phase 1 investigations at petroleum sites. The vast majority of these he has project managed and they have been undertaken out of the Brisbane office in Queensland, New Caledonia and Western Samoa.

Client Account Manager for Hancock/GVK 2010 – 2012

Rob is currently the URS client account manager for Hancock GVK. He has held that position since developing the relationship as part of the Alpha Coal EIS. Rob is the primary contact for all URS work with Hancock GVK. This work includes; approvals, engineering, planning, monitoring and compliance.

Project Manager for a 30 Mtpa greenfield open cut coal mine and 500 km rail line EIS in the Galilee Basin Queensland. (Hancock/GVK)

Rob was the Project Manager for this pioneering state significant project coal mine EIS, the first in the Galilee Basin to receive state and federal approval. Rob was responsible for all aspects of the mine EIS and the overall delivery and combination of the mine and rail components. During the project Rob was heavily involved in government (local, state and federal) and community liaison and negotiating approval conditions. In recognition of his work on this project Rob was awarded the Project Management and Business Development Pyramid Awards from URS for the Asia Pacific region in 2011.

Project Manager for a 30 Mtpa greenfield underground and open cut coal mine EIS in the Galilee Basin Queensland. (Hancock/GVK)

Rob was the Project Manager for this state significant project coal mine EIS. The Project is currently waiting to receive state and federal approval. Rob was responsible for all aspects of the EIS and SEIS including deliverable, schedule and budget. During the project Rob was heavily involved in government (local, state and federal) and community liaison.

Project Manager for the MIM Environmental Authority transition process. (Xstrata Copper).

Rob was the Project Manager on this challenging environmental approvals project. The 85 year old Mount Isa Mine was, due to legislation changes brought under the current Queensland EP Act requirements and a new EM Plan and Environmental Authority conditions were required to be developed and receive regulator approval. Rob managed over 8 specialist sub consultants who worked on areas from human health risk assessments, hydrological modelling to particulate and noise modelling. Additionally a program of expert peer review was developed and engaged to confirm the findings and add rigour to the process.

Project Manager for an 8 Mtpa greenfield open cut coal mine EIS in central Queensland. (BMA)

Rob was the Project Manager for the state significant Caval Ridge open cut coal mine EIS situated near Moranbah in Central Queensland. In this role Rob was responsible for all aspects of the EIS including deliverables, schedule, budgets and sub consultants. In addition to the EIS Rob was involved in the change applications submitted to the Coordinator General for the projects accommodation village. This mine project has been approved and is currently being constructed.

Rob Storrs.*Principal Environmental Scientist*

Project Manager for a 5 Mtpa greenfield underground coal mine EIS in central Queensland. (Vale)

Rob was the Project Manager for the Ellensfield underground coal mine EIS situated near Moranbah in Central Queensland. During his time on the project Rob has participated in protracted regulator negotiations and project changes. This project includes aspects of CSG, power generation and desalination as part of the project description. In this role Rob was responsible for all aspects of the EIS including deliverables, schedule, budgets and sub consultants. This project was a voluntary EIS under the EP Act and is in the final stages of approval.

Baseline study manager for large Oil Shale deposit in Queensland. (Confidential Client)

Rob was the Assistant Project Manager and responsible for thirteen study components of a confidential major EIS baseline project in Queensland including a mine, power station, pipelines and port. The study areas and sub consultants that Rob was responsible for included air and noise, surface water, marine water quality, coastal processes and acid sulphate soils.

Project Manager for a chlorinated solvent site investigation. (Confidential Client)

Rob was the Project Manager on confidential chlorinated solvent site investigation and remediation project in Brisbane. Rob planned, supervised and undertook drilling and groundwater investigations as well as soil vapour testing to determine potential levels of impact and risk at more than one industrial site. In this role Rob engaged and liaised with regulator third party reviewers.

URS Corporation Ltd (UK)

URS commercial manager and UK scheduler for Exxon Mobil retail site remediation work

In this role Rob was responsible for coordinating the Exxon Mobil retail site work for the UK Midlands and was URS commercial manager and UK (Wales, Scotland and England) scheduler for the project decommissioning and risk assessment activities (over 70 sites). Rob was required to know the progress on all sites, submit variation requests and maintain the portfolio schedule.

Project manager and auditor on various industrial site Phase I and Phase II environmental audits.

During his time in the UK, Rob undertook both phase I and phase II contaminated site investigations at a variety of business types including chemical, packaging, environmental laboratory, engineering and petroleum sites.

Project Manager of Pollution Prevention and Control (PPC) permit support and Application Site Report at BP Wytch Farm, Dorset, England

Rob was the Project Manager and principal author of the Pollution Prevention and Control (PPC) permit application and the Application Site Report at BP Wytch Farm oilfield (largest landbased oilfield in Western Europe). Site work included review of site infrastructure, procedures and risk assessment.

Project Manager for PPC permit and Application Site Report for Vopak Terminal Windmill, Barry, Wales

Rob was the Project Manager and principal author of the Pollution Prevention and Control (PPC) permit Report for Vopak Terminal Windmill, Barry – operations at the site include large-scale methanol storage, ship unloading and material transfer.

Rob Storrs.*Principal Environmental Scientist*

PPC support for Rhodia and Thermphos chemical plants in Birmingham.

Project Manager and co-author for a verification scoping study for the International Council on Mining and Metals. London.

URS Australia Pty Ltd

- Assisted in review and summary of Environmental Management Plans and legal requirements for a Greenfield gold mine in NSW, Australia (2004).
- Pisces Coal Project EIS review (Central Queensland).
- Senior Environmental Scientist engaged in a variety of impact assessment and environmental management studies.
- Corporate sustainability report verification of mining, smelting and construction sites in Australia and South Africa.
- Development of Environmental Management Plans (EMPs) for EMS implementation at central Queensland Coal Mine sites.
- Soil and Rehabilitation component of the Alcan Gove (Northern Territory Aluminum Refinery) expansion EIS.
- Thalanga Copper Mine and Highway Reward Mine Environmental Risk Assessment. Central Queensland.
- Thalanga Copper Mine West Rock Waste Dump Drainage and Erosion control design.
- James Hardie Sand Mining Lease relinquishment criteria and licencing.
- QNI Ore Supplier Environmental Review, New Caledonia, Nickel Mines.
- Project Manager of numerous Shell Engineering and Exxon Mobil Phase 1 and Phase 2 Contaminated Site Investigations and validation assessments within Australia and the Pacific Islands (Samoa, New Caledonia and PNG).
- Engaged in the development of an ISO14001 certified EMS for multiple sites for an international mining company and a national meat producer.
- Project Manager and field auditor for an Australia wide abattoir environmental benchmarking project. This included ten sites covering five states.
- Capping and contamination assessment of the historical Toowoomba landfill, Queensland, Australia.

BHP Coal Peak Downs Mine Qld

- Coordinated environmental activities during dragline shutdown.
- Wrote sections of the site Environmental Management System.
- Compiled the site hydrocarbon / reagent farm management plan and FY97 internal audit.

Dames & Moore

- Assist design and test a waste audit system for building/demolition and commercial/ industrial waste for the NSW EPA.
- Liaise with client and councils in regard to the Sydney Optus Vision Project.

Professional History

- URS Australia Pty Ltd, Principal Environmental Scientist, 2011 -present
 - URS Australia Pty Ltd, Senior Associate Environmental Scientist, 2009 - 2011
 - URS Australia Pty Ltd, Associate Environmental Scientist, 2008 - 2009
 - URS Australia Pty Ltd, Senior Environmental Scientist, 2006-2007
 - URS Corporation Ltd, Project Environmental Scientist, 2005-2006
-

Rob Storrs.*Principal Environmental Scientist*

- URS Australia Pty Ltd, Senior Environmental Scientist, 2003-2005
- URS Australia Pty Ltd, Project Environmental Scientist, 2001-2003
- Cooks River Environmental Assessment & Education Project (Stormwater Trust – NSW), Environmental Assessment Officer, 1999-2000
- BHP Coal Blackwater Mine (Qld), Environmental Officer, 1998-1999
- BHP Coal Appin and Tower Collieries (NSW), Environmental Officer, 1997-1998
- BHP Coal Peak Downs Mine (Qld), Environmental Officer, Feb-Nov 1997
- Dames & Moore, Environmental Planner/Waste Audit Leader, May-Oct 1996

Education and Training

- Certified RABQSA Environmental Auditor, 2003
- URS Certified Project Manager, 2008
- Certificate in Training Small Groups, “Assessment & Workplace Training”.
- Defensive driving trained
- Advanced First Aider
- Environmental Management Systems Auditor Training Course 2002
- URS Health and Safety 24hr course

Awards

- URS Asia Pacific Pyramid Awards for Project Management and Business Development in 2011
- Prize for Academic Achievement in Science, 1993, Weerona College
- Duke of Edinburgh Award (Bronze, Silver, Gold)

Publications

Details available upon request

Curriculum Vitae



Qualifications

MSc -
Environment,
Health and
Safety, 2004
BSc (Hons)
Environmental
Studies, 1995

David Curwen

Senior Associate Environmental Scientist

Areas of Experience

- Environmental regulatory compliance
- Environmental risk assessment
- Due diligence
- Environmental management systems
- Process and resource optimisation and auditing

Career Summary

David is an environmental specialist with over 17 year's experience in environmental consultancy and operational plant support.

