



INDEPENDENT ENVIRONMENTAL AUDIT REPORT

Spring Farm Quarry

Lot 22 DP 833317 and Lot 32 DP 635271

Contractor: M Collins and Sons Holdings Pty Ltd

28 June 2016

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Client Contact Details

Nicole Pearce
Collins Group
17 Fitzpatrick St
Revesby NSW 2212

Issued by:

Peter Marshman
Lead Environmental Auditor
J2M Systems Pty Ltd
P.O. Box 163 Newport Beach NSW 2106

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Independent Environmental Audit – Spring Farm Quarry

1. Introduction:

J2M Systems Pty Ltd was engaged by M.Collins and Sons Holdings Pty Ltd (Collins) to undertake an independent environmental audit (IEA) at the Collins Spring Farm Quarry (SFQ) in accordance with Schedule 5, Condition 5 of NSW Department of Planning and Infrastructure, Development Consent Notice of Modification 3 (DA 75/256 Mod 3).

Development Consent DA 75/256 for SFQ was granted by the NSW Minister for Planning on 13 October 1988 including the latest modification (Mod 3) approved 25 October 2012. The approval (DA 75/256 Mod 3), which is the scope of this audit, includes conditions covering the extraction of sand from approximately 7 hectares of agricultural land located at Lot 32 DP635271 as well as existing extraction of sand from Lot 22 DP833317. The approval also includes conditions related to rehabilitation and/or revegetation of the extraction areas as well as the riparian corridors along the Nepean River and the dry Anabranch of the Nepean River, which form the western and eastern boundaries of the extraction areas respectively.

1.1. Scope of Work

In accordance with Schedule 5, Condition 5 of NSW Department of Planning and Infrastructure, Development Consent Notice of Modification 3 (DA 75/256 Mod 3) the objectives of this IEA were to:

- assess the environmental performance of the development and its effects on the surrounding environment;
- assess the environmental performance of the development, and its effects on the surrounding environment;
- assess whether the development is complying with the relevant standards, performance measures and statutory requirements; and
- review the adequacy of any strategy/plan/program required under this approval, and, if necessary, recommend measures or actions to improve the environmental performance of the development, and/or any strategy/plan/program required under this approval.

The audit period is defined as the period between the previous IEA (Feb 2011) to the end of the 2015 calendar year. Current activities, i.e. from end 2015 to date of the audit site inspection, are also included in the assessment of compliance.

The scope of the audit included the requirements of:

- NSW Department of Planning and Infrastructure, Development Consent (DA 75/256) Notice of Modification;
- Statement of Commitments (within above stated DA);
- NSW Environmental Protection Authority, Environmental Protection Licence (4093); and
- Water licensing requirements under the Water Management Act 2000/Water Act 1912.

Additional to the above, the audit site inspection also included areas of the operational quarry which are critical to the operation of the quarry, but do not relate directly to the DA 75/256 Mod 3 Development Consent as they are covered under Council (DA252/93). These areas include the access to the premises via the main entrance, the weighbridge, the wheel wash, site offices, workshops, resource processing and blending area and water supply pump from the Nepean River.

1.2. Audit Methodology

The processes for this IEA involved a review of documentation (plans/programs/statutory requirements), as well as a site inspection and audit interviews with Collins employees to determine the level of environmental performance and compliance with requirements.

Document review

The following documents were reviewed and considered during this audit:

- Environmental management Plan (November, 2013),
- Water Management and Erosion Sediment Control Plan (April, 2013),
- Landscape Management Plan (April 2014),
- Air Quality Monitoring Program (2013),
- Independent Environmental Audit Spring Farm Quarry (2011), and
- Collins Spring Farm Quarry, Compliance3 Audit as part of State Sand Quarries Campaign (May – August 2015).

Site inspection and Interviews

An opening meeting was held on Thursday 5 May 2016 to introduce the auditor to the SFQ management team and to outline the audit process and confirm audit arrangements. Immediately following this opening meeting, the auditor conducted a site inspection guided by the SFQ Manager (Jason Lewis) and Collins Compliance Officer (Nicole Pearce). The aim of this inspection was to assess the effectiveness of environmental management measures on site. The main focus of the audit site inspection were the areas identified and approved under DA 75/256 Mod 3, including:

- the current extraction area within Lot 22;
- rehabilitation areas within lot 22;
- the future extraction areas in Lot 32; and
- current monitoring locations for dust and groundwater.

