

Harvest Scientific Services Pty Ltd
Geotechnical Environmental & Resource Consultants
ABN 43 132 363 289

ANNUAL ENVIRONMENTAL MANAGEMENT REPORT

SPRING FARM SAND AND SOIL EXTRACTION AND PROCESSING OPERATION (DA 75/256)

MACARTHUR ROAD, SPRING FARM

Prepared for:

M Collins and Sons (Contractors) Pty Ltd



**Job reference: 201267
22 February 2011**

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ABBREVIATIONS

AEMR	Annual Environmental Management Report
CAA	Controlled Activity Approval
CC	Camden Council
CMA	Catchment Management Authority
CRZ	Core riparian zone
DECCW	Department of Environment Climate Change and Water (formally Department of Environment Climate Change DECC)
DEHWA	Department of Environment, Heritage, Water and the Arts
DOP	Department of Planning
EECs	Endangered Ecological Communities
EMP	Environmental Management Plan
EP&BC Act	Environment Protection and Biodiversity Act 1999
EP&A Act	Environmental Planning and Assessment Act 1979
ESCP	Erosion and Sediment Control Plan
HSS Pty Ltd	Harvest Scientific Services Pty Ltd
LGA	Local government area
LMP	Landscape Management Plan
MCS Pty Ltd	M Collins and Sons (Contractors) Pty Ltd
NES	National environmental significance
NOM	Notice of Modification
NOW	NSW Office of Water

PEO Act	Protection of the Environment Operations Act 2000
PM ₁₀	Particulate Matter less than 10µm in size
TSP	Total Suspended Particles
TSC Act	Threatened Species Conservation Act 1995
VB	Vegetated buffer
WM Act	Water Management Act 2000
WMP	Water Management Plan
WM & ESCP	Water Management and Erosion and Sediment Control Plan

1. INTRODUCTION

This Annual Environmental Management Report (AEMR) was prepared by Harvest Scientific Services Pty Ltd, on behalf of M Collins and Son (Contractors) Pty Ltd and is based upon a site inspection, discussions with personnel from M Collins and Sons (Contractors) Pty Ltd (MCS Pty Ltd) and documentation made available by the MCS Pty Ltd.

2. OBJECTIVE

The objective of this AEMR was to address Items 26 of Schedule 3 and Item 4 of Schedule 5 of the Department of Planning (DoP) Notice of Modification (NOM) dated 22 May 2009. These items are summarised in **Table 1**.

Table 1. Summary of NOM conditions addressed in this AEMR.

NOM Schedule	Item #	Requirements	Location in AEMR
3	26	The applicant shall: (a) provide annual production data to the DPI using the standard form for that purpose; and (b) include a copy of this data in the AEMR.	Appendix 1.
5	4	Within 12 months of the date of this approval, and annually thereafter, the Applicant shall submit an AEMR to the DG, relevant agencies and Council. The report shall:	See below.
		(a) Identify the standards and performance measures that apply to the development.	Section 5.3
		(b) describe the works that will be carried out in the next 12 months.	Section 7
		(c) include a summary of complaints received during the past year, and compare this to the complaints received in the previous years.	Section 7
		(d) include a summary of the monitoring results for the development during the past year.	Section 6.2
		(e) include an analysis of these monitoring results against the relevant: ➤ impact assessment criteria / limits. ➤ monitoring results for previous years; and ➤ predictions in the EA.	Section 6.2
		(f) identify any trends in the monitoring results over the life of the development.	Section 6.2
		(g) identify any non-compliance during the previous year.	Section 9
		(h) describe what actions were, or are being, taken to ensure compliance.	Section 9

3. AEMR reporting period

This AEMR has been prepared for whole year ending 22 May 2010 and the part-year ending 02 December 2010.

4. STAKEHOLDERS TO BE PROVIDED WITH A COPY OF THIS AEMR

The DoP and Camden Council will be provided with a copy of this AEMR.

5. SITE LOCATION AND PERFORMANCE STANDARDS

5.1. Introduction and site location

MCS Pty Ltd own and operate the Spring Farm sand and soil quarry located at Lot 22 DP833317 at Spring Farm, in the Camden Local Government Area (LGA). These operations are accessed via Macarthur Road, Spring Farm (**Figure 1**).

This site is a major source of landscaping products for the Sydney region and comprises part of the regionally significant resource identified in the Sydney Regional Environmental Plan No 9 (Extractive Industry).

