

APPENDIX B - Copy of Development Consent, DA Modifications & Other Planning Instruments



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10/02144

Department Generated Correspondence (Y)



Planning

ASSESSMENT REPORT

Adams Road Quarry, Luddenham - Section 96(1A) Modification (MOD 2)

BACKGROUND

Blue Sky Mining Pty Limited (BSM) has consent for the development of the Adams Road Quarry, a clay/shale quarry, located approximately 3 kilometres northeast of Luddenham in the Liverpool local government area (see Figure 1).

Consent for the quarry was granted to Badger Mining on 23 May 2004, by the then Minister for Infrastructure, Planning and Natural Resources. This consent was later acquired by BSM.

On 4 January 2006, approval was granted to modify the consent to relocate the quarry access bridge across Oakey Creek towards the south eastern corner of the site.

In 2008 the Department became aware that development was being carried out on site. Following an investigation, it was found that the works were being carried out in breach of the conditions of consent. The Department required BSM to immediately cease all development on site, until such time as the appropriate conditions had been complied with.

In May 2009, following certification that the company had complied with all relevant conditions, the Department advised BSM that works could re-commence on site, provided that all other relevant approvals and licences were in place. This included a requirement that BSM obtain consent for an incorrectly constructed acoustic bund near the western boundary of the site.

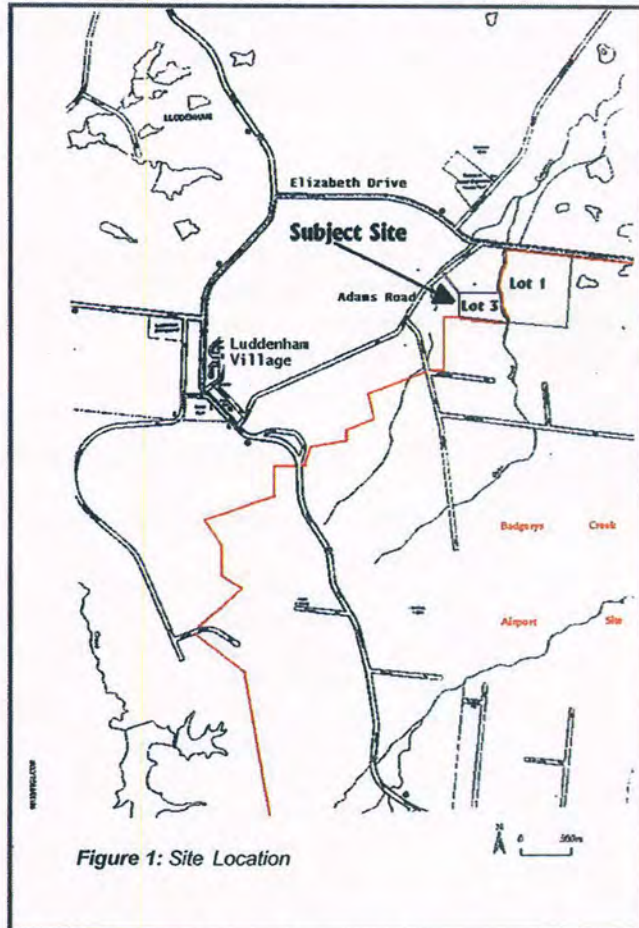


Figure 1: Site Location

PROPOSED MODIFICATIONS

On 31 August 2009, BSM lodged a modification application under section 96(1A) of the *Environmental Planning and Assessment Act 1979* (EP&A Act). Primarily, the proposed modification seeks approval for the 'as built' western acoustic bund, including the relocation of the northern acoustic bund further westwards along the line of its approved location (see Figures 2 and 3).

The proposed changes to the approved development comprise:

- the relocation of the western acoustic bund 50m towards the western boundary of the site;
- the relocation of the northern acoustic bund towards the western boundary of the site;
- an amendment to condition 6 of schedule 5, requiring the first independent environmental audit to be conducted by 31 December 2010; and
- an amendment to condition 5 of schedule 3, to extend the development consent until 15 years after the date of the modification application.

The proposed modification does **not** include:

- increasing the approved depth or surface area of the open pit;
- increasing the approved methodology, rates or volumes of clay/shale extraction or processing;
- changes to the amount of clay/shale transported by road;
- changes to the hours of operations; or
- changes to the water supply.

STATUTORY CONTEXT

Consent Authority

The Minister for Planning was the consent authority for the original development application, and is consequently the consent authority for this modification application. However, the Director, Major Development Assessment may determine the application under the Minister's delegation of 4 March 2009.

Section 96

Under section 96(1A) of the EP&A Act, a consent authority may modify a development consent if:

- a) it is satisfied that the proposed modification is of minimal environmental impact, and*
- b) it is satisfied that the development to which the consent as modified relates is substantially the same development for which consent was originally granted and before that consent as originally granted was modified (if at all); and*
- c) it has notified the application in accordance with:*
 - (i) the regulations, if the regulations so require, or*
 - (ii) a development control plan, if the consent authority is a council that has made a development control plan that requires the notification or advertising of applications for modification of a development consent, and*
- d) it has considered any submissions made concerning the proposed modification within any period prescribed by the regulations or provided by the development control plan, as the case may be.*

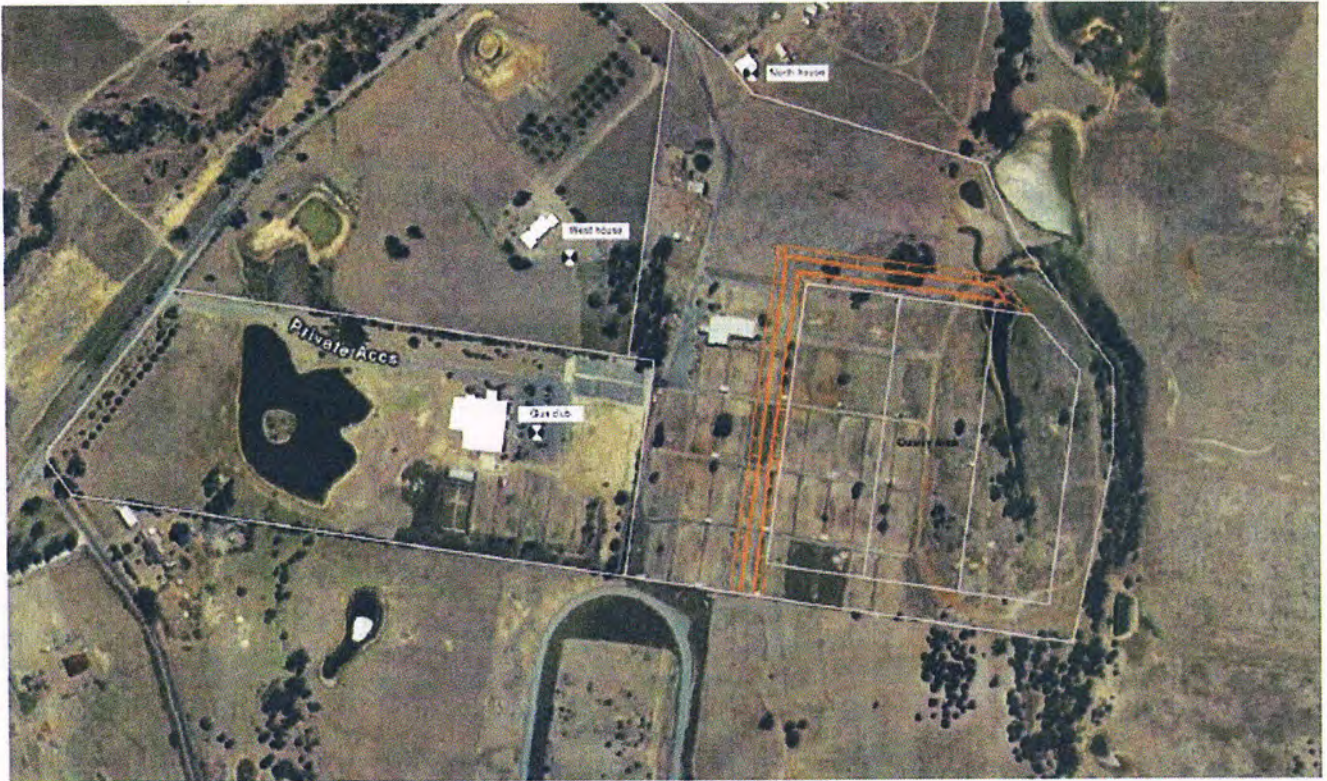


Figure 2: Approved Noise Attenuation Bunds

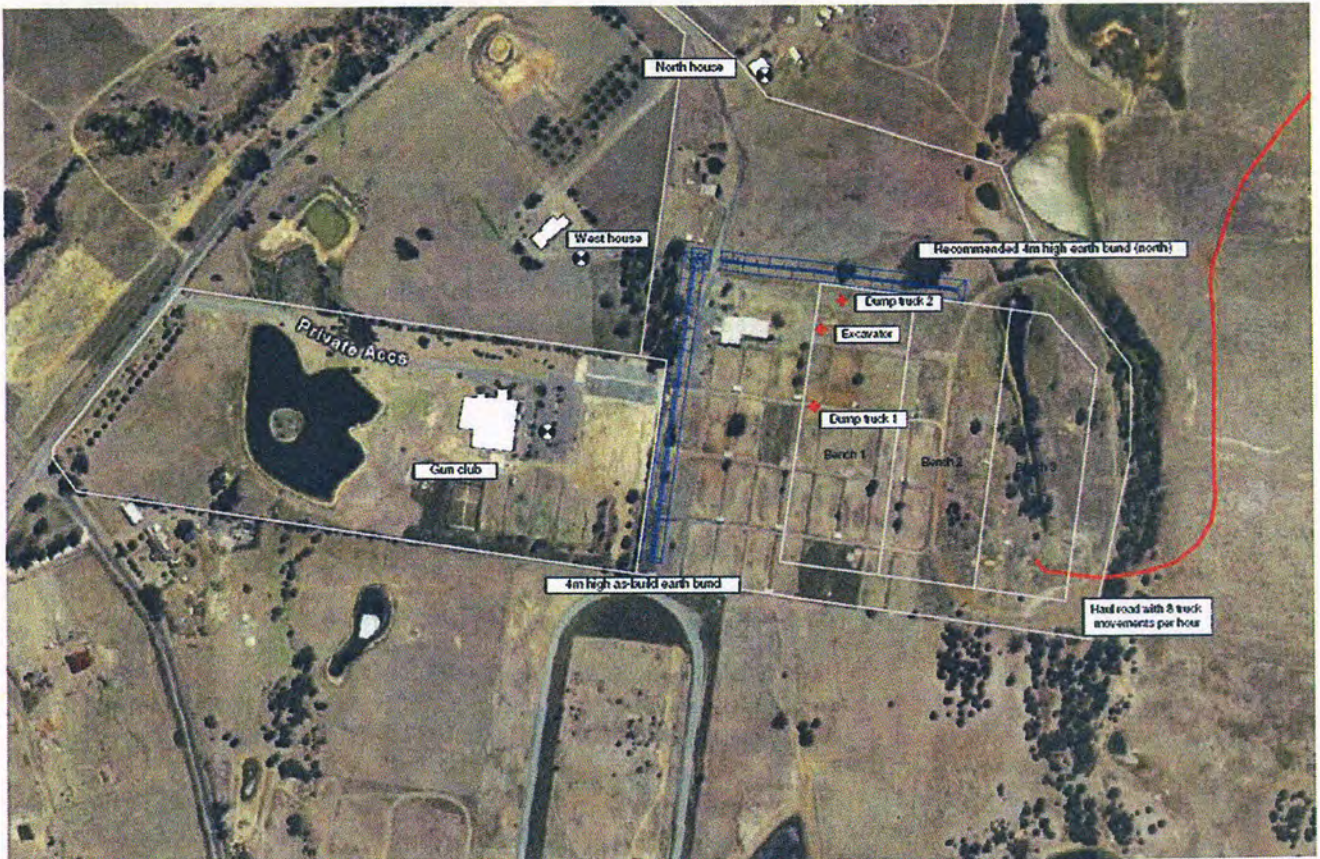


Figure 3: Proposed Noise Attenuation Bund and Sensitive Receiver Locations

The Department has assessed the merits of the application and is satisfied that the proposed modifications would have minimal environmental impact (see "Consideration of Issues" below). The Department is also satisfied that the consent as modified would be "substantially the same" as the development approved in the original consent. The Department is therefore satisfied that the modification application can reasonably be considered and determined under section 96(1A).

CONSULTATION

The Department is not required to publicly consult regarding this modification. However, the Department did consult with the Department of Environment, Climate Change and Water (DECCW). DECCW raised no objections to the proposal.

CONSIDERATION OF ISSUES

The Department has assessed the application, the accompanying Statement of Environmental Effects (SEE) and DECCW's comments on the proposal in accordance with the relevant requirements of the EP&A Act. The key issues for each component of the proposed modification are discussed below.

<i>Issue</i>	<i>Consideration</i>
<i>Noise</i>	<p>The SEE included a specialist noise assessment undertaken by Golder Associates Ltd (Golder), which considered the potential noise impacts of the modification against the noise impact assessment criteria contained in the development consent.</p> <p>Golder's assessment considered the proposed changes to both the western and northern acoustic bund walls. The noise assessment found that there would be an increase in noise levels at surrounding receivers to the north and west of the quarry, over those previously predicted in the Environmental Impact Statement (EIS).</p> <p>However, although noise levels would increase, they would still remain below the approved criteria of 41dB_{Leq, 15min} for all sensitive receivers, except for the North house. At this location, noise levels would exceed the criteria by 2dB(A) if all equipment was operating in Bench 1. Golder recommended that when extraction operations are taking place in Bench 1, operations are restricted to the use of 1 truck and 1 excavator, until the quarry floor is at least 1.5m below the existing ground level, to ensure that the existing noise criteria levels can be met. The Department supports this proposal, and has recommended conditions to that effect.</p> <p>The Department and DECCW are satisfied that the modification has been adequately assessed and that any potential noise impacts of the proposed modification could be sufficiently reduced to meet the existing noise criteria for the development.</p>
<i>Visual</i>	<p>The proposed modification has the potential to result in a visual impact to neighbouring properties, due to the relocation of the western bund wall closer to surrounding properties to the west.</p> <p>A small section of the western bund would run parallel to an existing 6-8m high noise bund constructed for the adjoining Gun Club. However, part of the western bund would be visible from the actual club itself and the car park area. Although this would amount to an increased visual impact over that previously approved, once the bund is vegetated, its visibility is not considered to result in significant impact to the club.</p> <p>The 'as built' location of the western bund wall would not be visible from the street and would also be substantially obscured from view from the West House by a scattering of trees, therefore limiting any visual impacts likely to occur as a result of the amended location.</p> <p>Further, it is considered that any visual impacts likely to occur as a result of the relocation of the northern bund would be negligible due to the distance from the most affected receiver to the north.</p> <p>The Department is satisfied that the visual impacts of the proposed modification would be low.</p>
<i>Flora and Fauna</i>	<p>Although a small number of bushes were removed, no trees were cleared for the construction of the as-built western acoustic bund.</p> <p>The northern bund wall is proposed to be relocated towards the west on land which has been extensively cleared. The proposed relocation would not require the removal of any vegetation.</p> <p>The Department is satisfied that the proposed modification would not increase flora and fauna impacts over those previously approved.</p>