David has extensive experience in the power, oil & gas, nuclear and waste sectors, providing support to government bodies and direct to industry including regulatory compliance, environmental risk assessment, process optioneering, management systems, process and resource optimisation and auditing.

Career Details

Senior Associate Environmental Scientist, URS

David recently project managed the Australia Pacific third party independent CG audit and was one of the URS team of auditors approved by both Queensland Coordinator-General (CG) and Queensland Department of Environment and Heritage Protection (EHP), David has subsequently been approved by the EHP to carry out third party compliance audits on several occasions over the last 12 months. The subsequent report received very positive feedback from the CG on its thoroughness, readability and presentation. David has also recently provided peer review services for an audit of the ConocoPhillips Curtis Island operations assessing the implementation of their Construction EM Plan, audited the Australia Pacific LNG Combabula and Narrows Crossing EAs, the Australia Pacific LNG Talinga Recycled Water Management Plan and assessed environmental compliance manual implementation for the Shell (Pinkenba) installation.

David is the call-off contract manager for GLNG OPL providing downstream services to GNLG and is the project manager for the Vale Ellensfield and New Lenton EIS projects and has supported the EISs for the Arrow Energy Bowen Gas Project and BMA Goonyella Riverside Coal Project and developed the EM Plan for the Hancock Kevin's Corner Coal Mine Project.

Principal Consultant/Senior Consultant, Entec

David was responsible for developing, managing and resourcing projects in the public sector as well as across the oil & gas, power, chemicals, nuclear, waste and combustion sectors. His role included technical project delivery and project management (including budget and resource control), technical review and

David Curwen. *Senior Associate Environmental Scientist*

business development and client management. David also managed multidisciplinary teams of project staff across the UK.

David provided services to a number of clients including ExxonMobil, BP/Ineos, Electricite de France (British Energy) and Scottish Power (Iberdrola), as well as regulatory and government bodies such as the Environment Agency, Scottish Government and a number of water and waste utility providers.

A key feature of David's role was the management and preparation of environmental regulatory submissions. This required a broad range of skills including environmental impact assessment (air and water quality), process optimisation, risk assessment (environmental accidents), abatement optioneering, resource efficiency (waste/waste/energy), environmental management system assessment, noise/odour impacts and best available technique (BAT) assessment.

Areas of experience include:

- Auditing of management systems and permit compliance. Development of waste and water efficiency audit methodologies and auditing of operational sites. Training and supervision of junior staff to perform audits through the development of audit templates and methodologies.
- Corporate environmental and sustainability reporting including gap analysis of operations against reporting indices such as the Global Reporting Initiative (GRI), data collection and verification across operating sites.
- Due Diligence auditing supporting mergers and acquisitions. Assessing risks, liabilities and legislative compliance individually and as a member of nationwide teams.
- Providing support to UK environment agencies in the technical assessment of environmental permit applications (chemicals, power generation, waste treatment and large volume food and drink
- Project management and technical assessment, reporting of findings to clients including government and regulatory bodies.
- Representation of clients to regulators and liaison with regulators.

Examples of project work include:

- Due diligence audit of paving products manufacturer for potential purchase (compliance, performance and liabilities).
 - National audit of power generation facilities for Scottish Power (coal, gas and hydro) assessing management system compliance and resource efficiency (raw material use and waste management practices).
 - Environmental permitting for ExxonMobil cited as best practice by the regulator.
 - Environmental Permit technical assessment, determination and permit writing for the Environment Agency and Northern Ireland Environment Agency.
 - Water balance, effluent abatement technology and impact assessment for BP refinery and chemical plants.
 - Environmental impact assessment of process discharges from power plant for Scottish Power.
 - Nation-wide waste assessment of chemical, biological, radioactive and nuclear (CBRN) waste treatment and disposal options for the Scottish Government.
 - Permitting of new build and existing nuclear power plant (7 existing sites, two new build sites).
 - Environmental risk assessment at the main Nestle chocolate crumb facility in the UK.
 - Environmental optimisation of new build waste treatment and disposal facilities for the decommissioning of nuclear facilities.
-

David Curwen. *Senior Associate Environmental Scientist*

Environment Engineer, Sellafield Site (nuclear fuel reprocessing)

- Held the role of EMS Area Environmental Coordinator.
- Responsible for compiling the annual reporting returns to the Environment Agency.
- A member of the Sellafield Emergency Response Team.
- Environmental Risk Assessor to the Plant Modification Process.
- Plant optimisation studies including scrubber operations, cooling tower operations,
- Managing the regulatory interface which involved negotiating permit conditions on behalf of BNFL.
- Assessment of the business impacts of a pollution incident to a salmon river factoring in financial impact of negative PR, loss of amenity and tourism associated to understand the true business cost of environmental harm.

Professional History

Senior Associate Environmental Scientist, URS, 2011 - present

Principal Consultant, Entec UK, 2007 - 2011

Senior Consultant, Entec UK, 2001 - 2007

Environment Engineer, British Nuclear Fuels Limited Sellafield, 1996 - 2001

Education and Training

MSc Environment, Health and Safety, University of Sunderland, 2004

BSc (Hons) Environmental Studies, University of Sunderland, 1995

Registration

Member of the Environment Institute of Australia and New Zealand (MEINZ)



APPENDIX C DEVELOPMENT CONSENT DA 152-6-2005

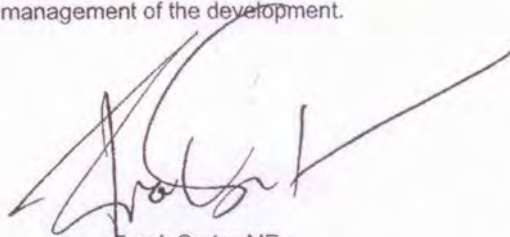
Development Consent

Section 80 of the *Environmental Planning & Assessment Act 1979*

I, the Minister for Planning, approve the Development Application referred to in schedule 1, subject to the conditions in schedules 2 to 5.

These conditions are required to:

- prevent, minimise, and/or offset adverse environmental impacts;
- set standards and performance measures for acceptable environmental performance;
- require regular monitoring and reporting; and
- provide for the on-going environmental management of the development.



Frank Sartor MP
Minister for Planning

Sydney

31st July

2006

File: 9035944

SCHEDULE 1

Development Application:	DA 152-6-2005
Applicant:	P Guinane Pty Ltd.
Consent Authority:	Minister for Planning
Land:	Lot 22 DP 1082435, Lot 23 DP 1077509 and Lot 494 DP 720450, Crescent Street, Cudgen
Proposed Development:	Expansion of an existing sand quarry, and operation of a recreational fishing facility

Notes:

- To find out when this consent becomes effective, see Section 83 of the *Environmental Planning and Assessment Act 1979 (EP&A Act)*;
- To find out when this consent is liable to lapse, see Section 95 of the *EP&A Act*; and
- To find out about appeal rights, see Section 97 of the *EP&A Act*.

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DEFINITIONS

AEMR	Annual Environmental Management Report
Applicant	P Guinane Pty Ltd, or its successors
ARI	Average recurrence interval
BCA	Building Code of Australia
CCC	Community Consultative Committee
Council	Tweed Shire Council
DA	Development Application
Day	The period from 7am to 6pm on Monday to Saturday, and 8am to 6pm on Sundays and public holidays
DEC	Department of Environment and Conservation
Department	Department of Planning
Director-General	Director-General of the Department of Planning, or delegate
DNR	Department of Natural Resources
DPI	Department of Primary Industries
EIS	Environmental Impact Statement
EMS	Environmental Management Strategy
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	<i>Environmental Planning and Assessment Regulation 2000</i>
EPL	Environment Protection Licence issued under the <i>Protection of the Environment Operations Act 1997</i>
Evening	The period from 6pm to 10pm
GTA	General Term of Approval
Heavy vehicle	Any vehicle with a gross vehicle mass of 5 tonnes or more
Land	Land means the whole of a lot in a current plan registered at the Land Titles Office at the date of this development consent
Minister	Minister for Planning, or delegate
NHMRC	National Health and Medical Research Council
Night	The period from 10pm to 6am on Monday to Saturday, and 10pm to 8am on Sundays and Public Holidays
Phase	The quarry development phases as described in the EIS for the development
POEO Act	<i>Protection of the Environment Operations Act 1997</i>
Privately owned land	Land not owned by the Applicant or its related companies or where a private agreement does not exist between the Applicant and the land owner
RTA	Roads and Traffic Authority
Site	Land to which the DA applies

**SCHEDULE 2
GENERAL ADMINISTRATIVE CONDITIONS**

Obligation to Minimise Harm to the Environment

1. The Applicant shall implement all practicable measures to prevent and/or minimise any harm to the environment that may result from the construction, operation, or rehabilitation of the development.

