

EPL 4860 WATER QUALITY STATEMENT OF COMPLIANCE – UPDATED 11/06/2019

Broken Head Quarry

Leadshine Pty Ltd t/a Broken Head Quarry PO Box 165, Byron Bay, NSW 2481

June 2019

Stuart Dixon-Smith

Dear Stuart,

Re: EPL 4860 Water Quality Statement of Compliance (May 2019)

Site: Broken Head Quarry (BHQ)

ENV Solutions Pty Ltd (ENV) was commissioned by Leadshine Pty Ltd to prepare a *Statement of Compliance* in relation to the *Water Quality* of two (2) sediment ponds located on the eastern side and three (3) sediment ponds located on the western side of Broken Head Quarry (the 'site'). Located in Broken Head NSW (Lot 1, DP184443 and Lot 1, DP123302), a plan outlining relative location is presented in Figure 1 (Attachment 1).

Initial sampling was undertaken by Robert Mitchell (Environmental Manager) on the 4th and 29th of April 2019. On each occasion, a single (1) sample was collected from each of the eastern ponds known as *sediment basin no. 1* and *sediment basin no. 2*. Figure 2 (**Attachment 1**) outlines both basin location and sampling location.

Additional sampling was conducted by Ollie Fick (Environmental Engineer) on the 8th of May and 5th of June 2019. Here, one (1) sample was collected from each of the eastern basins and each of the western basins know as; *sediment basin no. 3, Process Pond and Lily Pond* at locations presented in Figure 2 (**Attachment 1**).

Once collected, each sample was placed into an 'esky', 'iced' and sent to NATA accredited Environmental Analysis Laboratory (EAL) in Lismore NSW. Here, samples were analysed for pH and Total Suspended Solids (TSS) where results were compared against EPL 'Concentration Limits' specified in section 'L2' of EPL 4860 (Attachment 2). Comparisons are presented in Table 1 (eastern) and Table 2 (western), where a copy of NATA accredited results are provided in Attachment 3. In addition, and as per the EPL, a visual inspection was conducted for visible oil and grease where this was absent.

Table 1: Analytical Comparison (Eastern)

Analyte	Sampling Date	Units	Sediment Basin 1 (P1)	Sediment Basin 2 (P2)	EPL 4860 Criteria (Section L2)
рН	04/04/19	pH Units	6.75	7.19	6.5 - 8.5
Total Suspended Solids (TSS)	04/04/19	mg/L	10	1	50
рН	29/04/19	pH Units	7.13	6.68	6.5 - 8.5
Total Suspended Solids (TSS)	29/04/19	mg/L	7	2	50
рН	08/05/19	pH Units	6.76	7.08	6.5 - 8.5
Total Suspended Solids (TSS)	08/05/19	mg/L	2	3	50
рН	05/06/19	pH Units	6.96	6.95	6.5 - 8.5
Total Suspended Solids (TSS)	05/06/19	mg/L	7	7	50

Table 2: Analytical Comparison (Western)

Analyte	Sampling Date	Units	Process Pond (P1)	Lily Pond (P2)	Sediment Basin 3 (P3)	EPL 4860 Criteria (Section L2)
рН	08/05/19	pH Units	6.42	5.92	6.16	6.5 - 8.5
Total Suspended Solids (TSS)	08/05/19	mg/L	98	14	552	50
pH	05/06/19	pH Units	6.63	6.13	6.58	6.5 - 8.5
Total Suspended Solids (TSS)	05/06/19	mg/L	28	14	77	50

In summary, water quality from Sediment Basin no. 1 and Sediment Basin no. 2 (eastern side) was shown to be compliant for discharge when compared against EPL 4860 Criteria for samples collected on all occasions.

The water quality of the *Lily Pond* (western side) was shown to have compliant TSS, however the pH remained non-compliant on both sampling occasions. The water quality of the *Process Pond* and *sediment basin no. 3* were shown to be initially non-compliant. Following the most recent sampling, *Process Pond* was shown to be compliant and *sediment basin no. 3* was non-compliant with TSS while pH was compliant. At the request of the client, monitoring is to occur monthly (commencing 6th May 2019).