Issue	Consideration
<i>Erosion and Sediment Control</i>	<p>The relocation of the western and northern bund walls are not considered to have a significant impact on surface water flows around the site, due to the contour of the existing surface water diversion structures and catchment area.</p> <p>The Department is satisfied that there would be no significant impacts to the existing erosion and sediment control structures on site as a result of the proposal.</p>
<i>Quarry Life and Socio-Economic Issues</i>	<p>The original consent allowed for the quarry to operate for 15 years from the date of approval, meaning the consent would have expired in 2019. However since the consent was granted, the owner of the site has changed, access arrangements were modified and works on site were ordered to be ceased by the Department for some 12-18 months until compliance with the consent was achieved. As such, no actual quarrying of material has commenced to date.</p> <p>Despite this, the Department acknowledges that physical works have commenced on site with the construction of the haul road, western noise bund and removal of top soil satisfying that the consent has been physically commenced under Section 95 of the EP&A Act.</p> <p>Since actual quarrying operations have not yet commenced, the Department considers it reasonable to extend the expiry date of the development consent for a further 5 years, until December 2024 (ie from the original expiry date of 2019). Further, due to quarry operations not yet having commenced, the Department considers it appropriate to require the first independent environmental audit to be conducted by 31 December 2010, and thereafter every 3 years. This is more frequent than under the original consent and reflects contemporary standards applied by the Department.</p> <p>The proposed extension to the life of the quarry would have substantially the same effect on the community and the economy as the previously approved development and would allow the quarry adequate time to extract and deliver high quality clay/shale materials to Sydney and regional markets as well as provide direct employment for up to 14 people. The proposed modification would not result in any changes to the socio-economic benefits outlined in the EIS. The Department is also satisfied that the existing consent conditions would manage any potential impacts from the operation of the quarry.</p> <p>In addition, the Department is satisfied that maintaining the workforce on site and the supply of construction materials to Sydney and regional markets would be positive outcomes for the local economy and NSW as a whole.</p>
<i>Amendment to Plans</i>	<p>The Proponent requested an amendment to condition 3 of schedule 3 to include a reference to plan No. 124558-NB-WAE, prepared by JBW Surveyors and dated 6/4/2009, illustrating the location of the western bund wall as-built and the acoustic modelling plan showing the required extension of the northern bund wall. The Department has considered the request and determined that the inclusion of the reference to the current modification application and SEE in condition 2 of schedule 3, as well as the addition of the plan as an Appendix to the consent, is sufficient to indicate approval of the amended location of the bund walls, without the requirement to also amend condition 3 of schedule 3.</p>

SECTION 79C CONSIDERATION

Section 96 of the EP&A Act requires a consent authority to give consideration to the matters listed under Section 79C when it determines a modification application.

The Department has assessed the proposal against these matters, and is satisfied that:

- the proposal is consistent with the provisions of the relevant planning instruments;
- the potential impacts of the proposal can be minimised, mitigated and/or managed;
- the site is suitable for the development as previously approved; and
- the proposal is in the public interest.

RECOMMENDED CONDITIONS

The Department is satisfied that the existing conditions of consent for the Adams Road Quarry are generally adequate to manage the development as modified by the application. The Department has recommended additional conditions, including a requirement to update any strategies, plans or programs necessary to encompass the proposed modification, as well as administrative updates of certain other conditions. The Applicant does not object to the proposed conditions.

CONCLUSION

The Department has assessed the application, the SEE and correspondence regarding the proposed modification and is satisfied that the proposed modification would have a minimal impact on the environment and the amenity of nearby residences.

The Department is further satisfied that the development as modified would be substantially the same as that originally approved, and that the proposal is in the public interest. Consequently, the Department believes the proposed modification should be approved, subject to it being carried out in accordance with the SEE and other minor administrative modifications to the consent.

RECOMMENDATION

It is recommended that the Director, Major Development Assessment, as delegate of the Minister:

- consider the findings and recommendations of this report;
- determine that the proposed modification is of minimal environmental impact;
- determine that the development to which the consent, as modified, relates is substantially the same development for which consent was originally granted;
- approve the proposed modification under Section 96(1A) of the EP&A Act; and
- sign the attached notice of modification (Tab A).



Howard Reed 28.1.10
Manager Mining



Chris Ritchie
A/Director
Major Development Assessment

DEPARTMENT OF PLANNING

Office of Sustainable Development Assessment and Approvals

For Decision

PURPOSE

To determine an application from Badger Mining Company Pty Ltd (Badger Mining) to modify the Minister's development consent for the Luddenham clay/shale quarry.

BACKGROUND

On 23 May 2004, the then Minister for Infrastructure, Planning and Natural Resources approved a development application (DA) from Badger Mining for the Luddenham clay/shale quarry and associated infrastructure.

The proposed quarry is located about 3 kilometres northeast of Luddenham in the Liverpool local government area (see Figure 1).

Under the Minister's approval, Badger Mining may extract up to 300,000 cubic metres of clay/shale a year for about 10 years, and transport this material to regional brickworks by truck.

The proposed quarry has a capital value of \$4 million, and will employ 13 full-time workers.

Construction of the quarry is planned to commence in early 2006.

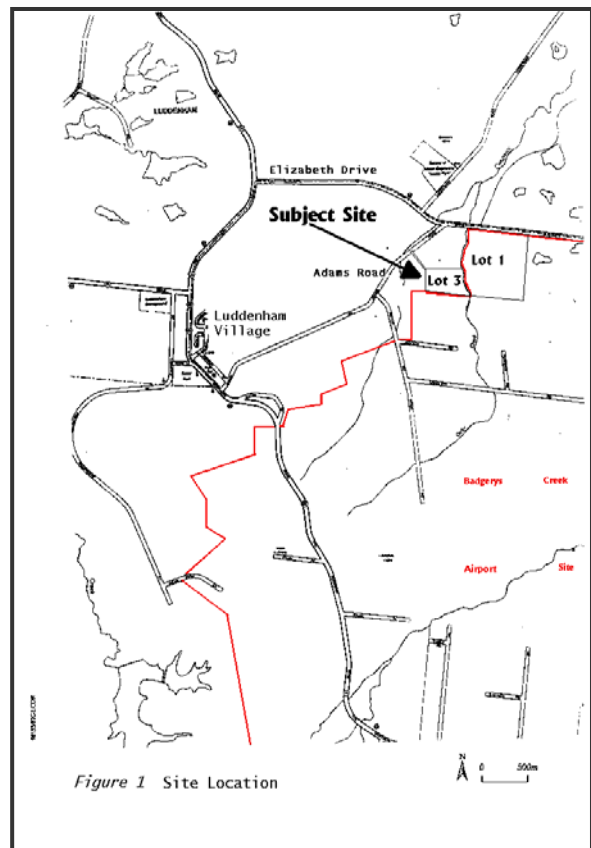


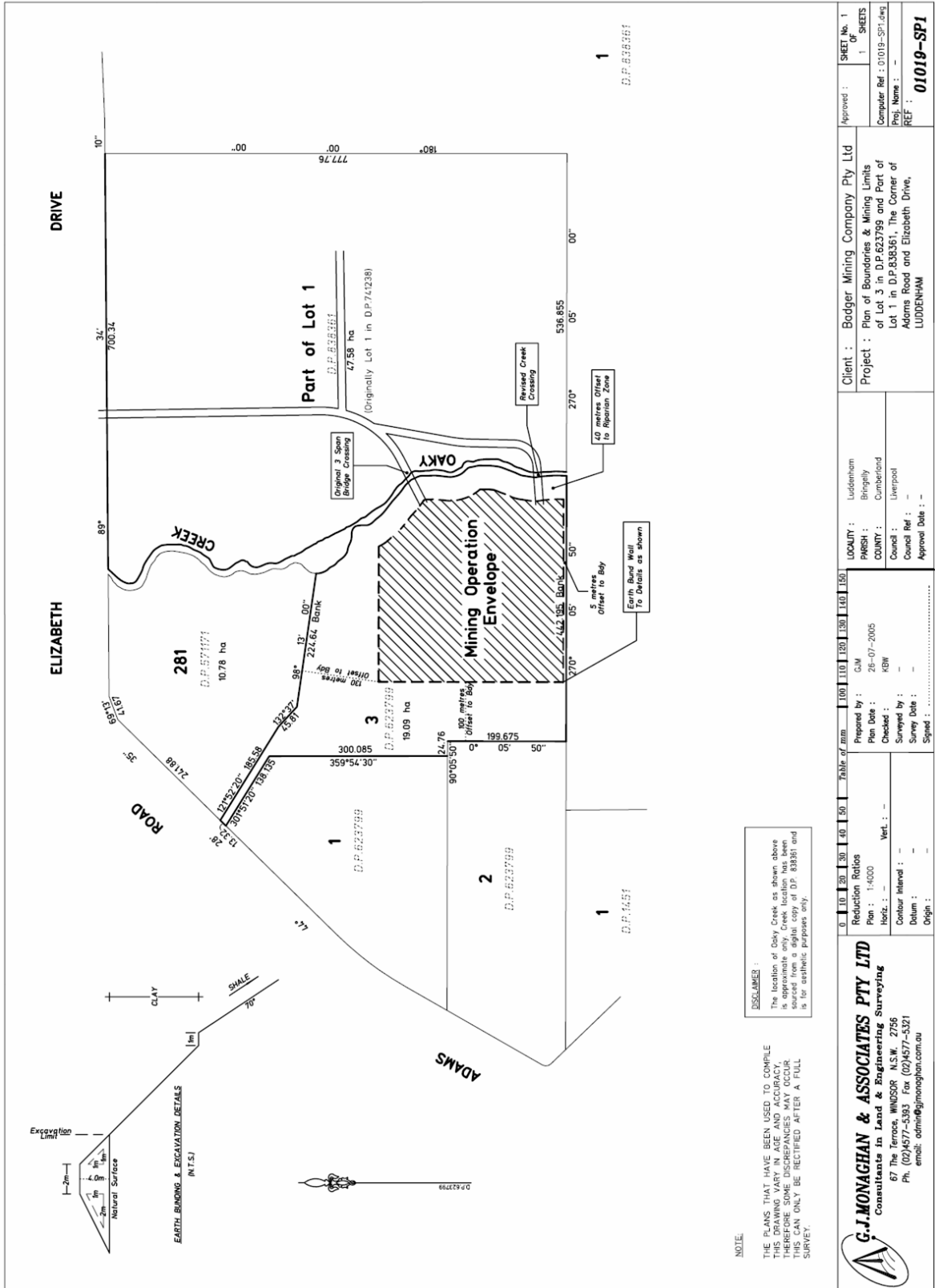
Figure 1: Location of Luddenham Clay/shale

Quarry

PROPOSED MODIFICATION

Badger Mining proposes to relocate the internal access road of the quarry 200 metres to the south (see Figure 2).

On 16 November 2005, Badger Mining submitted an application (DA 315-7-2003-MOD-1) to the Department, seeking approval for the proposed changes to the internal access road under Section 96(1A) of the *Environmental Planning and Assessment Act 1979* (EP&A Act).



DISCLAIMER :
 The location of Oaky Creek as shown above is approximate only. Creek location has been sourced from a digital copy of D.P. 83361 and is for aesthetic purposes only.

NOTE:
 THE PLANS THAT HAVE BEEN USED TO COMPILE THIS PLAN HAVE BEEN CHECKED FOR ACCURACY. THEREFORE SOME DISCREPANCIES MAY OCCUR. THIS CAN ONLY BE RECTIFIED AFTER A FULL SURVEY.

G.J. MONAGHAN & ASSOCIATES PTY LTD Consultants in Land & Engineering Surveying 67 The Terrace, WINDSOR NSW 2756 Ph: (02)4577-5393 Fax: (02)4577-5371 email: admin@jmonaghan.com.au		Prepared by : GJM Plan Date : 26-07-2005 Checked : KBW Surveyed by : Survey Date : Signed :	Reduction Ratios Plan : 1:4000 Horiz. : Contour Interval : Datum : Origin :	Table of mm 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150	LOCALITY : Ludenhum PARISH : Bragely COUNTY : Cumberland Council : Liverpool Council Ref : Approval Date :	Client : Badger Mining Company Pty Ltd Project : Plan of Boundaries & Mining Limits of Lot 3 in D.P.833799 and Part of Lot 1 in D.P.83361, The Corner of Adams Road and Elizabeth Drive, LUDDENHAM	Approved : SHEET No. 1 1 SHEETS Computer Ref : 01019-SPT.dwg Proj. Name : REF : 01019-SPI
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Figure 2: Location of Approved and Proposed Access Road Crossing of Oaky Creek

STATUTORY CONTEXT

Consent Authority

The Minister was the consent authority for the original DA and is consequently the consent authority for this application.

On 12 September 2005, the Minister delegated his powers and functions as a consent authority to modify development consents under Section 96(1A) of the EP&A Act to the Deputy Director-General, Office of Sustainable Assessments & Approvals, Department of Planning.

Consequently the Deputy Director-General may determine this application under delegated authority.

Section 96(1A)

Under Section 96(1A) of the EP&A Act a consent authority can modify a development consent if it is satisfied that the:

- (a) *...proposed modification is of minimal environmental impact, and*
- (b) *...development to which the consent as modified relates is substantially the same development for which consent was originally granted and before that consent as originally granted was modified (if at all).*

The Department is satisfied that the proposed modification meets these criteria.

CONSULTATION

Under the EP&A Act, the Department is not required to consult over the proposal, however, it has consulted the Department of Environment and Conservation (DEC), the Department of Natural Resources (DNR) and Liverpool City Council (LCC).

The DEC did not object to the proposed modification as Badger Mining has not sought to change the noise limits applicable to the proposed development.

The DNR did not object to the proposed modification, and reissued its General Terms of Approval (GTAs) under Part 3A of the *Rivers and Foreshores Improvement Act 1948* for the proposed relocated road crossing of Oakey Creek. They are unchanged from its previous GTAs, which were incorporated into the conditions of the Minister's consent.

The LCC did not object to the proposed modification.

CONSIDERATION OF ISSUES

Impacts on Oakey Creek

At the site of the proposed relocated road crossing, Oakey Creek consists of an often dry channel 2 to 3 metres wide (see Figure 3). Badger Mining proposes to move the Oakey Creek road crossing 200 metres to the south, and importantly, upstream of its approved location. This means that, compared to its approved location, the proposed creek crossing would benefit from a reduced upstream catchment, and in times of flooding, reduced volumes of water passing under the crossing. Accordingly, the relocated crossing would have reduced impacts on upstream flood depths and a reduced potential to restrict flood flows and increase downstream water velocities.



Figure 3: Proposed Site of Relocated Creek Crossing

Mathematical modelling, undertaken by Larry Cook and Associates, confirms this analysis and concludes that the flood event resulting from a 1% Annual Exceedance Probability (AEP) storm “will not impact the proposed development”, and “the new bridge will not significantly impede the Probable Maximum Flood (PMF) flow”.

The Department believes the conditions of the Minister’s consent are appropriate, without change, to manage and mitigate the impacts of the creek crossing’s construction and operation. These conditions also require Badger Mining to produce a range of management plans before operations can commence on the site. Any minor alterations to impacts of the creek crossing would be considered in the production of these plans.

Noise

The relocated creek crossing would move clay/shale product trucking operations 200 metres closer to several residences located to the south of the proposed quarry. However, these trucks would be no closer to these residences than noise emissions from the proposed quarry (see Figure 2).

Without any noise attenuation, noise impacts at the southern residences would increase by 1.5 dB(A). Badger Mining’s assessment of noise impacts demonstrates that rising topography to the south of the site would provide an acoustic shielding effect to attenuate noise impacts so that there would be no net increase in received noise levels. For residences to the north and west, noise levels are predicted to decrease, and for residences to the east noise levels are predicted to be unchanged.

Badger Mining has not sought to increase the noise limits of the Minister’s consent. It intends to operate the quarry and relocated access road to comply with these noise limits (including noise limits applicable to residences to the south of the proposed quarry).

