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Geotechnical Environmental & Resource Consultants
ABN 43 132 363 289

2015 ANNUAL ENVIRONMENTAL MANAGEMENT REPORT

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

MACARTHUR ROAD, SPRING FARM

Prepared for:

M. Collins & Sons Holdings Pty Ltd

COLLINS

1st August 2016

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Revisions register

Date	Details
24-03-2016	Progress Draft Report 1 for client review.
30-03-2016	Progress Draft Report 2 for client review
31-03-2016	Progress Draft Report 3 for client review
31-03-2016	Progress Draft Report 4 for client review
31-03-2016	Final
01-08-2016	Final Review Changes

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1.0 INTRODUCTION

Harvest Scientific Services Pty Ltd has been commissioned by M. Collins & Sons Holdings Pty Ltd to prepare this *Annual Environmental Management Report* (AEMR). The Report has been prepared in accordance with the NSW Department of Planning and Environment requirements for the Collins Sand and Soil Quarry on Lot 22 (DP833317), and Lot 32 (DP 635271), Macarthur Road, Spring Farm.

1.1. OBJECTIVES

The objective of this Annual Environmental Management Report is to address Item 4 of Schedule 5 of the NSW Department of Planning and Environment *Notice of Modification* (DA 75/256 Mod 3) dated 25 October 2012.

By the end of March each year, the Applicant shall review the environmental performance of the project to the satisfaction of the Director-General. This review must:

1. *Describe the development (including rehabilitation) that was carried out in the previous calendar year, and the development that is proposed to be carried out over the current calendar year;*
2. *Describe the works that that will be carried out in the next 12 months;*
3. *Include a comprehensive review of the monitoring results and complaints records of the project over the previous calendar year, which includes a comparison of results against:*
    a. *The relevant statutory period requirements;*
    b. *The monitoring results of previous years; and*
    c. *The relevant predictions in the EIS, SEE and EA;*
4. *Identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance;*
5. *Identify any trends in the monitoring data over the life of the project;*
6. *Identify any discrepancies between the predicted and actual impacts of the project, and analyse the potential cause of any significant discrepancies; and*
7. *Describe what measures will be implemented over the current calendar year to improve the environmental performance of the project.*

1.2. REPORTING PERIOD

This report covers the period between 1 January 2015 and 31 December 2015.

1.3. ACTIVE ENVIRONMENTAL MANAGEMENT PLAN

The active Environmental Management Plan is entitled '*Environmental Management Plan for Spring Farm Sand and Soil Extraction and Processing Operation'* dated 1 November 2013 by Harvest Scientific Services.

1.4. CONSENT AUTHORITIES

The following consent authorities will be provided with a copy of this AEMR:

1. The NSW Department of Planning and Environment;
2. Camden Council; and
3. The NSW Environmental Protection Authority.

1.5. CONSENTS AND PERMITS

The site is operated by Collins Construction Materials Pty Ltd (a subsidiary of M. Collins & Sons Holdings Pty Ltd). This site is subject to the following consents and permits:

1. NSW Department of Planning and Environment *Notice of Modification* (DA 75/256 Mod 3) dated 25 October 2012;
2. NSW Environmental Protection Authority *Environmental Protection Licence* (EPL) 4093; and
3. Controlled Activity Approval issued by the NSW Office of Water (NOW) dated 8 October 2013.

Other activities which are critical to the operation but do not relate directly to DA 75/256 Mod 3 are undertaken on Lot 1 (DP 587631) and subject to Council approval (DA252/93) (Figure 1). These activities include access to the premises via the main entrance, weighbridge, wheel wash, site offices, workshops, resource processing and blending area and water supply pump from the Nepean River. These activities were not considered when preparing this AEMR.

2.0 SITE IDENTIFICATION AND LOCATION

Collins Spring Farm Quarry operations occupy Lot 1 (DP 587631), Lot 22 (DP833317) and Lot 32 (DP 635271), situated between Macarthur Road and the Nepean River, Spring Farm (Figure 1).

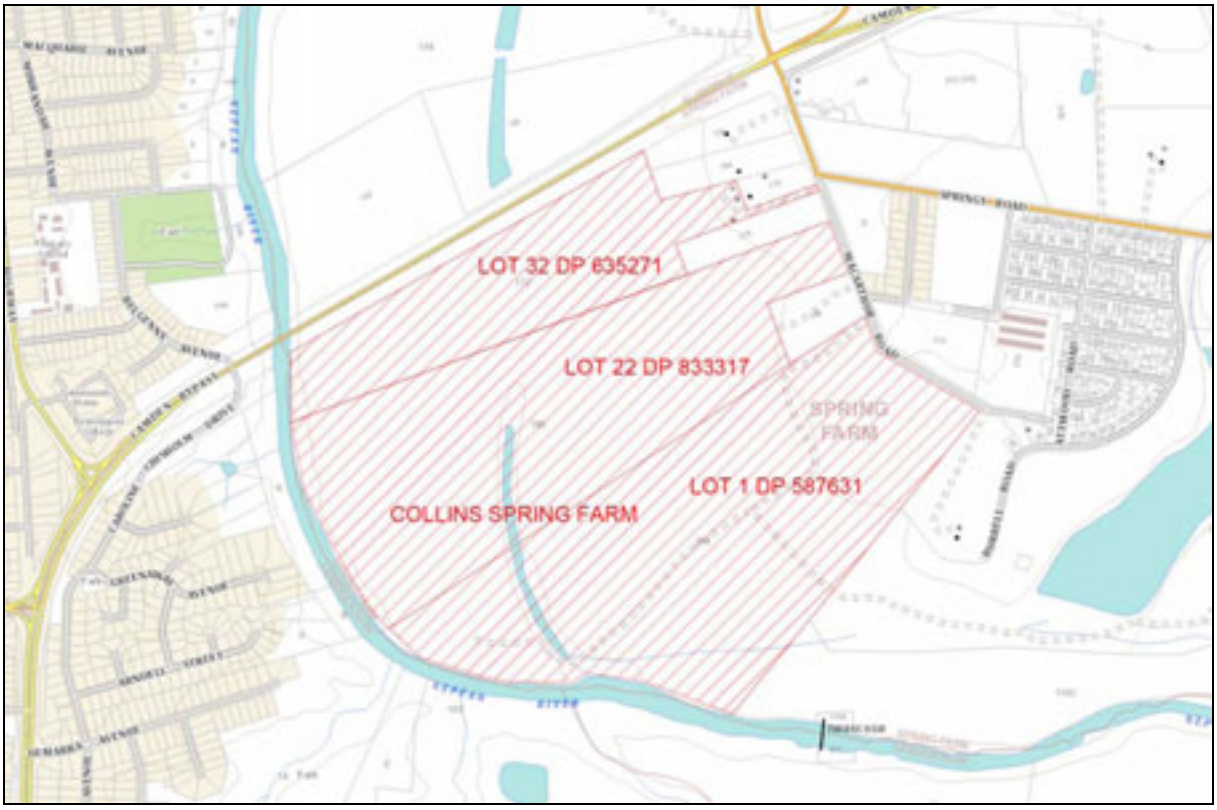


Figure 1: Site Locality

3.0 PROJECT DESCRIPTION

The Collins Spring Farm Quarry is a major supplier of bulk soil materials to the greater Sydney region. Soil is extracted from an approved sixteen hectare (16 Ha) extraction area within the western part of Lot 22 (DP 833317) and more recently from an approved 7 hectare (7 Ha) extraction area within the western part of Lot 32 (DP 635271) (Figure 1). The soil resource is extracted to a nominated working depth of approximately 8 metres - the purpose of which is to safeguard the underlying groundwater.

The active working area is confined to five hectares (5 Ha) at any one time in accordance with the approved working plan. Soil is extracted by excavator and placed into tipper trucks. The tipper trucks convey the material to a nearby working area where it is screened using a diesel driven screening plant. Sand and soil are screened to -2 mm and -8 mm respectively. Screened sand and soil is then hauled by tipper truck from the working area to a central stockpile and blending area. Un-screened waste material is used to backfill voids and for site rehabilitation purposes.

Up to 5,000 tonnes of sand and soil are held at any one time in up to five stockpiles. These are segregated by material type, allowing the company to satisfy market demands for specific blended products. Current operations produce around 200,000 – 300,000 tonnes of sand and soil products annually. Eleven people are directly employed at the quarry including plant operators, supervisors and clerical staff. In addition, drivers are employed to deliver and distribute material to customers.

Figure 2: Active extraction area on Lot 32

4.0 ANNUAL PRODUCTION

Production of sand and soil over the 2015 AEMR is summarized in Table 1. Supporting documentation provided by M. Collins & Sons Holdings Pty Ltd is appended as follows:

1. Copies of the *Industry and Investment Return for Extractive Materials* are provided in Appendix 1.
2. Copies of the *Weigh Bridge Transactions* are provided in Appendix 2.
3. Copies of the *Number of Laden Loads Outwards* are provided in Appendix 3.

Table 1: Collins Spring Farm Annual Production (2015 AEMR period)

Total Number of Laden Loads Outwards	10,451
Total Material Extracted	154,000 tonnes
Total Site Production	285,974 tonnes

It is noted that Total Site Production was approximately 15,000 tonnes less than anticipated for the period.

5.0 ANNUAL CONTRIBUTIONS

As per Item 7 of Schedule 2 of NSW Department of Planning and Environment *Notice of Modification* (DA 75/256 Mod 3) dated 25 October 2012, the Applicant is required pay an annual contribution to Camden Council for the maintenance of Macarthur Road between the main site entrance and intersection with Springs Road.

A total of $8,226.10 was paid to Camden Council on the 27 March 2015 (Appendix 4).

6.0 EXTRACTION AND WORKING AREA

6.1. PRODUCTION - 2015 AEMR PERIOD

Sand and soil was actively extracted from Lot 1 (DP 587631) (Area 3) and Lot 22 (DP 833317) (Area 5) between January and April 2015. By the end of the reporting period:

1. The active excavation cells measured approximately 0.9 (Lot 1) and 1.3 Ha (Lot 22) respectively (Figure 3) with a soil processing and stockpile area of 1.4 Ha (Lot 22); and
2. Approximately 38,000 tonnes of raw material had been extracted.

Sand and soil was actively extracted from Lot 32 (DP 635271) (Area E1) between April and December 2015. By the end of the reporting period:

1. The active excavation cell measured approximately 1.0 hectare (Figure 3); and
2. Approximately 116,000 tonnes of raw material had been extracted:
    a. Sand (43,000 tonnes);
    b. Soil (61,000 tonnes); and
    c. Clay / Overburden (12,000 tonnes).

The 2015 total site combined extraction area, open area or working area was 4.6 Ha (Lot 22 and 32 was 3.7 Ha) Lot 1 was 0.9 Ha) complying with the 5.0 Ha limit approved by Camden Council.

6.2. FORECAST PRODUCTION - 2016 AEMR PERIOD

It is proposed to:

1. Recommence extraction from Area 5 of Lot 22 (DP 833317);
2. Continue extraction on Lot 32 (DP 635271) proceeding north as illustrated in Figure 4 into E2 after exhaustion of E1. It is estimated that total extraction and production figures for the 2016 reporting year will be similar to that of 2015 (Table 1).

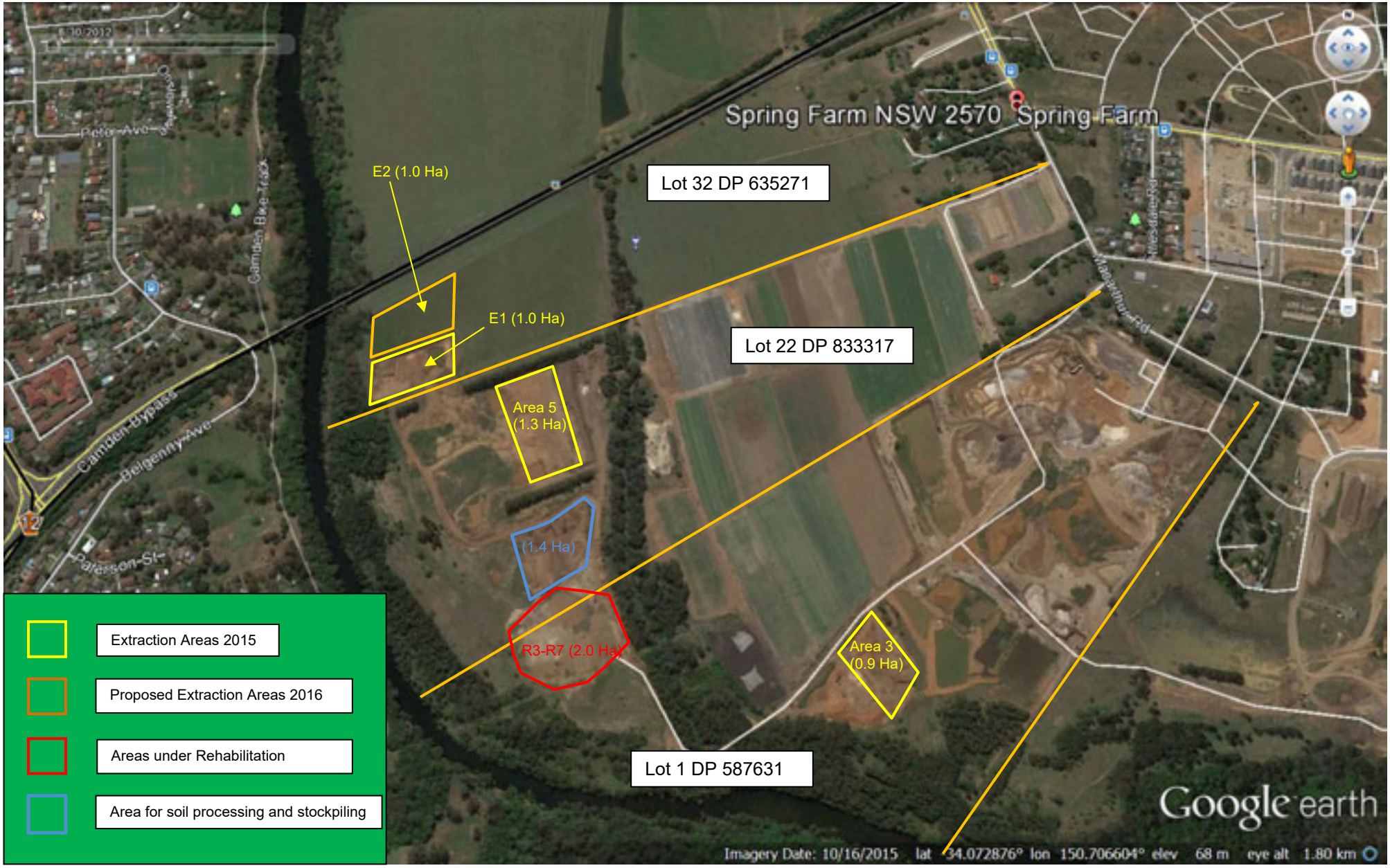


Figure 3: Project Layout

Figure 4: Approved extraction and rehabilitation sequence

7.0 REHABILITATION - 2015 AEMR PERIOD

7.1. FINAL LEVELS

With the exception of minor trimming, final levels (RL66 as confirmed by Keatley Surveyors) were largely achieved within Rehabilitation Cells R4 and R5 denoted on Figures 5 and 6 (Lot 1 DP 587631). At the time of inspection revegetation in the form of pasture grass was establishing well over approximately half the area.

Figure 5: Aerial photo of the site denoting rehabilitation cells on Thursday 8 January 2015.

Figure 6: Aerial photo of the site denoting rehabilitation cells on Thursday 25 February 2016.

7.2. REHABILITATION AND MAINTENANCE

Rehabilitation is undertaken in general accordance with the Landscape Management Plan for the site (Harvest Scientific Services, 24 April 2013). Contractors from Bowantz Landscaping and Environmental Pty Ltd routinely inspect the site each week to perform maintenance tasks as necessary. These tasks include but are not limited to; extensive weeding (including manual removal and herbicide applications to woody, herbaceous and scrambling weeds), erosion repair, supplementary planting and mulching, and litter removal.

Two new areas for active rehabilitation were commissioned during the reporting period (Figures 7 and 8). These areas consisted of the Nepean River Bank and an associated Anabranch both on Lot 32 (DP 635271). On-going maintenance of all other rehabilitated areas continued. Photos captured on 13 November 2015 of rehabilitation are provided in Appendix 5.

A copy of the 2015 Rehabilitation Schedule and monthly Monitoring Reports from Bowantz Landscaping and Environmental are available in Appendix 6.

Figure 7: Dry anabranch recently cleared of woody weeds and fenced

Figure 8: Active rehabilitation and maintenance areas during the 2015 AEMR period

8.0 PROPOSED REHABILITATION - 2016 AEMR PERIOD

8.1. FINAL LEVELS

It is proposed to:

1. Achieve final levels(RL66) and trimming within Rehabilitation Cells R3, R6 and R7 (Lot 22) denoted on Figures 6 and 7 and ensure complete revegetation; and
2. Achieve final levels and revegetate Extraction Cell E1 (Lot 32) by the end of 2016.

8.2. REHABILITATION AND MAINTENANCE

It is understood that contractors from Bowantz Landscaping and Environmental Pty Ltd will continue to routinely inspect the site each week to perform rehabilitation tasks as necessary. These tasks will be undertaken in general accordance with the active Landscape Management Plan (Harvest Scientific Services, 24 April 2013) and will include:

1. Fencing rehabilitation areas;
2. Rubbish removal;
3. An extensive weeding regime incorporating the spraying and manual removal of woody, herbaceous and scrambling weeds;
4. Monitoring and repair as necessary of eroded sites;
5. Extensive planting with endemic species sourced from propagules collected on site;
6. Monitoring of species composition;
7. Monitoring of groundcover; and
8. General on-going maintenance.