In addition, whilst not within the scope of the audit, the following area and facilities were also inspected during the audit to further assess overall environmental performance:

- the wet processing area, sediment dams and haul roads;
- the water pump on the bank of the Nepean River; and
- the weighbridge, wheelwash, site offices and main site entrance.

The audit was conducted with the following personnel in attendance (Table 2).

Table 1: Audit attendance

Name	Title / Role	Opening Meeting Attendance	Closing Meeting Attendance
Peter Marshman	Lead Auditor	Yes	Yes
Nicole Pearce	Systems Manager	Yes	Yes
Jason Lewis	Quarry Manager	Yes	Yes
Billy Lewis	Assistant Quarry Manager	Yes	Yes

2. Site Description and Operation

2.1. Site Location

The Collins SFQ is located at Elderslie, approximately 65 kilometres (km) southwest of Sydney. Collins own and operate the SFQ located at Lot 22 (DP833317) and Lot 32 (DP635271) at Spring Farm, in the Camden Local Government Area (LGA). Figure 1 below is sourced from the Collins SFQ EMP and identifies the two Lots, as well as the general locality.

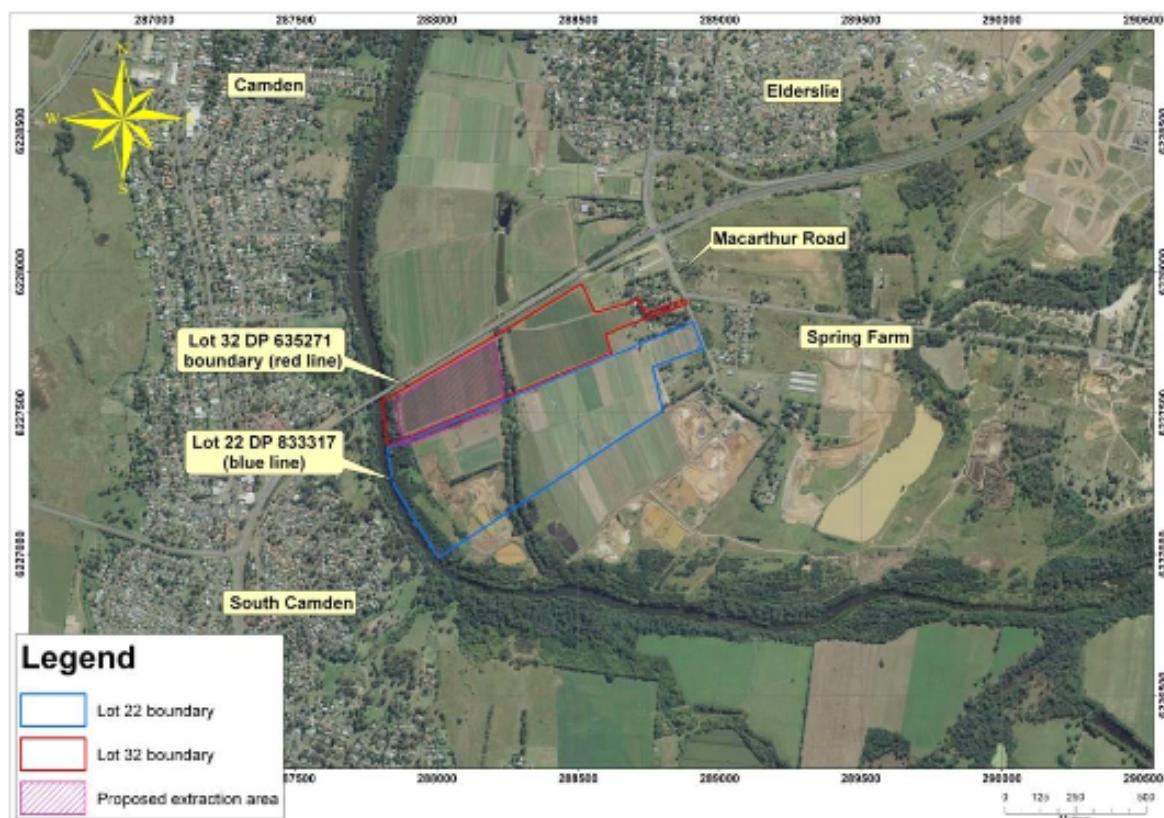


Figure 1: Site Location (Source: M.Collins Environmental Management Plan, 2013) showing Lot 22 (blue line) and Lot 32 (red line).