As Badger Mining will be required to restrict noise emissions to below limits contained in the Minister’s consent, the proposed modification would result in no additional noise impacts on the amenity of nearby residents. The Department believes the noise limits in the Minister’s consent should not be altered.

Other Issues

The Department has also considered potential impacts on riparian vegetation, Aboriginal sites, air quality and traffic movements. The Department is satisfied that there would be no change to these impacts as a result of the proposed modification when compared to the impacts of the approved development.

Consequently, the Department believes the proposed modification would not change the environmental impacts of the quarry and would not materially change the development for which consent was granted.

RECOMMENDED CONDITIONS

The Department has drafted a notice of modification for the proposal (tagged A). Badger Mining does not object to this draft notice.

RECOMMENDATION

It is RECOMMENDED that the Acting Deputy Director-General:

- consider this submission;
- approve the application under Section 96(1A) of the EP&A Act; and
- sign the attached notice of modification (tagged A).

David Kitto
Acting Director
Major Development Assessment

Yolande Stone
Acting Deputy Director-General

Notice of Modification

Section 96(1A) of the *Environmental Planning and Assessment Act 1979*

Under Section 96(1A) of the *Environmental Planning and Assessment Act 1979*, I, the Acting Deputy Director-General, Office of Sustainable Assessments and Approvals, modify the development consent referred to in Schedule 1, as set out in Schedule 2.

Yolande Stone
Acting Deputy Director-General
Office of Sustainable Assessment and Approvals
(as Delegate for the Minister for Planning)

Sydney

2006

SCHEDULE 1

The development consent (DA 315-7-2003) for the Luddenham clay/shale quarry, which was granted by the Minister for Infrastructure, Planning and Natural Resources on 23 May 2004.

SCHEDULE 2

1. Delete the word "and" at the end of condition 2(c) of schedule 3.
2. Add the following after condition 2(c) of schedule 3:
 - (d) information accompanying modification application DA 315-7-2003-MOD-1 for the relocation of the access bridge across Oakey Creek, lodged 16 November 2005, and prepared by Stuart J Castle Pty Ltd; and
3. Replace the numbering of condition 2(d) of schedule 3 with 2(e).
4. Replace the words "the Department" at the end of the first sentence of condition 29 of schedule 4 with "the Department of Natural Resources".
5. Modify the text of the following definitions in schedule 2 to read:

Department
Director-General
Minister

Department of Planning
Director-General of the Department of Planning, or delegate
Minister for Planning, or delegate

Notice of Modification

Section 96(1A) of the *Environmental Planning and Assessment Act 1979*

As delegate of the Minister for Planning, I modify the development consent referred to in Schedule 1, as set out in Schedule 2.



Chris Ritchie
A/Director
Major Development Assessment

Sydney, *28th January*

2010

SCHEDULE 1

The development consent (DA 315-7-2003) for the Luddenham clay/shale quarry, which was granted by the Minister for Infrastructure, Planning and Natural Resources on 23 May 2004.

SCHEDULE 2

1. Delete the definition for "DEC" in the list of Definitions in Schedule 2, and insert in alphabetical order the following:

DECCW	Department of Environment, Climate Change and Water
SEE	Statement of Environmental Effects
2. Delete all references to "DECC" and replace with "DECCW".
3. In condition 2 of schedule 3, delete all words after "Castle Pty Ltd" and replace with:
 - e) Modification Application DA 315-7-2003 MOD 2 and the accompanying SEE titled "*Section 96(1A) Modification Application, 275 Adams Road Luddenham*" produced by Planning Direction Pty Ltd and dated 3 November 2009 and "*Acoustic Report – Clay/Shale Quarry at 275 Adams Road Luddenham*" produced by Golders Associates Ltd and dated 15 December 2009; and
 - f) conditions of this consent.
4. Delete condition 3 of schedule 3 and replace with:
 3. If there is any inconsistency between the above documents, the most recent document shall prevail to the extent of the inconsistency. However, the conditions of this approval shall prevail to the extent of any inconsistency.
6. After condition 4 of schedule 3 insert the following:
 - 4A. The Applicant shall prepare revisions of any strategies, plans or programs required under this consent if directed to do so by the Director-General. Such revisions shall be prepared to the satisfaction of, and within a timeframe approved by, the Director-General.

7. Delete condition 5 of schedule 3 and replace with:
5. The Applicant may undertake quarrying operations on the site until 31 December 2024.

Note: Under this consent, the Applicant is required to rehabilitate the site and perform additional undertakings to the satisfaction of the Director-General. Consequently, this consent will continue to apply in all other respects other than the right to conduct quarrying operations until the site has been properly rehabilitated.

8. After condition 12 of schedule 4 insert the following:

12A. When extraction operations are taking place in Bench 1, as indicated on Figure 1 in Appendix 1, operations are restricted to the use of 1 truck and 1 excavator, until the quarry floor is at least 1.5m below the existing ground level.

8. In condition 6 of schedule 5, delete the first sentence and replace with:

Before 31 December 2010, and every 3 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.

9. After condition 10 of schedule 5 insert:

APPENDIX 1 GENERAL SITE LAYOUT



Figure 1: General Layout of the Site

Development Consent

Section 31 of the Environmental Planning and Assessment Act 1979

I, the Minister for Infrastructure, Planning and Natural Resources, approve the Development Application referred to in Schedule 1, subject to the conditions in Schedules 2 to 5.

These conditions are required to:

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

Craig Knowles, MP
Minister for Infrastructure, Planning and Natural Resources

Sydney,

2004

File No. P91/02045

SCHEDULE 1

Development Application:	DA No. 315-7-2003.
Applicant:	Badger Mining Company Pty Limited.
Consent Authority:	The Minister for Infrastructure, Planning and Natural Resources.
Land:	Lot 3, DP 623799 and Lot 1, DP 838361.
Proposed Development:	The development and operation of a clay/shale quarry on Lot 3, DP 623799 and the construction and use of an access road and service facilities on Lot 1, DP 838361.
State Significant Development	The proposal is classified as State significant development under section 76A(7) of the <i>Environmental Planning and Assessment Act 1979</i> because it is a class of development listed in the schedule of the Minister's declaration of 3 August 1999.
Integrated Development	The proposal is classified as integrated development under section 91 of the <i>Environmental Planning and Assessment Act 1979</i> , because it requires approvals under the: <ul style="list-style-type: none">• <i>Protection of the Environment Operations Act 1997</i>;• <i>Rivers and Foreshores Improvement Act 1948</i>;• <i>Water Act 1912</i>; and• <i>Roads Act 1993</i>.
Designated Development	The proposal is classified as designated development under section 77A of the <i>Environmental Planning and Assessment Act 1979</i> , because it would disturb a total surface area of more than 2 hectares of land by clearing or excavating, and consequently meets the criteria in Schedule 3 of the <i>Environmental Planning and Assessment Regulation 2000</i> .

BCA Classification:

Class 10b

Bunded fuel storage
Plant nursery
Weighbridge
Bridge
Conveyor and hoppers

Note:

- 1) *To find out when this consent becomes effective, see Section 83 of the Environmental Planning and Assessment Act 1979 (EP&A Act);*
 - 2) *To find out when this consent is liable to lapse, see Section 95 of the EP&A Act; and*
 - 3) *To find out about appeal rights, see Section 97 of the EP&A Act.*
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SCHEDULE 2

DEFINITIONS

AEMR	Annual Environmental Management Report
Applicant	Badger Mining Company Pty Limited
BCA	Building Code of Australia
DA	Development Application
DEC	Department of Environment and Conservation (also includes the former Environment Protection Authority and the National Parks and Wildlife Service)
Department	Department of Infrastructure, Planning and Natural Resources
Director-General	Director-General of the Department of Infrastructure, Planning and Natural Resources, or her delegate
DNA	Douglas Nicolaisen & Associates Pty Ltd
Dust	Any solid material that may become suspended in air or deposited
EIS	Environmental Impact Statement
EMP	Environmental Management Plan
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>
GTA	General Terms of Approval
Land	The whole of a lot in a current plan registered at the Land Titles Office at the date of this consent
LCC	Liverpool City Council
Minister	Minister for Infrastructure and Planning, or delegate
PCC	Penrith City Council
Privately-owned land	Land where: <ul style="list-style-type: none">• a private agreement does not exist between the Applicant and the land owner; and• there are no land acquisition provisions requiring the Applicant to purchase the land upon request from the land owner
POEO Act	<i>Protection of the Environment Operations Act 1997</i>
Riparian zone	A 40 metre-wide strip of land adjacent to a local watercourse, measured horizontally from the top of the bank of the watercourse
RTA	NSW Roads and Traffic Authority
SEMP	Site Environmental Management Plan
Site	Land to which the DA applies
Vacant land	The whole of a lot in a current plan registered at the Land Titles office that does not have a dwelling situated on the lot and is permitted to have a dwelling on that lot at the date of this consent

**SCHEDULE 3
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. 315-7-03
 - (b) EIS titled *Proposed Clay/Shale Extraction Operation – Lot 3 – 275 Adams Road Luddenham*, dated May 2003, and prepared by Douglas Nicolaisen & Associates Pty Ltd (DNA);
 - (c) correspondence from DNA to the Department dated 16 March 2004 relating to operating hours, location of environmental bunds and reduction in the proposed extraction area; and
 - (d) conditions of this consent.
3. If there is any inconsistency between the above, either the conditions of this consent or the most recent document 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.

Limits on Approval

5. This consent lapses 15 years from the date on which it is granted.

Notes:

- (a) *The conditions of approval may require rehabilitation activities to be undertaken more than 15 years after the date on which the consent is granted; and*
- (b) *This condition does not affect the operation of section 95 of the EP&A Act.*

Limits on Production

6. The hours of operation for the development are limited to between 7 am and 6 pm Monday to Friday. The Applicant shall ensure that no haulage vehicles enter or leave the site between 6 pm and 7 am Monday to Friday, and on public holidays. Maintenance activities may be conducted between 7 am and 1 pm on Saturday. No other work is to be undertaken on Saturday, Sunday and public holidays.
7. The production of quarry products from the quarry shall not exceed 300,000 tonnes per annum.
8. The Applicant shall provide annual production data to the Department of Mineral Resources, in the manner required, on the standard form supplied for that purpose. These data are also to be included in the Annual Environmental Management Report (AEMR).

Protection of Public Infrastructure

9. The Applicant shall:
 - (a) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by the development; and
 - (b) relocate, or pay the full costs associated with relocating, any public infrastructure that needs to be relocated as a result of the development.

Structural Adequacy

10. The Applicant shall ensure that all 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:

- (a) *Under Part 4A of the EP&A Act, the Applicant is required to obtain construction and occupation certificates for the proposed building works.*
- (b) *Part 8 of the EP&A Regulation sets out the requirements for the certification of development.*

Demolition

11. The Applicant shall ensure that any 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.

Compliance

13. Prior to commencement of development on Lot 3 DP 629799 and Lot 1 DP 838361, the Applicant shall commission an independent person(s) or organisation(s), approved by the Director-General, to certify in writing to the satisfaction of the Director-General, that the Applicant has complied with all relevant conditions of this consent applicable prior to that event.

**SCHEDULE 4
ENVIRONMENTAL PERFORMANCE**

AIR QUALITY

Impact Assessment Criteria

1. The Applicant shall ensure that the air pollution generated by the development does not exceed the criteria listed in Tables 1, 2, and 3 at any privately-owned land.

Pollutant	Averaging period	Criterion
Total suspended particulate (TSP) matter	Annual	50 µg/m ³
Particulate matter < 10 µm (PM ₁₀)	Annual	50 µg/m ³

Table 1: Long-term impact assessment criteria for particulate matter

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

Table 2: Short-term impact assessment criterion for particulate matter

Pollutant	Averaging period	Maximum increase in deposited dust level	Maximum total deposited dust level
Deposited dust	Annual	2 g/m ² /month	5 g/m ² /month

Table 3: Long-term impact assessment criteria for deposited dust

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.

Environmental Management

2. ¹The site must be maintained in a condition that minimises or prevents the emission of dust from the site, including the prompt and effective rehabilitation of all disturbed areas.
3. ²The Applicant shall ensure that all vehicles entering or leaving the site, carrying a load that may generate dust, are covered to prevent dust emissions at all times, except during loading and unloading.
4. ³The Applicant shall ensure that all vehicles leaving the site are subject to equipment or facilities to remove adhering materials from wheels and underneath the bodies, unless otherwise approved by the DEC. The aims of the installed facilities are:
 - preventing materials from being carried away from the site to adjoining road surfaces; and
 - collecting, treating and disposing of any washdown.
5. The Applicant shall ensure that all internal unsealed roadways, quarry floor and stockpiles are to be watered as required to minimise dust generation.

¹ Incorporates DEC's GTA

² Incorporates DEC's GTA

³ Incorporates DEC's GTA

6. ⁴The Applicant shall not allow offensive odour to be emitted from the site.

Notes:

- (a) Section 129 of the POEO Act provides that the licensee must not cause or permit the emission of any offensive odour from the premises but provides a defence if the emission is identified in the relevant Environment Protection Licence (EPL) as a potentially offensive odour and the odour was emitted in accordance with the conditions of a licence directed at minimising odour.
- (b) No condition of this licence identifies a potentially offensive odour for the purposes of section 129 of the POEO Act.

Monitoring

7. The Applicant shall establish air quality monitoring stations at a minimum of 5 locations around the site, (including the Hubertus Country Club, the "northern" residence in the EIS, and locations representative of the most-affected residences in Jackson Road, Ferndale Road and adjoining landowners to the east of the site) to monitor, by sampling and obtaining results by analysis, dust deposition to the satisfaction of DEC and the Director-General, using the specified averaging period, frequency, and sampling method in Table 4:

Parameter	Units of Measure	Averaging Period	Frequency	Sampling Method
PM ₁₀	µg/m ³	1 hour	1 per day	Direct
PM _{2.5}	µg/m ³	1 hour	1 per day	Direct
SO ₂	ppb	1 hour	1 per day	Direct
NO ₂	ppb	1 hour	1 per day	Direct
O ₃	ppb	1 hour	1 per day	Direct
CO	ppm	1 hour	1 per day	Direct
Lead	ppb	1 hour	1 per day	Direct
Cadmium	ppb	1 hour	1 per day	Direct
Mercury	ppb	1 hour	1 per day	Direct
Chloride	µg/m ³	1 hour	1 per day	Direct
Sulfate	µg/m ³	1 hour	1 per day	Direct
Nitrate	µg/m ³	1 hour	1 per day	Direct
Ammonia	µg/m ³	1 hour	1 per day	Direct
Hydrogen Sulfide	ppb	1 hour	1 per day	Direct
Methane	ppm	1 hour	1 per day	Direct
Acetylene	ppm	1 hour	1 per day	Direct
Ethylene	ppm	1 hour	1 per day	Direct
Propylene	ppm	1 hour	1 per day	Direct
Butadiene	ppm	1 hour	1 per day	Direct
Hexane	ppm	1 hour	1 per day	Direct
Octane	ppm	1 hour	1 per day	Direct
Nonane	ppm	1 hour	1 per day	Direct
Dodecane	ppm	1 hour	1 per day	Direct
Hexachlorocyclohexane	ppb	1 hour	1 per day	Direct
Polychlorinated Biphenyls	ppb	1 hour	1 per day	Direct
Polycyclic Aromatic Hydrocarbons	ppb	1 hour	1 per day	Direct
Organochlorine Pesticides	ppb	1 hour	1 per day	Direct
Organophosphorus Pesticides	ppb	1 hour	1 per day	Direct
Organotin Compounds	ppb	1 hour	1 per day	Direct
Organolead Compounds	ppb	1 hour	1 per day	Direct
Organocopper Compounds	ppb	1 hour	1 per day	Direct
Organosilver Compounds	ppb	1 hour	1 per day	Direct
Organorhodium Compounds	ppb	1 hour	1 per day	Direct
Organoplatin Compounds	ppb	1 hour	1 per day	Direct
Organogold Compounds	ppb	1 hour	1 per day	Direct
Organonickel Compounds	ppb	1 hour	1 per day	Direct
Organocadmium Compounds	ppb	1 hour	1 per day	Direct
Organomercury Compounds	ppb	1 hour	1 per day	Direct
Organoselenium Compounds	ppb	1 hour	1 per day	Direct
Organotellurium Compounds	ppb	1 hour	1 per day	Direct
Organobismuth Compounds	ppb	1 hour	1 per day	Direct
Organantimony Compounds	ppb	1 hour	1 per day	Direct
Organotin Compounds	ppb	1 hour	1 per day	Direct
Organolead Compounds	ppb	1 hour	1 per day	Direct
Organocopper Compounds	ppb	1 hour	1 per day	Direct
Organosilver Compounds	ppb	1 hour	1 per day	Direct
Organorhodium Compounds	ppb	1 hour	1 per day	Direct
Organoplatin Compounds	ppb	1 hour	1 per day	Direct
Organogold Compounds	ppb	1 hour	1 per day	Direct
Organonickel Compounds	ppb	1 hour	1 per day	Direct
Organocadmium Compounds	ppb	1 hour	1 per day	Direct
Organomercury Compounds	ppb	1 hour	1 per day	Direct
Organoselenium Compounds	ppb	1 hour	1 per day	Direct
Organotellurium Compounds	ppb	1 hour	1 per day	Direct
Organobismuth Compounds	ppb	1 hour	1 per day	Direct
Organantimony Compounds	ppb	1 hour	1 per day	Direct

Table 4: Air quality monitoring

¹ NSW EPA, 2001, *Approved Methods for the Sampling and Analysis of Air Pollutants in NSW*.