In addition it is proposed to:

1. Improve progress reporting and data collection (photo and record evidence);
2. Streamline site process and record documents;
3. Implement effective Controls to DoP and Independent Audit; and
4. Review Environmental Key Performance Indicators annually.

A copy of the 2015 Rehabilitation Schedule and monthly Monitoring Reports from Bowantz Landscaping and Environmental are available in Appendix 6.

9.0 ENVIRONMENTAL MONITORING

9.1. PERFORMANCE MEASURES

An overview of Environmental Compliance Targets for this quarry is provided in Table 2 below.

Table 2: Environmental Targets

Element	Component	Target	Averaging period	Source
Air quality	Nuisance Dust	< 4 g / m^2 /month	Annual	DoP Conditions of Consent.
	Total Suspended Particles (TSP) Matter	< 90 µg/m^3	Annual	
	Particulate Matter (PM_{10})	< 30 µg/m^3	Annual	
	Particulate Matter (PM_{10})	< 50 µg/m^3	24 hour	
Noise	LA10 (15 minute) at each sensitive receptor	< 55 dB(A)	15 minutes	Environmental Protection License 4093.
Groundwater	Electrical conductivity	< 800 uS/cm	N/A	Water Management and Erosion and Sediment Control Plan (24 April 2013)
	pH	4.0 – 6.5	N/A	March 2009 – December 2015 Monitoring data. Highest and lowest values rounded up and down to nearest 0.5 respectively.

9.2. MONITORING SITES

There are three monitoring sites across the Collins Spring Farm Quarry; MS1 (*Penman*), MS2 (*Turf Farm*), and MS3 (*Wash Plant*). They can be identified on the western boundary of the site, central to the site and nearest the front gate respectively (Figure 9). Monitoring Stations 1 and 3 consist of a dust deposition sampler. Monitoring Station 2 consists of a dust deposition sampler and groundwater monitoring bore.

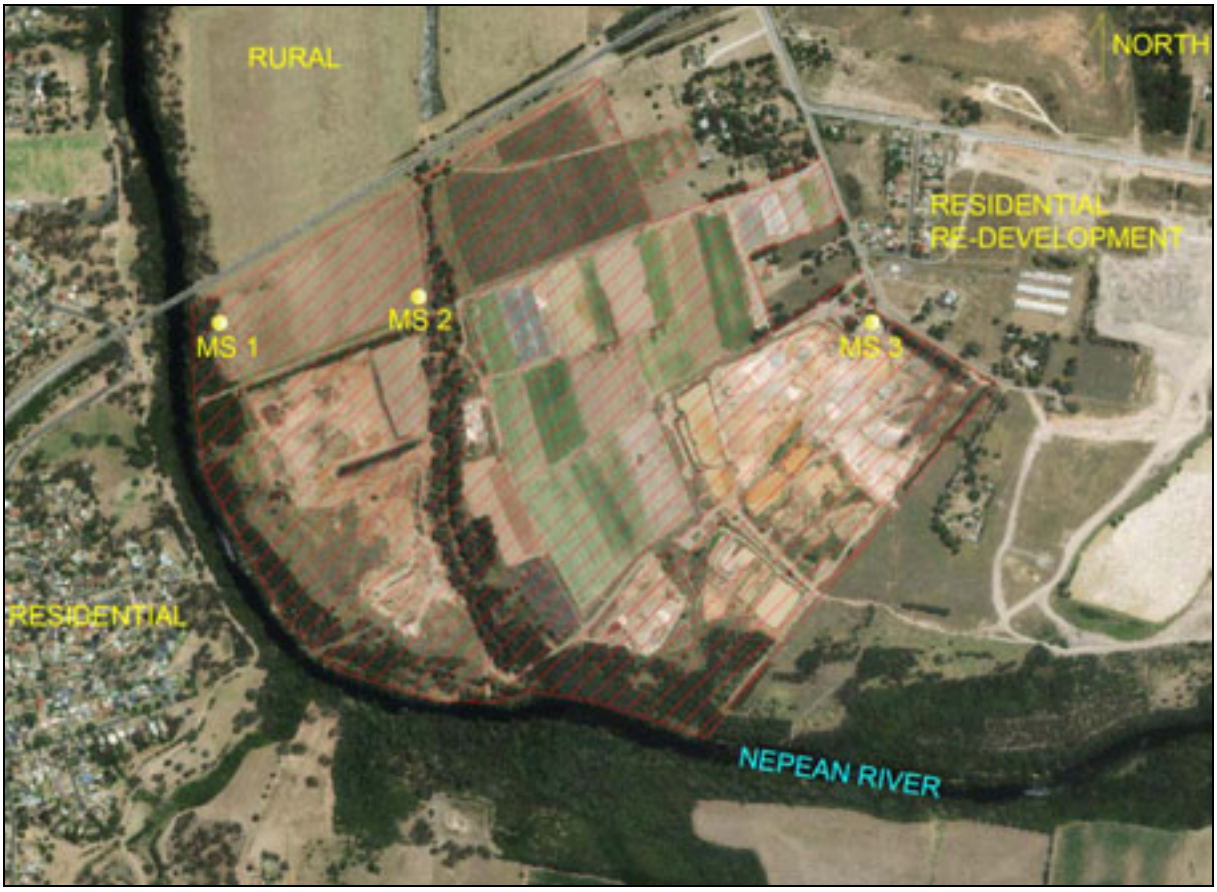


Figure 9: Collins Spring Farm Monitoring Sites

10.0 AIR QUALITY

10.1. MONITORING

Harvest Scientific Services Pty Ltd has been monitoring dust deposition over the Spring Farm Quarry routinely since 2008.Samples are collected monthly from three monitoring stations (Figure 9) and shipped to ALS Environmental Division Pty Ltd and analysed for Total Insoluble Matter (g/m^2/month) Analysis. Monitoring data is available on the Collins and Sons website – http://www.mcollins.com.au/environmental/environmental-monitoring/

Table 3 and Figure 10 below summarise the results for the 2015 monitoring period. All samples were below the EMP target (4 g/m^2/month) with the exception of the following recorded exceedances:

1. MS1 (April and August 2015). These exceedances were attributed to the expansion of the quarry extraction area into Lot 32 and within 10 m of MS1. Subsequently, and as recommended by the NSW EPA, MS1 (and MS2) were relocated to their current positions in September 2015.

2. MS3 (April, September, October and December 2015). These exceedances were largely attributed to earthworks associated with expansion of the nearby Spring Farm urban development site which activities are beyond the control of Collins and Sons. It is considered that mowing and site clean-up activities taking place immediately adjacent to MS3 were also responsible for recorded exceedances.

Review of data since introduction of monitoring in 2008 suggests:

1. A general increase in exceedances at Stations 1 and 3 (Figure 11). These are attributed to:

    a. Expansion of the quarry extraction area into Lot 32 and within 10 m of MS1; and

    b. Earthworks associated with expansion of the nearby Spring Farm urban development site.

2. The data also indicates that exceedances are most likely to occur during summer months (hot dry winds).

Table 3: Results of 2015 Routine Dust Deposition Monitoring (exceedances highlighted in red)

	MS1	MS2	MS3	NOTES	CONTROLS IMPLEMENTED
Jan-15	1.2	1.2	2		
Feb-15	1.7	0.9	2.3		
Mar-15	2.9	3.3	3.6		
Apr-15	6	1.6	4.4	New earthworks noted 50 metres from M1	Monitor results May-15 due to new E1 extraction works proximity to MS1. Possible relocate.
May-15	1.5	0.9	0.9		
Jun-15	1.6	1.2	2		
Jul-15	1.9	0.8	1.5		
Aug-15	4.2	1.1	2.5	Expanded quarry area to within 20 m of M1.	Relocation of Monitoring Sites 1 and 2 (September)
Sep-15	1.7	0.9	6.1	Earthworks asociated with expansion of nearby Spring Farm urban development	Regular inspection monitor urban development activity.
Oct-15	3.9	4	6.4	Hot windy weather and nearby grass mowing	Dust suppression irrigation
Nov-15	1.7	0.5	2.4		
Dec-15	3.5	2.4	5.3	Earthworks asociated with expansion of nearby Spring Farm urban development	Regular inspection monitor urban development activity.

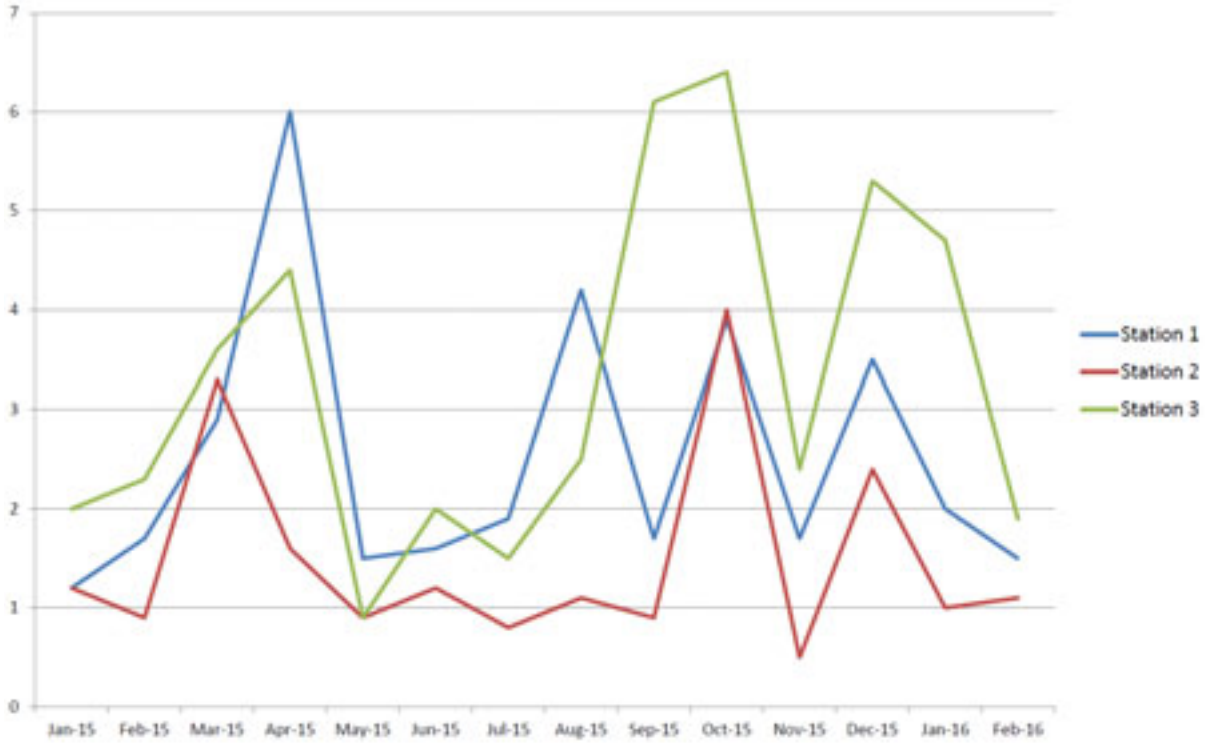


Figure 10: Results of 2015 Routine Dust Deposition Monitoring

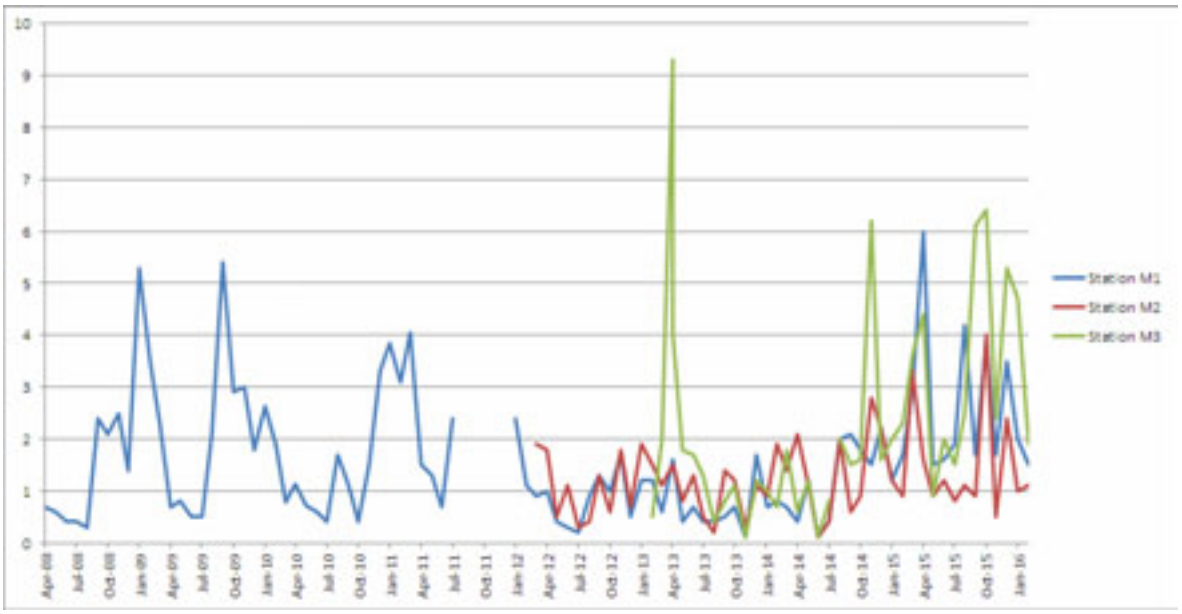


Figure 11: Results of 2008 - 2015 Routine Dust Deposition Monitoring

10.2. PROJECTIONS

The following was extracted from Environmental Assessment - Macarthur Road, Spring Farm (Pascoe Planning Solutions, July 2011):

Model predictions were reported for total suspended particulates (TSP), deposition, and particulate matter (PM10 and PM2.5 fractions). Incremental and cumulative impact levels for both concentration and deposition profiles were determined at the nearest potentially affected sensitive receptors.

Annual total suspended particles (TSP) concentration levels were predicted to be within the 90 µg/m^3 cumulative goal and annual TSP deposition levels (monthly averages) were predicted as complying with the 4 g/m^2/month (30 days) goal. Reported annual PM10 and PM2.5 concentration levels are within their respective air quality goals of 30 µg/m^3 and 8 µg/m^3 at all sensitive receptors considered.

The highest cumulative 24 hour PM10 level exceeded the 50 µg/m^3 targets at all locations modelled due to high background dust levels exceeding the 24 hour goal for 4 days in the 2006 data set for Macarthur. This result is therefore as a product of background levels and beyond the control of the proponent. It is also noted that NEPM goals allows for up to 5 exceedances per year. All other cumulative impacts were below the adopted goal and modelled cumulative 24 hours PM10 impacts are considered to be acceptable.

Incremental 24 hour PM2.5 concentrations were below the 25 µg/m^3 advisory goal at all receptors modelled. Cumulative impacts exceeded the 25 µg/m^3 on one day at all receptors for the 2006 data set. This exceedance was due to an elevated 24 hour average background PM10 level on 24 September 2006 from which the background PM2.5 data was derived. Second highest cumulative impacts were below the 24 hour advisory level.

10.3. IMPROVEMENTS

In an effort to reduce the number of recorded exceedances, Collins and Sons have increased the frequency of access road dust suppression wet downs and water cart frequencies. They have also checked, repaired and replaced where necessary all dust suppression sprinkler heads and extended line lengths to expand the wetted area. Dust migration from the nearby Spring Farm urban re-development is beyond the control of Collins and Sons.

11.0 GROUND WATER

11.1. MONITORING

Harvest Scientific Services Pty Ltd has been monitoring groundwater at the Spring Farm Quarry routinely since 2009. Grab samples are collected monthly from a groundwater bore located at MS2 (Figure 10) and shipped to Sydney Analytical Laboratories Pty Ltd for pH and Conductivity analysis. Groundwater depth is also monitored on a monthly basis. Monitoring data is available on the Collins and Sons website – http://www.mcollins.com.au/environmental/environmental-monitoring/

Table 4 and Figures 12 and 13 below summarise the results for the 2015 monitoring period. All samples were below the EMP Salinity target (< 800 µS/cm) and within the nominated pH range (4.00 - 6.50) [(1)].

A slight downtrend in groundwater conductivity (EC) values was noted over the 2015 monitoring period. However, no obvious trends or fluctuations in groundwater depth or pH were noted. Groundwater fluctuated between 10.80m and 11.50m depth.

Review of data since commencement of monitoring (March, 2009) indicates:

1. Minor fluctuations in pH and groundwater depth (Figure 14); and
2. Moderate fluctuation in groundwater electrical conductivity (EC) (Figure 15).

The reason for the moderate fluctuation in electrical conductivity is uncertain but is likely to be associated with prevailing rainfall conditions.