3. Consultation with relevant agencies

As part of the audit process, J2M Systems consulted with the following key government agencies to gain an understanding of their interests in the Spring Farm Quarry and its environmental performance. This section provides a summary of this consultation.

3.1. NSW Department of Planning and Environment (NSW DPE)

The NSW DPE was contacted and Megan Dawson, Planning Officer provided an email response (dated 26/04/2016), which indicated that 'as the approval agency, NSW DPE does not typically provide comments for the IEA'. Attention was drawn to the compliance audit conducted by NSW DPE in 2015, which was reviewed prior to and during this audit.

3.2. NSW Department of Primary Industries (NSW DPI)

NSW DPI were contacted via phone on 26 April 2016 and Mitchell Isaacs, Director Planning Policy and Assessment Advice provided an email response (dated 28/04/2016) which outlined the following questions to be considered during the audit. Whilst the auditor is not a specialist water management expert, a general assessment of compliance against the questions was completed during the audit and an audit response is provided.

- Do the relevant management plans adequately describe the water licensing requirements under the *Water Management Act 2000/Water Act 1912*, and compliance with these requirements?

Audit response: Yes, Collins Water Management and Erosion and Sediment Control Plan describes relevant water licensing requirements, water sharing plans and maximum harvestable right dam capacity details for the SFQ operations.

- Are adequate records kept to enable determination of the volume and source of surface and groundwater taken?

Audit response: No groundwater or surface water is currently taken from the extraction areas under the scope of this audit and there is no requirement for records.

- Is the operation capturing and/or harvesting any clean water?

Audit response: The SFQ Manager reported that no water is captured by the operations under the scope of this audit. Surface waters that collect within the current extraction areas are left to natural seep or evaporation into the environment. When required, i.e. after prolonged rainfall, clean surface water is pumped to onsite-rehabilitated areas in order to allow for extraction activities to continue. The site was dry at the time of inspection.

- Has the proponent calculated its maximum harvestable right under the Water Management Act 2000?

Audit response: Yes, section 4.2 of the Collins Water Management and Erosion and Sediment Control Plan outlines details for determining the maximum harvestable right. The proposed sedimentation terminal pond to which this relates was not established as at the time of this audit.

- Is the capture of water in excess of the harvestable right?

Audit response: At the time of this audit there was no process for the capture of waters in excess of the determined harvestable right.

- Do any exemptions under the Water Management (General) Regulation 2011 or Harvestable Rights Order (gazetted 31 March 2006) apply to the capture of water?

Audit response: Collins has determined (Section 4.2 of the Collins Water Management and Erosion and Sediment Control Plan) that the terminal sedimentation pond is less than the MHRDC

and as such a Water Access Licence (WAL) is not required for this structure. This feature is proposed to be retained post extraction as a sediment trap for the post-extraction agricultural production areas, however has not been constructed as at the time of this audit.

- If necessary, does the proponent hold water access licenses in the correct water sources under the relevant water sharing plan (for the take of surface water or alluvial groundwater), or licences under part 5 of the Water Act 1912 (for the take of groundwater from non-alluvial aquifers), and do they hold sufficient quantity of entitlement under these licenses?

Audit response: The SFQ Manager reported that no water is taken by the operations under the scope of this audit, therefore there is no requirement to hold water access licences.

3.3. NSW Environmental Protection Authority (NSW EPA)

NSW EPA was contacted via phone on 26 April 2016 and Chris Kelly, Regional Operations Officer provided an email response (dated 03/05/2016) which stated that 'in undertaking the audit J2M may wish to consider any Annual Environmental Management Reports (AEMRs) required to be prepared for Department of Industry and Investment (Resources and Energy)'.

Audit response: There is inconsistency with the preparation and submission of AEMRs and SFQ is considered non-compliant with the conditions of the development consent (Schedule 5, Conditions 4(a) – (f)). Whilst the most recent annual environmental management report was prepared and submitted for the calendar year 2015 (report dated 31 March 2016), the AEMRs for 2014 and 2013 were prepared and issued as one report (report dated 20 November 2015). The Development Consent requires AEMR to be issued to the Director-General by March each year.