² Standards Australia, 1991, AS 3580.10.1-1991, *Methods for Sampling and Analysis of Ambient Air - Determination of Particulates - Deposited Matter - Gravimetric Method*.

8. Before carrying out any development, the Applicant shall prepare an Air Quality Monitoring Program, in consultation with DEC, and to the satisfaction of the Director-General.

Soil and Land Management

9. The Applicant shall immediately utilise or stockpile, for use in the rehabilitation of the site, any topsoil removed during the development. Topsoil shall not be mixed with other overburden products. The topsoil stockpile(s) shall be protected from erosion. The topsoil stockpile(s) shall be sown with appropriate vegetation to stabilise the soil if they are to be stored for longer than 6 weeks. The topsoil stockpile(s) shall have a maximum height of 1.5 metres.
10. The Applicant shall minimise the removal of trees and other vegetation from the project site, and restrict any clearance to the areas occupied by quarrying activities, noise attenuation bund, access roads and ancillary facilities.
11. The Applicant shall regularly consult with adjoining property owners to ensure property management issues including maintenance of common fences, weed control measures, and bushfire management are coordinated. Details of this consultation are to be reported in the AEMR.

NOISE

Noise Impact Assessment Criterion

12. ⁵The Applicant shall ensure that the noise generated by the development does not exceed the noise impact assessment criterion presented in Table 5.

⁴ Incorporates DEC's GTA

⁵ Incorporates DEC's GTAs

Day	Criteria
41	

Table 5: Noise impact assessment criterion dB(A)

Notes:

- (a) The noise limits in Table 5 are for the noise contribution of the establishment and operation of the clay/shale quarry on Lot 3, DP 623799 and Lot 1 DP838361, Adams Road, Luddenham.
- (b) The criterion in Table 5 does not apply to a six-week period for the construction of a noise attenuation bund adjacent to the quarry excavation area.
- (c) Noise from the development is to be measured at the most affected point or within the residential boundary, or at the most affected point within 30 metres of a dwelling (rural situations) where the dwelling is more than 30 metres from the boundary.
- (d) To determine compliance with the $L_{Aeq(15 \text{ minute})}$ noise limits in the above table where it can be demonstrated that direct measurement of noise from the development is impractical, the DEC may accept alternative means of determining compliance (see Chapter 11 of the NSW Industrial Noise Policy). The modification factors in Section 4 of the NSW Industrial Noise Policy shall also be applied to the measured noise levels where applicable.

Operating Conditions

13. The Applicant shall ensure that all vehicles travelling on internal roads do not exceed 20 kilometres per hour.
14. The Applicant shall design operations to minimise the need for reversing of trucks and machinery where reversing beepers may contribute to noise impacts exceeding the criterion in condition 12.

Monitoring

15. The Applicant shall prepare noise compliance assessments of the operations at the site, within 3 months of the commencement of operations, and at intervals of 3 months thereafter, unless otherwise directed by the Director-General. The assessment shall be carried out by a suitably qualified and experienced acoustical consultant, approved by the Director-General, and submitted to the DEC and the Department.

Construction of the Noise Attenuation Bund

Note: The noise attenuation bund also functions as visual screen of the operations associated with the extraction of the clay/shale resource.

16. The Applicant shall minimise noise levels during the construction of the noise attenuation bund by the implementation of best available techniques economically achievable.
17. The Applicant shall complete the construction of the noise attenuation bund in the minimum time, not to exceed 6 weeks from the commencement of its construction, unless otherwise approved by the Director-General.
18. The Applicant shall prepare a noise assessment of the construction of the noise attenuation bund within 3 weeks of the commencement of construction of the bund. The assessment shall be carried out by a suitably qualified and experienced acoustical consultant, approved by the Director-General, and submitted to the DEC and the Department.

Environmental Management

19. Prior to carrying out any development on the site, the Applicant shall prepare a Noise Management Plan for the development, in consultation with the DEC and to the satisfaction of the Director-General, which addresses;
 - actions to be undertaken to achieve compliance with condition 12;
 - actions to be undertaken during the construction of the noise attenuation bund;

- circumstances that would lead to the construction of the noise attenuation bund to a height of 5 or 6 metres instead of the proposed 4 metre height, and any additional noise control measures to be undertaken during the construction of a higher bund;
- measurement of the acoustic performance of plant and equipment used on site to demonstrate that the predictions of the EIS and documentation listed in condition 2 of schedule 3 are met; and
- a program for monitoring noise generated by the development at a minimum of 5 locations around the site, (including the Hubertus Country Club, the "northern" residence in the EIS, and locations representative of the most-affected residences in Jackson Road, Ferndale Road and adjoining landowners to the east of the site) which includes a noise monitoring protocol for evaluating compliance with the criterion in condition 12.

METEOROLOGICAL MONITORING

20. The Applicant shall maintain a permanent meteorological station at a location approved by the DEC, and to the satisfaction of the Director-General, to monitor the parameters specified in Table 6, using the specified units of measure, averaging period, frequency, and sampling method in the table.

Parameter	Units of measure	Averaging period	Frequency	Sampling method
Temperature	°C	15 min	15 min	Direct
Relative Humidity	%	15 min	15 min	Direct
Wind Speed	m/s	15 min	15 min	Direct
Wind Direction	°	15 min	15 min	Direct
Barometric Pressure	hPa	15 min	15 min	Direct
Soil Temperature	°C	15 min	15 min	Direct
Soil Moisture	%	15 min	15 min	Direct
Soil pH	pH	15 min	15 min	Direct
Soil Conductivity	µS/cm	15 min	15 min	Direct
Soil Nitrogen	mg/kg	15 min	15 min	Direct
Soil Phosphorus	mg/kg	15 min	15 min	Direct
Soil Potassium	mg/kg	15 min	15 min	Direct
Soil Calcium	mg/kg	15 min	15 min	Direct
Soil Magnesium	mg/kg	15 min	15 min	Direct
Soil Zinc	mg/kg	15 min	15 min	Direct
Soil Copper	mg/kg	15 min	15 min	Direct
Soil Lead	mg/kg	15 min	15 min	Direct
Soil Cadmium	mg/kg	15 min	15 min	Direct
Soil Chromium	mg/kg	15 min	15 min	Direct
Soil Nickel	mg/kg	15 min	15 min	Direct
Soil Manganese	mg/kg	15 min	15 min	Direct
Soil Selenium	mg/kg	15 min	15 min	Direct
Soil Vanadium	mg/kg	15 min	15 min	Direct
Soil Cobalt	mg/kg	15 min	15 min	Direct
Soil Molybdenum	mg/kg	15 min	15 min	Direct
Soil Boron	mg/kg	15 min	15 min	Direct
Soil Sodium	mg/kg	15 min	15 min	Direct
Soil Chloride	mg/kg	15 min	15 min	Direct
Soil Fluoride	mg/kg	15 min	15 min	Direct
Soil Iodine	mg/kg	15 min	15 min	Direct
Soil Bismuth	mg/kg	15 min	15 min	Direct
Soil Antimony	mg/kg	15 min	15 min	Direct
Soil Arsenic	mg/kg	15 min	15 min	Direct
Soil Barium	mg/kg	15 min	15 min	Direct
Soil Beryllium	mg/kg	15 min	15 min	Direct
Soil Cadmium	mg/kg	15 min	15 min	Direct
Soil Chromium	mg/kg	15 min	15 min	Direct
Soil Cobalt	mg/kg	15 min	15 min	Direct
Soil Copper	mg/kg	15 min	15 min	Direct
Soil Lead	mg/kg	15 min	15 min	Direct
Soil Manganese	mg/kg	15 min	15 min	Direct
Soil Mercury	mg/kg	15 min	15 min	Direct
Soil Nickel	mg/kg	15 min	15 min	Direct
Soil Silver	mg/kg	15 min	15 min	Direct
Soil Vanadium	mg/kg	15 min	15 min	Direct
Soil Zinc	mg/kg	15 min	15 min	Direct

Table 6: Meteorological monitoring

¹NSW EPA, 2001, *Approved Methods for the Sampling and Analysis of Air Pollutants in NSW*.

BLASTING

21. Blasting is not permitted on the site.

⁶SURFACE & GROUND WATER

Note: The Applicant is required to obtain licences for the development under the Water Act 1912, the Rivers and Foreshores Improvement Act 1948 and the Protection of the Environment Operations Act 1997.

Pollution of Waters

22. Except as may be expressly provided by a DEC licence, the Applicant shall comply with section 120 of the *Protection of the Environment Operations Act 1997* during the carrying out of the development.

Surface Water Management System

23. The Applicant shall:
- (a) design, install, operate and maintain a stormwater management system for the site in accordance with the publication titled *"Managing Urban Stormwater: Soil and Construction, Department of Housing 1998"* for a 90 percentile five day rainfall interval (unless condition 9 applies);
 - (b) install bund(s) around areas in which fuels, oils and chemicals are stored. Bunds must:
 - have walls and floors constructed of impervious materials;
 - be of sufficient capacity to contain 110% of the volume of the tank (or 110% of the volume of the largest tank where a group of tanks are installed);
 - have walls not less than 250 millimetres high;
 - have floors graded to a collection sump; and
 - not have a drain valve incorporated in the bund structure;
 - (c) conduct maintenance on mobile plant and equipment within a bunded area, unless within the quarry excavation;
 - (d) install a wastewater treatment facility with oil separator and sediment trap to treat the drainage from any hardstand, vehicle servicing and workshop areas; and
 - (e) divert stormwater away from disturbed land surfaces. All diversion banks, channels and points of discharge should be constructed or stabilised so as to minimise erosion and scouring.

⁶ Incorporates DEC's GTAs

Site Water Management Plan

24. Prior to the carrying out of any development on the site, the Applicant shall prepare a Site Water Management Plan for the site, to the satisfaction of the Director-General. This plan must include:
- (a) a Surface Water Monitoring Program;
 - (b) a Groundwater Monitoring Program;
 - (c) an Erosion and Sediment Control Plan; and
 - (d) an Irrigation Management Plan.
25. The Surface Water Monitoring Program shall include:
- (a) detailed baseline data on surface water flows and quality in Oakey Creek upstream and downstream of the development;
 - (b) surface water impact assessment criteria;
 - (c) a program to monitor surface water flows and quality in Oakey Creek; and
 - (d) a program to monitor the effectiveness of the Erosion and Sediment Control Plan.
26. The Groundwater Monitoring Program shall include:
- (a) baseline data on groundwater levels and quality, based on statistical analysis, to benchmark the pre-quarrying natural variation in groundwater levels and quality;
 - (b) groundwater impact assessment criteria;
 - (c) a program to monitor groundwater impacts during quarry operations.
- Note: Licences are required under the Water Act 1912 for groundwater monitoring bores.*
27. The Erosion and Sediment Control Plan shall:
- (a) comply with the requirements of the with the publication titled "*Managing Urban Stormwater: Soils and Construction, Department of Housing 1998*";
 - (b) identify activities that could cause soil erosion or discharge sediment or water pollutants from the site;
 - (c) describe the location, function and capacity of all erosion and sediment control structures;
 - (d) describe the measures to minimise soil erosion and the potential migration of sediments to downstream waters.
28. The Irrigation Management Plan shall:
- (a) comply with the requirements of the Surface Water Licence issued under the *Water Act 1912* for the use of water obtained from the quarry;
 - (b) identify the specific areas of land to be irrigated, determine sustainable water application rates and monitoring requirements;
 - (c) describe measures to prevent any tailwater drainage from entering Oakey Creek; and
 - (d) ensure that the soils subject to irrigation are not adversely affected by the concentration of salts.

Internal Road Crossing of Oakey Creek

29. Prior to the commencement of any work within 40 metres of Oakey Creek, a permit under Part 3A of the *Rivers and Foreshores Improvement Act 1948* shall be obtained from the Department. All works shall be:
- (a) undertaken in accordance with the permit application, except as otherwise provided by conditions of the permit;
 - (b) constructed generally in accordance with the information contained in the documents (including the EIS) listed in condition 2 of schedule 3; and
 - (c) designed and constructed such that the works do not cause sedimentation, erosion or permanent diversion of the Protected Waters;

Note: Should Crown land, as defined under the Crown Lands Act 1989, be included in the crossing, there is a requirement to seek approval from the Department of Lands under the Crown Lands Act 1989.

WASTE MANAGEMENT

30. ⁷The Applicant shall not cause, permit or allow any waste generated outside the site to be received at the site for storage, treatment, processing, reprocessing or disposal, or any waste generated at the site to be disposed of at the site, except as expressly permitted by a licence under the *Protection of the Environment Operations Act 1997*.

Note: This condition only applies to the storage, treatment, processing, reprocessing or disposal of waste at the site if it requires an Environment Protection Licence under the Protection of the Environment Operations Act 1997.

31. The Applicant shall ensure that the site has a suitable sewage disposal system, to the satisfaction of the LCC.

ABORIGINAL HERITAGE

32. The Applicant shall:
- protect from disturbance, by fencing, the Aboriginal site and relics (the site) located close to Oakey Creek shown in Figure 2 of Technical Document 8 of the EIS (*Assessment and Management Recommendations for the Aboriginal Archaeological Site at 275 Adams Road Luddenham*) prepared by Umwelt (Australia) Pty Limited and dated September 2001;
 - not allow stormwater or other discharges to be directed across the site;
 - not allow sedimentation to occur on the site;
 - provide training in the cultural values of Aboriginal sites to all permanent staff;
 - protect the site from damage; and
 - allow access to the site by representatives of the Gandangara Local Aboriginal Land Council to allow educational and cultural activities and monitoring of the condition of the site.