Additionally, utilising rainfall data recorded via the 'Cape Byron AWS', the Bureau of Meteorology has outlined at 'monthly total' rainfall of 121.8 mm in March 2019, 124.0 mm in April 2019 and 76.8 mm in May 2019 (BOM, Accessed 11 June 2019).

Should you have any queries about this Statement of Compliance, please don't hesitate to contact me directly.

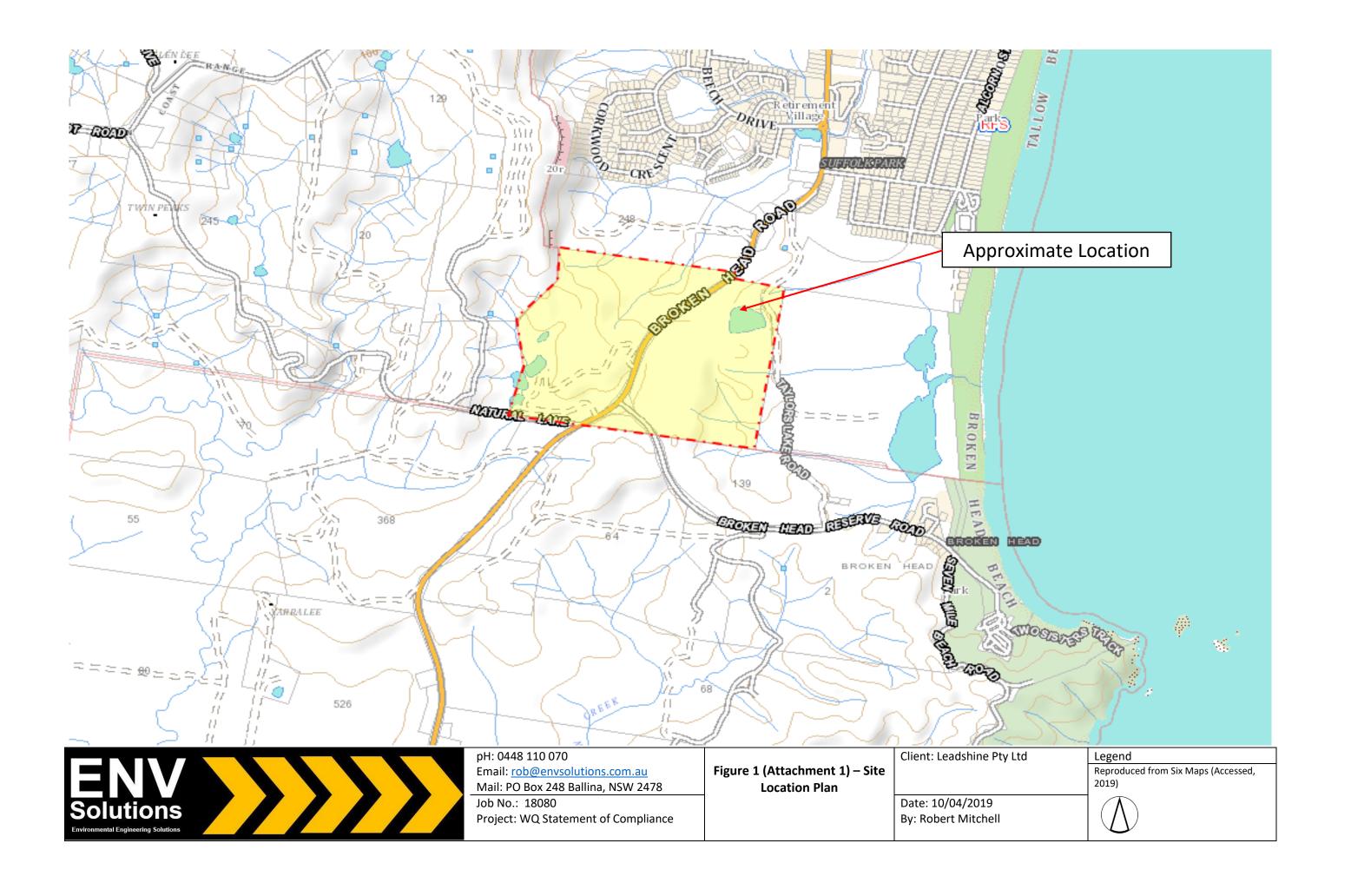
Yours faithfully,

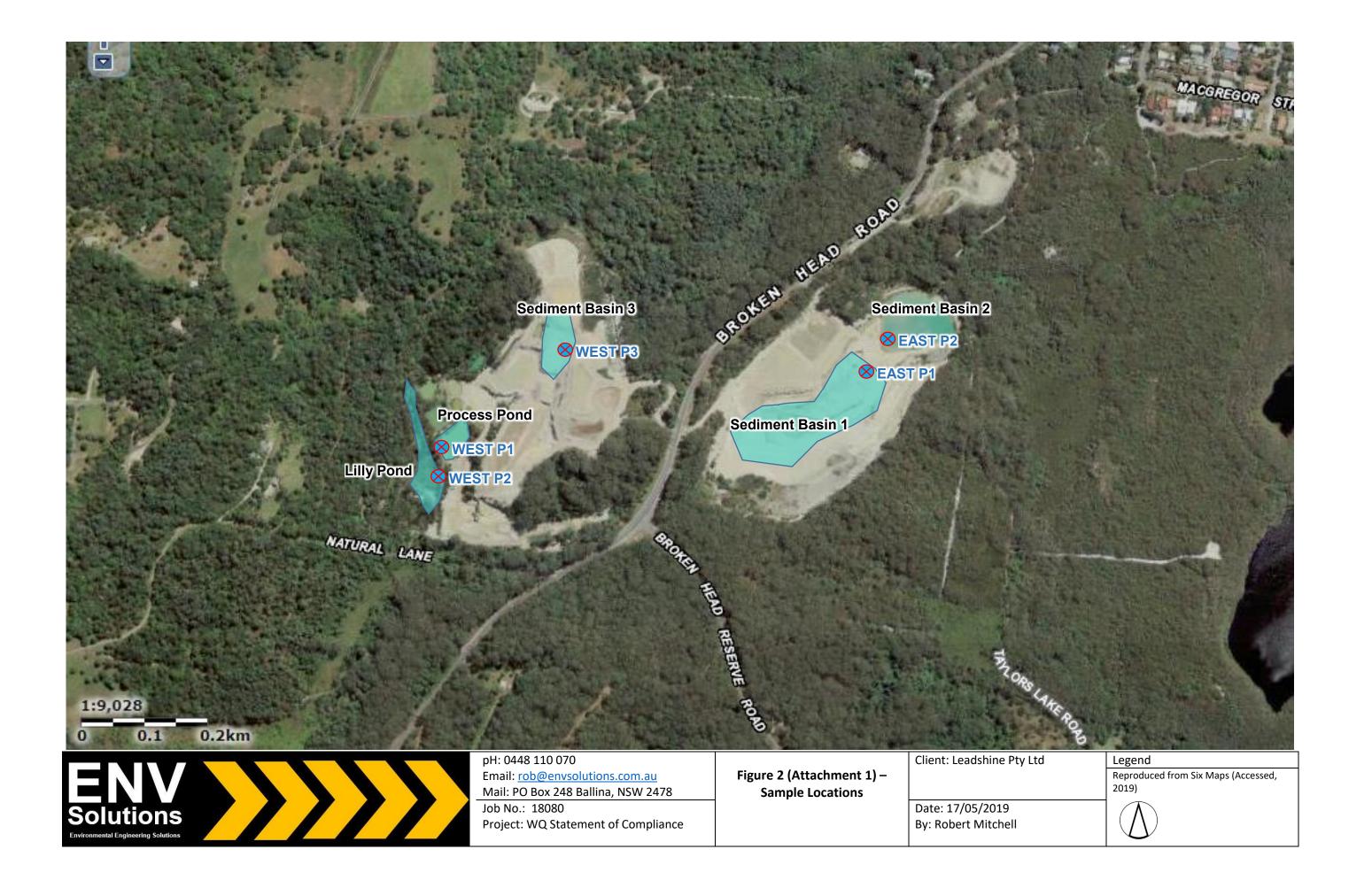
Ollie Fick

Environmental Engineer

ENV Solutions Pty Ltd

Attachment 1





Attachment 2





Licence Details				
Number:	4860			
Anniversary Date:	10-March			

<u>Licensee</u>
LEADSHINE PTY. LIMITED
5 PUNCH STREET
BALMAIN NSW 2041

<u>Premises</u>	
BROKEN HEAD QUARRY	
BROKEN HEAD ROAD	
SUFFOLK PARK NSW 2481	

Extractive activities

Fee Based Activity	Scale
Land-based extractive activity	0-30000 T annual capacity to extract,
·	process or store

Region				
North - North Coast				
NSW Govt Offices, 49 Victoria Street				
GRAFTON NSW 2460				
Phone: (02) 6640 2500				
Fax: (02) 6642 7743				
PO Box 498 GRAFTON				
NSW 2460				



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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);
- 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).

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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:

LEADSHINE PTY. LIMITED
5 PUNCH STREET
BALMAIN NSW 2041

subject to the conditions which follow.

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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	Land-based extractive activity	0 - 30000 T annual capacity to extract, process or store