Scope of Development

2. The Applicant shall carry out the development generally in accordance with:
 - a) DA No. 152-6-2005;
 - b) EIS titled *Proposed Expansion of Sand Quarry at Crescent Street Cudgen*, dated June 2005; and
 - c) conditions of this consent.
3. If there is any inconsistency between the above, the conditions of this consent shall prevail to the extent of the inconsistency.
4. The Applicant shall comply with any reasonable requirement/s of the Director-General arising from the Department's assessment of:
 - a) any reports, plans or correspondence that are submitted in accordance with this consent; and
 - b) the implementation of any actions or measures contained in these reports, plans or correspondence.

Surrender of Consents

5. Within 18 months of this consent, or as otherwise approved by the Director-General, the Applicant shall surrender all previous development consents for the quarry and recreational fishing facility, to the satisfaction of the Director-General.

Note: This consent will apply to all phases and components of the quarry and recreational fishing facility from the date of this approval.

Limits on Approval

6. This consent shall lapse on 1 July 2036.

Note: Conditions of this consent may require activities to be carried out by the Applicant beyond the period of approval for sand extraction, processing, and rehabilitation on the project site.
7. This consent is granted for Phases 3 and 4 of the quarry extension only, as described in the EIS, and shown conceptually on the plan in Appendix 1.
8. The Applicant shall not produce or transport more than 150,000 cubic metres of sand products per year from the site.
9. The Applicant shall ensure that heavy vehicle movements (in and out) associated with the development do not exceed:
 - a) 20 per hour (peak);
 - b) 200 per day (peak); and
 - c) 80 per day (rolling quarterly average).

Structural Adequacy

10. The Applicant shall ensure that any new buildings and structures, and any alterations or additions to existing buildings and structures, are constructed in accordance with the relevant requirements of the BCA.

Notes:

- Under Part 4A of the EP&A Act, the Applicant is required to obtain construction and occupation certificates for any building works.
- Part 8 of the EP&A Regulation sets out the detailed requirements for the certification of development.

Demolition

11. The Applicant shall ensure that all demolition work is carried out in accordance with AS 2601-2001: *The Demolition of Structures*, or its latest version.

Operation of Plant and Equipment

12. The Applicant shall ensure that all plant and equipment at the site, or used in connection with the development, are:
 - a) maintained in a proper and efficient condition; and
 - b) operated in a proper and efficient manner.

Section 94 Contributions

13. Prior to carrying out any development, or as otherwise agreed by Council, the Applicant shall pay Council \$5,046.30 in accordance with Council's *Tweed Road Contributions Plan*.

**SCHEDULE 3
SPECIFIC ENVIRONMENTAL CONDITIONS**

GENERAL EXTRACTION AND PROCESSING PROVISIONS

Identification of Boundaries

1. Within 1 month of the date of approval of the Rehabilitation and Landscape Management Plan (see condition 24 below), the Applicant shall:
 - a) engage a registered surveyor to mark out the boundaries of the approved limits of extraction;
 - b) submit a survey plan of these boundaries to the Director-General; and
 - c) ensure that these boundaries are clearly marked at all times in a permanent manner that allows operating staff and inspecting officers to clearly identify those limits.

Note: The limit of extraction includes the area described in the documents listed in condition 2 of schedule 2, and shown conceptually on the plan in Appendix 1, as amended by the conditions of this consent (including conditions 2 and 3 below).

Buffers and Lake Design

2. The Applicant shall maintain a minimum buffer of 10 metres to the boundaries of the site. No extraction shall occur within this buffer. The buffer may be used for minor drainage works, access, bunds and landscaping only.
3. The Applicant shall vary the buffer distance to the site boundary to achieve a stable, natural-looking final lake design with curved lake boundaries, to the satisfaction of the Director-General.

Notes:

- The final landform/lake design shall be shown on the plans accompanying the Rehabilitation and Landscape Management Plan (see condition 24 below).
- The final landform/lake design may encroach marginally into the Phase 5 area to achieve the required final lake design.

NOISE

Impact Assessment Criteria

4. ¹The Applicant shall ensure that noise generated by the development does not exceed the criteria specified in Table 1.

Table 1: Noise impact assessment criteria dB(A) L_{Aeq} (15 min)

Receiver Location	Day / Evening	Night
Residences on privately owned land	40	36

Notes:

- The noise criteria do not apply where the Applicant and the affected landowner have a valid agreement in regard to noise from the development, and a copy of the agreement has been forwarded to the Director-General and DEC. In this case the Applicant may exceed the noise limits in Table 1 in accordance with the noise agreement.
- Noise from the premises 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 (rural situations) where the dwelling is more than 30 metres from the boundary, to determine compliance with the noise level limits in Table 1. Where it can be demonstrated that direct measurement of noise from the premises is impractical, the DEC may accept alternative means of determining compliance (see Chapter 11 of the NSW Industrial Noise Policy). The modification factors presented in Section 4 of the NSW Industrial Noise Policy shall also be applied to the measured noise level where applicable.
- The noise emission limits identified in Table 1 apply under meteorological conditions of wind speed up to 3m/s at 10 metres above ground level.

Cumulative Noise Criteria

5. The Applicant shall take all reasonable and feasible measures to ensure that the noise generated by the development combined with the noise generated by other industrial development does not exceed the following amenity criteria on any privately owned land, to the satisfaction of the Director-General:
 - $L_{Aeq}(11 \text{ hour})$ 50 dB(A) – Day;
 - $L_{Aeq}(4 \text{ hour})$ 45 dB(A) – Evening; and
 - $L_{Aeq}(9 \text{ hour})$ 40 dB(A) – Night.

¹ Incorporates DEC GTA

Operating Hours

6. ²The Applicant shall comply with the operating hours in Table 2.

Table 2: Operating Hours

Activity	Day	Time
Sand extraction and processing, and other quarry related activities	Monday – Friday	7:00am to 5:00pm
	Saturday	7:00am to 4:00pm
	Sunday and Public Holidays	Nil
Sand product delivery and distribution, and other activities involving heavy vehicles movements off-site	Monday – Friday	7:00am to 5:00pm
	Saturday	7:00am to 12:00pm
	Sunday and Public Holidays	Nil
Recreational fishing facility	Any day	Any time
Maintenance (if inaudible at neighbouring residences)	Any day	Any time

7. ³The following activities may be carried out at the premises outside the hours specified in Table 2:
- the delivery of materials as requested by Police or other authorities for safety reasons; and
 - emergency work to avoid the loss of lives, property and/or to prevent environmental harm.
- In such circumstances the Applicant shall notify DEC and affected residents prior to undertaking the works, or within a reasonable period in the case of emergency.

Noise Monitoring Program

8. Within 3 months from the date of this consent, the Applicant shall prepare (and following approval implement) a Noise Monitoring Program for the development, in consultation with DEC, and to the satisfaction of the Director-General. This program must include a combination of attended and unattended noise monitoring, and a noise monitoring protocol for evaluating compliance with the noise impact assessment criteria in this consent.

AIR QUALITY

Impact Assessment Criteria

9. The Applicant shall ensure that dust generated by the development does not cause additional exceedances of the criteria listed in Tables 3 to 5 at any residence on, or on more than 25 percent of, any privately owned land.

Table 3: Long term impact assessment criteria for particulate matter

Pollutant	Averaging period	Criterion
Total suspended particulate (TSP) matter	Annual	90 µg/m ³
Particulate matter < 10 µm (PM ₁₀)	Annual	30 µg/m ³

Table 4: Short term impact assessment criteria for particulate matter

Pollutant	Averaging period	Criterion
Particulate matter < 10 µm (PM ₁₀)	24 hour	50 µg/m ³

Table 5: Long term impact assessment criteria for deposited dust

Pollutant	Averaging period	Maximum increase in deposited dust level	Maximum total deposited dust level
Deposited dust	Annual	2 g/m ² /month	4 g/m ² /month

Note: Deposited dust is assessed as insoluble solids as defined by Standards Australia, 1991, AS 3580.10.1-1991: Methods for Sampling and Analysis of Ambient Air - Determination of Particulates - Deposited Matter - Gravimetric Method.

² Incorporates DEC GTA

³ Incorporates DEC GTA

Air Quality Monitoring Program

10. Within 3 months from the date of this consent, the Applicant shall prepare (and following approval implement) an Air Quality Monitoring Program for the development, in consultation with DEC, and to the satisfaction of the Director-General. This program must include an air monitoring protocol for evaluating compliance with the air quality impact assessment criteria in this consent.

Note: Initially, this program may concentrate on monitoring the dust deposition impacts of the development. However, in time, it may be expanded to include other pollutants.

SOILS, SURFACE WATER & GROUNDWATER

Note: The Applicant is required to obtain licences and permits for the development under the Protection of the Environment Operations Act 1997, Water Act 1912 and Fisheries Management Act 1994.

Water Discharges

11. ⁴The Applicant shall not discharge any surface water from active dredge and fines return ponds. The Applicant must ensure that any pond subject to dredging, or containing turbid water due to recent dredging, is maintained and operated to prevent discharges of any surface water from these ponds.