REHABILITATION & VEGETATION

33. Prior to the carrying out of any development on the site, the Applicant shall prepare a Site Rehabilitation Plan in accordance with the rehabilitation guidelines in the document titled *"Sydney Regional Environmental Plan No. 9 – Extractive Industry (No. 2) – Planning Report"*, to the satisfaction of the Director-General. The Site Rehabilitation Plan shall include a Vegetation Management Plan.
34. The Vegetation Management Plan shall include:
- revegetation of the riparian zone of Oakey Creek;
 - protection, establishment and maintenance of the riparian zone;
 - protection of remnant native vegetation;
 - restoration of any areas within the riparian zone disturbed by the development; and
 - a program to vegetate the noise attenuation bund.
35. The Applicant shall provide annual audits of the performance of the rehabilitation undertaken on the site to be included in the AEMR. The audit shall be conducted by a qualified rehabilitation consultant, approved by the Director-General.
36. Prior to 5 years of the estimated completion of extractive activities at the site, the Applicant shall submit a report to the Department identifying the final land use of the site and method of treatment for the final void.

Rehabilitation Bond

37. Prior to commencement of operations on Lot 3, DP 623799, the Applicant shall provide a Rehabilitation Bond in the sum of \$166,750 in the form of an insurance bond or bank guarantee acceptable to the Director-General from any bank licensed pursuant to the *Banking Act 1959 (Cth)*. The Rehabilitation Bond shall be made in favour of the Minister administering the *Environmental Planning & Assessment Act 1979* to ensure completion of the rehabilitation and landscaping works at the site. The sum of the Rehabilitation Bond is calculated based on \$2.50 per square metre for a maximum exposed area of 6.67 hectares (ha).

⁷ DEC GTA

The Department shall review the adequacy of Rehabilitation Bond to provide for the completion of rehabilitation and landscaping works on the site at intervals of not less than three years. The Applicant shall ensure that the Rehabilitation Bond is in accordance with the sum determined by the review.

Notes:

- (a) *The Director-General may at any time, and without notice to the Applicant, demand all or part of the monies available under the Rehabilitation Bond if, in the Director-General's opinion, the Applicant has failed to make satisfactory progress on the rehabilitation and landscaping of the site.*
- (b) *The Director-General shall apply the monies to ensure that the actions specified in the documents listed in condition 2 of schedule 3 and/or any approved Site Rehabilitation Plan are achieved.*
- (c) *The Rehabilitation Bond will be released when the Applicant submits documentation prepared by a qualified rehabilitation consultant certifying that the final rehabilitation has been completed in accordance with the conditions of this consent and/or any approved Site Rehabilitation Plan, to the satisfaction of the Director-General.*

VISUAL AMENITY

- 38. The Applicant shall carry out the development in a way that prevents and/or minimises the visual impacts of the development.
- 39. Buildings, structures and roadworks shall be designed and constructed to present a neat and orderly appearance, to blend as far as practicable with the surrounding landscape and to minimise visual impact.

TRAFFIC & TRANSPORT

Site Access Road/Elizabeth Drive Intersection

- 40. ^{8&9}Prior to the transport of clay/shale materials from the site, the Applicant shall construct an intersection of the site access road and Elizabeth Drive in accordance with the information contained in the EIS, to the satisfaction of the RTA. This treatment shall be in accordance with RTA standards for a Rural Type AUR Right Turn Treatment and shall:
 - (a) incorporate an auxiliary left turn deceleration lane;
 - (b) safely integrate existing access to the neighbouring property immediately to the east of the intersection;
 - (c) incorporate signs and linemarking in accordance with the relevant RTA standards;
 - (d) provide intersection lighting to the relevant standards, should the intersection be used outside of daylight hours; and
 - (e) be in accordance with detailed design plans submitted to the RTA for approval prior to the commencement of any roadworks.

Note: All works must be carried out at the Applicant's expense. A plan checking fee and lodgement of performance bond may be required prior to the release of approved road design plans by the RTA.

- 41. ¹⁰Prior to 8 years from the commencement of this consent, the Applicant shall review the access arrangements to Elizabeth Drive, in consultation with PCC and LSC, and to the satisfaction of the RTA.

Note: Part of the RTA's proposal for the road widening of Elizabeth Drive would result in its conversion to a four lane divided carriageway that would restrict access to the quarry site to left-in/left-out movements only.

⁸ Incorporates RTA's GTAs

⁹ Incorporates PCC's GTA

¹⁰ Incorporates RTA's GTA

Road Transport Protocol

42. ¹¹Prior to the commencement of road haulage from the site, the Applicant shall develop a Road Transport Protocol, in consultation with the RTA, PCC and LCC. This protocol shall:
- (a) specify the haulage route(s) to be used, the maximum number of road movements and the haulage hours;
 - (b) include a Traffic Management Plan which addresses:
 - procedures to ensure that drivers adhere to the designated haulage route(s) as required under this Protocol;
 - measures to achieve a low-frequency, regular trucking schedule rather than a high-frequency, campaign trucking schedule;
 - contingency plans where, for example, any designated transport route is disrupted. This shall also address procedures for notifying relevant agencies and affected communities by the implementation of any such contingency plan;
 - procedures to ensure that all haulage vehicles associated with the quarry are clearly distinguishable as Badger Mining Company product haulers;
 - details for procedures for receiving and addressing complaints from the community concerning traffic issues associated with haulage from the quarry or return of unladen trucks to the quarry; and
 - measures to ensure the provisions of the traffic management plan are implemented, for example, education of drivers and any contractual agreements with operators of heavy vehicles which serve the quarry.
 - (c) include a Code of Conduct for drivers which addresses:
 - travelling speeds;
 - staggering of truck departures to ensure a regular trucking schedule throughout the day;
 - instructions to drivers not to overtake each other on the haulage route(s), as far as practicable, and to maintain appropriate distances between vehicles;
 - instructions to drivers to adhere to the designated haulage route(s);
 - instructions to drivers to be especially safety conscious and to ensure that traffic regulations are obeyed strictly;
 - driver training in the Code to ensure that all drivers are made aware and adhere to the Code; and
 - procedures for ensuring compliance with and enforcement of the Code.

¹¹ Incorporates RTA's GTAs

SCHEDULE 5

ENVIRONMENTAL MANAGEMENT, MONITORING, AUDITING & REPORTING

ENVIRONMENTAL MANAGEMENT STRATEGY

1. Before carrying out any development, the Applicant shall prepare and 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.
2. Within 14 days of the Director-General's approval, the Applicant shall:
 - (a) send copies of the approved strategy to the relevant agencies, PCC, LCC and the Community Consultative Committee (CCC) (see condition 8); and
 - (b) ensure the approved strategy is publicly available during the development.

ENVIRONMENTAL MONITORING PROGRAM

3. Before carrying out any development, the Applicant shall prepare an Environmental Monitoring Program for the development in consultation with the relevant agencies, and to the satisfaction of the Director-General. This program must consolidate the various monitoring requirements in schedule 4 of this consent into a single document.
4. The Applicant shall regularly review, and if necessary update, this program in consultation with the Director-General.

ANNUAL REPORTING

5. The Applicant shall submit, annually, an AEMR to the Director-General and the relevant agencies. This report must:
 - (a) provide a summary of the operations conducted at the site in the reporting period;
 - (b) provide details of quantities of light-firing claystone/shale, dark-firing claystone/shale, plastic clay, sandstone and waste materials extracted;
 - (c) provide monthly summaries of the quantities of extracted materials transported, and number of truck movements, to each market destination;
 - (d) identify the standards and performance measures that apply to the development;
 - (e) include a summary of the complaints received during the past year, and compare this to the complaints received in the previous years;
 - (f) include a summary of the monitoring results on the development during the past year;
 - (g) include an analysis of these monitoring results against the relevant:
 - impact assessment criteria;
 - monitoring results from previous years; and
 - predictions in the EIS;
 - (h) identify any trends in the monitoring over the life of the development;
 - (i) identify any non-compliance during the previous year; and
 - (j) describe what actions were, or are being, taken to ensure compliance.

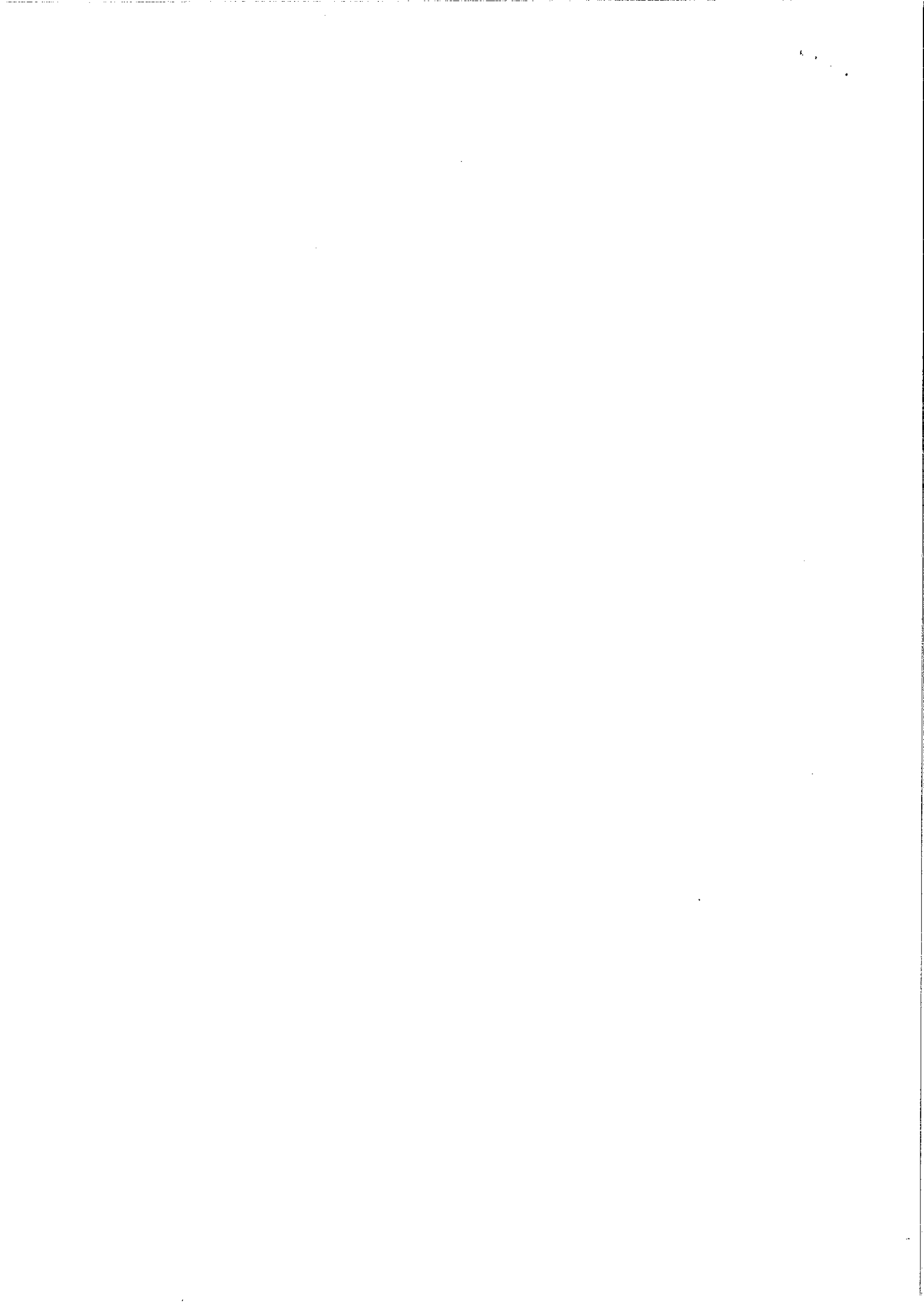
INDEPENDENT ENVIRONMENTAL AUDIT

6. Within 2 years of the date of this consent, and every 5 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 a suitably qualified, experienced, and independent person whose appointment has been endorsed by the Director-General;

- (b) be consistent with *ISO 19011:2002 – Guidelines for Quality and/or Environmental Systems Auditing*, or equivalent updated versions of this guideline;
 - (c) assess the environmental performance of the development, and its effects on the surrounding environment;
 - (d) assess whether the development is complying with the relevant standards, performance measures, and statutory requirements;
 - (e) review the adequacy of the Applicant's Environmental Management Strategy and Environmental Monitoring Program; and, if necessary,
 - (f) 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 this audit, the Applicant shall submit a copy of the audit report to the Director-General, with a response to any of the recommendations contained in the audit report

COMMUNITY CONSULTATIVE COMMITTEE

8. The Applicant shall ensure that there is a Community Consultative Committee to oversee the environmental performance of the development. This committee shall, unless otherwise agreed by the Director-General:
- (a) be comprised of:
 - 2 representatives from the Applicant, including the person responsible for environmental management at the quarry;
 - 1 representative from LCC;
 - invited representatives from DEC and the Department; and
 - 3 representatives from the local communitywhose appointment has been approved by the Director-General, in consultation with LCC;
 - (b) be chaired by an independent Chair, whose appointment is approved by the Director-General;
 - (c) meet at least four times in the first year of its operation and at least twice a year thereafter; and
 - (d) review and provide advice on the environmental performance of the development, including any construction or environmental management plans, monitoring results, audit reports, or complaints.
9. 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 for inspection within 14 days of the Committee meeting, or as agreed to by the Committee;
 - (g) respond to any advice or recommendations the Committee may have in relation to the environmental management or performance of the development;
 - (h) forward a copy of the minutes of each Committee meeting, and any responses to the Committee's recommendations to the PCC, LCC and Director-General within a month of the Committee meeting.
10. The Applicant shall ensure that the Committee has its first meeting before the Environmental Management Strategy (see condition 1) is submitted to the Director-General for approval.



**APPENDIX C - Copy of Current Environment Protection Licence No 12863 and other Statutory
Instruments Issued by the NSW EPA**

Environment Protection Licence

Licence - 12863



Licence Details

Number:	12863
Anniversary Date:	05-June

Licensee

EPIC MINING PTY LIMITED
 PO BOX 177
 KEMPS CREEK NSW 2171

Premises

FERNDALE
 275 ADAMS ROAD
 LUDDENHAM NSW 2525

Scheduled Activity

Extractive Activities

Fee Based Activity

Scale

Other Land-Based Extraction	> 100000-500000 T obtained
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Region

Metropolitan - Sydney Industry
 Level 3, NSW Govt Offices, 84 Crown Street
 WOLLONGONG NSW 2500
 Phone: (02) 9995 5000
 Fax: (02) 9995 6900
 PO Box 513 WOLLONGONG EAST
 NSW 2520

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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).

Environment Protection Licence

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

EPIC MINING PTY LIMITED
PO BOX 177
KEMPS CREEK NSW 2171

subject to the conditions which follow.

Environment Protection Licence

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1 Administrative Conditions

A1 What the licence authorises and regulates

- A1.1 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.

Scheduled Activity	Fee Based Activity	Scale
Extractive Activities	Other Land-Based Extraction	> 100000 - 500000 T obtained

A2 Premises or plant to which this licence applies

- A2.1 The licence applies to the following premises:

Premises Details
FERNDALE
275 ADAMS ROAD
LUDDENHAM
NSW 2525
LOT 3 DP 623799, LOT 1 DP 838361

A3 Information supplied to the EPA

- A3.1 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:

- 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
- 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 The following points referred to in the table below are identified in this licence for the purposes of monitoring and/or the setting of limits for the emission of pollutants to the air from the point.