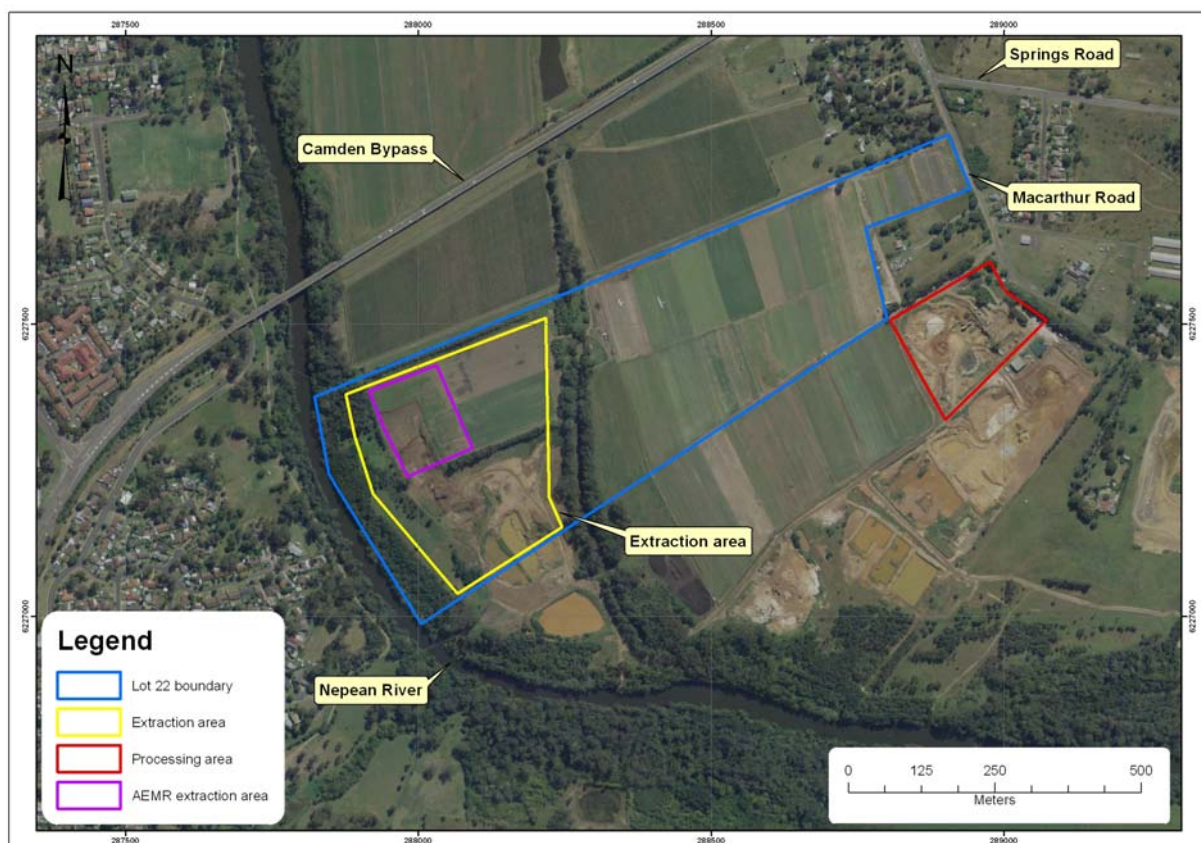


Figure 1. Site location. Source: Department of Lands circa 2008.

5.2. Consents and permits

This site is subject to the following consents and permits:

- A Notice of Modification (NOM) from the DoP dated 22 May 2009;
- Environmental Protection Licence (EPL) 4093; and
- A Controlled Activity Approval (CAA) issued by the NSW Office of Water (NOW).

5.3. Standards and performance measures

Environmental targets for this facility are outlined in **Table 2** and are derived from the Environmental Management Plan for this facility.

Table 2: Environmental targets

Environmental aspect	Component	Location	Target	Averaging period	Source
Air quality	Nuisance dust – deposited dust.	Plan 4 of EMP	< 4 g / m ² / month	Annual	DoP Conditions of Consent.
	Long-term - Total Suspended Particles (TSP) Matter	Plan 4 of EMP	< 90 µg/m ³	Annual	
	Long-term - Particulate Matter (PM ₁₀)	Plan 4 of EMP	< 30 µg/m ³	Annual	
	Short-term - Particulate Matter (PM ₁₀)	Plan 4 of EMP	< 50 µg/m ³	24 hour	
Noise	LA10 (15 minute) at each sensitive receptor outlined on Figure 3.	Plan 4 of EMP	< 55 dB(A)	15 minutes	EPL 4093.
Groundwater	pH	Plan 4 of EMP	pH < 4.03 pH > 5.48	N/A	WM&ESCP.
	Electrical conductivity	Plan 4 of EMP	< 800 uS/cm	N/A	

6. WORKS UNDERTAKEN DURING THE AEMR REPORTING PERIOD

6.1. Extraction activities

During the AEMR period, extraction activities occurred within the area of land depicted on **Figure 1**.