Table 4: Results of Routine Groundwater Analysis

Date	Time	Temp. (°C)	EC (uS/cm)	pH	Depth to Water Table (m) from top of stand pipe
9/01/2015	12:00	30	601	5.68	11.45
11/02/2015	11:45	28	588	5.43	11.45
10/03/2015	12:00	22	581	5.79	11.45
8/04/2015	11:00	20	573	5.13	11.40
7/05/2015	11.00	20	527	5.26	11.20
10/06/2015	9.00	15	507	5.28	11.20
6/07/2015	10.00	10	500	4.96	11.20
7/08/2015	10:00	12	480	5.58	11.45
3/09/2015	9:00	11	417	5.75	11.25
8/10/2015	9:00	16	423	5.15	11.50
6/11/2015	9:00	22	456	5.26	11.45
7/12/2015	10:00	23	434	5.25	11.50

[(1)] March 2009 – December 2015 monitoring data - Highest and lowest values rounded up and down to nearest 0.5 respectively.

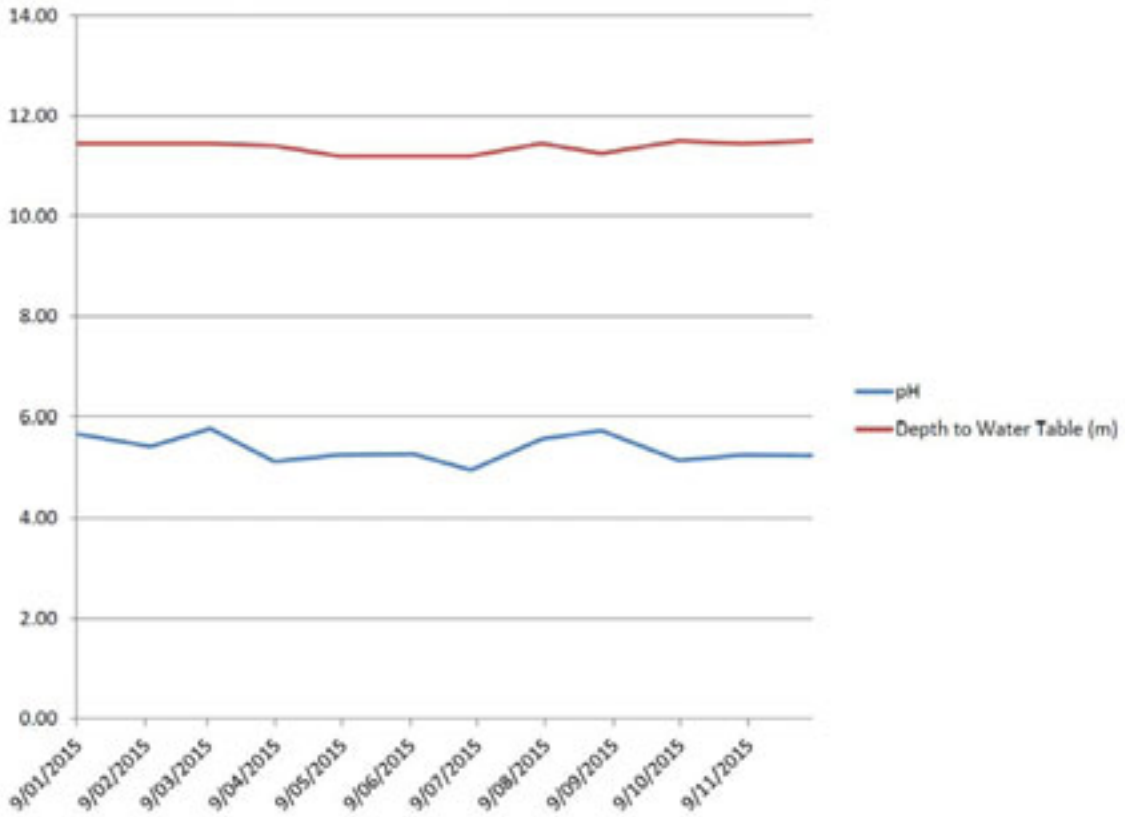


Figure 12: Results of 2015 Groundwater Monitoring (pH and Depth)

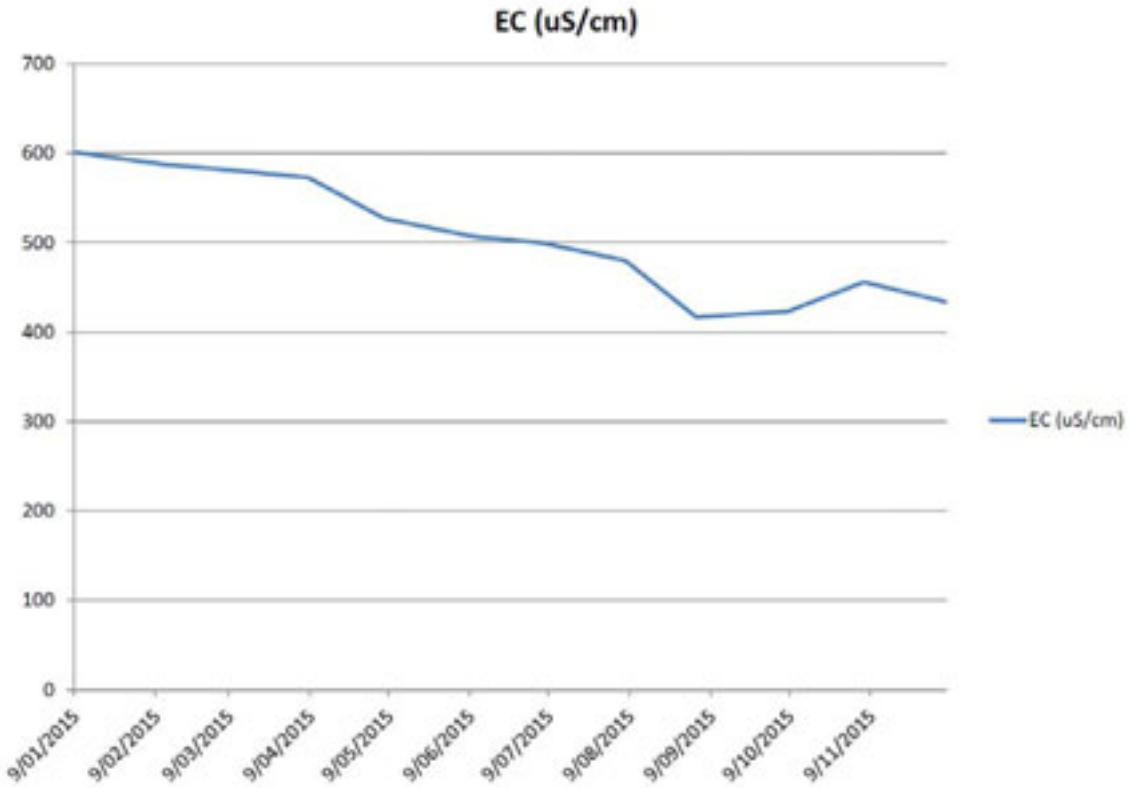


Figure 13: Results of 2015 Groundwater Monitoring (EC)

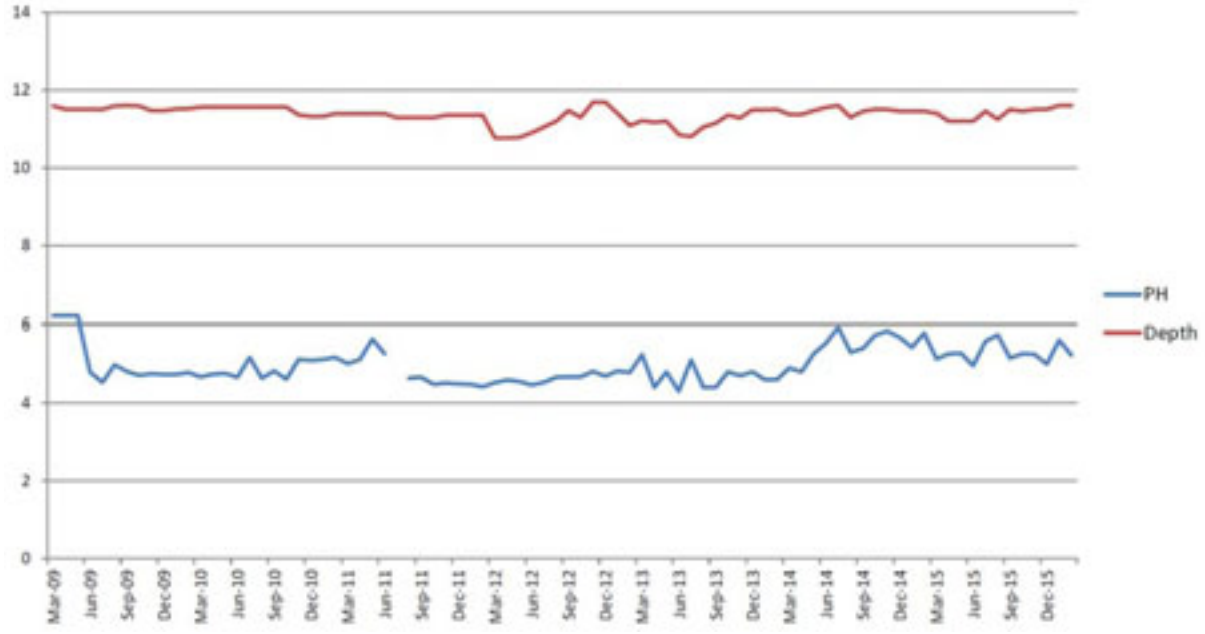


Figure 14: Results of 2009 - 2015 Groundwater Monitoring (pH and Depth)

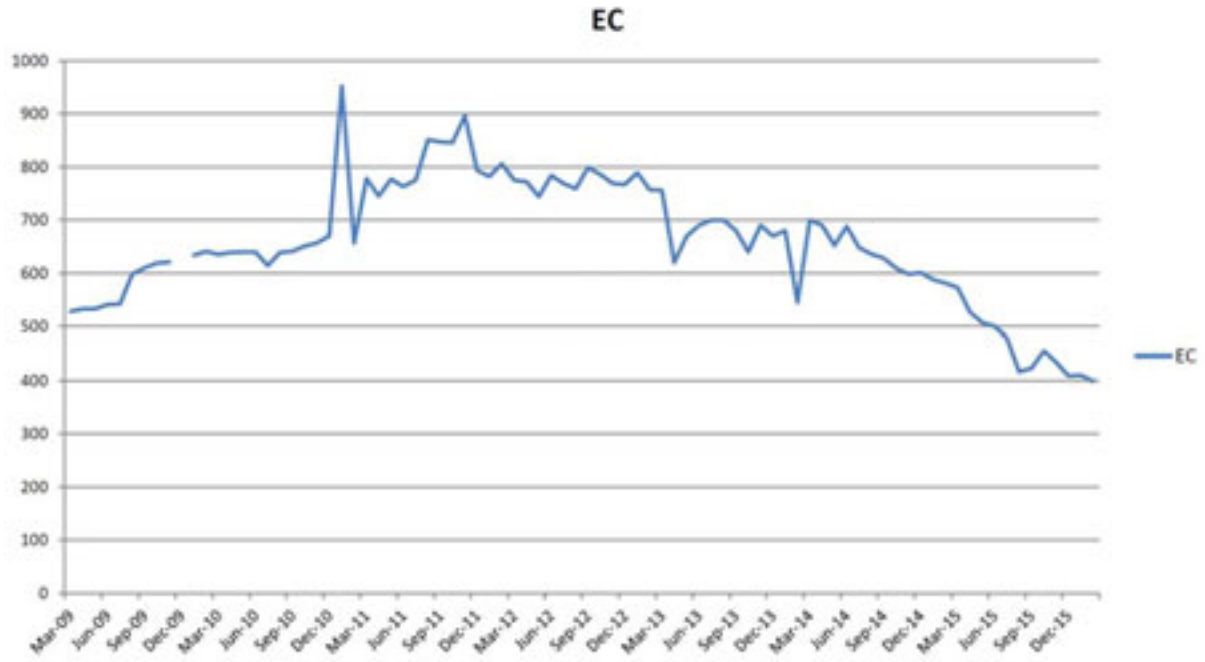


Figure 15: Results of 2009 - 2015 Groundwater Monitoring (EC)

11.2. PROJECTIONS

The following was extracted from Environmental Assessment - Macarthur Road, Spring Farm (Pascoe Planning Solutions, July 2011):

Groundwater monitoring has been undertaken on a monthly basis in conjunction with the existing operations on Lot 22 since March 2009. Monitoring results are summarised in Table 5 [(1) (2)].

Table 5: Groundwater Monitoring

Parameter	Depth to water table[1] (m)	EC[1] (uS/cm)	Salinity category[2]
Minimum	10.65	528	Medium salinity (280-800 uS/cm)
Maximum	10.93	952	
Average	10.82	643	

Based on historical groundwater monitoring detailed in Table 5 above, groundwater is approximately 10 to 11 metres below the natural ground surface. Assuming a final landform level of up to 8 metres below the existing natural ground level, permanent groundwater is anticipated to be approximately 3 metres below the finished final landform. This distance is considered to be sufficient buffer distance for the protection of the local groundwater regime from future agricultural impacts.

A test-pitting regime was undertaken at six locations across the extraction site by Harvest Scientific Services; such investigation did not intercept free-flowing groundwater at any location.

It is proposed that groundwater be managed onsite as follows:

1. Maintenance of 1m vertical buffer distance. During active extraction a buffer distance of 1 meter is to be maintained between the base of the quarry floor and the permanent groundwater horizon. The purpose of the buffer is to ensure adequate protection of groundwater. This buffer is based upon accepted practice on adjacent operations.

2. If, during active extraction, the permanent groundwater is inadvertently intercepted, the quarry floor is to be back-filled to provide a 1 meter buffer between the operational surface and groundwater.

3. Monitoring. Groundwater depth and salinity levels are to be continued to be monitored at the existing groundwater monitoring location on a monthly basis.

11.3. IMPROVEMENTS

Recorded values are well within realistic ranges and no groundwater management improvements are considered necessary at this point.

([1]) EC and groundwater depth values presented in this table represent a summary of 26 samples collected on a monthly basis from March 2009 until November 2009.

([2]) Medium salinity (280-800 uS/cm) - This water can be used for irrigation purposes if moderate leaching occurs. Plants with medium salt tolerance can be grown, usually without special measures for salinity control. Sprinkler irrigation with the more saline waters in this group may cause leaf scorch on salt sensitive crops, especially at high temperatures in the daytime and with low application rates (Based on Table 5.6 of the Australian and New Zealand Environment and Conservation Council (ANZECC) 1992 Australian Water Quality Guidelines for Fresh and Marine Waters).

12.0 COMPLAINTS

12.1. NOISE

Noise from the premises must not exceed an LA10 (15 minute) noise emission criterion of 55 dB(A). Noise from the premises is to be measured or computed at any point within one metre of the boundary of any residential premises or other noise sensitive areas (such as schools, hospitals) in the vicinity of the premises to determine compliance. 5dB(A) must be added if the noise is tonal or impulsive in character.

One noise related complaint was received during the 2015 AEMR period on 22 January 2015 (Appendix 7). Specifically, the complaint came from a neighboring resident and referred to the tail gate banging from a tipping truck. Subsequently, the tipping truck driver was instructed to change tipping direction and the problem was immediately rectified.

12.2. DUST

No dust related complaints were received during the 2015 AEMR period.

12.3. ODOUR

Section 129 of the Protection of the Environment Operations Act 1997, 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 as a potentially offensive odour and the odour was emitted in accordance with the conditions of a licence directed at minimising odour.

No odour related complaints were received during the 2015 AEMR period.

12.4. RUN-OFF

No run-off related complaints were received during the 2015 AEMR period.

13.0 COMPLIANCE WITH CONDITIONS OF CONSENT

13.1. INTRODUCTION

Compliance findings pertaining to the Collins and Sons quarrying activities have been highlighted by the NSW Department of Planning and Environment. These findings are dealt with in the following sections.

13.2. RESPONSE TO 2013 - 2014 AEMR

In direct response to the submission of the 2013-14 AEMR, the NSW Department of Planning and Environment highlighted the following items. These matters and the appropriate response have been addressed in Table 6.

Table 6: 2013-2014 AEMR - NSW Department of Planning and Environment Response

Item	Response
The AEMR does not mention whether the annual contribution was paid to Council as per Condition 7 of Schedule 2.	Refer Section 5.0 Annual Contributions
While Figure 2 in the AEMR provides an overview of the extraction areas during the reporting period, it does not provide a breakdown of the size of the disturbance areas.	Refer Section 6.0 Extraction and Working Area
The AEMR states on Page 13 that "Under the requirements of that Development Consent the licensee was required to undertake 24 hour Total Suspended Particle (TSP) and Fine Particulate (PM10) monitoring at Stations 1 and 3 in the months of August 2013 to October 2013 and December 2013 to February 2014". In fact, the Approval does not provide a specific limited timeframe for the undertaking of TSP and PM10 monitoring.	Refer to Appendix 8.0 EPA Pollution Studies and Reduction Programs. TSP and PM10 monitoring ceased in 2014 as it was removed from EPA Licence. It was re-instated when picked up as a consent requirement April 2016 onwards and will be reported in 2016 AEMR.
The AEMR does not include monitoring results of previous years (prior to 2013) nor does it report against predictions of the EIS, SEE (Mod 2) or EA (Mod 3) as required by Condition 4(b) of Schedule 5.	Refer Sections 10.0 Air Quality and 11.0 Groundwater
The AEMR mentions a number of exceedances during the reporting period but does not provide a description of the actions taken to address the exceedances as required by Condition 4 (c) of Schedule 5.	Refer Sections 10.3 and 11.3 Improvements
The AEMR does not identify trends in the monitoring data over the life of the project as required by Condition 4(d) of Schedule 5.	Refer Sections 10.0 Air Quality and 11.0 Groundwater
The AEMR does not describe measures that will be implemented over the current calendar year to improve the environmental performance of the project as required by Condition 4(f) of Schedule 5.	Refer Section 8.0 Proposed Rehabilitation and Sections 10.3 and 11.3 Improvements
The 2015 AEMR is to incorporate a table which clarifies the compliance /non-compliance status of each condition of approval.	Refer Appendix 9.
A copy of the 2015 AEMR is to be posted on the Company's website within one month of the completion of the AEMR.	Noted. The 2013-2014 AEMR has now been posted on the Collins and Sons website.