A2 Premises or plant to which this licence applies

A2.1 The licence applies to the following premises:

Premises Details
BROKEN HEAD QUARRY
BROKEN HEAD ROAD
SUFFOLK PARK
NSW 2481
LOT 1 DP 123302, LOT 1 DP 184443, LOT 2 DP 700806

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:

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

2 Discharges to Air and Water and Applications to Land

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P1 Location of monitoring/discharge points and areas

- P1.1 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.
- 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.

Water and land

EPA Identi- fication no.	Type of Monitoring Point	Type of Discharge Point	Location Description
4	The overflow from the Process Pond in the in the western quarry area	The overflow from the Process Pond in the in the western quarry area	The overflow from the Process Pond in the in the western quarry area
5	The overflow from the "Sediment basin number two" in the Eastern quarry area	The overflow from the "Sediment basin number two" in the Eastern quarry area	The overflow from the "Sediment basin number two" in the Eastern quarry area

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.
- L1.2 Rainfall runoff from all disturbed areas of the premises arising from up to 82.5mm (up to five day event duration) must, prior to discharge from the premises, be captured and treated to the standard set out in condition L2 below.

L2 Concentration limits

- L2.1 For each monitoring/discharge point or utilisation area specified in the table\s 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\s.
- L2.4 Water and/or Land Concentration Limits

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POINT 4,5

Pollutant	Units of Measure	50 percentile concentration limit	90 percentile concentration limit	3DGM concentration limit	100 percentile concentration limit
Oil and Grease	Visible				nil
рН	рН				6.5 to 8.5
Total suspended solids	milligrams per litre				50

- L2.5 The concentration limits in the above table do not apply to any discharge from the sediment ponds solely arising from rainfall exceeding 82.5 mm in total falling over any consecutive five day period.
- L2.6 If the licensee uses turbidity (NTU) in place of TSS to determine compliance with Condition L2.4, the licensee must develop a statistical correlation which identifies the relationship between NTU and TSS for water quality in the sediment basin/s in order to determine the NTU equivalent of 50 mg/L TSS before its use.
- L2.7 The licensee must provide the EPA with a copy of the statistical correlation assessment methodology and results before using NTU in place of TSS.
- L2.8 The licensee must develop and implement a method to enable the ongoing verification of the relationship between NTU and TSS.
- L2.9 The licensee must provide the EPA with any amendments the licensee makes to the statistical correlation as a result of the ongoing verification required by Condition L2.8 before using the revised statistical correlation.