A copy of Industry and Investment return for extractive materials for the period ending June 30, 2010 is appended as **Appendix 1**.

6.2. Environmental monitoring

6.2.1. Dust deposition

Routine dust deposition monitoring results are summarised graphically as **Figure 2**. With the exception of a state-wide dust storm in September 2009, environmental targets have been met throughout the monitoring period.

Relatively higher deposition rates were observed in the months August until February.

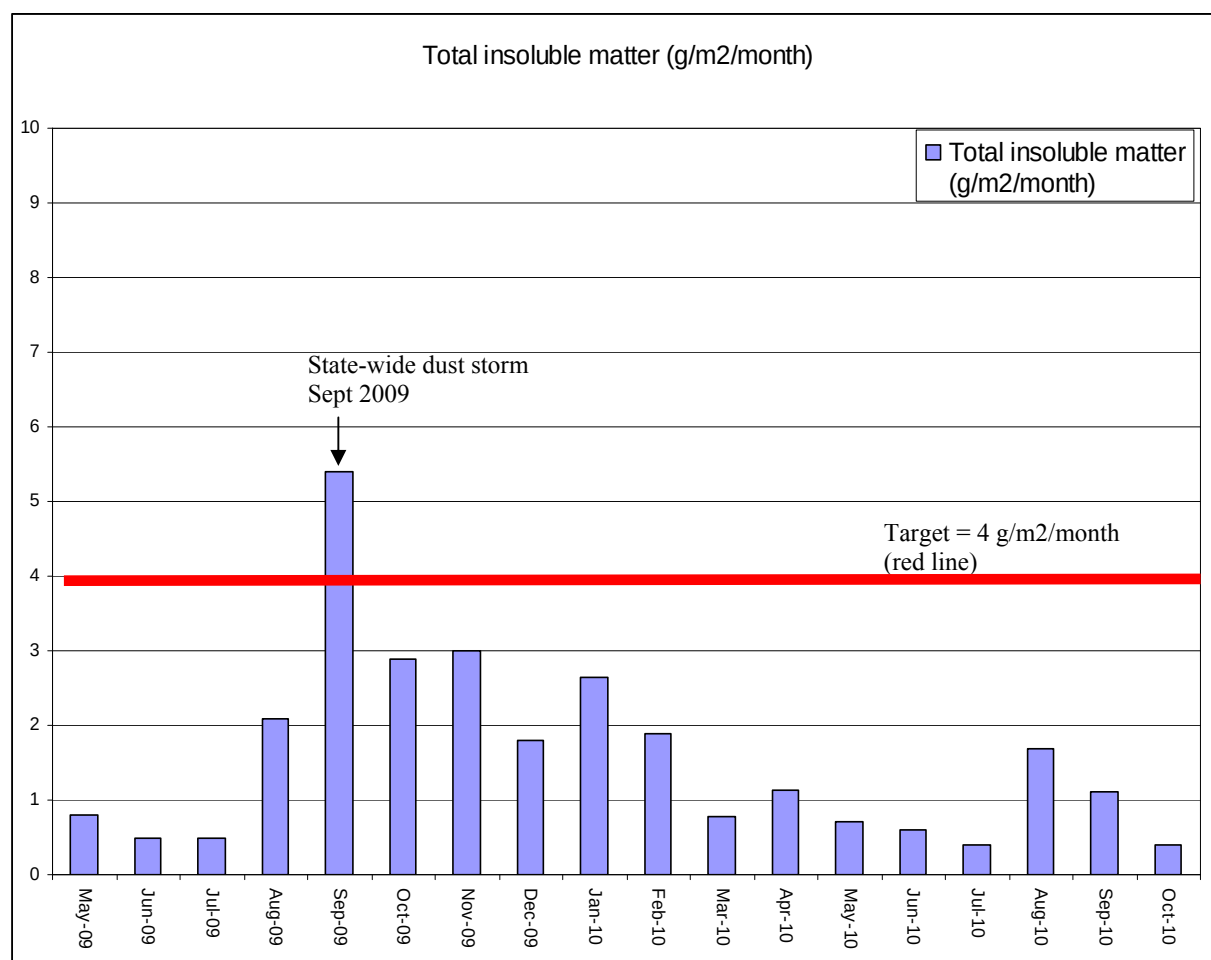


Figure 2. Summary of historical dust deposition monitoring results.

6.2.2. Total suspended particles (TSP) and Particulate Matter (PM₁₀)

TSP and PM₁₀ monitoring has not been undertaken and is planned to be undertaken within the next AEMR reporting period.

6.2.3. Noise

There have been no noise related complaints. As per the EMP for the facility as no noise related complaints were received during the AEMR period instrumental noise monitoring was not required to be undertaken.