Water Quality Objectives

12. The Applicant shall aim to meet the water quality objectives in Table 6 for water in the dredge ponds and in (shallow) groundwater surrounding the dredge ponds, unless otherwise approved or directed by the Director-General:

Table 6: Water Quality Objectives

Pollutant	Unit of Measure	Water Quality Objective
Turbidity	NTU	5-20
pH	pH	6.5 – 8.5
Salinity	µS/cm	<3,000
Dissolved oxygen	mg/L	>6
Chlorophyll-a	µg/L	2-10
Faecal coliforms	Median No./100mL	<1000
Enterococci	Median No./100mL	<230
Algae and blue-green algae	No.cells/mL (<i>M.aeruginosa</i>)	<50,000
	mm ³ /L (total biovolume)	<4
Sodium	mg/L	500
Potassium ion	mg/L	40
Magnesium ion	mg/L	100
Chloride ion	mg/L	1000
Sulphate ion	mg/L	800
Bicarbonate ion	mg/L	400
Soluble Iron ion	mg/L	20
Soluble aluminium ion	mg/L	0.5
Ammonium ion	mg/L	20

Notes:

- 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 flooding.
- The Department acknowledges that pre-existing water quality may not meet the objectives for some analytes, including blue-green algae, bacteria and turbidity. The Applicant shall strive to meet these water quality objectives through implementation of the Soil and Water Management Plan (see condition 17 below), as far as is reasonable and feasible and within the Applicant's control, to the satisfaction of the Director-General.
- The Department acknowledges that deep groundwater (ie. around 20 metres below surface) on the site is influenced by brackish water and as such may not meet applicable water quality objectives.

⁴ Incorporates DEC GTA

Fines Management

13. ⁵The Applicant shall ensure that all excavated potential acid sulfate soil fines material is returned back to below the watertable as soon as possible to prevent oxidation. No potential acid sulfate soil shall be removed from the site, unless adequately neutralised in accordance with methods approved under the Soil and Water Management Plan (see condition 17 below).

Note: Acid sulfate soils are as defined in the NSW Acid Sulfate Soils Manual.

14. ⁶The Applicant shall ensure that all potential acid sulfate soil fines material is discharged into the pond at a depth of no less than 3 metres from the water surface, and that all fines are deposited to a final depth of at least 8 metres from the water surface, unless an alternative method(s) is approved by the DNR and the Director-General.

Flood Management

15. The Applicant shall cease dredging and processing activities not less than 24 hours prior to the commencement of overflow from any dredge pond. No dredging or processing shall occur when the dredge ponds are overflowing.
16. The Applicant shall ensure that the flood storage capacity of the site is no less than the pre-existing flood storage capacity at all stages of the development. Details of the available flood storage capacity shall be reported in the AEMR.

Monitoring and Management

17. ⁷Within 6 months of the date of this consent, the Applicant shall prepare (and following approval implement) a Soil and Water Management Plan for the development, in consultation with the DEC, DNR and Council, and to the satisfaction of the Director-General. This plan must be prepared by a qualified hydrologist/hydrogeologist and include:
- a) a Water Balance;
 - b) a Soil and Water Management Plan;
 - c) a Blue-Green Algae Management Plan;
 - d) a Surface Water Monitoring Program; and
 - e) a Ground Water Monitoring Program.
18. The Water Balance shall include:
- a) details of all water extracted, transferred, used and/or discharged by the quarry;
 - b) the source of all water collected or stored on the site, including rainfall, stormwater and groundwater; and
 - c) measures to minimise water use by the development.
19. The Soil and Water Management Plan shall:
- a) be consistent with the requirements of the Department of Housing's *Managing Urban Stormwater: Soils and Construction* manual, the NSW Acid Sulfate Soil Advisory Committee's *Acid Sulfate Soil Manual*, and Council's codes including its *Code of Practice for Soil and Water Management on Construction Sites*;
 - b) describe the location, function, and capacity of soil and water management and control structures during construction, stabilisation and operational stages;
 - c) identify construction and operational activities that could cause soil erosion, sedimentation or generation of acid sulfate soils;
 - d) describe measures to minimise soil erosion and the potential for the transport of sediment to downstream waters;
 - e) define procedures for managing the potential acid sulfate soils on the site;
 - f) define procedures for managing water releases from the site; and
 - g) define procedures for the maintenance of soil and water management structures over time.
20. The Blue-Green Algae Management Plan shall:
- a) be prepared by a suitably qualified blue-green algae expert, whose appointment has been approved by the Director-General;
 - b) be consistent with extant guidelines for blue-green algae management including the NHMRC's *Guidelines for Managing Risks in Recreational Water*;
 - c) include a detailed recovery plan that aims to reduce algae levels to meet the water quality objectives in Table 6 within a reasonable timeframe;
 - d) describe the measures that would be implemented to prevent and control the sources of algal blooms over the short, medium and long term;

⁵ Incorporates DNR GTA

⁶ Incorporates DNR GTA

⁷ Incorporates DNR and DEC GTA

- e) include reasonable and feasible measures to reduce nutrient levels in the pond/s over the short, medium and long term, and include interim water quality targets for nutrients based on continual improvement and established water quality objectives for the Tweed catchment; and
 - f) define procedures for the management and notification of identified algal blooms.
21. The Surface Water Monitoring Program shall include:
- a) detailed baseline data on surface water flows and quality in waterbodies that could potentially be impacted by the quarry;
 - b) surface water impact assessment criteria;
 - c) a program to monitor surface water flows and quality;
 - d) a program to manage water releases from the site;
 - e) a program to monitor bank and bed stability; and
 - f) a protocol for the investigation, notification and mitigation of identified exceedances of the surface water impact assessment criteria.
22. The Ground Water Monitoring Program shall include:
- a) detailed baseline data on ground water levels and quality, based on statistical analysis;
 - b) ground water impact assessment criteria;
 - c) a program to monitor ground water levels and quality;
 - d) a program to monitor ground water level effects on vegetation, and on ground water supply to adjoining properties; and
 - e) a protocol for the investigation, notification and mitigation of identified exceedances of the groundwater impact assessment criteria.

REHABILITATION AND LANDSCAPING

Rehabilitation

23. The Applicant shall progressively rehabilitate the site to the satisfaction of the Director-General.

Rehabilitation and Landscape Management Plan

24. Within 6 months of the date of this consent, the Applicant shall prepare (and following approval implement) a Rehabilitation and Landscape Management Plan for the development to the satisfaction of the Director-General. This plan must:
- a) include a detailed final landform concept plan;
 - b) describe in general the short, medium, and long-term measures that would be implemented to rehabilitate and stabilise the site;
 - c) describe in detail the measures that would be implemented over the next 5 years to rehabilitate and stabilise the site;
 - d) describe how the performance of these measures would be monitored over time;
 - e) set completion criteria for the rehabilitation and stabilisation of the site (including appropriate water quality criteria); and
 - f) include a Vegetation Clearing Protocol, Landscape Plan/s and a Pest and Weed Management Plan.

Notes:

- *The final landform concept plan described in (a) shall be based on the requirements of the relevant conditions of this consent, including conditions 2 and 3 of schedule 3.*
- *The measures for stabilising the final pond must ensure the long term stability of the banks from erosion and shall be generally consistent with the rock stabilisation methods described in the report titled Cudgen Lake Slope Stability Review, prepared by International Coastal Management, dated December 2005, unless otherwise approved by the Director-General.*
- *Within the context of ensuring long term stability, the pond design shall incorporate a variety of lake bank treatments (eg. beaches, wetlands) to achieve a natural looking final pond comprising a variety of habitats. Details of the treatments, along with appropriate modelling/analysis of the long term stability of the treatments, shall be provided with the Rehabilitation and Landscape Management Plan.*

25. The Rehabilitation and Landscape Management Plan must be prepared:
- a) in consultation with Council, DNR, DEC, DPI-Fisheries and the CCC;
 - b) by suitably qualified consultants, including a specialist hydrologist, coastal engineer, wetlands ecologist and landscape architect; and
 - c) in accordance with extant guidelines including the DNR's *Constructed Wetlands Manual, Volumes 1 & 2*, to the satisfaction of the Director-General.
26. The Landscape Plan/s shall include:
- a) concept design plans for the final landform; and
 - b) detailed design plans for the areas to be rehabilitated in the next 5 years.
27. The Pest and Weed Management Plan shall:
- a) identify potential terrestrial and aquatic pests and weeds that may be expected on the site;

- b) describe the measures that would be implemented to prevent and eradicate the occurrence of pests and weeds on the site; and
- c) describe how the performance of these measures would be monitored over time.

Rehabilitation Bond

28. Within 12 months of the date of this consent, the Applicant shall lodge a rehabilitation bond for the development with the Director-General. The sum of the bond shall be calculated at:
- a) \$2.50/m² for the total area to be disturbed in each 5 year review period (see condition 29 below); and
 - b) \$1.50/m² for the total area of land previously disturbed and/or rehabilitated by the development (including the Phase 1 and 2 area), to the satisfaction of the Director-General.