L3 Waste

L3.1 The licensee must not cause, permit or allow any waste generated outside the premises to be received at the premises for storage, treatment, processing, reprocessing or disposal or any waste generated at the premises to be disposed of at the premises, except as expressly permitted by the licence.

L4 Hours of operation

L4.1 Hours of operation are to be confined to 7:00am to 5:00pm Monday to Friday, and 8:00am and 1:00pm Saturday inclusive. No operations or deliveries are to be undertaken on Sundays or Public Holidays.

This condition does not apply if written permission from sensitive receivers within 1 kilometre of the quarry for extended hours of operation has been provided to the EPA.

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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.

O4 Emergency response

Note: The licensee must maintain, and implement as necessary, a current Pollution Incident Response Management Plan (PIRMP) for the premises. Details of the requirements can be found on the EPA website via the following link http://www.epa.nsw.gov.au/legislation/poefaqspirmps.htm

O5 Processes and management

- O5.1 Sediment Basins shall be treated, if required, to reduce the Total Suspended Solids level to the licenced concentration limit before being discharged to the environment. Treatment can be with gypsum or any other material that has been approved by the EPA.
- O5.2 Each sedimentation basin must have a marker (the "sedimentation basin marker") that identifies the upper level of the sediment storage zone.
- O5.3 Whenever the level of liquid and other material in any sedimentation basin exceeds the level indicated by the sedimentation basin marker, the licensee must take all practical measures as soon as possible to reduce the level of liquid and other material in the sedimentation basin.
- O5.4 The licensee must ensure the design storage capacity of the sediment basins installed on the premises is reinstated within 5 days of the cessation of a rainfall event that causes runoff to occur on or from the

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premises.

- O5.5 The licensee must maximise the diversion of stormwater runoff containing suspended solids to sediment basins installed on the premises.
- O5.6 The licensee must ensure that sampling point(s) for water discharged from the sediment basin(s) are provided and maintained in an appropriate condition to permit:
 - a) the clear identification of each sediment basin and discharge point;
 - b) the collection of representative samples of the water discharged from the sediment basin(s); and
 - c) access to the sampling point(s) at all times by an authorised officer of the EPA.
- O5.7 The licensee must maximise the diversion of run-on waters from lands upslope and around the site whilst land disturbance activities are being undertaken.
- O5.8 The sediment basins must meet the design and operational standards of *Managing Urban Stormwater Soils and Construction: Volume 1 and Volume 2 E. Mines and quarries.* This document requires that at a minimum 90 percentile five-day rainfall event be used to determine basin sizing for quarries.
- O5.9 The site's sediment basin/s must be maintained and operated to ensure that:
 - 1. All 5-day rainfall events up to 82.5 mm (the 90th percentile 5 day rain event) are captured.
 - 2. Any discharge from the sediment basin/s that occurs as a result of rainfall below the 5-day total of 82.5 mm (including managed discharges to restore basin capacity) must meet the limit conditions specified in condition L2.4.

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

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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 Water and/ or Land Monitoring Requirements

POINT 4,5

Pollutant	Units of measure	Frequency	Sampling Method
рН	рН	Special Frequency 1	Grab sample
Total suspended solids	milligrams per litre	Special Frequency 1	Grab sample

M2.3 Special Frequency 1 means sampling once <24 hours prior to actively emptying the ponds and during each discharge event arising from rainfall less than 82.5 mm falling in total over a period of up to five days duration.

M3 Testing methods - concentration limits

M3.1 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 Environmental monitoring

- M4.1 Rainfall at the premises must be measured and recorded in millimetres per 24 hour period, at the same time each day.
- M4.2 The rainfall monitoring data collected in compliance with Condition M4.1 can be used to determine compliance with L2.4 and L2.5.

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:
 - a) the date and time of the complaint;
 - b) the method by which the complaint was made;
 - c) any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect;
 - d) the nature of the complaint;

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- e) the action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; and
- f) if no action was taken by the licensee, the reasons why no action was taken.
- 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.