It is noted that an independent environmental audit of (IEA) is to be undertaken as per Condition 5 of Schedule 5 – which is overdue. The Company is to seek approval from the Department for the appointment of an independent auditor.	An Independent Environmental Audit is to be conducted early 2016 (currently awaiting approval of auditor from NSW Department of Planning and Environment)

13.3. AUDIT ITEMS RAISED BY SAND QUARRIES STRATEGIC AUDIT

The NSW Department of Planning and Environment conducted a strategic audit of a number of sand quarries operating in NSW during 2015. This included the Collins and Sons quarry at Spring Farm. A number of audit items were recorded (some of which have been addressed in Section 13.2 of this AEMR) and are outlined in Table 7. A comprehensive schedule of items was provided by Collins and is available in Appendix 10.

Table 7: Items Raised by Sand Quarries Strategic Audit

ID number	Condition	Details of Non-compliance	Risk Rating	Recommendation
1.1	Schedule 3, Condition 8	(1) The Proponent outlines the implementation of high volume samplers in the Air Quality Monitoring Program (2010). Monitoring records available on the Proponent's website for the 12-month period from May 2014 to April 2015 indicate that monitoring is only undertaken by means of dust deposition gauge (DDG), thus only deposited dust is monitored, not total suspended solids (TSP) nor PM10 as required by Tables 1 and 2 of the consent condition. (2) The auditors noted potential interference with representative sample collection from the DDGs (refer to photos 5-7 in Appendix 2): (i) DDG on the western bank of the dry Anabranch - located amongst trees and thick undergrowth. (ii) DDG on the eastern bank of the Nepean River – collection funnel positioned at an angle (not level). (iii) DDG near the site entrance – collection funnel and sample collector positioned at an angle (not level). (3) The Proponent submitted a notice of variation of the EPL from the EPA for the removal of a Pollution Reduction Program for "non-routine dust monitoring" (refer to the Proponent's comments in Appendix 5). However, the consent condition still requires the ongoing monitoring of TSP and PM10 which is not possible by means of dust deposition gauges.	Non - Compliant (Moderate Risk)	(1) Make arrangements for the installation of suitable sampling equipment to monitor total suspended particulate (TSP) matter and PM10 particles as per the Air Quality Monitoring Program (2010). (2) Revise DDGs against AS/NZS 3580.10.1:2003 to ensure the equipment collect representative samples. (3) Major adjustments requiring revision of the Air Quality Monitoring Program such as relocation of DDGs to more suitable sampling locations should be done in consultation with the appropriate regulatory agencies (e.g. DP&E and EPA). (4) It is recommended that the monitoring points be named in order to avoid confusion. (5) The Air Quality Management Plan (2010) should be updated with the names when next it is reviewed and the names should be consistently used when reporting on air quality in the AEMRs and other correspondence.

ID number	Condition	Details of Non-compliance	Risk Rating	Recommendation
1.2	Schedule 3, Condition 13(a)	The site water balance description in the Water and Erosion and Sediment Control Management Plan (2013) provides a broad outline of some of the inputs and outputs from a water balance. However, inputs and outputs such as evaporation and rainfall are not mentioned. Furthermore, the management plan does not provide a description of what type of model is used, the monitoring used to provide inputs and outputs nor how the model is calibrated. Discussions with the Proponent at the time of the audit inspection suggest that no water balance is available.	Non - Compliant (Moderate Risk)	It is recommended that the Proponent develop a water balance using the information already available and outlined in the management plan but supplemented with additional inputs and outputs. The Water and Erosion and Sediment Control MP (2013) should be updated to reflect this and outline how the water balance will be maintained as operational changes occur. It is noted that the Proponent advised that all management plans would be reviewed and updated (refer to Appendix 5).
1.3	Schedule 5, Condition 5(a) to (e)	The most recent Independent Environmental Audit (IEA) is dated 4 February 2011. No IEA was undertaken in 2014.	Non - Compliant (Moderate Risk)	It is recommended that arrangements be made for an IEA to be undertaken as soon as possible. The audit should cover the period from the time of the last IEA to present (i.e. 2011 to 2015). It is noted that the Proponent advised that a consultant has been contacted to undertake the audit (refer to Appendix 5).

13.3.1. RESPONSE: ITEM 1.1

1. 24 hour Total Suspended Particle (TSP) and Fine Particulate (PM 10) monitoring was undertaken at Stations 1 and 3 in the months of August 2013 to October 2013 and December 2013 to February 2014.

   An LSA High Volume Air Sampler (Model number 070 C150) was used to sample as necessary. Initial set up and calibration training was carried out by a Lear Siegler Australasia Pty Ltd representative. The sampler was permitted to run for at least 24 hours for each sample. Concise records were kept of the date, time, operating hours, machine flow, and weather on the day of each sampling event by M Collins staff.

   The results of the Assessment were provided in report entitled "*TSP and PM 10 Dust Monitoring Report, Spring Farm Sand and Soil Quarry 214 Macarthur Road, Spring Farm*" by Harvest Scientific Services (12 May, 2014).

   All samples were below the stipulated licence targets (90µg/m^3 and 50µg/m^3 for Daily TSP and PM10 respectively) with the exception of:

   - TSP exceedances were recorded at Monitoring Station 3 on 1 October 2013 and 4 February 2014. The recorded values were 96.10µg / m^3 and 93.20µg / m^3 respectively. These marginal exceedances were attributed to strong wind gusts (76 km /hr and 46 km/hr winds recorded on each day respectively) with potential dust deposition from the adjacent Spring Farm subdivision works.

   - One PM 10 exceedance was recorded at Monitoring Station 3 on 9 December 2013. The recorded PM 10 was 50.80µg / m^3. This marginal exceedance was attributed to an above average number of truck movements on that day. Council mowing of the Macarthur Road roadside reserve was also noted on that day as a potential contributor of dust.

2. TSP and PM10 monitoring ceased in 2014 as it was removed from EPA Licence. It was re-instated when picked up as a consent requirement April 2016 onwards and will be reported in 2016 AEMR.

3. As recommended by the NSW EPA, MS1 and MS2 were relocated to their current positions in September 2015 (Figure 10).

13.3.2. RESPONSE: ITEM 1.2

1. It is proposed to review and update as necessary all Site Plans and Site Management Plans including Landscape, Rehabilitation, and Air Quality by mid-2016.

13.3.3. RESPONSE: ITEM 1.3

1. An Independent Environmental Audit is planned for early 2016 as per Schedule 5: Conditions 5 (A to E).

14.0 LIMITATIONS OF THIS REPORT

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

1. 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;

2. 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;

3. In preparing this report, Harvest Scientific Services Pty Ltd has relied upon information and documentation provided by the client and/or third parties. Harvest Scientific Services Pty Ltd 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 Pty Ltd 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 Pty Ltd; and

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

Prepared by:

Cheyne Hudson (BEnvSc(Hons))

Environmental Scientist

15.0 APPENDICES

15.1. APPENDIX 1: INDUSTRY AND INVESTMENT RETURN (2015 FINANCIAL YEAR)

Form S 1

Department of Industry
Resources & Energy

RETURN FOR EXTRACTIVE MATERIALS: YEAR ENDED 30 JUNE 2015

Quote RIMS ID in all correspondence

Quarry Id: 6339 Rims ID:400233

Operators Name: COLLINS CONSTRUCTION MATERIALS PTY LTD
Address: PO BOX 55
MILPERRA
NSW 2214

Email: matt@mcollins.com.au

Quarry Name: SPRING FARM/NESBITT QUARRY
Quarry Address: SPRINGFARM/NESBITT MACARTHUR RD

Inquiries please telephone:
(02) 4931 6434
Completed or Nil Returns
Fax - (02) 4931 6788
Email -
mineral.royalty@industry.nsw.gov.au
Postal Address (see address below)

Please amend name, postal address and location of mine or quarry if incorrect or incomplete

2014-2015

The return should be completed and forwarded to the **STATISTICAL OFFICER, NSW DEPARTMENT OF INDUSTRY RESOURCES AND ENERGY, PO BOX 344, HUNTER REGION MAIL CENTRE NSW 2310 on or before 30 November, 2015**. 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.

Adrian Delany, Director Industry Coordination

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 & DP587631 Lot22

Email Address of Operator matt@mcollins.com.au

Name of Owner or Licensee Collins Construction Materials 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) _____

From Department of Lands or other Department _____

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 _____

- 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** 20/11/2015
- **PERSON to be contacted if queries arise regarding this return** _____
- **NAME** (Block letters) Matthew J. Collins **Telephone** (02) 97741544

SALES During 2014-2015

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 SAND	25,500
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	IMPORTED SAND	90750
Manufactured Sand		
Prepared Road Base & Sub Base		
Other Unprocessed Materials		
• **River Gravel**		
Over 30mm		
5mm to 30mm		
Under 5mm		
• **Construction Sand**	Excluding Industrial	110,750
• **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)	38,250
• **TOTAL SITE PRODUCTION**		265,250
• **Gross Value ($) of all Sales**		
• **Type of Material**		
• **Number of Full-Time Equivalent (FTE) Employees**	Employees: QUARRY 11	Contractors QUARRY 13

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

15.2. APPENDIX 2: LADEN LOADS OUTWARDS (2015 CALENDAR YEAR)

M Collins & Son - weigh-bridge Transactions
Transactions dated between 1/1/15 and 31/12/15
Transaction Types Included :-All Transactions Number Laden Loads Outward

Count of Net Weight (Tn)	Column Labels	
Row Labels	DELIV	Grand Total
Mon-05-Jan-15	31	31
Tue-06-Jan-15	21	21
Wed-07-Jan-15	40	40
Thu-08-Jan-15	41	41
Fri-09-Jan-15	41	41
Sat-10-Jan-15	2	2
Mon-12-Jan-15	27	27
Tue-13-Jan-15	40	40
Wed-14-Jan-15	53	53
Thu-15-Jan-15	39	39
Fri-16-Jan-15	47	47
Sat-17-Jan-15	10	10
Mon-19-Jan-15	37	37
Tue-20-Jan-15	35	35
Wed-21-Jan-15	47	47
Thu-22-Jan-15	37	37
Fri-23-Jan-15	47	47
Sat-24-Jan-15	6	6
Tue-27-Jan-15	11	11
Wed-28-Jan-15	17	17
Thu-29-Jan-15	17	17
Fri-30-Jan-15	41	41
Sat-31-Jan-15	3	3
Mon-02-Feb-15	33	33
Tue-03-Feb-15	40	40
Wed-04-Feb-15	47	47
Thu-05-Feb-15	47	47
Fri-06-Feb-15	40	40
Sat-07-Feb-15	13	13
Mon-09-Feb-15	30	30
Tue-10-Feb-15	42	42
Wed-11-Feb-15	51	51
Thu-12-Feb-15	52	52
Fri-13-Feb-15	32	32
Sat-14-Feb-15	18	18
Mon-16-Feb-15	48	48
Tue-17-Feb-15	48	48
Wed-18-Feb-15	37	37
Thu-19-Feb-15	37	37
Fri-20-Feb-15	43	43
Sat-21-Feb-15	16	16
Mon-23-Feb-15	32	32
Tue-24-Feb-15	46	46
Wed-25-Feb-15	33	33

M Collins & Son - weigh-bridge Transactions
Transactions dated between 1/1/15 and 31/12/15
Transaction Types Included :-All Transactions Number Laden Loads Outward

Count of Net Weight (Tn)	Column Labels	
Row Labels	DELIV	Grand Total
Thu-26-Feb-15	23	23
Fri-27-Feb-15	36	36
Sat-28-Feb-15	8	8
Mon-02-Mar-15	54	54
Tue-03-Mar-15	37	37
Wed-04-Mar-15	46	46
Thu-05-Mar-15	60	60
Fri-06-Mar-15	35	35
Sat-07-Mar-15	11	11
Mon-09-Mar-15	38	38
Tue-10-Mar-15	49	49
Wed-11-Mar-15	37	37
Thu-12-Mar-15	37	37
Fri-13-Mar-15	40	40
Sat-14-Mar-15	20	20
Mon-16-Mar-15	53	53
Tue-17-Mar-15	39	39
Wed-18-Mar-15	41	41
Thu-19-Mar-15	47	47
Fri-20-Mar-15	51	51
Sat-21-Mar-15	12	12
Mon-23-Mar-15	44	44
Tue-24-Mar-15	41	41
Wed-25-Mar-15	35	35
Thu-26-Mar-15	47	47
Fri-27-Mar-15	34	34
Sat-28-Mar-15	10	10
Mon-30-Mar-15	36	36
Tue-31-Mar-15	25	25
Wed-01-Apr-15	41	41
Thu-02-Apr-15	27	27
Tue-07-Apr-15	27	27
Wed-08-Apr-15	35	35
Thu-09-Apr-15	38	38
Fri-10-Apr-15	28	28
Sat-11-Apr-15	22	22
Mon-13-Apr-15	45	45
Tue-14-Apr-15	36	36
Wed-15-Apr-15	35	35
Thu-16-Apr-15	33	33
Fri-17-Apr-15	20	20
Sat-18-Apr-15	3	3
Mon-20-Apr-15	14	14
Tue-21-Apr-15	6	6

M Collins & Son - weigh-bridge Transactions
Transactions dated between 1/1/15 and 31/12/15
Transaction Types Included :-All Transactions Number Laden Loads Outward

Count of Net Weight (Tn)	Column Labels	
Row Labels	DELIV	Grand Total
Wed-22-Apr-15	3	3
Thu-23-Apr-15	19	19
Fri-24-Apr-15	23	23
Mon-27-Apr-15	34	34
Tue-28-Apr-15	41	41
Wed-29-Apr-15	33	33
Thu-30-Apr-15	40	40
Fri-01-May-15	19	19
Sat-02-May-15	1	1
Mon-04-May-15	21	21
Tue-05-May-15	47	47
Wed-06-May-15	34	34
Thu-07-May-15	31	31
Fri-08-May-15	32	32
Sat-09-May-15	5	5
Mon-11-May-15	31	31
Tue-12-May-15	40	40
Wed-13-May-15	33	33
Thu-14-May-15	32	32
Fri-15-May-15	28	28
Sat-16-May-15	13	13
Mon-18-May-15	35	35
Tue-19-May-15	33	33
Wed-20-May-15	43	43
Thu-21-May-15	27	27
Fri-22-May-15	22	22
Sat-23-May-15	12	12
Mon-25-May-15	35	35
Tue-26-May-15	33	33
Wed-27-May-15	48	48
Thu-28-May-15	34	34
Fri-29-May-15	38	38
Sat-30-May-15	17	17
Mon-01-Jun-15	37	37
Tue-02-Jun-15	48	48
Wed-03-Jun-15	51	51
Thu-04-Jun-15	28	28
Fri-05-Jun-15	38	38
Sat-06-Jun-15	5	5
Tue-09-Jun-15	42	42
Wed-10-Jun-15	48	48
Thu-11-Jun-15	34	34
Fri-12-Jun-15	38	38
Sat-13-Jun-15	10	10

M Collins & Son - weigh-bridge Transactions
Transactions dated between 1/1/15 and 31/12/15
Transaction Types Included :-All Transactions Number Laden Loads Outward

Count of Net Weight (Tn)	Column Labels	
Row Labels	DELIV	Grand Total
Mon-15-Jun-15	26	26
Tue-16-Jun-15	26	26
Wed-17-Jun-15	14	14
Thu-18-Jun-15	12	12
Fri-19-Jun-15	5	5
Sat-20-Jun-15	9	9
Mon-22-Jun-15	27	27
Tue-23-Jun-15	37	37
Wed-24-Jun-15	36	36
Thu-25-Jun-15	33	33
Fri-26-Jun-15	42	42
Sat-27-Jun-15	10	10
Mon-29-Jun-15	39	39
Tue-30-Jun-15	32	32
Wed-01-Jul-15	36	36
Thu-02-Jul-15	26	26
Fri-03-Jul-15	36	36
Sat-04-Jul-15	6	6
Mon-06-Jul-15	26	26
Tue-07-Jul-15	18	18
Wed-08-Jul-15	22	22
Thu-09-Jul-15	20	20
Fri-10-Jul-15	43	43
Sat-11-Jul-15	13	13
Mon-13-Jul-15	29	29
Tue-14-Jul-15	45	45
Wed-15-Jul-15	30	30
Thu-16-Jul-15	27	27
Fri-17-Jul-15	7	7
Sat-18-Jul-15	3	3
Mon-20-Jul-15	24	24
Tue-21-Jul-15	33	33
Wed-22-Jul-15	31	31
Thu-23-Jul-15	19	19
Fri-24-Jul-15	48	48
Sat-25-Jul-15	15	15
Mon-27-Jul-15	43	43
Tue-28-Jul-15	33	33
Wed-29-Jul-15	27	27
Thu-30-Jul-15	38	38
Fri-31-Jul-15	34	34
Sat-01-Aug-15	12	12
Mon-03-Aug-15	29	29
Tue-04-Aug-15	37	37