Notes:

- *If the rehabilitation and stabilisation works are completed to the satisfaction of the Director-General, the Director-General will release the rehabilitation bond.*
- *If the rehabilitation and stabilisation works are 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 these works.*

29. Within 6 months of each Independent Environmental Audit (see condition 6 of schedule 5) excluding the inaugural audit, unless the Director-General directs otherwise, the Applicant shall review, and if necessary revise, the sum of the rehabilitation bond to the satisfaction of the Director-General. This review must consider:
- a) the effects of inflation;
 - b) any changes to the total area of disturbance; and
 - c) the performance of the rehabilitation to date.

LONG TERM MANAGEMENT

Long Term Management Strategy

30. Within 12 months of the date of this consent the Applicant shall prepare a Long Term Management Strategy for the site, in consultation with Council, DPI-Fisheries and the CCC, and to the satisfaction of the Director-General. The strategy must:
- a) define the objectives and criteria for quarry closure and post-extraction management;
 - b) investigate options for the future use of the site, including the recreational fishing facility;
 - c) describe the measures that would be implemented to minimise or manage the ongoing environmental effects of the development; and
 - d) describe how the performance of these measures would be monitored over time.

Note: The Long Term Management Strategy may be prepared as part of the Rehabilitation Management Plan.

TRAFFIC AND TRANSPORT

Site Access

31. The Applicant shall ensure that all heavy vehicle access to and from the site is via the Tweed Coast Road/Crescent Road/Altona Road route. No heavy vehicles shall travel via Crescent Street through Cudgen Village, except for local deliveries to Cudgen Village.

Road Haulage

32. The Applicant shall ensure that all loaded vehicles entering or leaving the site are covered.
33. The Applicant shall ensure all loaded vehicles leaving the site are cleaned of materials that may fall on the road before they are allowed to leave the site.

Parking

34. The Applicant shall provide sufficient parking on-site for all development related traffic and visitors, in accordance with Council's parking codes, and to the satisfaction of the Director-General. No on-street parking shall be undertaken.
35. The Applicant shall ensure that on-site parking and pedestrian facilities are adequately signposted and located so as to prevent conflict between quarry and recreational fishing facility operations.

VISUAL IMPACT

36. The Applicant shall minimise the visual impacts of the development to the satisfaction of the Director-General.

Tree Screens

37. Within 12 months from the date of this consent, the Applicant shall establish and subsequently maintain a tree screen along the southern boundary of the site.

Note: The tree screen shall be detailed on the Landscape Plan/s (see condition 24 above).

Lighting Emissions

38. Any external lighting associated with the development shall comply with *Australian Standard AS4282 (INT) 1995 – Control of Obtrusive Effects of Outdoor Lighting*.

WASTE MANGEMENT

Waste Minimisation

39. The Applicant shall:
- a) monitor the amount of waste generated by the development;
 - b) investigate ways to minimise waste generated by the development;
 - c) implement reasonable and feasible measures to minimise waste generated by the development; and
 - d) report on waste management and minimisation in the AEMR.
to the satisfaction of the Director-General.

Wastewater Treatment

40. The Applicant shall install and manage any on-site sewage treatment facility to the satisfaction of Council and DEC. The facility must comply with the requirements of the *Environment and Health Protection Guidelines – On-site Sewage Management for Single Households (1998)*.

HAZARDS MANAGEMENT

Dangerous Goods

41. The Applicant shall ensure that the storage, handling, and transport of dangerous goods is conducted in accordance with the relevant Australian Standards, particularly *AS1940* and *AS1596*, and the *Dangerous Goods Code*.

Safety

42. The Applicant shall secure the development to ensure public safety to the satisfaction of the Director-General.

PRODUCTION DATA

43. The Applicant shall:
- a) provide annual production data to the DPI using the standard form for that purpose; and
 - b) include a copy of this data in the AEMR.

SCHEDULE 4 ADDITIONAL PROCEDURES

NOTIFICATION OF LANDOWNERS

1. If the results of monitoring required in schedule 3 identify that impacts generated by the development are greater than the relevant impact assessment criteria in schedule 3, then the Applicant shall notify the Director-General and the affected landowners and/or existing or future tenants accordingly, and provide quarterly monitoring results to each of these parties until the results show that the development is complying with the criteria in schedule 3.

INDEPENDENT REVIEW

2. If a landowner considers that the operations of the development are exceeding the impact assessment criteria in schedule 3, then he/she may ask the Applicant in writing for an independent review of the impacts of the development on his/her land.

If the Director-General is satisfied that an independent review is warranted, the Applicant shall within 3 months of the Director-General advising that an independent review is warranted:

- a) consult with the landowner to determine his/her concerns;
- 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 development is complying with the relevant criteria in schedule 3, and identify the source/s and scale of any impact on the land, and the development's contribution to this impact; and
- c) give the Director-General and landowner a copy of the independent review.

3. If the independent review determines that the operations are complying with the relevant criteria in schedule 3, then the Applicant may discontinue the independent review with the approval of the Director-General.
4. If the independent review determines that the operations are not complying with the relevant criteria in schedule 3, and that the development is primarily responsible for this non-compliance, then the Applicant shall:
 - a) take all practicable measures, in consultation with the landowner, to ensure that the development complies with the relevant criteria; and
 - b) conduct further monitoring to determine whether these measures ensure compliance; or
 - 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 operations are complying with the relevant criteria in schedule 3, then the Applicant may discontinue the independent review with the approval of the Director-General.

If the Applicant is unable to finalise an agreement with the landowner, then the Applicant 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 2).

5. If the independent review determines that the operations are not complying with the relevant criteria in schedule 3, but that several developments are responsible for this non-compliance, then the Applicant shall, with the agreement of the landowner and other development/s, prepare and implement a Cumulative Impact Management Plan to the satisfaction of the Director-General. This plan must provide details of the joint approach to be adopted by the Applicant and other development/s to manage cumulative impacts at the landowner's dwelling.

If the Applicant is unable to finalise an agreement with the landowner and/or other development/s, and/or prepare a Cumulative Impact Management Plan, then the Applicant 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 2).

6. If the landowner disputes the results of the independent review, either the Applicant 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 2).

SCHEDULE 5
ENVIRONMENTAL MANAGEMENT, MONITORING, AUDITING AND REPORTING

ENVIRONMENTAL MANAGEMENT STRATEGY

1. Within 6 months of the date of this consent, the Applicant shall prepare, and subsequently implement, an Environmental Management Strategy for the development to the satisfaction of the Director-General. This strategy must:
 - a) provide the strategic context for environmental management of the development;
 - b) identify the statutory requirements that apply to the development;
 - c) describe in general how the environmental performance of the development would be monitored and managed during the development;
 - d) describe the procedures that would be implemented to:
 - keep the local community and relevant agencies informed about the operation and environmental performance of the development;
 - receive, handle, respond to, and record complaints;
 - resolve any disputes that may arise during the course of the development;
 - respond to any non-compliance;
 - manage cumulative impacts; and
 - respond to emergencies; and
 - e) describe the role, responsibility, authority, and accountability of all the key personnel involved in environmental management of the development; and
 - f) be updated within 3 months of the completion of each Independent Environmental Audit (see below).

ENVIRONMENTAL MONITORING PROGRAM

2. Within 3 months of the date of this consent, the Applicant shall prepare an Environmental Monitoring Program for the development, to the satisfaction of the Director-General. This program must consolidate the various monitoring requirements in schedule 3 of this consent into a single document.
3. Within 3 months of the completion of each Independent Environmental Audit (see below), the Applicant shall review, and if necessary update, the Environmental Monitoring Program to the satisfaction of the Director-General.

INCIDENT REPORTING

4. Within 7 days of detecting an exceedance of the limits/performance criteria in this consent or an incident causing, or threatening to cause, material harm to the environment; the Applicant shall report the exceedance/incident to the Department, and any relevant agency. The report must:
 - a) describe the date, time, and nature of the exceedance/incident;
 - b) identify the cause or likely cause of the exceedance/incident;
 - c) describe what action has been taken to date; and
 - d) describe the proposed measures to address the exceedance/incident.

ANNUAL REPORTING

5. Each year, following the date of this consent, the Applicant shall prepare and submit an AEMR to the Director-General and the relevant agencies. This report must:
 - a) identify the standards and performance measures that apply to the development;
 - b) describe the works carried out in the last 12 months;
 - c) describe the works that will be carried out in the next 12 months;
 - d) include a summary of the complaints received during the past year, and compare this to the complaints received in previous years;
 - e) include a summary of the monitoring results for the development during the past year;
 - f) include an analysis of these monitoring results against the relevant:
 - impact assessment criteria;
 - monitoring results from previous years; and
 - predictions in the EIS;
 - g) identify any trends in the monitoring results over the life of the development;
 - h) identify any non-compliance during the previous year; and
 - i) describe what actions were, or are being taken to ensure compliance.