6.2.4. Groundwater

Routine groundwater monitoring results are presented graphically as **Figures 3, 4 and 5** for the parameters pH, EC and depth respectively.

6.2.4.1 pH

pH was within the target range for the reporting period. No obvious trends were identified.

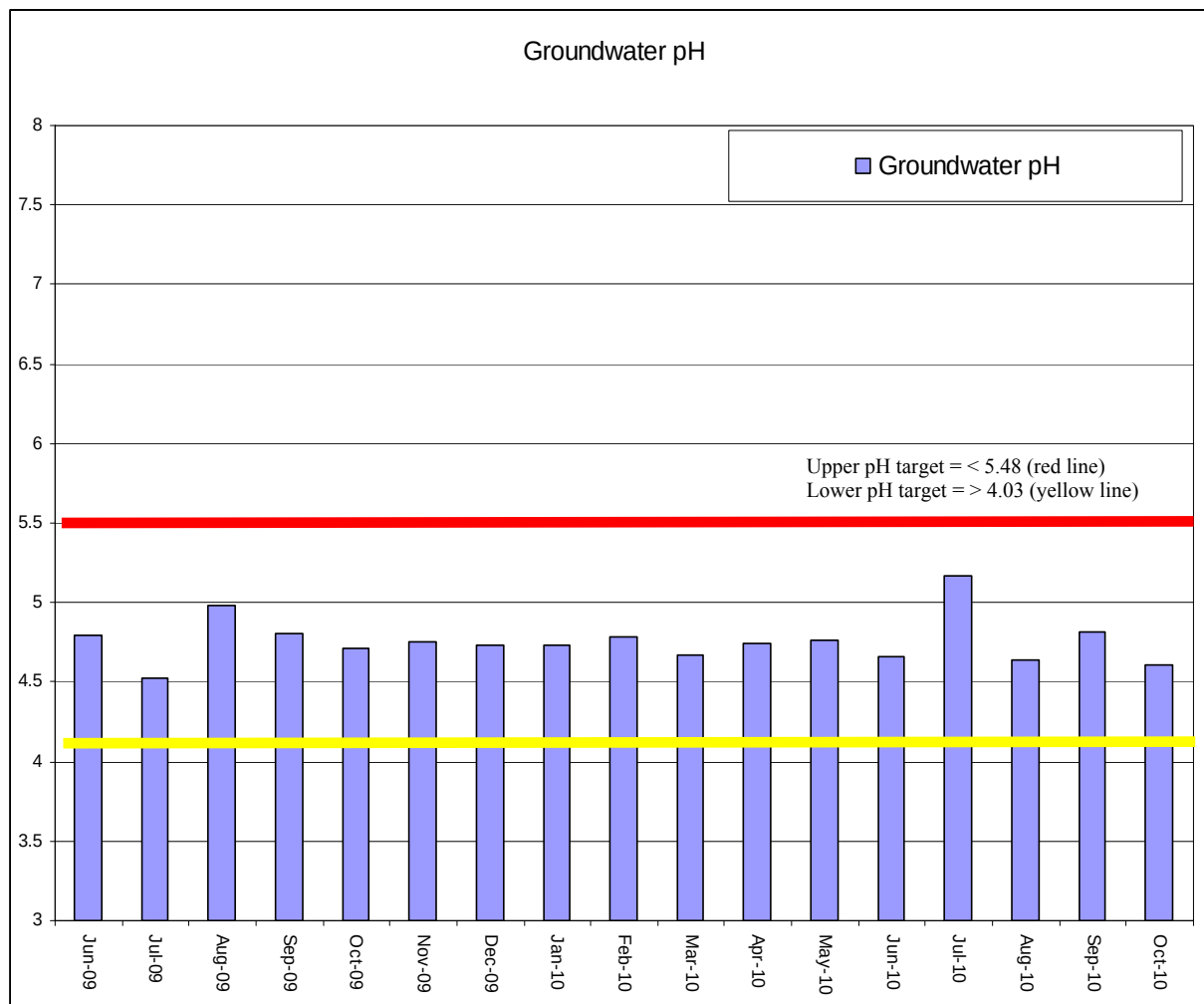


Figure 3. Summary of historical groundwater pH monitoring results.

6.2.4.2 Salinity (electrical conductivity)

Salinity levels were within the target range for the reporting period. No obvious trends were identified.