M Collins & Son - weigh-bridge Transactions
Transactions dated between 1/1/15 and 31/12/15
Transaction Types Included :-All Transactions Number Laden Loads Outward

Count of Net Weight (Tn)	Column Labels	
Row Labels	DELIV	Grand Total
Wed-05-Aug-15	42	42
Thu-06-Aug-15	54	54
Fri-07-Aug-15	59	59
Sat-08-Aug-15	25	25
Mon-10-Aug-15	52	52
Tue-11-Aug-15	33	33
Wed-12-Aug-15	38	38
Thu-13-Aug-15	38	38
Fri-14-Aug-15	31	31
Sat-15-Aug-15	8	8
Mon-17-Aug-15	32	32
Tue-18-Aug-15	52	52
Wed-19-Aug-15	44	44
Thu-20-Aug-15	64	64
Fri-21-Aug-15	36	36
Sat-22-Aug-15	13	13
Mon-24-Aug-15	27	27
Tue-25-Aug-15	15	15
Wed-26-Aug-15	8	8
Thu-27-Aug-15	25	25
Fri-28-Aug-15	34	34
Sat-29-Aug-15	10	10
Mon-31-Aug-15	40	40
Tue-01-Sep-15	37	37
Wed-02-Sep-15	56	56
Thu-03-Sep-15	27	27
Fri-04-Sep-15	54	54
Sat-05-Sep-15	9	9
Mon-07-Sep-15	53	53
Tue-08-Sep-15	56	56
Wed-09-Sep-15	37	37
Thu-10-Sep-15	40	40
Fri-11-Sep-15	24	24
Sat-12-Sep-15	14	14
Mon-14-Sep-15	53	53
Tue-15-Sep-15	60	60
Wed-16-Sep-15	50	50
Thu-17-Sep-15	27	27
Fri-18-Sep-15	25	25
Sat-19-Sep-15	3	3
Mon-21-Sep-15	33	33
Tue-22-Sep-15	36	36
Wed-23-Sep-15	51	51
Thu-24-Sep-15	36	36

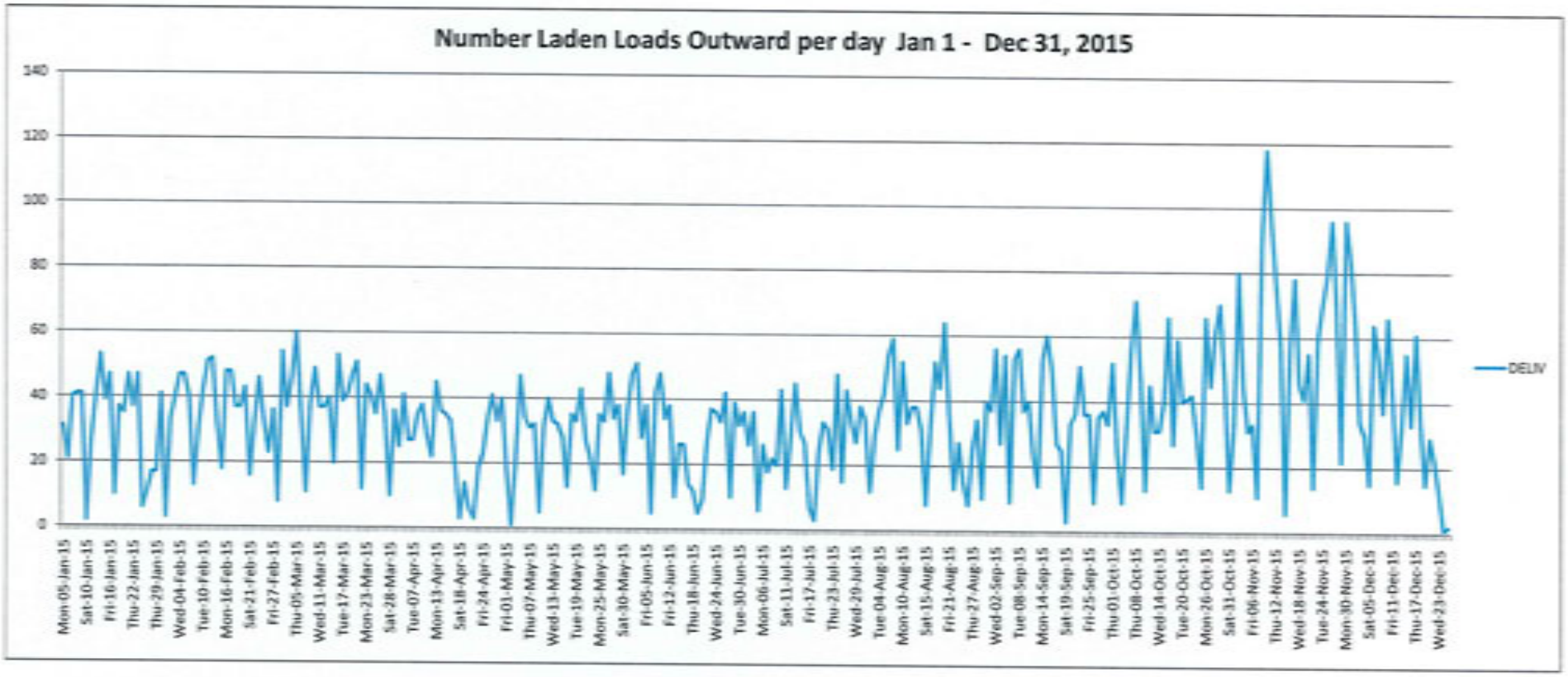
M Collins & Son - weigh-bridge Transactions
Transactions dated between 1/1/15 and 31/12/15
Transaction Types Included :-All Transactions Number Laden Loads Outward

Count of Net Weight (Tn)	Column Labels	
Row Labels	DELIV	Grand Total
Fri-25-Sep-15	36	36
Sat-26-Sep-15	9	9
Mon-28-Sep-15	35	35
Tue-29-Sep-15	37	37
Wed-30-Sep-15	33	33
Thu-01-Oct-15	52	52
Fri-02-Oct-15	25	25
Sat-03-Oct-15	9	9
Tue-06-Oct-15	32	32
Wed-07-Oct-15	56	56
Thu-08-Oct-15	71	71
Fri-09-Oct-15	47	47
Sat-10-Oct-15	13	13
Mon-12-Oct-15	45	45
Tue-13-Oct-15	31	31
Wed-14-Oct-15	31	31
Thu-15-Oct-15	40	40
Fri-16-Oct-15	66	66
Sat-17-Oct-15	27	27
Mon-19-Oct-15	59	59
Tue-20-Oct-15	40	40
Wed-21-Oct-15	41	41
Thu-22-Oct-15	42	42
Fri-23-Oct-15	30	30
Sat-24-Oct-15	14	14
Mon-26-Oct-15	66	66
Tue-27-Oct-15	45	45
Wed-28-Oct-15	61	61
Thu-29-Oct-15	70	70
Fri-30-Oct-15	47	47
Sat-31-Oct-15	13	13
Mon-02-Nov-15	32	32
Tue-03-Nov-15	80	80
Wed-04-Nov-15	45	45
Thu-05-Nov-15	31	31
Fri-06-Nov-15	33	33
Sat-07-Nov-15	11	11
Mon-09-Nov-15	91	91
Tue-10-Nov-15	118	118
Wed-11-Nov-15	95	95
Thu-12-Nov-15	77	77
Fri-13-Nov-15	58	58
Sat-14-Nov-15	6	6
Mon-16-Nov-15	56	56

M Collins & Son - weigh-bridge Transactions
Transactions dated between 1/1/15 and 31/12/15
Transaction Types Included :-All Transactions Number Laden Loads Outward

Count of Net Weight (Tn)	Column Labels	
Row Labels	**DELIV**	**Grand Total**
Tue-17-Nov-15	78	78
Wed-18-Nov-15	46	46
Thu-19-Nov-15	41	41
Fri-20-Nov-15	55	55
Sat-21-Nov-15	14	14
Mon-23-Nov-15	60	60
Tue-24-Nov-15	70	70
Wed-25-Nov-15	79	79
Thu-26-Nov-15	96	96
Fri-27-Nov-15	69	69
Sat-28-Nov-15	22	22
Mon-30-Nov-15	96	96
Tue-01-Dec-15	84	84
Wed-02-Dec-15	64	64
Thu-03-Dec-15	34	34
Fri-04-Dec-15	30	30
Sat-05-Dec-15	15	15
Mon-07-Dec-15	64	64
Tue-08-Dec-15	54	54
Wed-09-Dec-15	37	37
Thu-10-Dec-15	66	66
Fri-11-Dec-15	42	42
Sat-12-Dec-15	16	16
Mon-14-Dec-15	33	33
Tue-15-Dec-15	55	55
Wed-16-Dec-15	33	33
Thu-17-Dec-15	61	61
Fri-18-Dec-15	34	34
Sat-19-Dec-15	15	15
Mon-21-Dec-15	29	29
Tue-22-Dec-15	22	22
Wed-23-Dec-15	12	12
Thu-24-Dec-15	1	1
Wed-30-Dec-15	2	2
Grand Total	**10451**	**10451**

No of Week	52.0
No days per week	6.0
Ave Load per wek	201
Ave loads per day	33


Number Laden Loads Outward per day Jan 1 - Dec 31, 2015
140
120
100
80
60
40
20
0
DELIV
Mon-05-Jan-15
Sat-10-Jan-15
Fri-16-Jan-15
Thu-22-Jan-15
Thu-29-Jan-15
Wed-04-Feb-15
Tue-10-Feb-15
Mon-16-Feb-15
Sat-21-Feb-15
Fri-27-Feb-15
Thu-05-Mar-15
Wed-11-Mar-15
Tue-17-Mar-15
Mon-23-Mar-15
Sat-28-Mar-15
Tue-07-Apr-15
Mon-13-Apr-15
Sat-18-Apr-15
Fri-24-Apr-15
Fri-01-May-15
Thu-07-May-15
Wed-13-May-15
Tue-19-May-15
Mon-25-May-15
Sat-30-May-15
Fri-05-Jun-15
Fri-12-Jun-15
Thu-18-Jun-15
Wed-24-Jun-15
Tue-30-Jun-15
Mon-06-Jul-15
Sat-11-Jul-15
Fri-17-Jul-15
Thu-23-Jul-15
Wed-29-Jul-15
Tue-04-Aug-15
Mon-10-Aug-15
Sat-15-Aug-15
Fri-21-Aug-15
Thu-27-Aug-15
Wed-02-Sep-15
Tue-08-Sep-15
Mon-14-Sep-15
Sat-19-Sep-15
Fri-25-Sep-15
Thu-01-Oct-15
Thu-08-Oct-15
Wed-14-Oct-15
Tue-20-Oct-15
Mon-26-Oct-15
Sat-31-Oct-15
Fri-06-Nov-15
Thu-12-Nov-15
Wed-18-Nov-15
Tue-24-Nov-15
Mon-30-Nov-15
Sat-05-Dec-15
Fri-11-Dec-15
Thu-17-Dec-15
Wed-23-Dec-15

15.3. APPENDIX 3: DELIVERED TONNAGES (2015 CALENDAR YEAR)

M Collins & Son - weigh-bridge Transactions

Transactions by Product Report
Transactions dated between 1/1/15 and 31/12/15

Sum of Qty	Column Labels	
Row Labels	DELIV	Grand Total
01-099HOSF	545.36	545.36
01-100	8,602.46	8,602.46
01-100SFPE	30.72	30.72
01-100SFSW	44,092.65	44,092.65
01-100SFSWA5	874.56	874.56
01-100SFSWCS	545.60	545.60
01-102	76,525.36	76,525.36
01-103	15,122.52	15,122.52
01-104	10,650.39	10,650.39
01-115	2,198.84	2,198.84
01-117	3,773.28	3,773.28
01-122	5,766.62	5,766.62
01-126	20,366.20	20,366.20
01-135	29.94	29.94
01-978	168.80	168.80
01-979	190.16	190.16
01-979SFSWCS30C	254.82	254.82
01-986	248.66	248.66
02-008	1,636.54	1,636.54
04-001	1,145.85	1,145.85
05-001	21,804.07	21,804.07
05-012	632.70	632.70
05-042	862.06	862.06
05-047	67.66	67.66
05-050	157.62	157.62
05-062	2,582.14	2,582.14
05-064	1,494.44	1,494.44
05-065	51.16	51.16
05-075	14.32	14.32
05-076	1,854.80	1,854.80
05-077	32.10	32.10
06-100	1,650.30	1,650.30
06-101	62.70	62.70
06-150	256.14	256.14
06-151	1,901.80	1,901.80
06-160	94.36	94.36
06-900	422.78	422.78
07-003	448.41	448.41
07-004	249.10	249.10
07-007	3,234.20	3,234.20
07-008	146.76	146.76
07-015	2,684.30	2,684.30

M Collins & Son - weigh-bridge Transactions

Transactions by Product Report
Transactions dated between 1/1/15 and 31/12/15

Sum of Qty	Column Labels	
Row Labels	**DELIV**	**Grand Total**
07-016	6,432.22	6,432.22
07-019	34.56	34.56
07-053	647.00	647.00
07-055	190.38	190.38
07-058	69.33	69.33
07-065	2,919.64	2,919.64
07-100	3,496.20	3,496.20
07-101	1,021.46	1,021.46
07-105	161.26	161.26
07-107	1,319.26	1,319.26
07-109	2,974.36	2,974.36
07-110	52.80	52.80
07-111	117.38	117.38
07-112	1,684.64	1,684.64
07-987	11,586.58	11,586.58
07-988	8,007.24	8,007.24
07-989	8,297.80	8,297.80
09-201	549.24	549.24
09-202	277.23	277.23
09-204	701.06	701.06
09-208	43.10	43.10
10-010SF	1,688.30	1,688.30
10-011SF	25.00	25.00
14-999SF	30.98	30.98
16-002	174.12	174.12
Grand Total	**285,974.39**	**285,974.39**

15.4. APPENDIX 4: CONTRIBUTIONS

Camden Council
37 John Street, Camden NSW 2570
10 Queen Street, Narellan NSW 2567
PO Box 183, Camden 2570 DX 25807
Telephone 02 4654 5130 Fax 02 4654 7829
Email mail@camden.nsw.gov.au
www.camden.nsw.gov.au ABN 31 117 341 764

Tax Invoice

ABN [illegible]

M Collins & Sons Holdings Pty Ltd
PO Box 55
MILPERRA NSW 2214

Account No: 1391.10
Page No: 01
Date: 27/03/2015
TAX INVOICE

Date	Invoice	Description	Amount
27/04/2015	35680	Road levy as per conditions of consent GST 3747.49 as issued by Department of Planning Extraction Permit Extension 186 Macarthur Rd Commencement Date 16/12/2006 Period 18/12/14 - 17/12/15 (year 9/10) Invoice Total (including GST if applicable)	$726.10 $726.10

A/c CCM – Consent Conditions.
$7478 -27 + GST

Total Value non taxable supplied	0.00
Total Value taxable supplied (excluding GST	7478.27
Total GST Payable	747.83

Due Date: 26/04/2015 Amount Due: $726.10

Due Date:	Amount Due:
26/04/2015	726.10

M Collins & Sons Holdings Pt
PO Box 55
MILPERRA NSW 2214

Account No: Invoice
1391.10 35680

BPAY Biller Code: 717405
Ref. 1391109

How to pay
Payments can be made between 8.30am and 5.00pm Monday to Friday at the Camden Office 37 John Street, Camden, or the Narellan Office 10 Queen Street, Narellan

By Post
Send this tear off with your cheque or money order to Camden Council PO Box 183 Camden NSW 2570

Internet or Phone Banking
Contact your bank or financial institution to make this payment from your cheque, savings, debit or transaction account. For more information visit www.bpay.com.au

15.5. APPENDIX 5: REHABILITATION AREAS

Figure 16: Looking south along the western bank of the anabranch (Lot 22)

Figure 3: Looking north along the western bank of the anabranch (Lot 22)

Figure 4: Looking north along the eastern bank of the anabranch (Lot 32)

Figure 5: Looking south along the eastern bank of the anabranch (Lot 32)

Figure 20: Recently poisoned Broad Leaf Privet *(Ligustrum lucidum)* adjacent to the Nepean River

Figure 21: Woody weeds are removed and left in small piles where they serve as potential fauna habitat

15.6. APPENDIX 6: BOWANTZ ENVIRONMENTAL REPORTS

Spring Farm Quarry Landscape Management and Maintenance Program Schedule Jan 2015 - Dec 2015

Monitoring and reporting (12 monthly)

Summarize local vegetation characterisitics	
Plant Growth, percentage cover and survival rates	No Re-Vegetation was undertaken during this calender year.
Plant loses through herbivory, disease, vandalism, storm damage or other factors	No Re-Vegetation was undertaken during this calender year.
Weed regrowth and control measures	No Re-Vegetation was undertaken during this calender year.
Plant replacement	No Re-Vegetation was undertaken during this calender year.
Guard repair and weeding inside guards	No Re-Vegetation was undertaken during this calender year.
Maintenance watering regime	No Re-Vegetation was undertaken during this calender year.
Threatened species.	No Re-Vegetation was undertaken during this calender year.