INDEPENDENT ENVIRONMENTAL AUDIT

6. Within 2 years of the date of this consent, and every 4 years thereafter, unless the Director-General directs otherwise, the Applicant shall commission and pay the full cost of an Independent Environmental Audit of the development. This audit must:
 - a) be conducted by suitably qualified, experienced, and independent expert/s whose appointment has been endorsed by the Director-General;

- b) assess the environmental performance of the development, and its effects on the surrounding environment;
 - c) assess whether the development is complying with the relevant standards, performance measures, and statutory requirements;
 - d) review the adequacy of the Applicant's Environmental Management Strategy and environmental management strategies/plans/programs; and, if necessary,
 - e) recommend measures or actions to improve the environmental performance of the development, and/or the environmental management and monitoring systems.
7. Within 3 months of commissioning the Independent Environmental Audit, the Applicant shall submit a copy of the audit report to the Director-General, with a response to the recommendations contained in the audit report.
8. Within 6 months of each Independent Environmental Audit, the Applicant shall review and if necessary revise each of the environmental management and monitoring strategies/plans/programs in schedules 3 and 5, to the satisfaction of the Director-General.

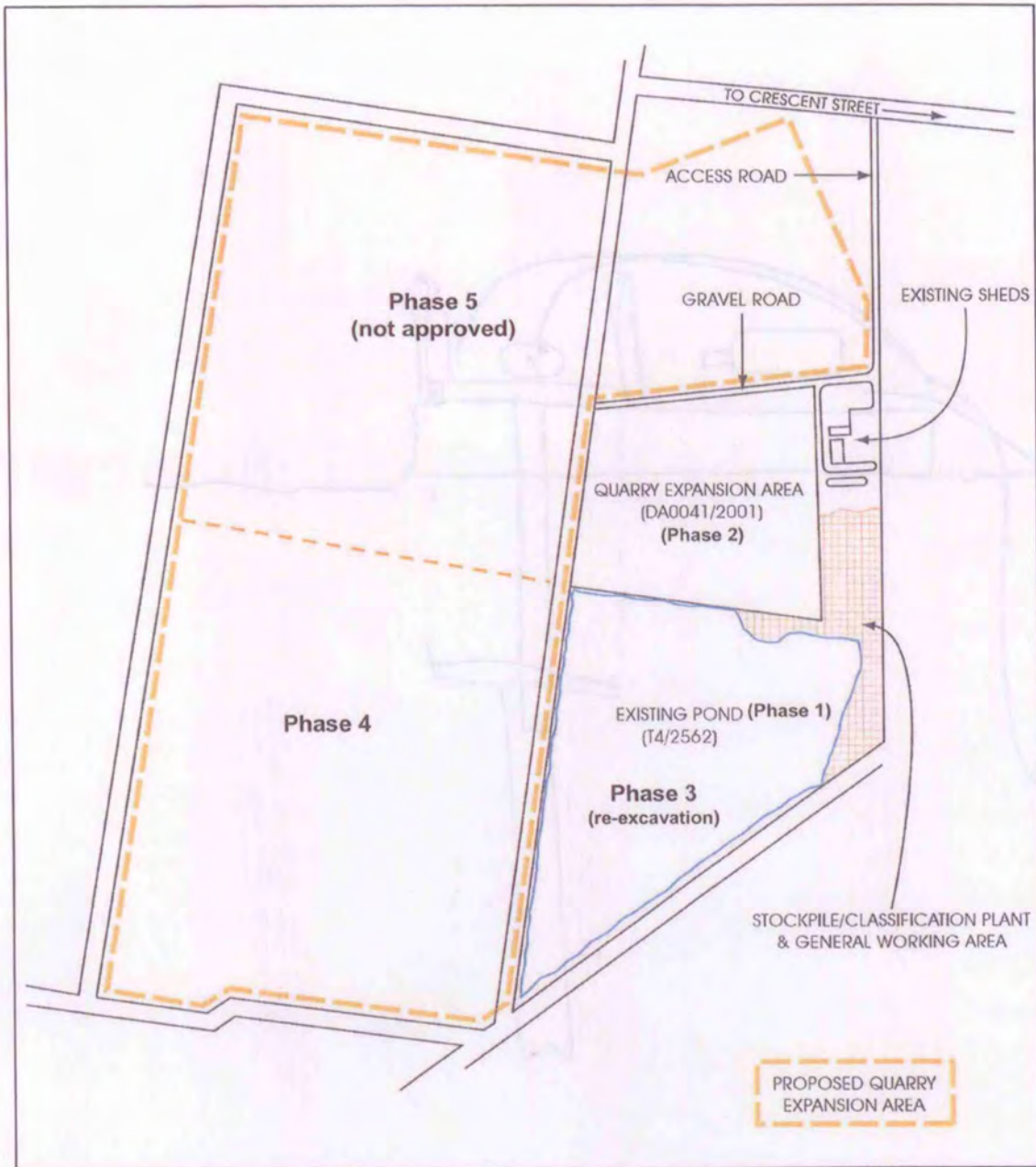
COMMUNITY CONSULTATIVE COMMITTEE

9. Within 6 months of the date of this consent, the Applicant shall establish a Community Consultative Committee to oversee the environmental performance of the development. The CCC shall:
- a) be comprised of at least:
 - 2 representatives from the Applicant, including the person responsible for environmental management at the quarry;
 - 1 representative from Council (if available); and
 - 2 representatives from the local community, whose appointment has been approved by the Director-General in consultation with the Council;
 - b) be chaired by an independent chairperson, whose appointment has been endorsed by the Director-General;
 - c) meet at least twice a year;
 - d) undertake regular inspections of the operations;
 - e) review and provide comment on the environmental performance of the development, including any construction or environmental management plans, monitoring results, audit reports, or complaints; and
 - f) be operated in accordance with any guidelines the Department may publish in regard to the operation of CCC for mining/quarrying projects.
10. The Applicant shall, at its own expense:
- a) ensure that 2 of its representatives attend the Committee's meetings;
 - b) provide the Committee with regular information on the environmental performance and management of the development;
 - c) provide meeting facilities for the Committee;
 - d) arrange site inspections for the Committee, if necessary;
 - e) take minutes of the Committee's meetings;
 - f) make these minutes available to the public;
 - g) respond to any advice or recommendations the Committee may have in relation to the environmental management or performance of the development; and
 - h) forward a copy of the minutes of each Committee meeting, and any responses to the Committee's recommendations, to the Director-General within a month of the Committee meeting.