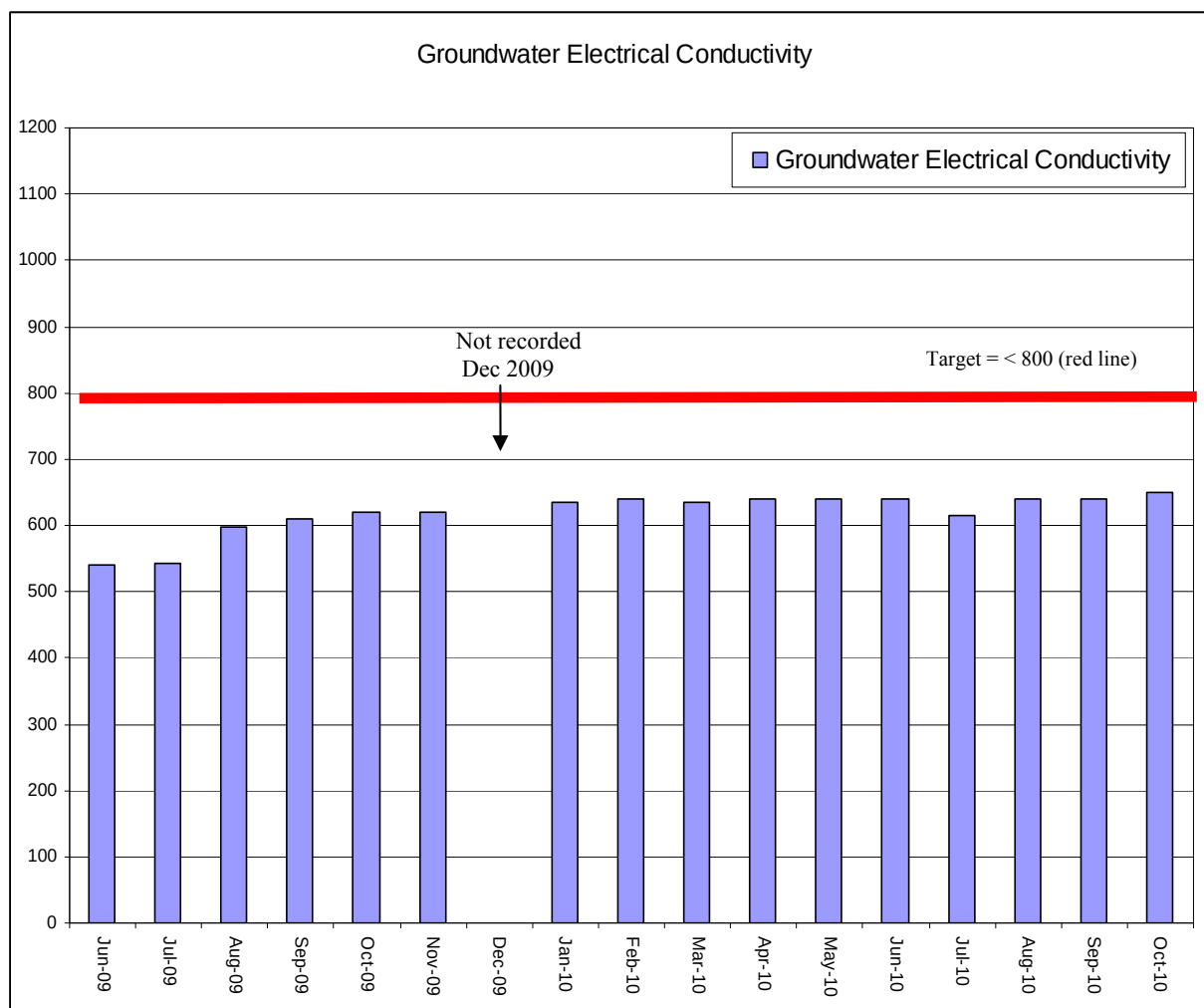


Figure 4. Summary of historical groundwater electrical conductivity monitoring results.

6.2.4.3 Groundwater depth

Environmental monitoring results for groundwater depth are presented on **Figure 5**. There are no environmental targets for this parameter. No obvious trends were identified.