Additionally, NSW DPE found that the 2013-2014 AEMR was non-compliant, as a number of requirements of the Development Consent were not addressed (letter dated 24/02/2016). Section 13.2 of the 2015 AEMR provides a response to the matters raised in the above stated letter. The auditor was not aware if this AEMR was approved (no response from NSW DPE provided), however the auditor considers that the 2015 AEMR does not adequately provide a breakdown of the size of disturbed areas, which was matter identified by the NSW DPE (refer to above stated letter).

3.4. Camden Council

Camden Council was contacted by phone and email on 26 April 2016. William Jones, Town Planner responded by email (dated 26/04/2016) and indicated that the request for consultation was 'passed onto the Team Leader for the East Team and someone will be in touch shortly'.

Audit response: No further correspondence was received or sought from Camden Council.

3.5. NSW Department of Industry, Resources and Energy (NSW DRE)

The auditor contacted NSW DRE by phone on 26 April 2016 however there was no answer after 30 minutes on hold and the auditor did not seek further correspondence with NSW DRE.

Audit response: No further correspondence was received or sought from NSW DRE.

4. Site Inspection

4.1. Site Inspection Observations

A site inspection was carried out as part of this audit and no environmental performance issues were observed. Table 3 below presents commentary of photos taken during the audit site.

Table 2: Site Photos and Observations

Photo No.	Photo	Description / Observation
01		Current wet processing area (area not within scope of this audit).
02		Dust monitoring #3 adjacent to main entrance and wet processing area.
03		Collins water cart in operation to minimise vehicle dust generation on haul road.

04		Clean and maintained oil storage area with the workshop areas (area not within scope of this audit).
05		Oil water bund underneath the water pump (located on the bank of the Nepean River). Bund was clean and no evidence of leaks observed (no visible soil contamination). Area was reportedly cleaned post DPE compliance audit. This area is not within scope of this audit.
06		New roofing installed over water pump (located on the bank of the Nepean River).
07		Revegetation landform in previous Lot 22 extraction area (Cells R3 – R7)

08		Sand processing within Lot 22 extraction areas.
09		Sand extraction activities within the current Lot 22 extraction area.
10		Sand extraction activities within the current Lot 22 extraction area.
11		Sand extraction activities within the current Lot 22 extraction area.

12		<p>Dust monitoring point adjacent to the sand extraction activities within the current Lot 22 extraction area. Landscape rehabilitation and maintenance also occurring on the bank of the Nepean River (to the back of this photograph).</p>
13		<p>Evidence of ongoing revegetation and land management within the anabranch of the Nepean River.</p>
14		<p>Wheel wash facilities in operation during the audit site inspection.</p>

5. ENVIRONMENTAL PERFORMANCE

This audit is considered to address the requirement of the scope of works to '*assess the environmental performance of the project*'. Section 9 of this report lists the conditions considered to be non-compliant, whilst Appendix A presents the status of environmental performance in respect of each condition of the Development Consent, Statement of Commitments and EPL.

The section of the report provides an overview of results reported in the recent 2015 AEMR (March 2016) as well as discusses complaints and incidents reported as further measures of environmental performance.

5.1. Summary of Environmental Management Measures

Environmental management of the SFQ is primarily focused on progressive rehabilitation of former extraction cells once final levels (RL66) and trimming is achieved, as well as on going landscape rehabilitation and maintenance of the Nepean River Bank and associated dry Anabranch.

An area of recent rehabilitation within the former extraction cells (south-western area of Lot 22 DP 833317) was inspected during the audit (Refer to Photo 07, Section 4.1 of this report) and was observed as well established with pasture grass.

SFQ has engaged Bowantz Landscaping and Environmental Pty Ltd to carry out landscape rehabilitation and maintenance work within areas covered under the Development Consent. Areas of current rehabilitation along the banks of the Nepean River and the associated dry Anabranch were inspected during the audit and observed to be well managed (refer to Photo 12 and 13, Section 4.1 of this report). Bowantz Landscaping and Environmental Pty Ltd provide monthly rehabilitation progress reports, which are included in the 2015 AEMR (March 2016).

5.2. Summary of Environmental Monitoring

SFQ has engaged Harvest Scientific Service Pty Ltd to undertake dust deposition ($\text{g}/\text{m}^2/\text{month}$) and groundwater (pH and electrical conductivity) monitoring in accordance with the monitoring plan detailed in the SFQ EMP. Monitoring records are maintained (sighted during audit) and are reported in the AEMS.