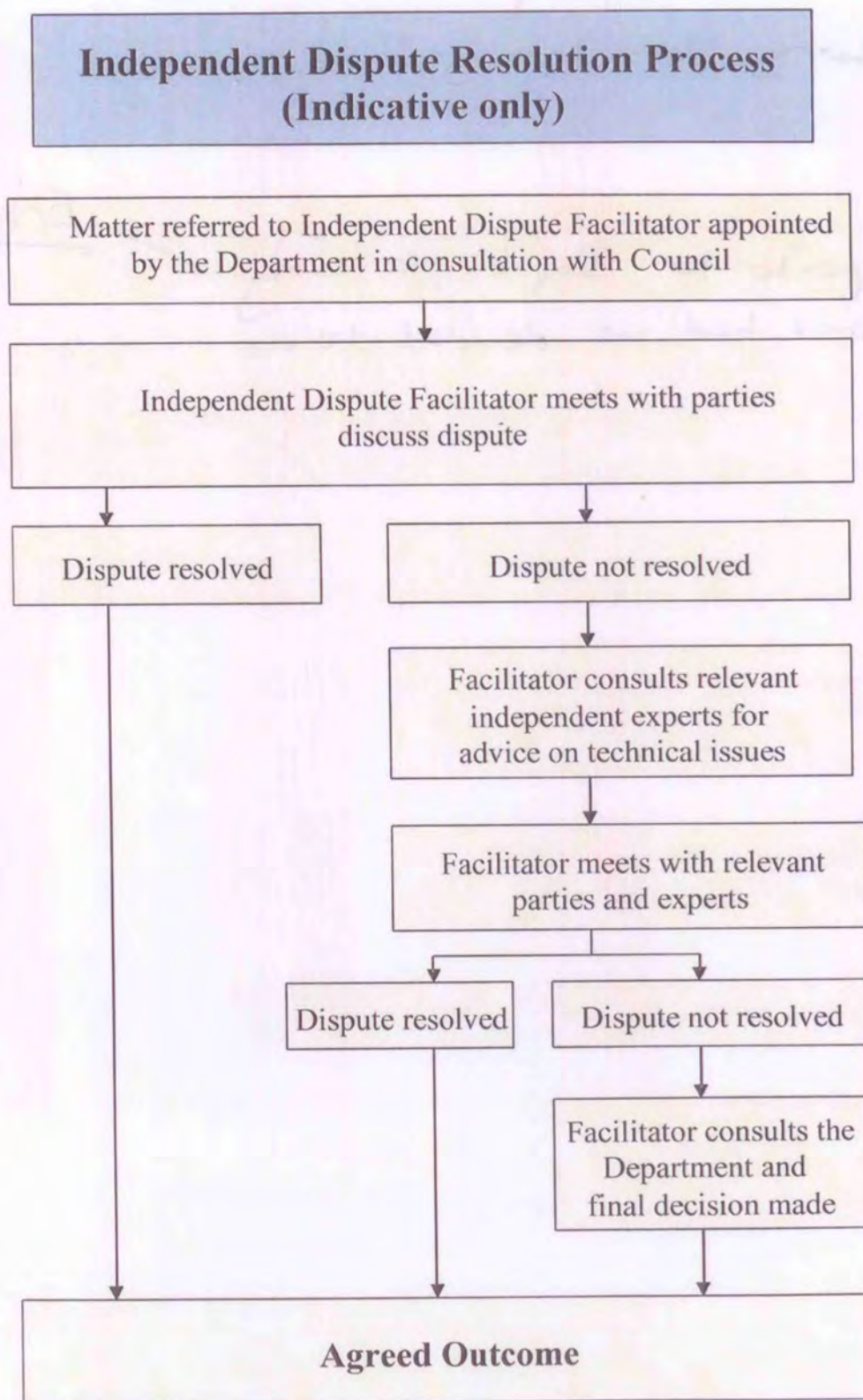
ACCESS TO INFORMATION

11. Within 1 month of the approval of any management plan/strategy or monitoring program required under this consent (or any subsequent revision of these management plans/strategies or monitoring programs), the completion of the independent audits required under this consent, or the completion of the AEMR, the Applicant shall:
- a) provide a copy of the relevant document/s to the Council, relevant agencies and the CCC;
 - b) ensure that a copy of the relevant documents is made publicly available at the site; to the satisfaction of the Director-General.
12. During the life of the development, the Applicant shall:
- a) make a summary of the results of all monitoring required under this consent publicly available at the site; and
 - b) update these results on a regular basis (at least every 3 months), to the satisfaction of the Director-General.

APPENDIX 1
CONCEPT DEVELOPMENT LAYOUT PLAN



APPENDIX 2
CONCEPT DEVELOPMENT LAYOUT PLAN



Environment Protection Licence

Licence - 11453

**Licence Details**

Number:	11453
Anniversary Date:	27-July
Review Due Date:	22-Jul-2014

Licensee

HANSON CONSTRUCTION MATERIALS PTY LTD
 LOCKED BAG 5260
 PARRAMATTA NSW 2124

Licence Type

Premises

Premises

HANSON CONSTRUCTION MATERIALS PTY LTD
 CRESENT STREET
 CUDGEN NSW 2487

Scheduled Activity

Extractive activities

Fee Based Activity

Water-based extractive activity

Scale

> 50000 - 100000 m3 obtained or moved

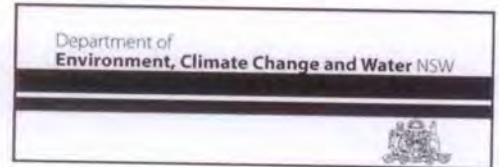
Region

North East - North Coast
 NSW Govt Offices, 49 Victoria Street
 GRAFTON NSW 2460
 Phone: 02 6640 2500
 Fax: 02 6642 7743

PO Box 498 GRAFTON
 NSW 2460

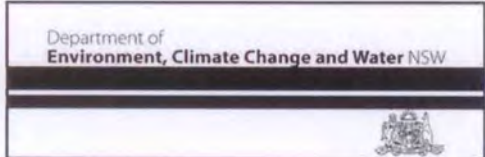
Environment Protection Licence

Licence - 11453



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Environment Protection Licence



Licence - 11453

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Information about this licence

Dictionary

A definition of terms used in the licence can be found in the dictionary at the end of this licence.

Responsibilities of licensee

Separate to the requirements of this licence, general obligations of licensees are set out in the Protection of the Environment Operations Act 1997 ("the Act") and the Regulations made under the Act. These include obligations to:

- ensure persons associated with you comply with this licence, as set out in section 64 of the Act;
- control the pollution of waters and the pollution of air (see for example sections 120 - 132 of the Act); and
- report incidents causing or threatening material environmental harm to the environment, as set out in Part 5.7 of the Act.

Variation of licence conditions

The licence holder can apply to vary the conditions of this licence. An application form for this purpose is available from the EPA.

The EPA may also vary the conditions of the licence at any time by written notice without an application being made.

Where a licence has been granted in relation to development which was assessed under the Environmental Planning and Assessment Act 1979 in accordance with the procedures applying to integrated development, the EPA may not impose conditions which are inconsistent with the development consent conditions until the licence is first reviewed under Part 3.6 of the Act.

Duration of licence

This licence will remain in force until the licence is surrendered by the licence holder or until it is suspended or revoked by the EPA or the Minister. A licence may only be surrendered with the written approval of the EPA.

Licence review

The Act requires that the EPA review your licence at least every 5 years after the issue of the licence, as set out in Part 3.6 and Schedule 5 of the Act. You will receive advance notice of the licence review.

Fees and annual return to be sent to the EPA

For each licence fee period you must pay:

- an administrative fee; and
- a load-based fee (if applicable).

The EPA publication "A Guide to Licensing" contains information about how to calculate your licence fees.

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The licence requires that an Annual Return, comprising a Statement of Compliance and a summary of any monitoring required by the licence (including the recording of complaints), be submitted to the EPA. The Annual Return must be submitted within 60 days after the end of each reporting period. See condition R1 regarding the Annual Return reporting requirements.

Usually the licence fee period is the same as the reporting period.

Transfer of licence

The licence holder can apply to transfer the licence to another person. An application form for this purpose is available from the EPA.

Public register and access to monitoring data

Part 9.5 of the Act requires the EPA to keep a public register of details and decisions of the EPA in relation to, for example:

- licence applications;
- licence conditions and variations;
- statements of compliance;
- load based licensing information; and
- load reduction agreements.

Under s320 of the Act application can be made to the EPA for access to monitoring data which has been submitted to the EPA by licensees.

This licence is issued to:

HANSON CONSTRUCTION MATERIALS PTY LTD
LOCKED BAG 5260
PARRAMATTA NSW 2124

subject to the conditions which follow.

1 Administrative conditions

A1 What the licence authorises and regulates

A1.1 Not applicable.

A1.2 This licence authorises the carrying out of the scheduled activities listed below at the premises specified in A2. The activities are listed according to their scheduled activity classification, fee-based activity classification and the scale of the operation.

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Unless otherwise further restricted by a condition of this licence, the scale at which the activity is carried out must not exceed the maximum scale specified in this condition.

Scheduled Activity

Extractive activities

Fee Based Activity	Scale
Water-based extractive activity	> 50000 - 100000 m3 obtained or moved

A1.3 Not applicable.

A2 Premises to which this licence applies

A2.1 The licence applies to the following premises:

Premises Details

HANSON CONSTRUCTION MATERIALS PTY LTD
 CRESENT STREET
 CUDGEN
 NSW
 2487
 LOT 2 DP777905

A3 Other activities

A3.1 This licence applies to all other activities carried on at the premises, including:

Environment Protection Licence



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Extractive Industries

A4 Information supplied to the EPA

A4.1 Works and activities must be carried out in accordance with the proposal contained in the licence application, except as expressly provided by a condition of this licence.

In this condition the reference to "the licence application" includes a reference to:

- (a) the applications for any licences (including former pollution control approvals) which this licence replaces under the Protection of the Environment Operations (Savings and Transitional) Regulation 1998; and
- (b) the licence information form provided by the licensee to the EPA to assist the EPA in connection with the issuing of this licence.

2 Discharges to air and water and applications to land

P1 Location of monitoring/discharge points and areas

P1.1 Not applicable.

P1.2 Not applicable.

P1.3 Not applicable.

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.

L2 Load limits

L2.1 Not applicable.

L2.2 Not applicable.

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L3 Concentration limits

L3.1 Not applicable.

L3.2 Not applicable.

L3.3 Not applicable.

L4 Volume and mass limits

L4.1 Not applicable.

L5 Waste

L5.1 Not applicable.

L6 Noise Limits

L6.1 Noise from the premises must not exceed an LA10 (15 minute) noise emission criterion of 40 dB(A), except as expressly provided by this licence.

L6.2 The noise emission limits identified in L6.1 apply for prevailing meteorological conditions (winds up to 3m/s), except under conditions of temperature inversions. Noise impacts that may be enhanced by temperature inversions must be addressed by:

- (a) Documenting noise complaints received to identify any higher level of impacts or patterns of temperature inversions.
- (b) Where levels of noise complaints indicate a higher level of impact then actions to quantify and ameliorate any enhanced impacts under temperature inversions conditions should be developed and implemented.

L6.3 Noise from the premises is to be measured at any effected residence to determine compliance with this condition.

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.

Environment Protection Licence



Licence - 11453

This includes:

- (a) the processing, handling, movement and storage of materials and substances used to carry out the activity; and
- (b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.