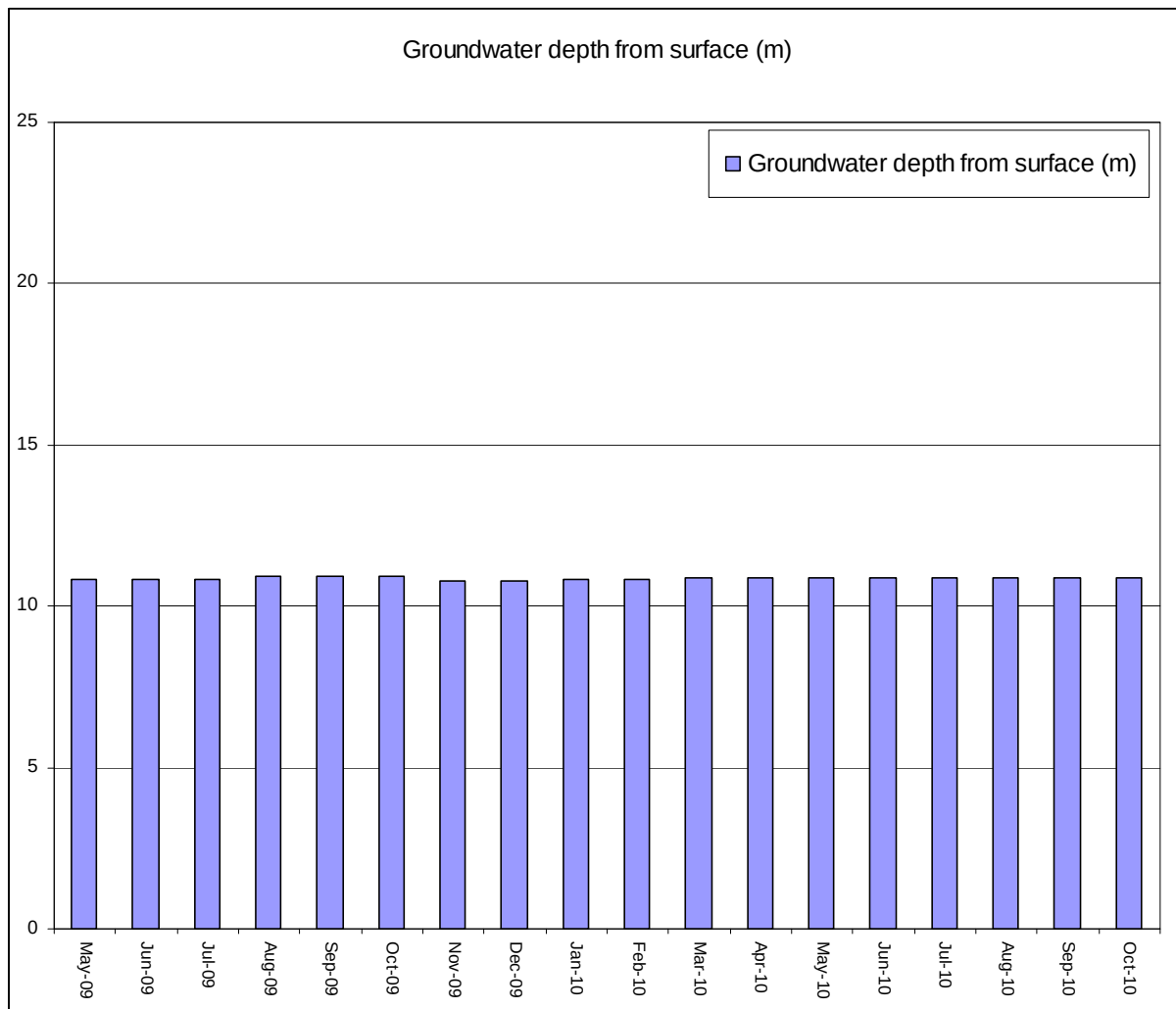


Figure 5. Summary of historical groundwater depth from surface monitoring results.

6.2.5. Re-vegetation

As per the Landscape Management Plan, the following works have been undertaken:

- **Zone 2a. Dry Anabran** - This area has under gone comprehensive bush regeneration including the treatment of all woody, herbaceous and vine weeds. Further works to be completed on this area over the next 6 months include spraying scrambling weeds, supplementary planting and follow up weeding.
- **Zone 2b. Dry Anabran** - This area has under gone comprehensive bush regeneration including the treatment of all woody, herbaceous and vine weeds. Further works to be completed on this area over the next 6 months include spraying scrambling weeds, supplementary planting and follow up weeding.

- **Nepean River Bank, Zone 1b** - This area is undergoing comprehensive bush regeneration including the treatment of all woody, herbaceous and vine weeds. Further works to be completed on this area over the next 6 months include spraying scrambling weeds, supplementary planting and follow up weeding. Work in this area will increase the resilience of the river bank vegetation and help to build biodiversity in past revegetation areas.
- **Revegetation** - Seed from 32 species has been collected from onsite and in the local area along the Nepean River. Adequate numbers of plants have been propagated and will be ready for Autumn planting 2011.
- Large trees and stumps are currently being accumulated for placement into revegetation areas.

The above information was supplied by Mr Greg Bray, the project ecologist, and indicates that rehabilitation works are progressing well as per the approved Land Management Plan.

6.3. Truck movements

Truck movements for the period from 22 May 2010 until 02 December 2010 are summarised in **Table 3**.