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Air

EPA identification no.	Type of Monitoring Point	Type of Discharge Point	Location Description
1	Dust deposition monitoring		Dust deposition gauge located 5 m from the northern boundary near Elizabeth Drive shown as point D1 on Drawing No 8102 titled "Figure 1 - Monitoring Sites - Luddenham Clay/Shale Quarry" and dated 06/05/09 prepared by Conacher environmental group
2	Dust deposition monitoring		Dust deposition gauge located 30 m from the boundary of the Hubertus Country Club shown as point D2 on Drawing No 8102 titled "Figure 1 - Monitoring Sites - Luddenham Clay/Shale Quarry" and dated 06/05/09 prepared by Conacher environmental group
3	Dust deposition monitoring		Dust deposition gauge located 150 m from the south western boundary of the site shown as point D3 on Drawing No 8102 titled "Figure 1 - Monitoring Sites - Luddenham Clay/Shale Quarry" and dated 06/05/09 prepared by Conacher environmental group
4	Dust deposition monitoring		Dust deposition gauge located in the middle of the southern boundary of the site shown as point D4 on Drawing No 8102 titled "Figure 1 - Monitoring Sites - Luddenham Clay/Shale Quarry" and dated 06/05/09 prepared by Conacher environmental group
5	Dust deposition monitoring		Dust deposition gauge located at the eastern boundary of the site shown as point D5 on Drawing No 8102 titled "Figure 1 - Monitoring Sites - Luddenham Clay/Shale Quarry" and dated 06/05/09 prepared by Conacher environmental group
11	Weather monitoring station		Weather monitoring station located near the site offices near the middle of the site labelled as WSM1 on drawing No 8102 titled "Figure 1 - Monitoring Sites - Luddenham Clay/Shale Quarry", dated 06/05/09 and prepared by Conacher environmental group

P1.2 The following points referred to in the table are identified in this licence for the purposes of the monitoring and/or the setting of limits for discharges of pollutants to water from the point.

P1.3 The following utilisation areas referred to in the table below are identified in this licence for the purposes of the monitoring and/or the setting of limits for any application of solids or liquids to the utilisation area.

Water and land

EPA Identification no.	Type of Monitoring Point	Type of Discharge Point	Location Description
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6	Effluent quality monitoring - Discharge to waters	Effluent quality monitoring - Discharge to waters	Outlet from the site to Oaky Creek labelled as point WS1 on drawing No 8102 titled "Figure 1 - Monitoring Sites - Luddenham Clay/Shale Quarry" and dated 06/05/09 prepared by Conacher environmental group
7	Effluent quality monitoring - Discharge to waters	Effluent quality monitoring - Discharge to waters	At Oaky Creek located 20 m from the southern boundary of the site labelled as point WS2 on drawing No 8102 titled "Figure 1 - Monitoring Sites - Luddenham Clay/Shale Quarry" and dated 06/05/09 prepared by Conacher environmental group
8	Groundwater monitoring		Groundwater monitoring bore located at the southern boundary of the site labelled as BMS1 on drawing No 8102 titled "Figure 1 - Monitoring Sites - Luddenham Clay/Shale Quarry", dated 06/05/09 and prepared by Conacher environmental group
9	Groundwater monitoring		Groundwater monitoring bore located near Oaky Creek and the southern boundary of the site labelled as BMS2 on drawing No 8102 titled "Figure 1 - Monitoring Sites - Luddenham Clay/Shale Quarry", dated 06/05/09 and prepared by Conacher environmental group
10	Groundwater monitoring		Groundwater monitoring bore located near Oaky Creek and -- southern boundary of the site labelled as BMS3 on drawing No 8102 titled "Figure 1 - Monitoring Sites - Luddenham Clay/Shale Quarry", dated 06/05/09 and prepared by Conacher environmental group

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 Concentration limits

L2.1 For each monitoring/discharge point or utilisation area specified in the table below (by a point number), the concentration of a pollutant discharged at that point, or applied to that area, must not exceed the concentration limits specified for that pollutant in the table.

L2.2 Where a pH quality limit is specified in the table, the specified percentage of samples must be within the specified ranges.

L2.3 To avoid any doubt, this condition does not authorise the pollution of waters by any pollutant other than those specified in the table.

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L2.4 Water and/or Land Concentration Limits

POINT 6

Pollutant	Units of Measure	50 percentile concentration limit	90 percentile concentration limit	3DGM concentration limit	100 percentile concentration limit
Biochemical oxygen demand	milligrams per litre				150
Oil and Grease	milligrams per litre				30
pH	-				5.5-8.5
Total suspended solids	milligrams per litre				50

POINT 7

Pollutant	Units of Measure	50 percentile concentration limit	90 percentile concentration limit	3DGM concentration limit	100 percentile concentration limit
Biochemical oxygen demand	milligrams per litre				150
Oil and Grease	milligrams per litre				30
pH	-				5.5-8.5
Total suspended solids	milligrams per litre				50

L3 Volume and mass limits

L3.1 For each discharge point or utilisation area specified below (by a point number), the volume/mass of:

a) liquids discharged to water; or;

b) solids or liquids applied to the area;

must not exceed the volume/mass limit specified for that discharge point or area.

Point	Unit of Measure	Volume/Mass Limit
6	kilolitres per day	1000

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7	kilolitres per day	1000
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L4 Waste

L4.1 The licensee must not cause, permit or allow any waste to be received at the premises, except the wastes expressly referred to in the column titled "Waste" and meeting the definition, if any, in the column titled "Description" in the table below.

Any waste received at the premises must only be used for the activities referred to in relation to that waste in the column titled "Activity" in the table below.

Any waste received at the premises is subject to those limits or conditions, if any, referred to in relation to that waste contained in the column titled "Other Limits" in the table below.

This condition does not limit any other conditions in this licence.

Code	Waste	Description	Activity	Other Limits
NA	General or Specific exempted waste	Waste that meets all the conditions of a resource recovery exemption under Clause 51A of the Protection of the Environment Operations (Waste) Regulation 2005	As specified in each particular resource recovery exemption	NA
NA	Waste	Any waste received on site that is below licensing thresholds in Schedule 1 of the POEO Act, as in force from time to time	-	NA

L5 Noise limits

L5.1 Noise from the premises must not exceed an LAeq(15 minute) noise emission criterion of 41 dB(A) at any residential or other sensitive receptors not associated with the activities except as expressly provided by this licence.

Where LAeq means the equivalent continuous noise level - the level of noise equivalent to the energy-average of noise levels occurring over a measurement period.

L5.2 To determine compliance with condition(s) L6.1 noise must be measured at, or computed for, the locations specified in the table titled "noise monitoring locations". A modifying factor correction must be applied for tonal, impulsive or intermittent noise in accordance with the "Environmental Noise Management - NSW Industrial Noise Policy (January 2000)".

L5.3 The noise emission limits identified in this licence apply under all meteorological conditions except:

- during rain and wind speeds (at 10m height) greater than 3m/s; and
- under "non-significant weather conditions".

Note: Field meteorological indicators for non-significant weather conditions are described in the NSW Industrial Noise Policy, Chapter 5 and Appendix E in relation to wind and temperature inversions.

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L6 Hours of operation

- L6.1 Activities covered by this licence, including haulage vehicles entering and leaving the premises, must only be carried out between the hours of 0700 and 1800 Monday to Friday and at no time on Saturdays, Sundays and Public Holidays.

This condition does not apply to the delivery of material outside the hours of operation, if that delivery is required by police or other authorities for safety reasons; and/or the operation or personnel or equipment are endangered. In such circumstances, prior notification is provided to the EPA and affected residents as soon as possible, or within a reasonable period in the case of emergency.

L6.2 Hours of operations for maintenance purposes

Maintenance of equipment used on site may be conducted during normal operating hours and on Saturdays between 0700 and 1300 hrs provided that the noise emission criterion of 41 dB(A) LAeq(15 minute) is not exceeded at the locations specified in table titled "Noise monitoring locations".

4 Operating Conditions

O1 Activities must be carried out in a competent manner

- O1.1 Licensed activities must be carried out in a competent manner.

This includes:

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

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 Dust

- O3.1 The premises must be maintained in a condition which minimises or prevents the emission of dust from the premises.

- O3.2 The tailgates of all haulage trucks leaving the premises must be securely fixed prior to loading or immediately after unloading to prevent loss of material.

O4 Other operating conditions

- O4.1 A Stormwater Management Plan must be prepared for the development and must be implemented as soon

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as normal operations commence. Implementation of the Plan must mitigate the impacts of stormwater runoff from and within the premises following the completion of construction activities. The Stormwater Management Plan should be consistent with the guidance contained in *Managing Urban Stormwater: Council Handbook* (available from the EPA).

O4.2 Blasting is not permitted on or within any part of the premises.

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 For each monitoring/discharge point or utilisation area specified below (by a point number), the licensee must monitor (by sampling and obtaining results by analysis) the concentration of each pollutant specified in Column 1. The licensee must use the sampling method, units of measure, and sample at the frequency, specified opposite in the other columns:

M2.2 Air Monitoring Requirements

POINT 1

Pollutant	Units of measure	Frequency	Sampling Method
Particulates - Deposited Matter	grams per square metre per month	Continuous	Australian Standard 3580.10.1-2003

POINT 2

Pollutant	Units of measure	Frequency	Sampling Method
Particulates - Deposited Matter	grams per square metre per month	Continuous	Australian Standard 3580.10.1-2003
PM10	micrograms per cubic metre	Monthly	AS/NZS 3580.9.6:2003

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POINT 3

Pollutant	Units of measure	Frequency	Sampling Method
Particulates - Deposited Matter	grams per square metre per month	Continuous	Australian Standard 3580.10.1-2003

POINT 4

Pollutant	Units of measure	Frequency	Sampling Method
Particulates - Deposited Matter	grams per square metre per month	Continuous	Australian Standard 3580.10.1-2003
PM10	micrograms per cubic metre	Monthly	AS/NZS 3580.9.6:2003

POINT 5

Pollutant	Units of measure	Frequency	Sampling Method
Particulates - Deposited Matter	grams per square metre per month	Continuous	Australian Standard 3580.10.1-2003

M2.3 Water and/ or Land Monitoring Requirements

POINT 6

Pollutant	Units of measure	Frequency	Sampling Method
Biochemical oxygen demand	milligrams per litre	Special Frequency 1	Grab sample
Oil and Grease	milligrams per litre	Special Frequency 1	Grab sample
pH	-	Quarterly during discharge	Grab sample
Total suspended solids	milligrams per litre	Special Frequency 1	Grab sample

POINT 7

Pollutant	Units of measure	Frequency	Sampling Method
Biochemical oxygen demand	milligrams per litre	Special Frequency 1	Grab sample
Oil and Grease	milligrams per litre	Special Frequency 1	Grab sample
pH	-	Special Frequency 1	Grab sample
Total suspended solids	milligrams per litre	Special Frequency 1	Grab sample

M2.4 Special frequency 1 referred to under Point 6 and Point 7 means: monitoring for the specified pollutants shortly after commencement of normal operation on site and on a quarterly basis thereafter provided that water is being discharged from the site. If water is not being discharged from the site, the monitoring must be conducted at least twice in the first 12 months period of normal operation. In this case the monitoring must be conducted at least 150 days apart.

M3 Testing methods - concentration limits

M3.1 Monitoring for the concentration of a pollutant emitted to the air required to be conducted by this licence must be done in accordance with:

- any methodology which is required by or under the Act to be used for the testing of the

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concentration of the pollutant; or

b) if no such requirement is imposed by or under the Act, any methodology which a condition of this licence requires to be used for that testing; or

c) if no such requirement is imposed by or under the Act or by a condition of this licence, any methodology approved in writing by the EPA for the purposes of that testing prior to the testing taking place.

Note: The *Protection of the Environment Operations (Clean Air) Regulation 2010* requires testing for certain purposes to be conducted in accordance with test methods contained in the publication "Approved Methods for the Sampling and Analysis of Air Pollutants in NSW".

M3.2 Subject to any express provision to the contrary in this licence, monitoring for the concentration of a pollutant discharged to waters or applied to a utilisation area must be done in accordance with the Approved Methods Publication unless another method has been approved by the EPA in writing before any tests are conducted.

M4 Weather monitoring

M4.1 For each monitoring point specified in the table below, the licensee must monitor (by sampling and obtaining results by analysis) the parameters specified in Column 1. The licensee must use the sampling method, units of measure, averaging period and sample at the frequency, specified opposite in the other columns.

Parameter	Units of Measure	Frequency	Averaging Period	Sampling Method
Air temperature	oC	Continuous	1 hour	AM-4
Wind direction	o	Continuous	15 minute	AM-2 & AM-4
Wind speed	m/s	Continuous	15 minute	AM-2 & AM-4
Sigma theta	o	Continuous	15 minute	AM-2 & AM-4
Rainfall	mm	Continuous	24 hour	AM-4

M5 Recording of pollution complaints

M5.1 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.

M5.2 The record must include details of the following:

- the date and time of the complaint;
- the method by which the complaint was made;
- any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect;
- the nature of the complaint;
- the action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; and
- if no action was taken by the licensee, the reasons why no action was taken.

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M5.3 The record of a complaint must be kept for at least 4 years after the complaint was made.

M5.4 The record must be produced to any authorised officer of the EPA who asks to see them.

M6 Telephone complaints line

M6.1 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.

M6.2 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.

M6.3 The preceding two conditions do not apply until 3 months after:

- the date of the issue of this licence or
- 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.

M7 Requirement to monitor volume or mass

M7.1 For each discharge point or utilisation area specified below, the licensee must monitor:

- the volume of liquids discharged to water or applied to the area;
- the mass of solids applied to the area;
- the mass of pollutants emitted to the air;

at the frequency and using the method and units of measure, specified below.

POINT 6

Frequency	Unit of Measure	Sampling Method
Each overflow event	kilolitres per day	In line instrumentation

POINT 7

Frequency	Unit of Measure	Sampling Method
Each overflow event	kilolitres per day	In line instrumentation

Note: In line instrumentation means using manufacturer's specifications for the existing pump multiplied by the time it is used.

M8 Other monitoring and recording conditions

M8.1 The licensee must monitor the noise emanating from the activities at all five (5) locations specified in the table titled "Noise monitoring locations". This monitoring must be conducted shortly after commencement of normal operation on site and on a quarterly basis thereafter.

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Noise monitoring locations

Location number	Location description	Easting	Northing
N1	Noise monitoring station located 5 m from the northern boundary near Elizabeth Drive shown as point N1 on Drawing No 8102 titled "Figure 1 - Monitoring Sites - Luddenham Clay/Shale Quarry" and dated 06/05/09 prepared by Conacher environmental group	289130	6249975
N2	Noise monitoring station located 30 m from the boundary of the Hubertus Country Club shown as point N2 on Drawing No 8102 titled "Figure 1 - Monitoring Sites - Luddenham Clay/Shale Quarry" and dated 06/05/09 prepared by Conacher environmental group	288680	6279460
N3	Noise monitoring station located 150 m from the south western boundary of the site shown as point N3 on Drawing No 8102 titled "Figure 1 - Monitoring Sites - Luddenham Clay/Shale Quarry" and dated 06/05/09 prepared by Conacher environmental group	288950	6248930
N4	Noise monitoring station located in the middle of the southern boundary of the site shown as point N4 on Drawing No 8102 titled "Figure 1 - Monitoring Sites - Luddenham Clay/Shale Quarry" and dated 06/05/09 prepared by Conacher environmental group	289480	6248890

M8.2 The monitoring specified in conditions M2, M4, M7 and M8 must be conducted for a minimum period of 12 months.

Following assessment of the monitoring results for this 12 months period, the EPA will adjust the monitoring requirements in consultation with the licensee.

6 Reporting Conditions

R1 Annual return documents

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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.
At 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.

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.

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').

R1.6 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.

R1.7 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.

R1.8 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

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

Environment Protection Licence

Licence - 12863



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.

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.

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.