O1.2 Unless otherwise agreed to in writing by the EPA, works covered by this Licence must only be carried out between the hours of 0700 and 1800 Monday to Friday, and 0700 and 1300 Saturday, and at no time on Sundays and Public Holidays. For the purpose of this licence, the term "works" refers to all dredging operations, maintenance, deliveries, barge movements, fueling and associated heavy transport.

O2 Maintenance of plant and equipment

O2.1 All plant and equipment installed at the premises or used in connection with the licensed activity:

- (a) must be maintained in a proper and efficient condition; and
- (b) must be operated in a proper and efficient manner.

O3 Trucks transporting material from the premises must be covered immediately after loading to prevent wind blown emissions and spillage. The covering must be maintained until immediately before unloading the trucks.

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 as set out in this condition.

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;
- (b) kept for at least 4 years after the monitoring or event to which they relate took place; and
- (c) produced in a legible form to any authorised officer of the EPA who asks to see them.

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;
- (b) the time(s) at which the sample was collected;
- (c) the point at which the sample was taken; and
- (d) the name of the person who collected the sample.

M2 Requirement to monitor concentration of pollutants discharged

M2.1 Not applicable.

Environment Protection Licence

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M3 Testing methods - concentration limits

M3.1 Not applicable.

M3.2 Not applicable.

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.

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; and
- (f) if no action was taken by the licensee, the reasons why no action was taken.

M4.3 The record of a complaint must be kept for at least 4 years after the complaint was made.

M4.4 The record must be produced to any authorised officer of the EPA who asks to see them.

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.

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.

M5.3 Conditions M5.1 and M5.2 do not apply until 3 months after:

- (a) the date of the issue of this licence or
- (b) if this licence is a replacement licence within the meaning of the Protection of the Environment Operations (Savings and Transitional) Regulation 1998, the date on which a copy of the licence was served on the licensee under clause 10 of that regulation.

Environment Protection Licence

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M6 Requirement to monitor volume or mass

M6.1 Not applicable.

6 Reporting conditions

R1 Annual return documents

What documents must an Annual Return contain?

- 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.

Period covered by Annual Return

- 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.

- R1.3 Where this licence is transferred from the licensee to a new licensee:
- (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; and
 - (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.

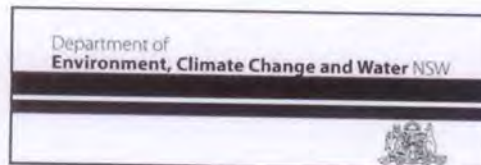
Note: An application to transfer a licence must be made in the approved form for this purpose.

- R1.4 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:
- (a) in relation to the surrender of a licence - the date when notice in writing of approval of the surrender is given; or
 - (b) in relation to the revocation of the licence - the date from which notice revoking the licence operates.

Deadline for Annual Return

- R1.5 The Annual Return for the reporting period must be supplied to the EPA by registered post not later

Environment Protection Licence



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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').

Notification where actual load can not be calculated

R1.6 Not applicable.

Licensee must retain copy of Annual Return

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.

Certifying of Statement of Compliance and signing of Monitoring and Complaints Summary

R1.8 Within the Annual Return, the Statement of Compliance must be certified and the Monitoring and Complaints Summary must be signed by:

- (a) the licence holder; or
- (b) by a person approved in writing by the EPA to sign on behalf of the licence holder.

R1.9 A person who has been given written approval to certify a certificate of compliance under a licence issued under the Pollution Control Act 1970 is taken to be approved for the purpose of this condition until the date of first review of this licence.

R2 Notification of environmental harm

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 accordance with the requirements of Part 5.7 of the Act.

R2.1 Notifications must be made by telephoning the Environment Line service on 131 555.

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.

R3 Written report

R3.1 Where an authorised officer of the EPA suspects on reasonable grounds that:

- (a) where this licence applies to premises, an event has occurred at the premises; or
- (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.

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.



- R3.3 The request may require a report which includes any or all of the following information:
- (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 recurrence of such an event; and
 - (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.

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.
- G1.2 The licence must be produced to any authorised officer of the EPA who asks to see it.
- G1.3 The licence must be available for inspection by any employee or agent of the licensee working at the premises.

Pollution studies and reduction programs

Special conditions

Dictionary

General Dictionary

Environment Protection Licence



Licence - 11453

In this licence, unless the contrary is indicated, the terms below have the following meanings:

3DGM [in relation to a concentration limit]	Means the three day geometric mean, which is calculated by multiplying the results of the analysis of three samples collected on consecutive days and then taking the cubed root of that amount. Where one or more of the samples is zero or below the detection limit for the analysis, then 1 or the detection limit respectively should be used in place of those samples
Act	Means the Protection of the Environment Operations Act 1997
activity	Means a scheduled or non-scheduled activity within the meaning of the Protection of the Environment Operations Act 1997
actual load	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 1998
AM	Together with a number, means an ambient air monitoring method of that number prescribed by the <i>Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales</i> .
AMG	Australian Map Grid
anniversary date	The anniversary date is the anniversary each year of the date of issue of the licence. In the case of a licence continued in force by the Protection of the Environment Operations Act 1997, the date of issue of the licence is the first anniversary of the date of issue or last renewal of the licence following the commencement of the Act.
annual return	Is defined in R1.1
Approved Methods Publication	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 1998
assessable pollutants	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 1998
BOD	Means biochemical oxygen demand
CEM	Together with a number, means a continuous emission monitoring method of that number prescribed by the <i>Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales</i> .
COD	Means chemical oxygen demand
composite sample	Unless otherwise specifically approved in writing by the EPA, a sample consisting of 24 individual samples collected at hourly intervals and each having an equivalent volume.
cond.	Means conductivity
environment	Has the same meaning as in the Protection of the Environment Operations Act 1997
environment protection legislation	Has the same meaning as in the Protection of the Environment Administration Act 1991
EPA	Means Environment Protection Authority of New South Wales.
fee-based activity classification	Means the numbered short descriptions in Schedule 1 of the Protection of the Environment Operations (General) Regulation 1998.
flow weighted composite sample	Means a sample whose composites are sized in proportion to the flow at each composites time of collection.
general solid waste (non-putrescible)	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
general solid waste (putrescible)	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
grab sample	Means a single sample taken at a point at a single time

Environment Protection Licence



Licence - 11453

hazardous waste	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
licensee	Means the licence holder described at the front of this licence
load calculation protocol	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 1998
local authority	Has the same meaning as in the Protection of the Environment Operations Act 1997
material harm	Has the same meaning as in section 147 Protection of the Environment Operations Act 1997
MBAS	Means methylene blue active substances
Minister	Means the Minister administering the Protection of the Environment Operations Act 1997
mobile plant	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
motor vehicle	Has the same meaning as in the Protection of the Environment Operations Act 1997
O&G	Means oil and grease
percentile [in relation to a concentration limit of a sample]	Means that percentage [eg.50%] of the number of samples taken that must meet the concentration limit specified in the licence for that pollutant over a specified period of time. In this licence, the specified period of time is the Reporting Period unless otherwise stated in this licence.
plant	Includes all plant within the meaning of the Protection of the Environment Operations Act 1997 as well as motor vehicles.
pollution of waters [or water pollution]	Has the same meaning as in the Protection of the Environment Operations Act 1997
premises	Means the premises described in condition A2.1
public authority	Has the same meaning as in the Protection of the Environment Operations Act 1997
regional office	Means the relevant EPA office referred to in the Contacting the EPA document accompanying this licence
reporting period	For the purposes of this licence, the reporting period means the period of 12 months after the issue of the licence, and each subsequent period of 12 months. In the case of a licence continued in force by the Protection of the Environment Operations Act 1997, the date of issue of the licence is the first anniversary of the date of issue or last renewal of the licence following the commencement of the Act.
restricted solid waste	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
scheduled activity	Means an activity listed in Schedule 1 of the Protection of the Environment Operations Act 1997
special waste	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
TM	Together with a number, means a test method of that number prescribed by the <i>Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales</i> .
TSP	Means total suspended particles
TSS	Means total suspended solids
Type 1 substance	Means the elements antimony, arsenic, cadmium, lead or mercury or any compound containing one or more of those elements
Type 2 substance	Means the elements beryllium, chromium, cobalt, manganese, nickel, selenium, tin or vanadium or any compound containing one or more of those elements

Environment Protection Licence



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utilisation area	Means any area shown as a utilisation area on a map submitted with the application for this licence
waste	Has the same meaning as in the Protection of the Environment Operations Act 1997
waste type	Means liquid, restricted solid waste, general solid waste (putrescible), general solid waste (non-putrescible), special waste or hazardous waste

Mr Jon Keats

Environment Protection Authority

(By Delegation)

Date of this edition - 01-Feb-2010

End Notes

- 1 Licence transferred through application 144797, approved on 13-Mar-2007, which came into effect on 01-Feb-2007.
- 2 Condition A1.3 Not applicable varied by notice issued on <issue date> which came into effect on <effective date>
- 3 Licence varied by legislative change to Sched. Act. name, issued on 28-Apr-2008, which came into effect on 28-Apr-2008.



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