Project: Environmental Management 2015 — Date: 31.12.2015

Quadrat: Zone 1A — Recorder: Kurt Bowman

Measure	Observation				Comments/Actions Required
Plant Growth (cm):					
Trees	0-5	5-20	20-50	50+	
Understorey	0-5	5-10	10-30	30+	
Ground cover	0-5	5-10	10-20	20+	
Percentage Cover (%):					
Trees	0-10	10-50	50-85	85+	
Understorey	0-10	10-50	50-85	85+	
Ground cover	0-10	10-50	50-85	85+	
Survival Rates (%):					
Trees	0-10	10-50	50-85	85+	
Understorey	0-10	10-50	50-85	85+	
Ground cover	0-10	10-50	50-85	85+	
Plant replacement required/Ha					
Trees	0-5	5-20	20-50	50+	
Understorey	0-5	5-20	20-50	50+	
Ground cover	0-5	5-50	50-100	100+	
Weed regrowth (% cover)	0-10	10-50	50-85	85+	
Condition of Tree Guards	Poor	Ok	Good		
Watering required	Yes	Some	No		
Stream bank erosion	Stable	Slight	Mod.	Severe	
Photographs:					
Number					
Location					
Direction					

Comments: _____

Item	Comments	Location	Date
Revegetation	No Re-Vegetation was undertaken during this calender year.	Zone 1A, 2A,4,5,6	19.01.15 to 31.12.15
Penman area anabranch and Nepean River Bank			
Sediment Control Fencing	Sediment control fencing has been installed downslope of the extraction area.	Zone 1A	16.11.2015
Native and feral animal protection			
Pest Control	No pest control was undertaken in this calender year. Observations were made.	Zone 1A, 2A,4,5,6	19.01.15 to 31.12.15
Tree Guards	Existing tree guards were re-instated if employees noticed disturbed guards.	Zone 6	19.01.15 to 31.12.15
Animal Deterrents (D-Ter)	D-ter was not used in this calender year as the previous re-vegetation was above ground predatory height.	Zone 6	19.01.15 to 31.12.15
Fencing rehabilitation areas	250m of Fencing was installed along the Western and Northern end of Zone 2A.	Zone 2A	01.09.2015
Rubbish removal	Rubbish discovered during weed control works has been stockpiled for collection.	Zone 1A, 2A,4,5,6	19.01.15 to 31.12.15
Weeding	Extensive primary and secondary weed control has been completed over all sites.	Zone 1A, 2A,4,5,6	19.01.15 to 31.12.15
Spraying	600L Quickspray unit was used for spraying invasive weeds.	Zone 1A, 2A,4,5,6	19.01.15 to 31.12.15
Removal of woody, herbaceous and scrambling weeds	Major stems of invasive weeds were traced to the ground then scraped and painted with appropriate herbicide.	Zone 1A, 2A,4,5,6	19.01.15 to 31.12.15
Planting endemic species, sourced from propagules collected on site	No Re-Vegetation was undertaken during this calender year.	Zone 1A, 2A,4,5,6	19.01.15 to 31.12.15
On-going maintenance	No Re-Vegetation was undertaken during this calender year.	Zone 1A, 2A,4,5,6	19.01.15 to 31.12.15
Soil Preparations			
Plantings LMP Table 1 - schedule of plants			
Battered Re-vegetation areas are to be covered to a minimum depth of 500mm	Ideal levels for banks and batters are still being finalised.	Zone 1A, 2A,4,5,6	19.01.15 to 31.12.15
Weeds sprayed out (non-battered areas) and vegetation planted directly into soil horizon.	No Re-Vegetation was undertaken during this calender year.	Zone 1A, 2A,4,5,6	19.01.15 to 31.12.15
Ground preparation (ripping depth of 300-400mm max 300mm apart)	No Re-Vegetation was undertaken during this calender year.	Zone 1A, 2A,4,5,6	19.01.15 to 31.12.15
Rotary Hoeing	No Re-Vegetation was undertaken during this calender year.	Zone 1A, 2A,4,5,6	19.01.15 to 31.12.15
Planting tube stock (list types and source)	No Re-Vegetation was undertaken during this calender year.	Zone 1A, 2A,4,5,6	19.01.15 to 31.12.15
Species Planted	No Re-Vegetation was undertaken during this calender year.	Zone 1A, 2A,4,5,6	19.01.15 to 31.12.15
Direct seeding	No Re-Vegetation was undertaken during this calender year.	Zone 1A, 2A,4,5,6	19.01.15 to 31.12.15
Seed collection	No Re-Vegetation was undertaken during this calender year.	Zone 1A, 2A,4,5,6	19.01.15 to 31.12.15
Plant propagation	No Re-Vegetation was undertaken during this calender year.	Zone 1A, 2A,4,5,6	19.01.15 to 31.12.15
Tree and shrub species guarding	No Re-Vegetation was undertaken during this calender year.	Zone 1A, 2A,4,5,6	19.01.15 to 31.12.15
Brush Matting	No Re-Vegetation was undertaken during this calender year.	Zone 1A, 2A,4,5,6	19.01.15 to 31.12.15
Maintenance Program	No Re-Vegetation was undertaken during this calender year.	Zone 1A, 2A,4,5,6	19.01.15 to 31.12.15
Watering	No Re-Vegetation was undertaken during this calender year.	Zone 1A, 2A,4,5,6	19.01.15 to 31.12.15
Herbicide Spraying (control of weed infestation)	No Re-Vegetation was undertaken during this calender year.	Zone 1A, 2A,4,5,6	19.01.15 to 31.12.15
General maintenance	No Re-Vegetation was undertaken during this calender year.	Zone 1A, 2A,4,5,6	19.01.15 to 31.12.15
Repairing damaged tree guards	No Re-Vegetation was undertaken during this calender year.	Zone 1A, 2A,4,5,6	19.01.15 to 31.12.15
Monitoring survival rate (list)	No Re-Vegetation was undertaken during this calender year.	Zone 1A, 2A,4,5,6	19.01.15 to 31.12.15
installing replacement plants where required	No Re-Vegetation was undertaken during this calender year.	Zone 1A, 2A,4,5,6	19.01.15 to 31.12.15
Weeding inside the tree guards	No Re-Vegetation was undertaken during this calender year.	Zone 1A, 2A,4,5,6	19.01.15 to 31.12.15
Follow up spot-spraying	No Re-Vegetation was undertaken during this calender year.	Zone 1A, 2A,4,5,6	19.01.15 to 31.12.15
Bush Regeneration - LMP Tables 4 - 6			
Restoration of robust plant community	Weed control was prioritised around the areas with the most natural resiliance and remnant vegetation.	Zone 1A, 2A,4,5,6	19.01.15 to 31.12.15
Rehabilitating the riparian forest	Weed control was prioritised around the areas with the most natural resiliance and remnant vegetation.	Zone 1A, 5	
Weed control	Extensive primary and secondary weed control has been completed over all sites.	Zone 1A, 2A,4,5,6	19.01.15 to 31.12.15
Improving Habitat value			
Creating habitats locations and numbers	All excess bio-mass created during weed control is chopped into habitat piles on site.	Zone 1A, 2A,4,5,6	19.01.15 to 31.12.15
Habitats created using….	All excess bio-mass created during weed control is chopped into habitat piles on site.	Zone 1A, 2A,4,5,6	19.01.15 to 31.12.15
Utilising logs, woody material, branches and sticks	All excess bio-mass created during weed control is chopped into habitat piles on site.	Zone 1A, 2A,4,5,6	19.01.15 to 31.12.15
Nesting Boxes (LMP Table 2)			

North East to south east aspects	Yes		
Entrance facing away from prevailling winds and rain	Yes		
Height as per Table 2 LMP	Yes		
10 Nesting boxes in revegetation areas adjoining remnant riparian forest	3 Nesting boxes have been installed in Zone 5	Zone 5	233.07.2015
Located a minimum 6m into vegetation	Yes		
Targeted Weed Control (located and removed) LMP Table 3			
Alligator Weed	This species has been included in our ongoing targeted weed control.	Zone 1A, 2A,4,5,6	19.01.15 to 31.12.15
Green Cestrum	This species has been included in our ongoing targeted weed control.	Zone 1A, 2A,4,5,6	19.01.15 to 31.12.15
Africal Box Thorn	This species has been included in our ongoing targeted weed control.	Zone 1A, 2A,4,5,6	19.01.15 to 31.12.15
Small-leaved Privet	This species has been included in our ongoing targeted weed control.	Zone 1A, 2A,4,5,6	19.01.15 to 31.12.15
Large-leaved Privet	This species has been included in our ongoing targeted weed control.	Zone 1A, 2A,4,5,6	19.01.15 to 31.12.15
Blackberry Complex	This species has been included in our ongoing targeted weed control.	Zone 1A, 2A,4,5,6	19.01.15 to 31.12.15
Bridal Creeper	This species has been included in our ongoing targeted weed control.	Zone 1A, 2A,4,5,6	19.01.15 to 31.12.15
Honey Locust Tree	This species has been included in our ongoing targeted weed control.	Zone 1A, 2A,4,5,6	19.01.15 to 31.12.15
Balloon Vine	This species has been included in our ongoing targeted weed control.	Zone 1A, 2A,4,5,6	19.01.15 to 31.12.15
Madeira Vine	This species has been included in our ongoing targeted weed control.	Zone 1A, 2A,4,5,6	19.01.15 to 31.12.15

Kurt Bowman
Bowantz Landscaping & Environmental

COLLINS & SONS PTY LTD, CAMDEN NSW

Spring Farm Sand And Soil Extraction Extension Zone 1A

Wednesday, 18 November 2015

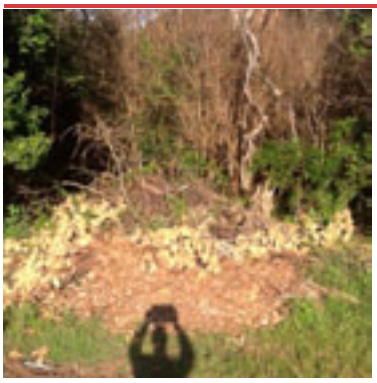
Prepared for Collins & Sons Pty Ltd, Camden NSW

Identified 8 Issues

SHADE TREE

Assigned to Zone 1a

Pictured here is an example of a larger woody weed that has been deliberately left, to provide some shade for the benefit of reduced follow up works.



DUMPING

Assigned to Zone 1a

A large amount of green waste and rubbish has been dumped on site in this area. Some of the vegetative matter in this waste is viable and will make for more work! We subject putting a lock on the gates, or alternatively talking to the farmer next door to advise him this is an environmental site and to remove the pictured green waste.

DEAD WOODY WEEDS

Assigned to Zone 1a

Pictured here is an example of woody weed control surrounding the remnant natives on site.

FOLLOW UP WORK

Assigned to Zone 1a

Some woody weeds are beginning to come up in the areas previously treated along the river bank. We will endeavour to control these weeds before they reach seeding maturity.

ZONE 1A

Assigned to Before 4

Weed control area prior to works.

ZONE 1A

Assigned to After 4

Weed control area after primary works were completed. The majority of the larger Privet sp. were frilled and injected with glyphosate bi-active. Some individuals were left to provide some shade in areas where the weeds were a monoculture.

ZONE 1A

Assigned to Before 5

Woody weeds pictured before works.

ZONE 1A

Assigned to After 5

Woody weeds were controlled in this area using the cut and paint method, cut stumps were painted with glyphosate bi-active. Biomass created during works were piled to consolidate any viable seed that may be present.

Kurt Bowman
Bowantz Landscaping & Environmental

COLLINS CAMDEN

Spring Farm Sand And Soil Extraction Extension Zone 1A

Tuesday, 22 September 2015

Identified 6 Issues

WOODY WEED INFESTATION

Assigned to Before 1

Mine extension area adjacent to the Napean River in Zone 1A prior to works.

WOODY WEED INFESTATION

Assigned to After 1

Mine extension area adjacent to the Napean River in Zone 1A after primary works. Some larger specimens of Privet sp. have been left to provide shade in the aid of future weed control and re-vegetation works.

INVASIVE VINE SPECIES

Assigned to Before 2

Balloon vine is abundant in this area.

INVASIVE VINE SPECIES

Assigned to After 2

Invasive vines were scraped and painted with Glyphosate Bi-Active.

JUVENILE PRIVET SP.

Assigned to Before 3

Pictured is the density of juvenile Privet sp. in this area.

JUVENILE PRIVET SP.

Assigned to After 3

All juvenile Privet sp. in this area were cut and painted with Glyphosate Bi-Active. Excess biomass was chopped down into habitat piles to aid future works.

Kurt Bowman
Bowantz Landscaping & Environmental

COLLINS CAMDEN

Spring Farm Sand And Soil Extraction Extension Zone 1A

Monday, 10 August 2015

Prepared for Collins & Sons Pty Ltd

Identified 3 Issues

ZONE 1A

Assigned to Before 1

Only 1 day was undertaken in this area this month.

ZONE 1A

Assigned to After 1

Privet sp. Was targeted in this area as shown in the picture. The pile in the foreground is as mentioned previously a 'Habitat' pile to consolidate the biomass. Larger Privet sp. we're frilled and injected with Glyphosate Bi-Active, juvenile Privet sp. we're cut and painted with Glyphosate Bi-Active, while seedlings were hand pulled. Some of the largest trees have been left to provide shade as a monoculture of Privet existed in this area. Providing temporary shade in these areas will not only make it easier to control the seedlings emerging but also assist in the re-vegetation works.

ZONE 1A

Assigned to Invasive Vine Species

Vines close to the water were not able to be broad sprayed with herbicide. Alternatively larger stems were traced to the ground then scraped and painted with Glyphosate Bi-Active to control these specimens. Pictured is several mature Balloon Vine stems.

Kurt Bowman
Bowantz Landscaping & Environmental

COLLINS CAMDEN

Spring Farm Sand And Soil Extraction Extension

Tuesday, 21 July 2015

Prepared for Collins & Sons Pty Ltd

Identified 2 Issues

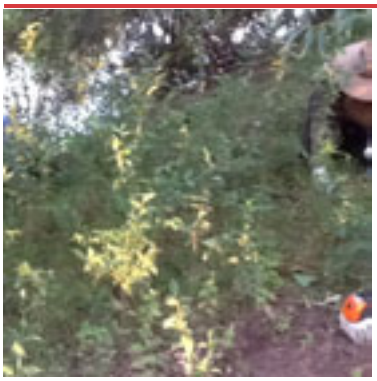
ZONE 2A

Assigned to Invasive Vines Pictured

Only 1 day was completed in this area this month. Works undertaken in this area included;

* Scraping invasive vine species such as Balloon Vine, & Moth Vine. Glyphosate Bi-Active was painted onto the scraped surfaces of the mentioned vines.

* Cut and paint with Glyphosate Bi-Active any identified woody weeds such as; Privet sp., African Olive, & Elm sp.



ZONE 1A

Assigned to Juvenile Invasive Woody Weeds Pictured 'Privet sp.'

Only 1 day was completed in this area this month. Works undertaken in this area included;

* Mainly Privet sp. was treated in this area. Larger Privet sp. we're frilled and injected with Glyphosate Bi-Active, juvenile Privet sp. we're cut and painted with Glyphosate Bi-Active, while seedlings were hand pulled. All excess biomass created during these works were consolidated into habitat piles to ensure follow up works are easier.

* Some invasive vines such as Balloon Vine were also targeted by scraping and painting with Glyphosate Bi-Active.

Kurt Bowman
Bowantz Landscaping & Environmental

COLLINS & SONS

Spring Farm Sand And Soil Extraction Extension

Tuesday, 30 June 2015

Prepared for Collins & Sons Pty Ltd

Identified 7 Issues

PRIMARY WEED CONTROL WORKS IN THE ANABRANCH ZONE 2A.

Assigned to Before 1

A large amount of invasive woody weed species including; Privet sp., Gleditsia sp., & Elms were targeted in this area.

PRIMARY WEED CONTROL WORKS IN THE ANABRANCH ZONE 2A.

Assigned to After 1

PRIMARY WEED CONTROL WORKS IN THE ANABRANCH ZONE 2A.

Assigned to Before 2

A large amount of invasive woody weed species including; Privet sp., Gleditsia sp., & Elms were targeted in this area.

PRIMARY WEED CONTROL WORKS IN THE ANABRANCH ZONE 2A.

Assigned to After 2

ISSUE 3

Assigned to Rubbish Found On Site.

Rubbish found scattered through the site was stockpiled for collection in appropriate areas.

MADEIRA VINE

Assigned to A Large Amount Of Madeira Vine Was Discovered In This Area.

Madeira vine was located climbing up some remnant trees in this area. Madeira vine will be targeted in spring. The method used for this invasive vine sp. is scraping of the main stems to expose the cambium layer, then a dose of 'Vigilant gel' is applied to the open scar. The large clusters of viable tubers are circled in red and approximately 30cm in length.

ISSUE 5

Assigned to Excess Biomass As A Result Of Weed Control Works.

All excess biomass created during weed control in this area have been placed into burn piles in appropriate areas. All burn piles are within the recommended RFS Guidelines.

Kurt Bowman
Bowantz Landscaping & Environmental

SPRING FARM SAND AND SOIL EXTRACTION EXTENSION

Thursday, 21 May 2015

Prepared for Collins & Sons Pty Ltd

Identified 9 Issues

RIPARIAN BUFFER ZONE 1A

Assigned to Before 1

Woody weed infestation along the riparian corridor zone 1a. The major weeds in this area were Privet sp., Gleditsia sp., & Japanese honeysuckle.

RIPARIAN BUFFER ZONE 1A

Assigned to After 1

Woody weed infestation along the riparian corridor zone 1a. The major weeds in this area were Privet sp., Gleditsia sp., & Japanese honeysuckle. All woody weeds and invasive vines were treated in this area. Excess biomass created in cutting and painting woody weeds was chopped down into habitat piles above the mean flood level.