Time period	Number laden truck movements per day^{1,2} (averaged over a week)	Maximum number of truck movements on any given day²
22/05/2009 – 02/12/2010	6.5	48 (22 November 2010)
Approved limits³	36	80

Notes:

1. Assuming a 6 day working week.
2. Represents laden trucks from the soil pit regulated under the DoP NoM dated 22 May 2009.
3. Based on Appendix 1 of the DoP NoM dated 22 May 2009.

7. WORKS TO BE UNDERTAKEN IN THE NEXT AEMR REPORTING PERIOD

7.1. Extraction

Extraction is proposed to continue in an easterly vector from the current area of extraction (**Figure 1**).

7.2. Environmental monitoring

Routine monthly dust deposition and groundwater monitoring are proposed to continue.

A monthly air quality monitoring program for TSP and PM₁₀ is proposed to commence during the next AEMR period and is proposed to occur for a six month period.

7.3. Rehabilitation

Rehabilitation works are proposed to continue as per the schedule outlined in the approved Landscape Management Plan.

8. COMPLAINTS

8.1. Historical complaints summary

There have been no complaints in recent years.

8.2. During this AEMR

No complaints occurred during the reporting period.

9. AREAS OF NON-COMPLIANCE

9.1. Previous AEMR

This is the first AEMR.

9.2. This AEMR

Based on the findings of this AEMR, the following areas of non-compliance were identified:

- Monitoring for TSP and PM₁₀ has not been undertaken.

9.3. Recommendations to address areas of non-compliance

Monitoring for TSP and PM₁₀ is to be undertaken for a 6 month period during the next AEMR period.

10. LIMITATIONS OF THIS REPORT

This report has been prepared subject to a number of limitations. These include:

- The application of conditions of approval or impacts of unanticipated future events could modify the outcomes described in this document. In particular, the occurrence of earthquakes of any magnitude, extreme rainfall events or the effects of climate change have not been considered but should they occur, may have a significant impact on the site. The client agrees that such events are possible but nevertheless accepts the risk that they pose;
- The findings contained in this report are the result of discrete/specific methodologies used in accordance with normal practices and standards. To the best of our knowledge, they represent a reasonable interpretation of the general condition of the site in question. Under no circumstances, however, can it be considered that these findings represent the actual state of the site/sites at all points;
- In preparing this report, Harvest Scientific Services has relied upon certain verbal information and documentation provided by the client and/or third parties. Harvest Scientific Services did not attempt to independently verify the accuracy or completeness of that information. To the extent that the conclusions and recommendations in this report are based in whole or in part on such information, they are contingent on its validity. Harvest Scientific Services assume no responsibility for any consequences arising from any

information or condition that was concealed, withheld, misrepresented, or otherwise not fully disclosed or available to Harvest Scientific Services; and

- This report is not to be relied upon for any purpose other than that defined in this report.

Prepared by:

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

Jim Cupitt BSc Agr (Hons)
Senior Environmental and Soil Scientist

Disclaimer

This report was prepared in accordance with the scope of services set out in the contract between Harvest Scientific Services and the client, or where no contract has been finalised, the proposal agreed to by the client. To the best of our knowledge the report presented herein accurately reflects the clients intentions when it was printed. However, the application of conditions of approval or impacts of unanticipated future events could modify the outcomes described in this document.

The findings contained in this report are the result of discrete/specific methodologies used in accordance with normal practices and standards. To the best of our knowledge, they represent a reasonable interpretation of the general condition of the site in question. Under no circumstances, however, can it be considered that these findings represent the actual state of the site/sites at all points.

In preparing this report, Harvest Scientific Services has relied upon certain verbal information and documentation provided by the client and/or third parties. Harvest Scientific Services did not attempt to independently verify the accuracy or completeness of that information. To the extent that the conclusions and recommendations in this report are based in whole or in part on such information, they are contingent on its validity. Harvest Scientific Services assume no responsibility for any consequences arising from any information or condition that was concealed, withheld, misrepresented, or otherwise not fully disclosed or available to Harvest Scientific Services.

APPENDIX 1

Industry and Investment annual production report

**COLLINS****M. COLLINS & SONS (CONTRACTORS) PTY. LIMITED****FACSIMILE TRANSMITTAL SHEET**

TO:	FROM:
Jim Cupitt	Michael Cutrupi
COMPANY:	DATE:
Harvest Scientific Services	09/11/10
FAX NUMBER:	TOTAL NO. OF PAGES INCLUDING COVER:
(02) 4647 6177	3
PHONE NUMBER:	SENDER'S REFERENCE NUMBER:
(02) 4647 7332	
RE:	YOUR REFERENCE NUMBER:
Audit Report	

(URGENT) (FOR REVIEW) (PLEASE COMMENT) (PLEASE REPLY) (PLEASE RECYCLE)

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NOTES/COMMENTS:

Good Afternoon

Please find following return for extractive material year ended 30 June 2010

Regards

Michael Cutrupi

17 Fitzpatrick Street, Revesby NSW 2212
Phone: (02) 9774 1544 Fax: (02) 9792 1532

PO Box 55, MILPERRA NSW 2214
ABN 28 000 521 871

*** www.mcollins.com.au ***



Industry &
Investment

Form S1

FAXED 911011

RETURN FOR EXTRACTIVE MATERIALS: YEAR ENDED 30 JUNE 2010

Quote Reference No. in all correspondence

Quarry Id: 6339 Rims ID: 400223 M Collins & Sons (Contractors) Pty Limited PO Box 55 MILPERRA NSW Email: matt@mcollins.com.au Quarry Name: M Collins & Sons (Contractors) Pty Limited - Spring Farm/Nesbitt Quarry Quarry Address: Springfarm/Nesbitt Macarthur Road	Inquiries please telephone: (02) 4931 6435 Completed or Nil Returns Fax - (02) 4931 6796 Email - mineral.royalty@industry.nsw.gov.au Postal Address (see address below)	2 0 0 9 - 2 0 1 0
Please amend name, postal address and location of mine or quarry if incorrect or incomplete		

The return should be completed and forwarded to the **STATISTICAL OFFICER, MINERALS & ENERGY DIVISION, INDUSTRY & INVESTMENT NSW, PO BOX 344 HUNTER REGION MAIL CENTRE NSW 2310** on or before **15 December, 2010**. If completion of the return is unavoidably delayed, an application for extension of time should be requested **before** the due date. If no work was done during the year, a **NIL** return must be forwarded.

The return should relate to the **above quarrying establishment**, and should cover the operations of quarrying and treatment (such as crushing, screening, washing etc.) carried out at or near the quarry. A return is required even if the operations are solely of a developmental nature, and whether the area being worked is held under a mining title or otherwise.

Brad Mullaard, Executive Director Mineral Resources

Please complete the following information to assist in identifying the location of the quarry.

Typical Geology Alluvia-Flood plain

Nearest Town to Quarry CAMDEN

Local Council Name CAMDEN

Deposited Plan and Lot Number/s of Quarry DP833317 Lot1 & DP587681 Lot22

Email Address of Operator matt@mcollins.com.au

Name of Owner or Licensee M-Collins & Sons (Contractors) Pty Limited

Postal Address of Licensee P.O. Box 55 Milperra NSW 2214

Licence/Lease Number/s (if any)
 From Mineral Resources NSW (Industry & Investment NSW) N/A
 From Department of Lands or other Department N/A

If any output was obtained from land NOT held under licence from the above Departments, state the Name/s and Address/es of the Owners of the land M-COLLINS & SONS (CONTRACTORS) PTY LIMITED

- To the best of my knowledge, the particulars which have been entered in this return are correct and no blank spaces have been left where figures should have been inserted.

SIGNATURE of PROPRIETOR or MANAGER [Signature] DATE 9/11/10

PERSON to be contacted if queries arise regarding this return

NAME (Block letters) Michael Cutrupi Telephone (02) 9774-1544

SALES During 2009-2010

Production Information may be published in aggregated form for statistical reporting. However, production data for individual operations is kept strictly confidential.

Product	Description	Quantity Tonnes
Virgin Materials		
• Crushed Coarse Aggregates		
Over 75mm		
Over 30mm to 75mm		
5mm to 30mm		
Under 5mm		
Natural Sand	On Site SANDS.	55,500
Manufactured Sand		
Prepared Road Base & Sub Base		
Other Unprocessed Materials		
Recycled Materials		
• Crushed Coarse Aggregates		
Over 75mm		
Over 30mm to 75mm		
5mm to 30mm		
Under 5mm		
Natural Sand	Import Sands (Blends).	79,250
Manufactured Sand		
Prepared Road Base & Sub Base		
Other Unprocessed Materials		
• River Gravel		
Over 30mm		
5mm to 30mm		
Under 5mm		
• Construction Sand	Excluding Industrial	85,000
• Industrial Sand		
Foundry, Moulding		
Glass		
Other (Specify)		
• Dimension Stone	Building, Ornamental, Monumental	
Quarried in Blocks		
Quarried in Slabs		
• Decorative Aggregate	Including Terrazzo	
• Loam	Soil for Topdressing, Garden soil, Horticultural purposes)	47,750
• TOTAL SITE PRODUCTION		267,500
• Gross Value (\$) of all Sales		
• Type of Material		
• Number of Full-Time Equivalent (FTE) Employees	Employees: Quarry 10	Contractors Quarry 16

Please Note: A return for clay based products can be obtained by contacting the inquiry number.