SFQ maintains three (3) dust monitoring stations (MS1, MS2 and MS3) for the quarry operations and it is noted that two of these (MS1 and MS2) are located within areas approved by the Development Consent (refer to figure 2 below) and as such are within the scope of this audit. Monitoring stations MS1 and MS3 consist of a dust deposition sampler, whilst monitoring station MS2 consists of a dust deposition sampler and groundwater monitoring bore. The following section provide a summary of monitoring results within the audit period.

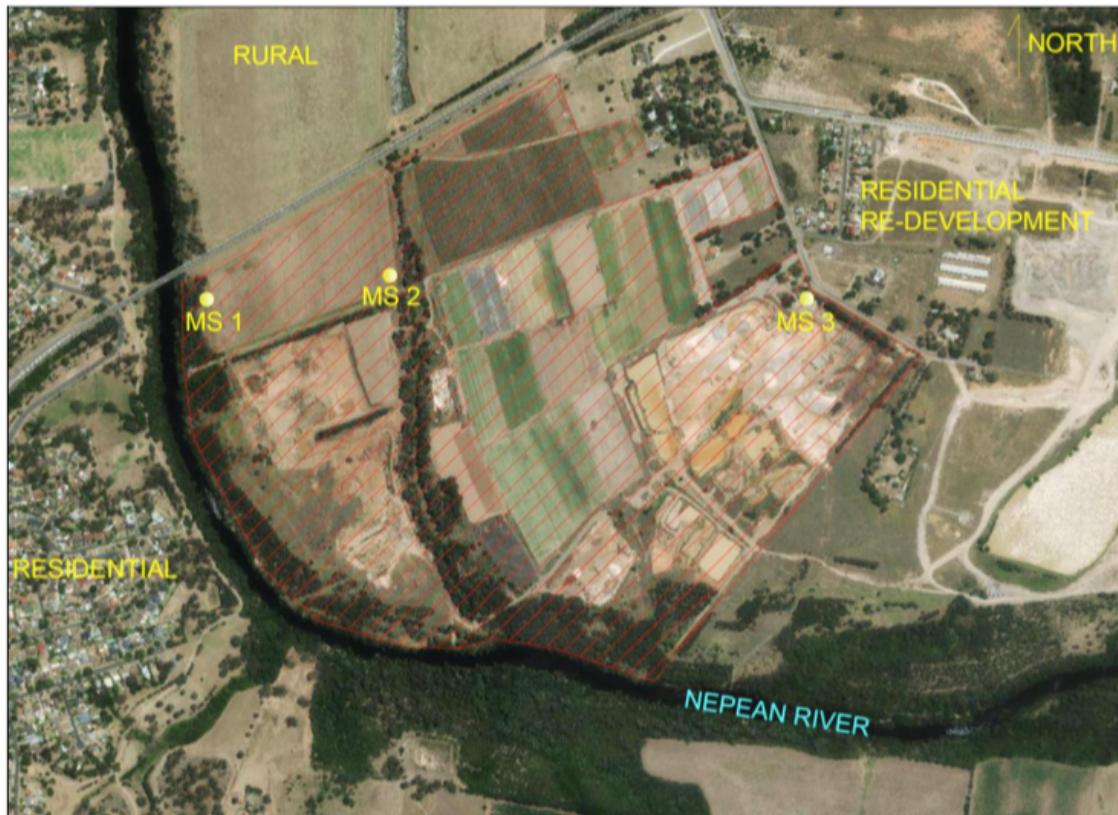


Figure 2: Monitoring locations on Spring Farm Quarry (Source: Collins 2015 AEMR, Harvest Scientific Services Pty Ltd).

Dust monitoring results:

Analysis presented in the 2013-2014 AEMR (November 2015) and the 2015 AEMR (March, 2016) indicates that all monitoring results for depositional dust samples recorded at MS1 and MS2 were below the EMP target of $4 \text{ g/m}^2/\text{month}$, with the exception of two (2) recorded exceedances at MS1 ($6 \text{ g/m}^2/\text{month}$ in April 2015 and $4.2 \text{ g/m}^2/\text{month}$ in August 2015).

The SFQ Manager reported that these exceedances were attributed to the expansion of the quarry extraction areas into Lot 32 and within 10 m of MS1. Subsequently, and with informal consultation with NSW EPA, MS1 was relocated to its current position approximately 10 m west of the quarry extraction area (moved closer to property boundary).

No further exceedances were reported.