RIPARIAN BUFFER ZONE 1A

Assigned to Before 2

Woody weed infestation along the riparian corridor zone 1a. The major weeds in this area were Privet sp., Gleditsia sp., & Japanese honeysuckle.

RIPARIAN BUFFER ZONE 1A

Assigned to After 2

Woody weed infestation along the riparian corridor zone 1a. The major weeds in this area were Privet sp., Gleditsia sp., & Japanese honeysuckle. All woody weeds and invasive vines were treated in this area. Excess biomass created in cutting and painting woody weeds was chopped down into habitat piles above the mean flood level.

RIPARIAN BUFFER ZONE 1A

Assigned to Before 3

Woody weed infestation along the riparian corridor zone 1a. The major weeds in this area were Privet sp., Gleditsia sp., & Japanese honeysuckle.

RIPARIAN BUFFER ZONE 1A

Assigned to After 3

Woody weed infestation along the riparian corridor zone 1a. The major weeds in this area were Privet sp., Gleditsia sp., & Japanese honeysuckle. All woody weeds and invasive vines were treated in this area. Excess biomass created in cutting and painting woody weeds was chopped down into habitat piles above the mean flood level.

RIPARIAN BUFFER ZONE 1A

Assigned to Before 4

Woody weed infestation along the riparian corridor zone 1a. The major weeds in this area were Privet sp., Gleditsia sp., & Japanese honeysuckle.

RIPARIAN BUFFER ZONE 1A

Assigned to After 4

Woody weed infestation along the riparian corridor zone 1a. The major weeds in this area were Privet sp., Gleditsia sp., & Japanese honeysuckle. All woody weeds and invasive vines were treated in this area. Excess biomass created in cutting and painting woody weeds was chopped down into habitat piles above the mean flood level.

RIPARIAN BUFFER ZONE 1A

Assigned to Invasive Vines Along Waters Edge

Invasive vine species such as Japanese honeysuckle were scraped and painted with Glyphosate bi-active along the waters edge. This method eliminates the need to broads pray herbicide close to the Napean River.

Kurt Bowman
Bowantz Landscaping & Environmental

COLLINS & SONS

Spring Farm Sand And Soil Extraction Extension

Friday, 27 March 2015

Prepared for Collins & Sons

Identified 11 Issues

WEED INFESTATION PRIOR TO WORKS COMMENCING

Assigned to Zone 1a

A large amount of Privet so. is present in this zone. Japanese honeysuckle (Lonicera japonica) and Balloon vine (Cardiospermum grandiflora) are also very dense in this zone.

WEED INFESTATION AFTER PRIMARY WORKS

Assigned to Zone 1a

All woody weeds and invasive vine species were treated in this area.

UNDERSTORY WEED INFESTATION

Assigned to Zone 1a

A large amount of juvenile weeds will be controlled in this area to reduce the rapid growth after the mature weeds treated loose their leaves.

UNDERSTORY WEED INFESTATION TREATED

Assigned to Zone 1a

All juvenile weeds and invasive vines were treated in this area.

LARGE ELM TREES

Assigned to Zone 1a

Larger species of weeds in this area were frilled and injected with Glyphosate bi-active.

INITIAL PRIMARY TARGET AREA

Assigned to Zone 1a

A 15m section parallel to the Napean River has been targeted as a priority in Zone 1a. The left side of the photo has been treated and the right side is yet to be treated.

REMNANT VEGETATION AREAS

Assigned to Zone 1a

Areas directly adjacent to the works along the rivers edge that contain significant remnant vegetation were also worked around. This area pictured has several mature Banksia integrifolia and other small mid story natives such as Hymenanthera dentata.

HABITAT PILES

Assigned to Zone 1a

Excess biomass created in cutting and painting woody weeds was chopped down into habitat piles above the mean flood level.

LARGE MATURE WOODY WEEDS

Assigned to Zone 2a

Large Elm trees, Gleditsia triacantos and African box thorn (Lycium ferocissimum) were treated in this area

INVASIVE VINES

Assigned to Zone 2a

Blackberry and Balloon vine will be sprayed in spring in this area. Hand treatment will be done surrounding natives to minimise off target kills.

REMNANT VEGETATION

Assigned to Zone 2a

Works will be prioritised around large patches of remnant native vegetation in this area.

15.7. APPENDIX 7: COMPLAINTS

TITLE: COMPLAINTS REGISTER SPRING FARM QUARRY

SUMMARY OF COMPLAINTS RECIEVED

Date	Nature of Complaint	Location of other details
26/8/12 to 25/8/13	No Complaints Recieved.	
15/10/2013	Dust	EMP Complaint Sect.
29/10/2013	Dust	EMP Complaint Sect
6/6/2014	Noise	EMP Complaint Sect
13/12/2014	Water	EMP Complaint Sect
22/1/2015	Noise	EMP Complaints Sect

Note: Supporting documentation may be attached.

APPENDIX 2

COLLINS

Environmental Complaints Form

Applicable Site / Address	Spring Farm 244 Macarthur Rd Elderslie
Name of person making the complaint	Mike Tuppenden
Any personal details of the person making the complaint	Resident on other side of river
The date and time of the complaint	22.1.2015 2.10 pm
(Complaint method) How was the complaint made, in person, phone, in writing etc.	Phone
What is the nature of the complaint, noise, dust, smell or other	Noise
What response was given to the complainant	Sharon told Mike she will pass on message to Jason
What immediate action was taken, detail below dates	Sharon called Jason, Jason actioned rectification immediately
If no action was taken detail why no action was taken	NA
In what area was the incident noticed from	Area 5
When was the incident noticed	22-1-15 - 2.10pm
Date and time of an investigation, record initial findings, (map, photo, etc).	22-1-15 - 2.10 pm
Was an authority called? And which one?	NO

Additional comments and notes: Dump truck tailgate bangs & making too much noise

Mike told Sharon he will call back if the noise does not stop; as of the 29/1/15 Mike has not called

INTERNAL USE

Person filling out this form, Name: Sharon [illegible] Signature: S. [illegible]

Date: 22.1.15 What manager was it reported to: Jason Lewis

Company and Division: Quarry - Spring Farm

How was it reported: Phone

Date and time the division manager recieved it: 22.1.15 2.15 pm

Records to be keep for 4 years

15.8. APPENDIX 8: EPA POLLUTION STUDIES AND REDUCTION PROGRAMS

8 Pollution Studies and Reduction Programs

U1 PRP 3 - Air Monitoring Program

U1.1 M Collins and Sons Holdings Pty Ltd was granted a modification to Development Consent DA 76/250 in October 2012 to expand extraction activities into Lot 32 DP 635271

The licensee undertook 24 hour Total Suspended Particle (TSP) and Fine Particulate (PM10) monitoring at three locations at Spring Farm in the months of May to October 2012 as part of the DA process. The EPA requires the licensee to undertaking additional monitoring to supplement the May to Oct 2012 program.

The licensee shall monitor at location 'M11' and location 'M13' as labelled on the M Collins and Sons Holdings Pty Ltd Environmental Monitoring Locations Plan - Spring Farm Water and Dust Monitoring Stations 9 August 2013 during the months of August to October 2013 and December 2013 to February 2014. These periods corresponds with prevailing wind conditions and the summer period. The Licensee must monitor on at least 3 occasions separated by a minimum of 6 days during each month.

At the end of the monitoring period an Air Quality Monitoring Report must be submitted to the EPA. The report must contain:

1. A brief summary of all the results for TSP and PM10 conducted over the monitoring period;

2. Include the previous monitoring results (May to October 2012).
3. Graphical presentation of all results conducted over both periods;
4. Where levels exceed the short term impact assessment criteria, an assessment to determine the likely reason for the elevated reading must be undertaken and included in the report. For individual results this may include:
- Weather data (including an assessment of wind speed and direction for the 24 hours of the test);
- Operating conditions such as blasting that may have coincided with the 24 hour monitoring period; and
- Other relevant factors.

Monitoring must be undertaken in accordance with the NSW EPA "Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales".

Completion date: 30 March 2014

15.9. APPENDIX 9: COMPLIANCE STATUS OF EACH CONDITION OF APPROVAL

Condition	Relevant details	Compliance	Comments
Schedule 2: Administrative			
	Minimise Harm to the Environment		
S2.1	The Applicant shall implement all practicable measures to prevent and/or minimise any harm to the environment that may result from the establishment, operation, or rehabilitation of the development.	Compliant	
	Limits on Approval		
S2.5	Extraction and processing operations may take place until 30 June 2019.	Compliant	
	Operation of plant equipment		
S2.6	The Applicant shall ensure that all plant and equipment used at the site is: (a) Maintained in a proper and efficient condition; (b) Operated in a proper and efficient condition.	Compliant	Pre-Start, Preventative Maintenance, Maintenance and Service Management in place.
	Contributions		
S2.7	The Applicant shall pay an annual contribution of $6.500 (adjusted annually by reference to the Consumer Price Index) to Council for the maintenance of Macarthur Road, between the main site entrance and the intersection with Springs Road.	Compliant	$8,226.10 was paid to Camden Council on the 27 March 2015 (Appendix 4).
	Inspection of site		
S2.8	The Applicant shall permit access to the site to Council officers or any other public authority at reasonable times for the purposes of inspecting site operations and environmental monitoring.	Compliant	The site is freely accessible once the onsite induction training has been undertaken. Public Authority access and inspections permitted.

Condition	Relevant details	Compliance	Comments
Schedule 3: Environmental Performance			
	Operating Conditions		
S3.1	The Applicant shall not excavate outside the extraction areas or the limits of extraction	Compliant	
S3.2	The Applicant shall not open, excavate or work an area exceeding 2 hectares at any one time without the written consent of Council.	Compliant	Permission was granted by Camden Council (10/09/2010) to work an area up to 5 hectares. At no point within the DA 75/256 Mod 3 area was this exceeded.
S3.3	The Applicant shall not: (a) Stockpile extractive material on the site, with the exception of topsoil stockpiles and proposed noise and/or visual mitigation bunds; or (b) Process any extractive material on the site, with the exception of mobile screening.	 Compliant Compliant	Noted.
S3.4	The Applicant shall not import fill to the site for any purpose without written approval from Council.	Compliant	Permission was granted by Camden Council (10/09/2010) to import Excavated Natural Material for rehabilitation works.
	Noise		
S3.5	The Applicant shall ensure that site operations, including processing and transportation, are conducted in such a way as to minimise noise emissions from the site.	Compliant	Noise is limited to the furthest extent possible. One noise related complaint was received during the 2015 AEMR period on 22 January 2015 (Appendix 7) and the problem was immediately rectified.
S3.6	The Applicant shall ensure that noise generated by the development does not exceed the noise impact assessment criteria as specified in the EPL.	Compliant	Noise from the premises must not exceed an LA10 (15 minute) noise emission criterion of 55 dB (A).
	Operating hours		
S3.7	The Applicant shall only operate the development: (a) Between the hours of 7:00am and 5:00pm Monday to Friday; (b) Between 8:00am and 1:00 pm Saturday; and (c) At no time on Sundays or Public Holidays	 Compliant Compliant Compliant	
	Air quality		
S3.8	The Applicant shall ensure that dust generated by the development does not cause exceedances of the criteria listed in Tables 1, 2 and 3 at any	Compliant	Refer to Section 10: Air Quality and Section 13.3.1.

Condition	Relevant details	Compliance	Comments
	residence or on more than 25 percent of any privately owned land.		
S3.9	The Applicant shall ensure that any visible air pollution generated by the development is assessed regularly, and that quarrying operations are relocated, modified and/or stopped as required minimizing air quality impacts on privately-owned land.	Compliant	As per Air Quality Monitoring Program.
S3.10	The Applicant shall prepare and implement an Air Quality Monitoring Program for the development to the satisfaction of the Director-General. This program must: (a) Be submitted to the Director-General for approval within 3 months of the date of this approval; (b) Be prepared in consultation with the EPA; and (c) Include details of how the air quality performance of the development would be monitored, and include a protocol for evaluating compliance with the relevant air quality criteria in this approval.	 Compliant Compliant Compliant	Refer to Section 10: Air Quality and Section 13.3.1.
	Water		
S3.11	The Applicant shall not discharge any water from the quarry or its associated operations except in accordance with an EPL.	Compliant	
S3.12	The Applicant shall prepare and implement a Water Management Plan for the development to the satisfaction of the Director-General. This plan must: (a) Be submitted to the Director-General within 3 months of the date of this approval; (b) Be prepared in consultation with Council, the EPA and NOW; and (c) Include a: ➢ Site Water Balance; ➢ Erosion and Sediment Control Plan; ➢ Groundwater Monitoring Program; and ➢ Flood Emergency	 Compliant Compliant Compliant	Included in current Water Management and Erosion and Sediment Control Plan (v7) dated 24 April 2013. It is proposed to review all Site Management Plans in 2016.

Condition	Relevant details	Compliance	Comments
	Procedures Plan.		
S3.13	The Site Water Balance must: (a) Include details of: ➢ Sources and security of water supply; ➢ Water use on site; ➢ Water management on site, including the location and capacity of water storages on site and the means of access; ➢ Any off-site water transfers; and ➢ Reporting procedures; and (b) Investigate and describe measures to minimise water use by the development.	Compliant	Included in current Water Management and Erosion and Sediment Control Plan (v7) dated 24 April 2013. It is proposed to review all Site Management Plans in 2016.
S3.14	The Erosion and Sediment Control Plan must: (a) be consistent with the requirements of *Managing Urban Stormwater:* Soils *and Construction,* *Volume* 1, *4th Edition, 2004* (Landcom); (b) Identify activities that could cause soil erosion and generate sediment; (c) Describe measures to minimise soil erosion and the potential for the transport of sediment to downstream waters, including during flood *events;* (d) Describe the location, function, and capacity of erosion and sediment control structures; (e) Demonstrate that the design capacity of basins will not be compromised by storage of operational water; and (f) Describe what measures would be implemented to maintain (and if necessary decommission) the structures *over* time.	Compliant	Included in current Water Management and Erosion and Sediment Control Plan (v7) dated 24 April 2013. It is proposed to review all Site Management Plans in 2016.
S3.15	The Groundwater Monitoring Program must include: (a) Baseline data on groundwater levels, flows and quality in the	Compliant	Included in current Water Management and Erosion and Sediment Control Plan (v7) dated 24 April 2013. It is proposed to review all Site

Condition	Relevant details	Compliance	Comments
	vicinity; (b) Groundwater assessment criteria, including trigger levels for investigating any potentially *adverse* groundwater impacts; and (c) A program to monitor any observed groundwater inflows to the quarry pit.		Management Plans in 2016.
S3.16	The Flood Emergency Procedures Plan must: (a) Address both the site and the adjacent stockpiling and blending site; (b) Include procedures to be carried out in advance of a major flood event to minimise damage to plant equipment, operating staff and the environment; and (c) Include procedures to be followed after a major flood event to repair any damage and return the site to productive operations, including reinstatement of all pollution control devices and rehabilitation.	Compliant	Included in current Water Management and Erosion and Sediment Control Plan (v7) dated 24 April 2013. It is proposed to review all Site Management Plans in 2016.
	Landscape Management		
S3.17	The Applicant shall prepare and implement a detailed Landscape Management Plan for the development to the satisfaction of the Director-General. This Plan must: (a) Be prepared in consultation with Council and DPI (Agriculture NSW) and DRE by suitably qualified expert's whose appointments have been approved by the Director-General; (b) Be submitted to the Director-General for approval within 6 months of the date of this approval; and (c) Include a Rehabilitation Management Plan.	Compliant	Included in current Landscape Management Plan (v10) dated 24 April 2013. It is proposed to review all Site Management Plans in 2016.

Condition	Relevant details	Compliance	Comments
S3.16A	The Applicant shall ensure that, in order to limit potential scour and erosion during flood events, all topsoil stockpiles and earthen bunds which are to be in place for any period longer than 3 months are oriented parallel to potential flood flows and are promptly and effectively spray-seed hydro-mulched with an appropriate fast-growing native grass mix, to the satisfaction of the Director-General.	Compliant	Completed
	Rehabilitation Management Plan		
S3.18	The Applicant shall prepare and implement a Rehabilitation Plan for the development. This plan must include: (a) The rehabilitation objectives for the site; (b) A description of the short, medium, and long term measures that would be implemented to rehabilitate the site, including re-establishing high order agricultural land suitability and land use establishing healthy native vegetation and habitat for native fauna or other future land use acceptable to Council and proposed rehabilitation timeframes and timelines; (c) Performance and completion criteria for the rehabilitation of the site, including appropriate high order agricultural land suitability objectives with reference to the NSW Agricultural Land Suitability Classification system; (d) A detailed description of the measures that would be implemented including the procedures for: ➢ Progressively rehabilitating disturbed areas; ➢ Protecting areas outside the disturbance areas; ➢ Protecting the Nepean River and drainage lines on the site to ensure no net loss of water ➢ Quality and aquatic habitat; ➢ Managing impacts on fauna;	Compliant	Included in current Landscape Management Plan (v10) dated 24 April 2013. It is proposed to review all Site Management Plans in 2016. Monthly Works Summaries and Annual Progress Reports are prepared by the project rehabilitation team and stored in the site office. These work summaries include photographic monitoring. These summaries are to be available for regulators and environmental auditors.