R4 Other reporting conditions

R4.1 The licensee must provide a written report to the Manager Sydney Industry, PO Box 668, DECC Parramatta 2124 within 28 days of the completion of the monitoring required in conditions M2, M6, M7 and M8.

R4.2 At the end of the first 12 months period, the licensee must submit to the EPA's Manager Sydney Industry, PO Box 668 Parramatta NSW 2124, a report outlining the results of the monitoring. The report must be submitted within 28 days from the completion of the monitoring.

Environment Protection Licence

Licence - 12863



7 General Conditions

G1 Copy of licence kept at the premises or plant

- 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.

Environment Protection Licence



Licence - 12863

Dictionary

General Dictionary

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 2009
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 2009
assessable pollutants	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
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 2009.
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

Environment Protection Licence



Licence - 12863

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 (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
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 2009
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> .

Environment Protection Licence



Licence - 12863

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
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 David Gathercole

Environment Protection Authority

(By Delegation)

Date of this edition: 05-June-2009

End Notes

- 1 Licence transferred through application 146040, approved on 22-Dec-2009, which came into effect on 14-Dec-2009.
- 2 Licence varied by notice 1112136, issued on 15-Mar-2010, which came into effect on 15-Mar-2010.
- 3 Licence transferred through application 146392, approved on 18-Jan-2011, which came into effect on 18-Jan-2011.
- 4 Licence varied by notice 1502055 issued on 28-Nov-2011



Our reference: | FIL12/ 9291

Mr Samuel Tarabori
EPIC MINING PTY LIMITED
PO BOX 177
KEMPS CREEK NSW 2171

1 November 2012

Dear Mr Tarabori,

**Desktop Audit of Requirements to Publish Pollution Monitoring Data
FINAL Audit Findings – FERNDALE
(Licence No. 12863)**

The Environment Protection Authority (EPA) has completed a desk top Epic Mining Pty Ltd's compliance with the recent amendments to the Protection of the Environment Operations Act 1997 (POEO Act) that require holders of environment protection licences who undertake monitoring as a result of a licence condition to publish the data on the licensee's website. If the licensee does not have a website, data is to be made publicly available on request.

The intention of these requirements is to improve the community's access to information about the environmental performance of licensed facilities.

The objective of the desk top audits was to assess the level of licensees' compliance with the requirements of section 66(6) of the POEO Act 1997 relating to the publishing of monitoring data.

Findings from the audits will also provide information to inform the review of the EPA's *Requirements for publishing pollution monitoring data*. The EPA will consider any issues identified to ensure that the Requirements enable licensees to publish pollution monitoring data in an effective and meaningful manner.

The desk top audit was undertaken on 18 September 2012 and a draft summary of audit findings was sent to the licensee on 19 September 2012.

The findings of the desk top audit indicated that Epic Mining Pty Ltd does not have a local or corporate website and as such is not required to publish pollution monitoring data.

However, the licensee is reminded that in accordance with the POEO Act requirements the licensee is required to provide a copy of the pollution monitoring data at no charge to any person who requests a copy of the data in writing.

PO Box A290 Sydney South NSW 1232
59-61 Goulburn St Sydney NSW 2000
Tel: (02) 9995 5000 Fax: (02) 9995 5999
TTY: (02) 9211 4723
ABN 30 841 387 271
www.environment.nsw.gov.au

No comments were received from the licensee on the draft audit findings.

The desk top audit has now been finalised and this letter outlining the Final Audit Findings will be placed on the POEO Public Register <http://www.environment.nsw.gov.au/prpoeoapp/> .

If you require further information or clarification on any matters regarding this audit, please do not hesitate to contact Marina.

Yours sincerely



Dr Winston Wickremeratne
A/Manager Compliance and Assurance
Environment Protection and Regulation

Licence Variation

Licence - 12863



BLUE SKY MINING (AUSTRALIA) PTY LTD,
ABN 12 140 940 192,
LEVEL 2 10 PHILLIP STREET,
PARRAMATTA NSW 2150

Attention: Mr. SAMUEL TARABORI

Notice Number 1112136
File Number LIC08/497
Date 15-Mar-2010

NOTICE OF VARIATION OF LICENCE NO. 12863

BACKGROUND

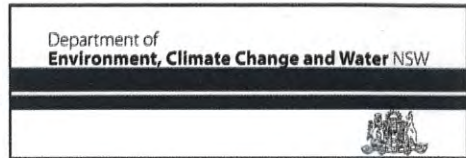
- A. BLUE SKY MINING (AUSTRALIA) PTY LTD ("the licensee") is the holder of Environment Protection Licence No. 12863 ("the licence") issued under the *Protection of the Environment Operations Act 1997* ("the Act"). The licence authorises the carrying out of Scheduled Activity - Premises Based at 275 Adams Road, LUDDENHAM, NSW.
- B. On 25 February 2010 the EPA received a request for the variation of the licence. The licensee requested that some changes be made to the licence to reflect monitoring and reporting requirements as agreed previously with the licensee. The request included also a change to reflect the current Australian Standard used for the monitoring of PM10.
- C. The EPA has considered the licensee's request and decided to approve it subject to the conditions included in this notice.
- D. This notice varies the licence in accordance with the attached document.

VARIATION OF LICENCE NO. 12863

1. By this notice the EPA varies licence No. 12863 as set out in the attached document. This document contains a copy of the provisions of the licence marked with the variations that are made to it by this notice.
2. The variations to the licence are indicated in the following way:
 - if a strike through mark appears through any word or other text (eg. ~~Solids or~~) this indicates that the word or other text is deleted from the licence by this notice; and
 - if a underline appears under any word or other text (eg. must be treated) this indicates that the word or other text is added to the licence by this notice.

Licence Variation

Licence - 12863



.....
Mr Robert Marr
Acting Head Regional Operations Unit
Sydney Industry Section
(by Delegation)

INFORMATION ABOUT THIS NOTICE

- ▣ This notice is issued under section 58(5) of the Act.
- ▣ Details provided in this notice, along with an updated version of the licence, will be available on the EPA's Public Register (<http://www.environment.nsw.gov.au/prpoeo/index.htm>) in accordance with section 308 of the Act.

Appeals against this decision

- ▣ You can appeal to the Land and Environment Court against this decision. The deadline for lodging the appeal is 21 days after you were given notice of this decision.

When this notice begins to operate

- ▣ The variations to the licence specified in this notice begin to operate immediately from the date of this notice, unless another date is specified in this notice.
- ▣ If an appeal is made against this decision to vary the licence and the Land and Environment Court directs that the decision is stayed the decision does not operate until the stay ceases to have effect or the Land and Environment Court confirms the decision or the appeal is withdrawn (whichever occurs first).

Licence Variation

Licence - 12863



Office of
Environment
& Heritage

EPIC MINING PTY LIMITED

ABN 86 144 713 931

PO BOX 177

KEMPS CREEK NSW 2171

Attention:

Notice Number 1502055
File Number LIC08/497
Date 28-Nov-2011

NOTICE OF VARIATION OF LICENCE NO. 12863

BACKGROUND

- A. EPIC MINING PTY LIMITED ("the licensee") is the holder of Environment Protection Licence No. 12863 ("the licence") issued under the *Protection of the Environment Operations Act 1997* ("the Act"). The licence authorises the carrying out of activities at 275 Adams Road, LUDDENHAM, NSW, 2525 ("the premises").
- B. The Environment Protection Authority (EPA) recently replaced its regulatory and statutory management system with a modernised window based system. As a result of this change, some licences were slightly modified.
- C. This variation notice is issued to correct these modifications to ensure that the current licence is consistent with the licence issued under the previous system.

VARIATION OF LICENCE NO. 12863

1. By this notice the EPA varies licence No. 12863. The attached licence document contains all variations that are made to the licence by this notice.
2. The following variation have been made to the licence:
 - Attach all conditions that were not migrated during the changes in statutory systems,
 - Perform minor editorial and formatting to sections of the licence to ensure consistency with previously archived licence, and
 - Amend condition M7.1 to clarify the sampling method.

Licence Variation



Office of
Environment
& Heritage

.....
Kieran Horkan
Unit Head
Metropolitan - Sydney Industry
(by Delegation)

INFORMATION ABOUT THIS NOTICE

- This notice is issued under section 58(5) of the Act.
- Details provided in this notice, along with an updated version of the licence, will be available on the EPA's Public Register (<http://www.environment.nsw.gov.au/prpoeo/index.htm>) in accordance with section 308 of the Act.

Appeals against this decision

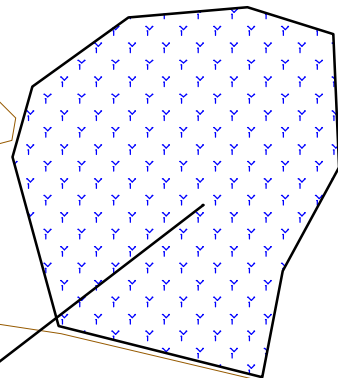
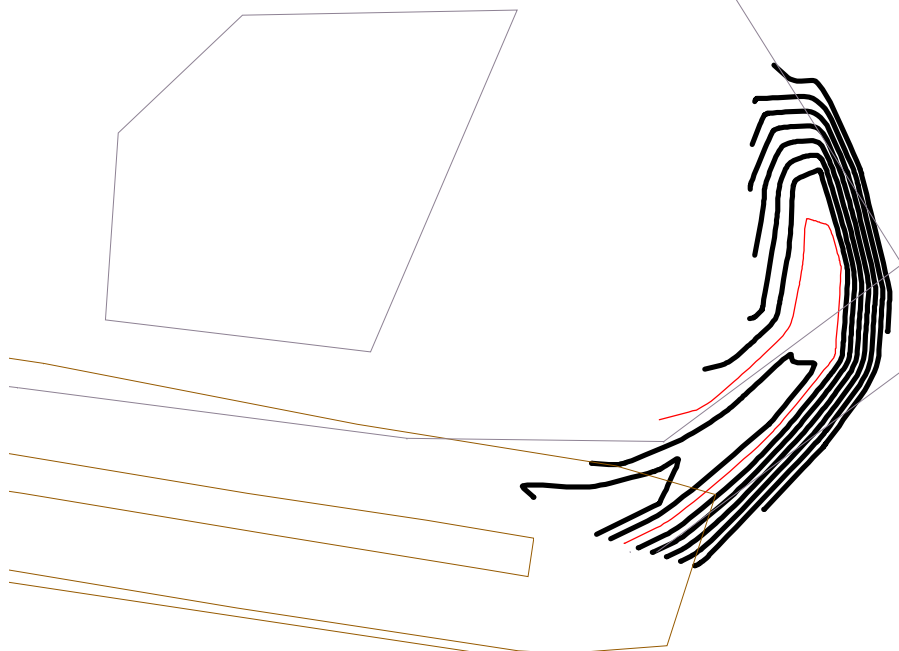
- You can appeal to the Land and Environment Court against this decision. The deadline for lodging the appeal is 21 days after you were given notice of this decision.

When this notice begins to operate

- The variations to the licence specified in this notice begin to operate immediately from the date of this notice, unless another date is specified in this notice.
- If an appeal is made against this decision to vary the licence and the Land and Environment Court directs that the decision is stayed the decision does not operate until the stay ceases to have effect or the Land and Environment Court confirms the decision or the appeal is withdrawn (whichever occurs first).

**APPENDIX D - New Site Plan Ref No 01019-T5 & T6 and 01019-T1 & T2 Sedimentation Dams
Surface Area Ref 01019**

Dam Surface Area
2825 square metres



Dam Surface Area
1015 square metres

Ref : 01019
21st May 2012



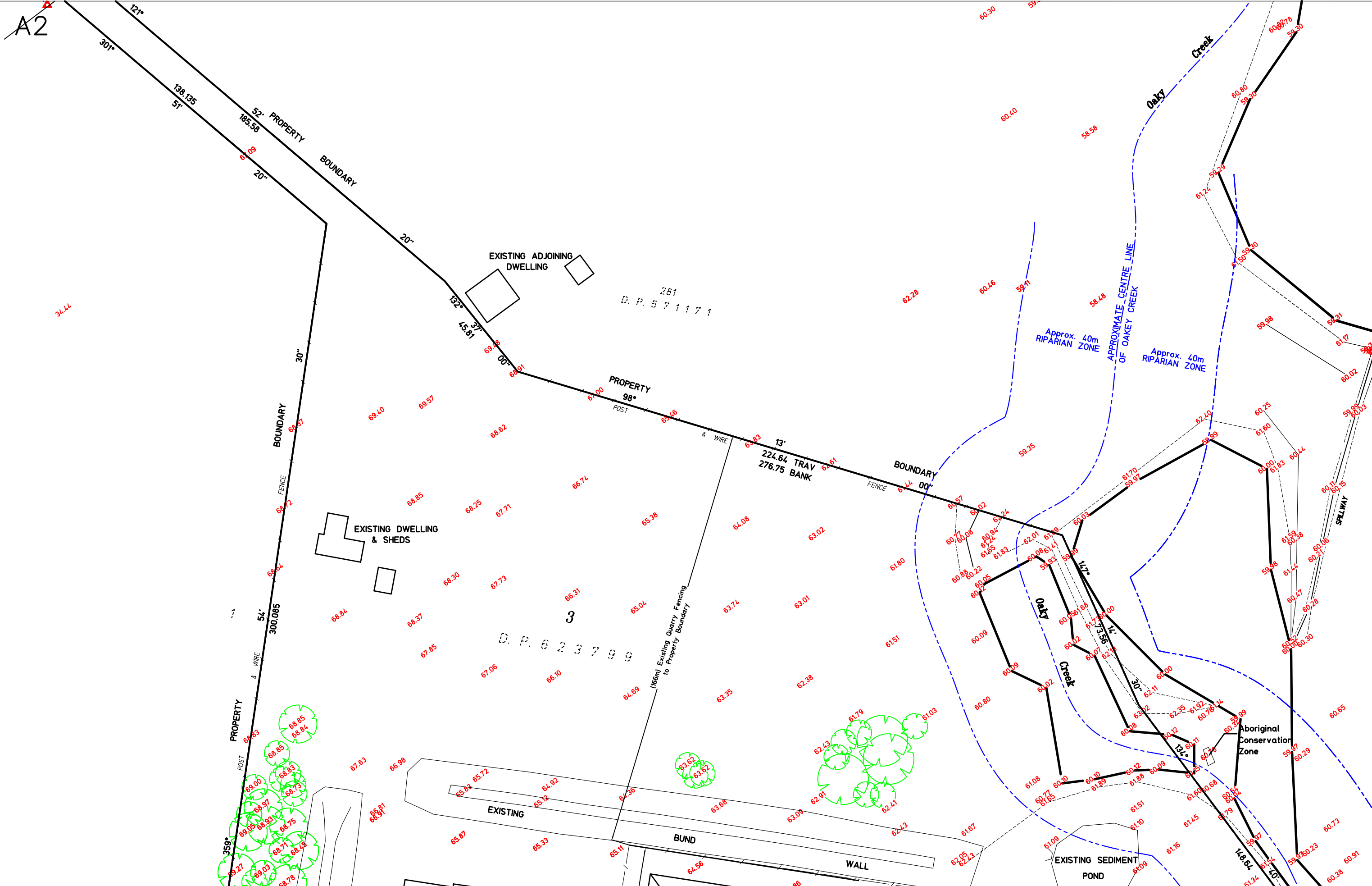
MONAGHAN SURVEYORS PTY LTD
 Consultants in Land & Engineering Surveying
 67 The Terrace, WINDSOR N.S.W. 2756
 Ph. (02)4577-5393 Fax (02)4577-5321
 email: admin@gjmonaghan.com.au