Groundwater monitoring results:

Analysis presented in the 2013-2014 AEMR (November 2015) and the 2015 AEMR (March, 2016) indicates that all monitoring results for groundwater samples collected at MS2 were below the electrical conductivity target ($<800 \mu\text{S/cm}$) and the nominated pH range (4.00 – 5.50 pH, nominated within EMP, 2012), with the exception of four (4) recorded pH exceedances in July, August, November and December 2014 (5.54, 5.94, 5.74 and 5.84).

The 2013-2014 AEMR states “these marginal pH exceedances are not considered problematic and it is recommended the EMP upper pH limit be increased to 6.5 pH units”. Subsequently, SFQ has updated the SFQ EMP and nominated the pH limits as 4.00 – 6.50 pH, citing historical data and the Australian and New Zealand Guidelines for Fresh and Marine Water Quality, October 2000 (ANZECC Guidelines, 2000).

As a result of this update to the EMP, four (4) 'exceedances' against the original nominated values in January, March, August and September 2015 (5.68, 5.79, 5.58 and 5.75 respectively) were not highlighted in the 2015 AEMR.

The ANZECC Guidelines, 2000 report that '*generally these Guidelines should apply to the quality both of surface water and of groundwater since the environmental values which they protect relate to above-ground uses (e.g. irrigation, drinking water, farm animal or fish production and maintenance of aquatic ecosystems)*' ... '*An important exception is for the protection of underground aquatic ecosystems and their novel fauna. Little is known of the lifecycles and environmental requirements of these quite recently-discovered communities, and given their high conservation value, the groundwater upon which they depend should be given the highest level of protection*'.

The auditor is not a groundwater expert and thus will not comment on the change to the nominate pH value within the EMP, other than that it is a nominated value and not a regulatory condition.

The auditor recommends SFQ continue to present pH data as a trend line within the AEMRs, so that deviations are may be identified, reported and discussed.

5.3. Summary of Environmental Incidents

The SFQ Manager and Collins Compliance Officer reported that whilst no major exceedances or incidents were reported within the audit period, one incident occurred that triggered external notification (including EPA, Camden Council).

The incident involved a hydraulic oil leak from an excavator and was reported to DPI on 17/09/2013, using the DPI Mine Notification of Incident Form. SFQ reported that no actual or threat of material harm to the environment was reported, however damage to plant exceeded \$10,000 and thus notification requirements were triggered. An Internal incident report and investigation was completed and the report includes record of the EPA notification (No. C14592-2013) and indicates that Camden Council was notified verbally. SFQ has investigated the incident, implemented identified corrective actions and considers in incident closed.

5.4. Summary of Environmental Complaints

The Quarry Manager maintains a register of environmental complaints, which identifies five (5) complaints in the audit period. Of the complaints, two (2) related to dust management, two (2) related to noise management, and one (1) related to water management. The Quarry Manager reported no complaint has been received since 22/01/2015. Details of complaints received to date are summarised in the AEMRs. The Quarry Manager reported that all complaints were immediately resolved and records (environmental complaints forms) are maintained.

6. Compliance with Relevant Requirements

In accordance with Clause 5 (d) of the Consent, this section provides an assessment of the project's compliance with current standards, performance measures and statutory requirements in its Project Approval and EPL. A summary of approvals and licences is provided in Table 3.

Table 3: Summary of Approvals and Licences

Authority	Requirement Type	Date Granted / Last variation	Expiry / Review date
NSW Department of Planning and Infrastructure	Development Consent (DA 75/256) Notice of Modification	13 October 1988/ 25 October 2012	30 June 2019
NSW Environmental Protection Authority	Environmental Protection Licence (4093)	18 June 2014	18 April 2021
NSW Department of Primary Industries – Water	Controlled Activity Approval (10 ERM2013/0830)	8 October 2013	8 October 2018

It is noted that not all Approvals were considered in the audit. The audit assessed compliance with the following approvals:

- Development Consent (DA 75/256) Notice of Modification;
- Statement of Commitments; and
- Environmental Protection Licence (4093).

Section 9 of this report lists the conditions considered to be non-compliant, whilst Appendix A presents the status of environmental performance in respect of each condition of the Development Consent, Statement of Commitments and EPL.

7. Review of Adequacy of Project Management Plans

7.1. Environmental Management Plan

An Environmental management plan was prepared in February 2010 and subsequently revised in November 2010 following submission to NSW DP&E (formerly Department of Planning) in accordance with the requirements of the DA 75/256 Mod 3. No further correspondence is available to support the EMP being re-submitted and/or approved by NSW DP&E. The EMP was revised November 2013 for a series of changes as identified within the revisions register of the EMP.