6 Reporting Conditions

R1 Annual return documents

- R1.1 The licensee must complete and supply to the EPA an Annual Return in the approved form comprising:
 - 1. a Statement of Compliance,
 - 2. a Monitoring and Complaints Summary,
 - 3. a Statement of Compliance Licence Conditions,
 - 4. a Statement of Compliance Load based Fee,
 - 5. a Statement of Compliance Requirement to Prepare Pollution Incident Response Management Plan,
 - 6. a Statement of Compliance Requirement to Publish Pollution Monitoring Data; and
 - 7. a Statement of Compliance Environmental Management Systems and Practices.

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.
- 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.
- R1.4 Where this licence is surrendered by the licensee or revoked by the EPA or Minister, the licensee must

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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 via eConnect *EPA* or 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 Statements 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.
- 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.
- Note: An application to transfer a licence must be made in the approved form for this purpose.

R2 Notification of environmental harm

- R2.1 Notifications must be made by telephoning the Environment Line service on 131 555.
- R2.2 The licensee must provide written details of the notification to the EPA within 7 days of the date on which the incident occurred.
- Note: The licensee or its employees must notify all relevant authorities of incidents causing or threatening material harm to the environment immediately 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.

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- 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.

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.

8 Pollution Studies and Reduction Programs

U1 PRP 4 Urgent remedial works (Western section of premises)

U1.1 Urgent works are required to be designed and installed to ensure that all runoff from disturbed areas of the premises is treated in accordance with *Managing Urban Stormwater: Soils and Construction: Volume 1 March 2004. Landcom and Managing Urban Stormwater Volume 2 E. Mines and Quarries. (the Blue Book).*

This includes the following:

All works necessary to ensure that all flow from disturbed areas within the premises are directed to the *Process Pond* or otherwise treated in accordance with the Blue Book.

All 'clean water' diversion works are designed, constructed and stabilised in accordance with the Blue Book. All treatment measures in accordance with the Blue Book must be designed and installed to treat any discharge leaving the premises that is not treated by a sediment basin designed and constructed in accordance with the Blue Book.

A report must be prepared detailing the calculation and design of all works set out in this PRP including

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points 1 to 3 and provided to the EPA by email to north.coast@epa.nsw.gov.au

U2 PRP 5 Operation brief for quarry staff to monitor pH and suspended solid loads

U2.1 Leadshine is required to provide an operational brief for quarry staff to monitor pH and suspended solid loads prior to any discharge to ensure any discharge is in accordance with licence limits. The operational brief is to be provided to the EPA by email to: north.coast@epa.nsw.gov.au

Compliance date: 18 August 2017.

U3 PRP 6 Sediment Basin capacity and pond markers

U3.1 The area of the two catchments currently directed to the *Process Pond* and *Sediment basin number two* must be calculated and the markers installed in/on these ponds that show the level representing 100% capacity, the upper level of the sediment storage zone, the sampling point and the discharge point (including the name or number) to comply with condition 5.2.

All details including delineation of the relevant catchment and calculations to inform the respective depths on pond markers must be documented and provided to the EPA by email to:

north.coast@epa.nsw.gov.au Compliance date: 18 August 2017

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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 Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales.
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 Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales.
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.

Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act

general solid waste (non-putrescible)

Licence - 4860



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 Environmen t 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]

plant

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.

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

TM

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

Together with a number, means a test method of that number prescribed by the Approved Methods for the

Sampling and Analysis of Air Pollutants in New South Wales.

Licence - 4860



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.