		Table of mm											
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Reduction Ratios	Plan : 1:1500												
Horiz. : -	Vert. : -												
Contour Interval : 1 metre	Datum : AHD												
Origin : PM43336 (RL61.255 AHD)	Prepared by : G. Monaghan												
	Plan Date : 08-11-2010												
	Checked : -												
	Surveyed by : Various												
	Survey Date : Adendum 29-10-10												
	Signed :												

LOCALITY : Luddenham
 PARISH : Bringelly
 COUNTY : Cumberland
 Council : Liverpool
 Council Ref : -
 Approval Date : -

Client : Epic Mining
 Project : Plan of Compiled Detail Site Information of Lot 3 in D.P.623799 & Adjoining Lot 281 in D.P.571171
 No. 275 Adams Road
 LUDDENHAM

Approved : SHEET No. 1 OF 5 SHEETS
 Computer Ref : 01019-T
 Proj. Name :
 REF : **01019-T1**



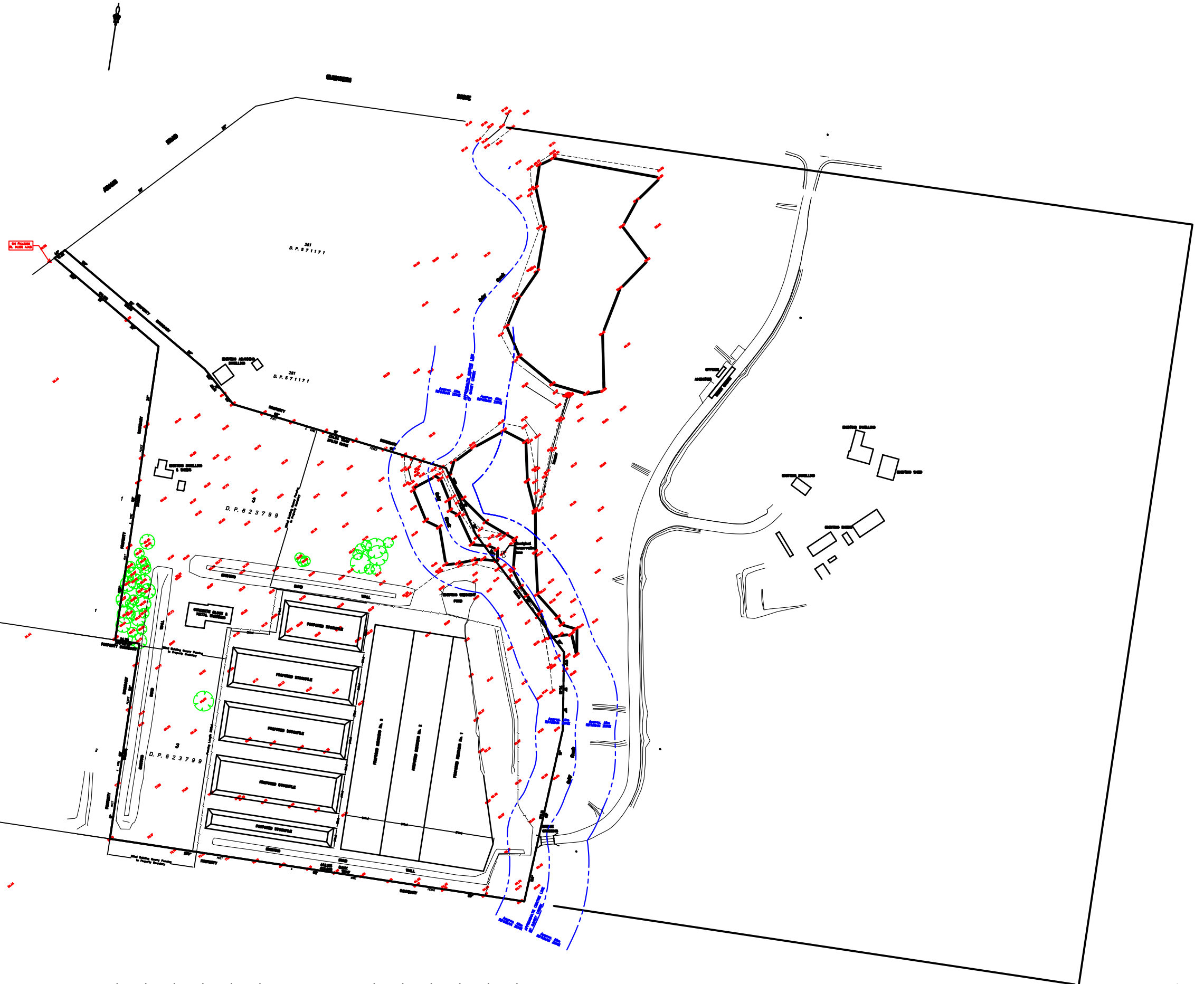
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0	10	20	30	40	50	Table of mm	100	110	120	130	140	150
Reduction Ratios			Prepared by : G. Monaghan									
Plan : 1:1500			Plan Date : 08-11-2010									
Horiz. : - Vert. : -			Checked : -									
Contour Interval : 1 metre			Surveyed by : Various									
Datum : AHD			Survey Date : Adendum 29-10-10									
Origin : PM43336 (RL61.255 AHD)			Signed : _____									

LOCALITY : Luddenham
 PARISH : Bringelly
 COUNTY : Cumberland
 Council : Liverpool
 Council Ref : -
 Approval Date : -

Client : Epic Mining
 Project : Plan of Compiled Detail Site Information of Lot 3 in D.P.623799 & Adjoining Lot 281 in D.P.571171 No. 275 Adams Road LUDDENHAM

Approved : _____ SHEET No. 2 OF 5 SHEETS
 Computer Ref : 01019-T2
 Proj. Name : _____
 REF : **01019-T2**



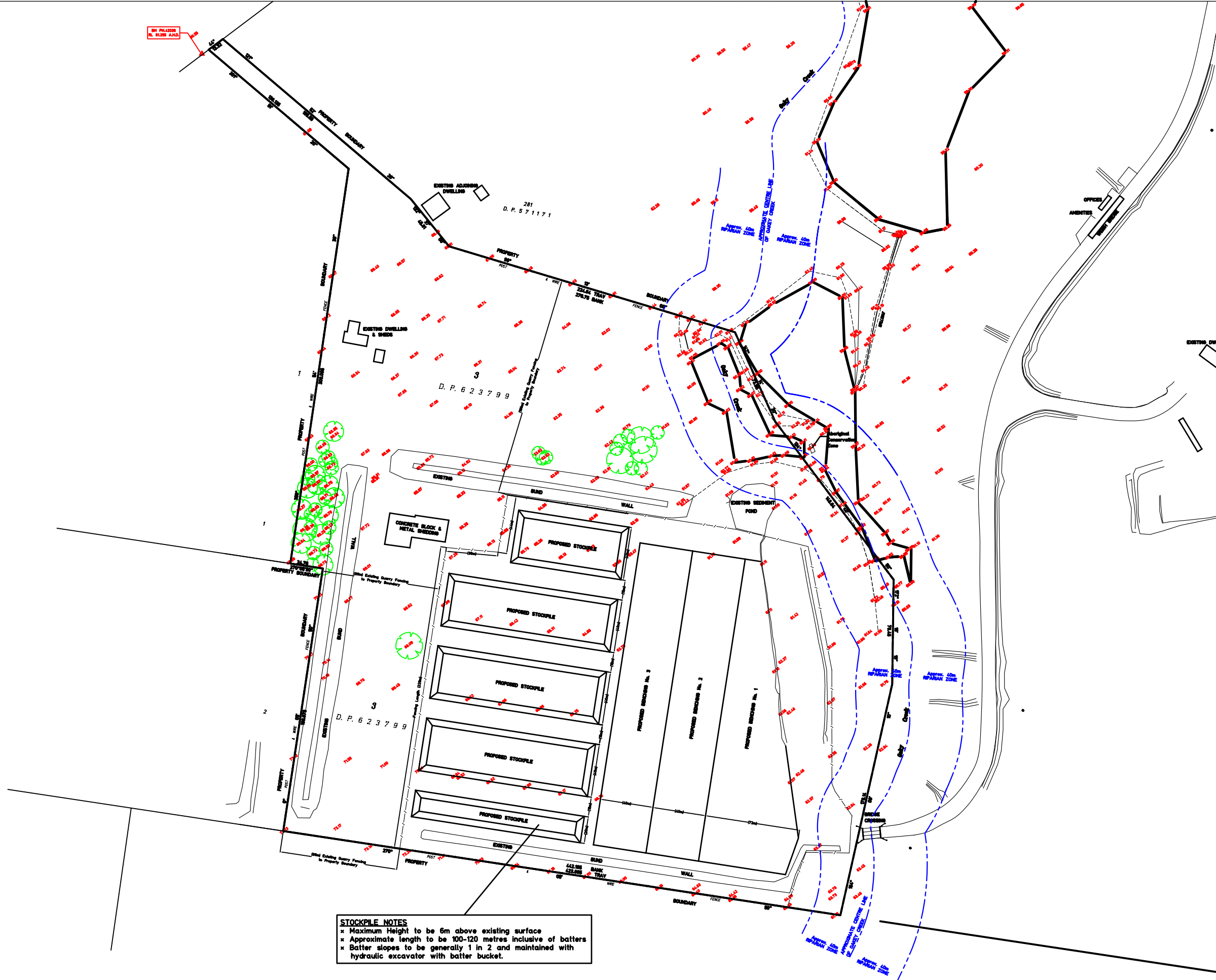
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Table of mm	
0	10 20 30 40 50 100 110 120 130 140 150
Reduction Ratios	Prepared by : G. Monaghan
Plan : 1:1500	Plan Date : 08-11-2010
Horiz. : - Vert. : -	Checked : -
Contour Interval : 1 metre	Surveyed by : Various
Datum : AHD	Survey Date : Adendum 29-10-10
Origin : PM43336 (RL61.255 AHD)	Signed :

LOCALITY : Luddenham
 PARISH : Bringelly
 COUNTY : Cumberland
 Council : Liverpool
 Council Ref : -
 Approval Date : -

Client : Epic Mining
 Project : Plan of Compiled Detail Site Information
 of Lot 3 in D.P.623799
 & Adjoining Lot 281 in D.P.571171
 No. 275 Adams Road
 LUDDENHAM

Approved : SHEET No. 5
 OF 5 SHEETS
 Computer Ref : 01019-T5
 Proj. Name :
 REF : **01019-T5**



STOCKPILE NOTES
 * Maximum Height to be 6m above existing surface
 * Approximate length to be 100-120 metres inclusive of batters
 * Batter slopes to be generally 1 in 2 and maintained with hydraulic excavator with batter bucket.

MONAGHAN SURVEYORS PTY LTD
 Consultants in Land & Engineering Surveying
 67 The Terrace, WINDSOR N.S.W. 2756
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 email: admin@gjmonaghan.com.au

0	10	20	30	40	50	Table of mm					100	110	120	130	140	150
Reduction Ratios						Prepared by : G. Monaghan										
Plan : Not to Scale						Plan Date : 21-11-2010										
Horiz. : - Vert. : -						Checked by : -										
Contour Interval : 1 metre						Surveyed by : Various										
Datum : AHD						Survey Date : Adendum 29-10-10										
Origin : PM43336 (RL61.255 AHD)						Signed : _____										

LOCALITY : Luddenham
 PARISH : Bringelly
 COUNTY : Cumberland
 Council : Liverpool
 Council Ref : -
 Approval Date : -

Client : Epic Mining
 Project : Plan of Compiled Detail Site Information of Lot 3 in D.P.623799 & Adjoining Lot 281 in D.P.571171 No. 275 Adams Road LUDDENHAM

Approved : _____ SHEET No. 6 OF 6 SHEETS
 Computer Ref : 01019-T6
 Proj. Name : _____
 REF : **01019-T6**

APPENDIX E - Photos of Current Features within the Site

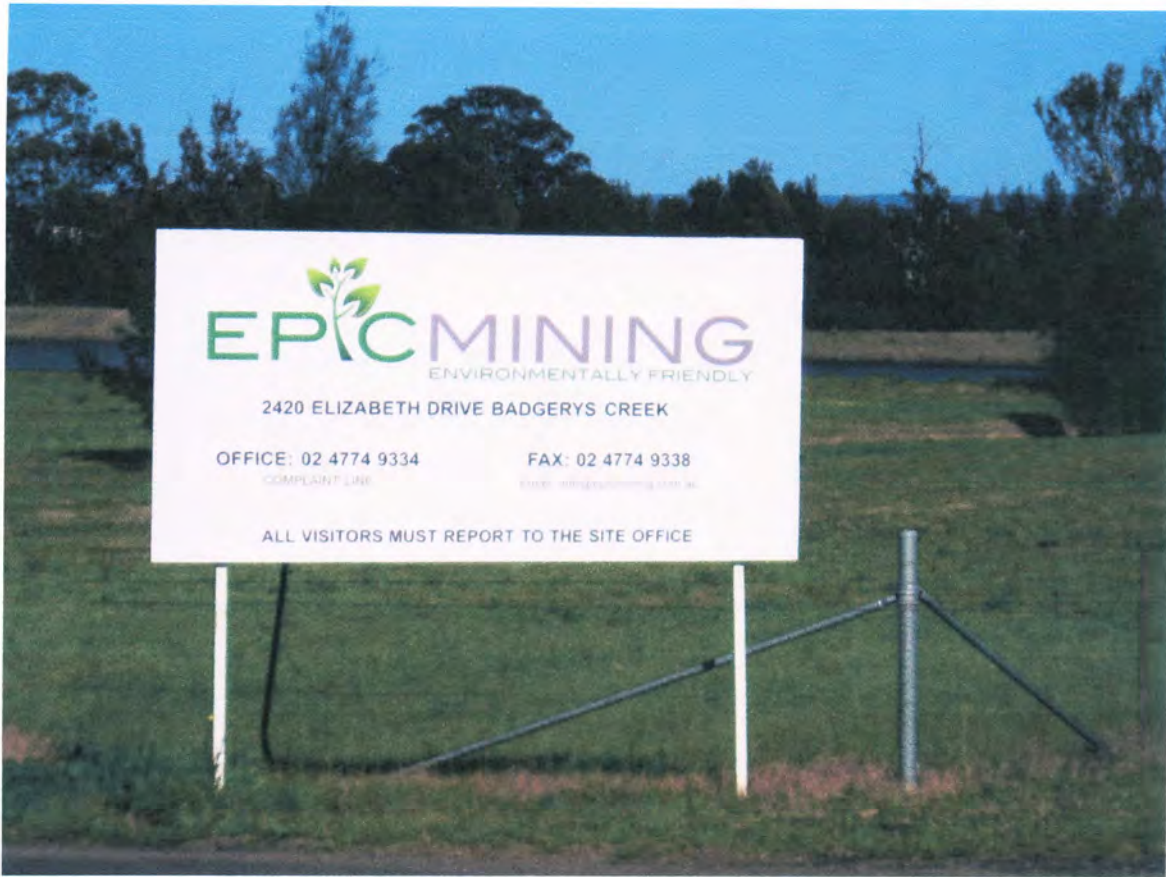


Photo 1 - Company's sign at main entrance to the quarry



Photo 2 – Aerial view of the site in the local context

Environmental Assessment Report for the Department of Planning
Application for Development Consent Modification



Photo 3 – View of the quarry & other features within/outside the site



Photo 4 – Main entrance of quarry from Elizabeth Drive



Photo 5 – A view of the site's main entrance from Elizabeth Drive



Photo 6 – Another view of the main entrance from Elizabeth Drive



Photo 7 – View of the riparian zone – early stage



Photo 8 – Another view of the riparian zone – early stage



Photo 9 – View of the riparian zone – later stage



Photo 10 – Sedimentation pond 1



Photo 11 – Sedimentation pond 2