Condition	Relevant details	Compliance	Comments
	➢ Landscaping the site to minimise visual impacts; ➢ Conserving and reusing topsoil; ➢ Achieving a free draining final landform; ➢ Ensuring compatibility of the final land form with surrounding land uses; ➢ Erosion and sediment control; ➢ Identifying any proposed types and methods of agriculture; ➢ Collecting and propagating seed for rehabilitation works; ➢ Salvaging and reusing material from the site for habitat enhancement; ➢ Controlling weeds and feral pests; ➢ Controlling access; and ➢ Bushfire management; (e) A program to monitor the effectiveness of these measures, and progress against the performance and completion criteria (see (c) above); (f) A description of the potential risks to successful rehabilitation and/or revegetation, and a description of the contingency measures that would be implemented to mitigate these risks; and (g) Details of who would be responsible for monitoring, reviewing, and implementing the plan.		
	Heritage		
S3.19	Should the Applicant discover material suspected of being Aboriginal relics or skeletal remains, work in that area shall cease and the Applicant shall advise the EPA and proceed in accordance with EPA instructions.	Compliant	Included in EMP for facility. It is proposed to review all Site Management Plans in 2016.
	Visual		
S3.20	The Applicant shall establish and	Compliant	Included in current Landscape

Condition	Relevant details	Compliance	Comments
	maintain perimeter plantings in order to minimise the visual impacts of the development, to the satisfaction of Council.		Management Plan (v10) dated 24 April 2013.
	Waste Management		
S3.21	The Applicant shall minimise the amount of waste generated by the development to the satisfaction of Council.	Compliant	Included in EMP for facility.
S3.22	The Applicant shall store and manage waste and by-products generated by the development to the satisfaction of Council.	Compliant	Included in EMP for facility.
S3.22A	The Applicant shall prepare and implement a Waste Management Plan for the project in consultation with Council and to the satisfaction of the Director-General. The plan must: (a) Be prepared by a suitably qualified person/s with expertise in asbestos risk management; (b) Be submitted to the Director-General for approval prior to commencing earthworks on Lot 32; and (c) Include a: ➢ Description of the measures and controls that would be implemented to manage asbestos within site; ➢ Validation protocol to be implemented to ensure that remaining soils and extractive materials products are asbestos free; ➢ Unexpected findings protocol in the event of encountering asbestos contaminated soils not previously identified in the EA (Mod 3); and ➢ Incident protocols in the event of exposure to asbestos.	Compliant	Completed and approved by Department of Planning and Environment 14 January 2015
	Emergency And Hazards Management		
S3.23	The Applicant shall ensure that the	Compliant	Completed

Condition	Relevant details	Compliance	Comments
	storage, handling, and transport of dangerous goods are conducted in accordance with the relevant Australian Standards, particularly AS1940 and AS1596, and the *Dangerous Goods Code.*		
S3.24	The Applicant shall secure the development to ensure public safety to the satisfaction of Council	Compliant	The development is fenced with no public access and deep excavations are bunded. Strict controls are in place to gain site access, including a thorough site induction process and requirements for appropriate personal safety equipment.
S3.25	The Applicant shall: (a) Ensure that the development is suitably equipped to respond to any fires on-site; and (b) Assist the Fire Service and emergency services as much as possible if there is a fire on site.	Compliant	As per Site SMP Emergency Response Planning.
	Production Data		
S3.26	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.	Compliant	Refer to Section 4 of this AEMR.

Condition	Relevant details	Compliance	Comments
Schedule 4: Additional Procedures			
	Notification to landowners		
S4.1	If the results of monitoring required in Schedule 3 identify that impacts generated by the development are greater than the relevant impact assessment criteria, then the Applicant shall notify the Director General and the affected landowners and tenants accordingly, and provide quarterly monitoring results to each of these parties until the results show that the development is complying with the relevant criteria.	Compliant	All Monitoring data is available on the Collins and Sons website – http://www.mcollins.com.au/environmental/environmental-monitoring/
	Independent review		
S4.2	If a landowner of privately owned land considers that the operations of the quarry are exceeding the impact assessment criteria in Schedule 3, then he/she may ask the Applicant in writing for an independent *review* of the impacts of the development on his/her land. If the Director-General is satisfied that an independent review is warranted, the Applicant shall within 3 months of the Director-General advising that an independent *review* is warranted: (a) Consult with the landowner to determine his/her concerns; (b) Commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Director-General, to conduct monitoring on the land, to determine whether the development is complying with the relevant criteria in Schedule 3, and identify the source(s) and scale of any impact on the land. and the development's contribution to this impact; and (c) Give the Director-General and landowner a copy of the independent *review.*	Compliance requirement not actioned	There has been no need to implement this condition to-date. An independent review is planned for early 2016.
S4.3	If the independent review determines that the quarrying operations are complying with the relevant criteria in Schedule 3, then the Applicant may discontinue	See above	

Condition	Relevant details	Compliance	Comments
	the independent review with the approval of the Director-General.		
S4.4	If the independent review determines that the quarrying operations are not complying with the relevant criteria in Schedule 3, and that the quarry is primarily responsible for this non-compliance, then the Applicant shall: (a) Implement all reasonable and feasible measures, in consultation with the landowner, to ensure that the development complies with the relevant criteria; and (b) Conduct further monitoring to determine whether these measures ensure compliance; or (c) Secure a written agreement with the landowner to allow exceedances of the relevant criteria in Schedule 3, to the satisfaction of the Director-General. If the additional monitoring referred to above subsequently determines that the quarrying operations are complying with the relevant criteria in Schedule 3, then the Applicant may discontinue the independent review with the approval of the Director-General. If the Applicant is unable to finalize an agreement with the landowner, then the Applicant or landowner may refer the matter to the Director-General for resolution. If the matter cannot be *resolved* within 21 days, the Director-General shall refer the matter to an Independent Dispute Resolution Process.	See above	
S4.5	If the landowner disputes the results of the independent review, either the Applicant or the landowner may refer the matter to the Director-General for resolution. If the matter cannot be resolved within 21 days, the Director-General shall refer the matter to an Independent Dispute Resolution Process (see Appendix 3).	See above	

Condition	Relevant details	Compliance	Comments
Schedule 5: Environmental Management Plan			
S5.1	The Applicant shall prepare and implement an updated Environmental Management Plan for the development to the satisfaction of the Director-General. This plan shall be submitted to the Director General for approval 3 months after the date of this consent and: (a) Provide the overall environmental management approach for 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; (d) Describe the procedures that would be implemented to: ➢ keep the local community and relevant agencies informed about the construction, ➢ operation and environmental performance of the development; ➢ receive, handle, respond to, and record complaints; ➢ resolve any disputes that may arise during the life of the development; ➢ respond to any non-compliance; ➢ manage cumulative impacts; ➢ respond to emergencies, including flood-related emergencies; and (e) Describe the role, responsibility, authority, and accountability of the key personnel involved in the environmental management of the development.	Compliant	The active Environmental Management Plan is entitled '*Environmental Management Plan for Spring Farm Sand and Soil Extraction and Processing Operation'* dated 1 November 2013 by Harvest Scientific Services Annual Environmental Management Reports are also prepared for the NSW Department of Planning and Environment and Camden Council.
	Environmental Monitoring Program		
S5.2	The Applicant shall prepare an Environmental Monitoring Program for the development to the	Compliant	Dust and Groundwater Monitoring Reports and Rehabilitation Progress Reports are prepared monthly by Harvest Scientific

Condition	Relevant details	Compliance	Comments
	satisfaction of the Director-General. This program shall be submitted to the Director-General concurrently with the submission of the various monitoring programs and consolidate the various monitoring requirements in Schedule 3 of this approval into a single document		Services and Bowantz Landscaping and Environmental Pty Ltd respectively. Annual Environmental Management Reports are also prepared for the NSW Department of Planning and Environment and Camden Council.
	Incident Reporting		
S5.3	Within 7 days of detecting an exceedance of the goals/limits/performance criteria in this approval or an incident causing (or threatening to cause) material harm to the environment, the Applicant shall report the exceedance/incident to the Department and any relevant agencies. This report shall: (a) Describe the date, time, and nature of the exceedance/incident; (b) Identify the cause (or likely cause) of the exceedance/incident; (c) Describe what action has been taken to date; and (d) Describe the proposed measures to address the exceedance/incident.	Compliance requirement not actioned	No major exceedances or incidents causing (or threatening to cause) material harm to the environment have been recorded. Minor exceedances in dust and groundwater compliance targets are recorded in monthly reports and presented in Annual Environmental Management Reports
	Annual Review		
S5.4	By the end of March each year, the Applicant shall review the environmental performance of the project to the satisfaction of the Director-General. This review must: (a) Describe the development (including rehabilitation) that was carried out in the previous calendar year, and the development that is proposed to be carried out over the current calendar year; (b) Include a comprehensive review of the monitoring results and complaints records of the project over the previous calendar year, which includes a comparison of these results against: ➢ The relevant statutory requirements, limits or performance measures/criteria; ➢ The monitoring results of previous years; and	Compliant	Annual Environmental Management Reports are prepared and submitted every March to the NSW Department of Planning and Environment and Camden Council.

Condition	Relevant details	Compliance	Comments
	➢ The relevant predictions in the EIS, SEE (Mod 2) and EA (Mod 3); (c) Identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance; (d) Identify any trends in the monitoring data over the life of the project; (e) Identify any discrepancies between the predicted and actual impacts of the project, and analyse the potential cause of any significant discrepancies; and (f) Describe what measures will be implemented over the current calendar year to improve the environmental performance of the project.		
	Independent Environmental Audit		
S5.5	Within 12 months of the date of the consent, 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. This audit shall: (a) Be conducted by a suitably qualified, experienced, and independent person(s) whose appointment has been approved by the Director-General; (b) Include consultation with the relevant agencies; (c) Assess the environmental performance of the development, and its effects on the surrounding environment; (d) Assess whether the development is complying with the relevant standards, performance measures and statutory requirements; and (e) Review the adequacy of any strategy/plan/program required under this approval, and, if necessary, recommends measures or actions to improve the environmental performance of the development. and/or any strategy/plan/program required under this approval.	Non-Compliant	Scheduled for completion in 2016. DPE to determine next IEA date at the request of Collins.

Condition	Relevant details	Compliance	Comments
S5.6	Within 6 weeks of completion of each Independent Environmental Audit, the Applicant shall submit a copy of the audit report to the Director-General, with a response to any of the recommendations in the audit report.	Non-compliant	To be submitted within 6 weeks of conducting IEA 2016.
S5.7	Within three months of: (a) The submission of an incident report under Condition 3 above; (b) The submission of an Annual Review under Condition 4 above; (c) The submission of an audit report under Condition 5 above, or (d) Any modification of the conditions of this approval (unless the conditions require otherwise), the Applicant shall review, and if necessary revise, the strategies, plans, and programs required under this approval to the satisfaction of the Director-General.	 Compliant Compliant Non-compliant Compliant	 To be submitted within 6 weeks of IEA 2016.
	Access to Information		
S5.8	Within 1 month of the approval of any plan/strategy/program required under this approval (or any subsequent revision of these plans/strategies/programs), or the completion of the audits or AEMR required under this approval, the Applicant shall: (a) Provide a copy of the relevant document's to the relevant agencies and to members of the general public upon request; and (b) Ensure that a copy of the relevant documents is made publicly available on its website.	Compliant	Annual Environmental Management Reports are prepared and submitted every March to the NSW Department of Planning and Environment and Camden Council.
S5.9	During the development, the Applicant shall: (a) Make a summary of monitoring results required under this approval publicly available on its website; and (b) Update these results on a regular basis (at least every 3 months).	Compliant	Noted. All Monitoring data is available on the Collins and Sons website – http://www.mcollins.com.au/environmental/environmental-monitoring/

15.10. COMPLIANCE AUDIT NSW PLANNING & ENVIRONMENT - SCHEDULE OF ITEMS

Collins Spring Farm Quarry
Compliance Audit NSW Planning & Environment - schedule of items as at 31/3/2016

ID number	Condition	Item Description	Description of completed works	Works Completed date	Description of works on agenda	Date for completion.
1.1	Schedule 3, Condition 8	Air Quality Monitoring program	(1,2,3,4) DDG dust deposit gauges (sampling equipment) relocated and compliant to AS/NZS3580.10.1:2003. Reporting and site map updated with locations in consultation with EPA and DPI.	30/11/2015	(5) Air Quality management plan to be reviewed and updated if necessary in consultation with regulatory authorities. Investigate consent modication to EPA licence or include TSP and PM10 testing. PM10 and TSP testing to be implemented asap.	31/3/2016 Closed
1.2	Schedule 3, Condition 13(a)	Site Water balance and Water and Erosion and Sediment Control Management Plan (2013)			Reviewed Water and Erosion and Sediment Control MP (2013) including water balance. Current Management Plan reviewed, consultation was conducted with DoP 2013. No changes required to MP.	31/3/2016 Closed
1.3	Schedule 5, Condition 5 (a-e)	Environmental Audit for period (2011-2015)	Quotes obtained for independent Environmental Audit at SFQ and Contractor awarded audit.	17/11/2015	Independent Environmental Audit to be conducted once approved by DoP, awaiting approval regarding endorsement of 2JM.	30/5/2016
1.4	Schedule 3, Condition 12(b)	Water Management and Erosion and Sediment Control Plan consultation.			Current Water and Erosion and Sediment Control MP (2013) consultation occurred November 2013 with DoP. Review current Water and Erosion and Sediment Control MP (2013) including water balance outline and if updates are required ensure consultation with regulatory authorities. Reviewed, no updates required.	31/3/2016 Closed
1.5	Schedule 3, Condition 12©	Water and Erosion and Sediment Control MP (2013) Groundwater Monitoring.			Current Water and Erosion and Sediment Control MP (2013) consultation occurred November 2013 with DoP. Review current Water and Erosion and Sediment Control MP (2013) including water balance outline and if updates are required ensure consultation with regulatory authorities. Reviewed, no updates required.	31/3/2016 Closed
1.6	Schedule 3, Condition 26(a)	Annual production data submitted to DPI	Completed	23/11/2015	DPI Return for Extractive Materials is completed and attached to the AEMR's.	23/11/2015 Completed

1.7	Schedule 5, Condition 1 (a,b,d,e)	Environmental Management Plan (2010)	Current Version of Environmental Management Plan (Nov 2013) under review, IBMS and Site EMP.		(1)Update EMP and submit to the Department. (2) reference statutory requirements to the development (3) Address procedural requirements of the condition, engage local community (4) Describe roles and responsibilities and accountability during EMP update and consult. Updates to also reflect any suggestions from audit outcome.	30/6/2016
1.8	Schedule 5, condition 2	Include Environmental Monitoring Program within EMP upgrades.	Under review		Include Environmental Monitoring Program in EMP via consultation. Reference AQMP in EMP. Seek approval of MP.	30/6/2016
1.9	Schedule 5, condition 4 (a - f)	AEMR's for 2013 and 2014.	AEMR's completed and approved. Attempted to email to tertius, bounced back file to large. Send USB drive with completed AEMR's for 2013 and 2014.	23/11/2015	Post thumb drive with AEMR's. 2015 AEMR being compiled with recommendations from DoP letter. 2014, 2015 sent and on website. 2016 AEMR being completed - send 31/3/2016. Upload on website by 30/4/2016.	31/3/2016 Closed
1.10	Schedule 5, Condition 6	2011 IEA recommendations			2011 IEA recommendations to be reviewed during scheduled audit of 2015 and forwarded within 6 weeks with items addressed.	30/6/2016
1.11	Schedule 5, Condition 8 (a and b)	Management Plans that were updated 24/4/2013 and sent to DoP November 2013 - Water and Erosion and Sediment Control Plan (dated 24/4/2013) and Landscape Management Plan. Waste Management Plan dated 14/1/2015) reviewed and approved in consultation with Camden Council (2/12/14) and DoP (14/1/15) as per approval letter.	EMP to be updated via consultation with regulatory authorities. LMP, WMP, EWSC Management Plan versions adequate via review completed 14/4/16.		Review all management plans internally. Update Environmental Management Plan in consultation and forward to relevant agencies with document numbers and revision dates within 1 month of final approval.	31/5/2016
2.4	Section 5.2.5	Data analysis reporting of groundwater monitoring results and trigger values - AEMRs for 2013 and 2014.	Trigger values added to monthly reports. AEMR's completed and approved. Attempted to email to tertius, bounced back file to large. Send USB drive with completed AEMR's for 2013 and 2014.	23/11/2015	Post thumb drive with AEMR's for 2013-2014. 2015 as per item 1.9	30/3/2016 Completed
2.1	Section 4.3	Total volume of water from groundwater sources.	Monthly reporting conducted, not requested at date of audit. See attached site records of water use to irrigation licence.	Jul-15		Completed
2.3	Section 4.7	Water use records	Monthly reporting conducted, not requested at date of audit. See attached site records of water use to irrigation licence.	Jul-15	Continue to have Water licence and conditions of site with records of river water usage available. Eye in the sky metres installed and monthly reporting recording of usage.	Completed
3.1	Section 5.1	Livestock grazing	Fence installed	30/8/2015		Completed

3.4	Section 5.5.1	Restricted Vegetation System signage	Site map used for site Induction and training (Proc 47 attached) updated to identify restricted vegetation area - no access.	30/11/2015		Completed
3.2	Section 5.2	Landscape Management Plan - rehabilitation of 5 hectares at a time as per Council approval.			Review Landscape Management Plan including progressive rehabilitation of additional areas (5Ha) as per Council approval. Review figures and maps within and update via consultation if necessary.	30/5/2016