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 Bernie Weir

Environment Protection Authority

(By Delegation)

Date of this edition: 27-April-2000

Licence - 4860



End Notes

- 1 Licence varied by notice V/M upgrade, issued on 08-Jul-2000, which came into effect on 08-Jul-2000.
- 2 Licence varied by notice 1012746, issued on 20-Dec-2001, which came into effect on 14-Jan-2002.
- 3 Licence transferred through application 141740, approved on 07-Feb-2003, which came into effect on 07-Feb-2003.
- 4 Licence varied by notice 1043166, issued on 01-Apr-2005, which came into effect on 26-Apr-2005.
- 5 Licence varied by Change to Schedule 1, issued on 02-May-2008, which came into effect on 02-May-2008.
- 6 Condition A1.3 Not applicable varied by notice issued on <issue date> which came into effect on <effective date>
- 7 Licence transferred through application 146220, approved on 01-Jul-2010, which came into effect on 01-Jul-2010.
- 8 Licence varied by notice 1503432 issued on 16-Dec-2011
- 9 Licence varied by notice 1505888 issued on 07-May-2012
- 10 Licence varied by notice 1533202 issued on 06-Oct-2015
- 11 Licence varied by notice 1542890 issued on 29-Jul-2016
- 12 Licence varied by notice 1543324 issued on 05-Aug-2016
- 13 Licence varied by notice 1546292 issued on 02-Nov-2016
- 14 Licence varied by notice 1547125 issued on 09-Dec-2016
- 15 Licence varied by notice 1554147 issued on 26-Jul-2017

Attachment 3

RESULTS OF WATER ANALYSIS

5 samples supplied by Env Solutions Pty Ltd on 5th June, 2019. Lab Job No.i2464 Samples submitted by Ollie Fick. Your Job: 18080

PO Box 248 BALLINA NSW 2478

Parameter	Methods reference	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5
		P1 - East	P2 - East	P1 - West	P2 - West	P3 - West
	Job No.	i2464/1	i2464/2	i2464/3	i2464/4	i2464/5
рН	APHA 4500-H ⁺ -B	6.96	6.95	6.63	6.13	6.58
Total Suspended Solids (mg/L)	GFC equiv. filter - APHA 2540-D	7	7	28	5	77

Notes:

- 1. 1 mg/L (milligram per litre) = 1 ppm (part per million) = 1000 µg/L (micrograms per litre) = 1000 ppb (part per billion).
- 2. Analysis performed according to APHA (2017) 'Standard Methods for the Examination of Water & Wastewater', 23rd Edition, except where stated otherwise.
- 3. Analysis conducted between sample arrival date and reporting date.
- 4. ** NATA accreditation does not cover the performance of this service.
- 5. .. Denotes not requested.
- 6. This report is not to be reproduced except in full.
- 7. All services undertaken by EAL are covered by the EAL Laboratory Services Terms and Conditions (refer scu.edu.au/eal or on request).
- 8. This report was issued on 06/06/2019.



Report Date/Time: 5 June 2019 4:26:24PM



Southern Cross University

PO Box 157 Lismore NSW 2480 P: +61 2 6620 3678 E: eal@scu.edu.au www.scu.edu.au/eal

ABN: 41 995 651 524

Sample Receipt Notification (SRN)

Project: EAL/I2464

Customer: Env Solutions Pty Ltd

Contact: Ollie Fick
Client Job ID: 18080
No. of Samples 5 x Water
Date Received: 05 JUN 2019
Comments: Standard Request

Biller: Env Solutions Pty Ltd - Accounts Payable

Test Request

Page 1 of 3

		SW-SING-003	SW-SING-055
Sample Text ID	Client Sample ID	TSS	Hd
12464/001	P1 - East	1	1
12464/002	P2 - East	1	1
I2464/003	P1 - West	1	1









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ABN: 41 995 651 524

Sample Receipt Notification (SRN)

for EAL/I2464

Page 2 of 3

E E E E E E E E E E			SW-SING-003	SW-SING-055
I2464/005 P3 - West 1 1			TSS	Hd
	I2464/004	P2 - West	1	1
Total 5 5	I2464/005	P3 - West	1	1
	Total		5	5









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ABN: 41 995 651 524

Sample Receipt Notification (SRN)

for EAL/I2464

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Test Descriptions

Test List Item Item Description

SW-SING-003 TS

ΓSS

Total Suspended Solids (TSS)

SW-SING-055

Н