The EMP incorporates the following elements:

- Project overview;
- Environmental policy;
- Waste management policy;
- Environmental risk and planning;
- Development program and approvals;
- Structure and responsibilities;
- Implementation and operation;
- Measurement, evaluation (targets) and review;
- Emergency preparedness and response; and
- Complaints.

On the basis that the EMP document and describe the SFQ's land management arrangements, it is considered to be generally adequate.

Recommendations

The auditor identified the following recommendations for improvement in the EMP:

1. The current EMP be submitted to NSW DP&E.
2. Section 8.3 Training, awareness and competence does not identify the training and competency requirements in relation to environmental monitoring (i.e. for dust monitoring as required by the EPL and DA 75/256 Mod 3).
3. Section 9.1 (Overview) provides a narrative on SFQ's commitment to achieving environmental management objectives, however the EMP does not further define what these objectives are, the timeframe from achieving them, the resources required or the personnel responsible for the management of them. Additionally, whilst Section 10.1 (Environmental Targets) of the EMP outlines environmental targets for the facility, these targets are all lag indicators. It is recommended that environmental objectives be defined in the EMP, and that these objectives and targets also consider and set lead (positive) indicators to ensure continual improvement.
4. Section 11 (Emergency Preparedness and Response) does not include provisions or planning for the conduct of drills on emergency scenarios.

7.2. Water Management and Erosion and Sediment Control Plan

A Water Management (Incl. Groundwater Assessment) and Erosion and Sediment Control Plan (WQ and SECP) was established in July, 2011 and submitted to and approved by NSW Office of Water (NOW) as part of the Controlled Activity Approval (October 2013).

No further correspondence is available to support the WQ and ESCP being re-submitted and/or approved by NSW DP&E in accordance with the DA 75/256 Mod 3. The WQ and ESCP was most recently revised in April 2013.

The Water Management (Incl. Groundwater Assessment) and Erosion and Sediment Control Plan (WQ and SECP) incorporates the following elements:

- Relevant legislation;
- Site characteristics and constraints;
- Site water balance;
- Groundwater assessment and management;
- Erosion and sediment control plan; and
- Flood emergency procedures plan.

It is noted that a water quality and sediment erosion expert was not included with the audit team and as such a full assessment of the adequacy of this plan has not been completed. On the basis that the WQ and SECP document and describe the SFQ's land management arrangements, it is considered to be generally adequate.

Recommendations

The following recommendations have been identified in regard to this plan:

1. The groundwater-monitoring plan does not provide adequate detail on what measures/investigations/actions will be taken in response to an identified exceedance(s) of groundwater salinity levels. It is recommended that the plan be updated to define actions to be implemented and the roles and responsibilities for completing them.

7.3. Landscape Management Plan

A Landscape Management Plan (LMP), including Quarry Closure, Rehabilitation and Post Extractive Land-use was established July, 2011 and revised November 2011 following NSW DPI comments (email dated 06/10/2011). No further correspondence is available to support the LMP being re-submitted and/or approved by NSW DP&E in accordance with the DA 75/256 Mod 3. The LMP was most recently revised in April 2013.

The LMP incorporates the following elements:

- Site opportunities and constraints;
- Site description;
- Restoration program; and
- Post extraction land-use and agricultural classification.

It is noted that a landscape management and rehabilitation expert was not included with the audit team and as such a full assessment of the adequacy of this plan has not been completed. On the basis that the LMP document and describe the SFQ's land management arrangements, it is considered to be generally adequate.

Recommendations

The auditor did not identify any recommendations for improvement to the Landscape Management Plan during this review.

8. Summary of Non Compliances and Recommendations

Overall, the audit generally found a **satisfactory level of compliance**. However the following three (3) non-compliances and six (6) improvement opportunities were identified against the requirements (listed in order as identified in checklist – Appendix A).

Table 4: Summary of Audit Non-compliances and Recommendations

Consolidated Consent – DA 75/256 – Notice of Modification (NoM)																												
Title	Condition No.	Condition	Evidence / Comment	Compliance Status	Recommendations																							
DA 75/256 NoM	S3.8	<p>AIR QUALITY</p> <p>Impact Assessment Criteria</p> <p>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 residence or on more than 25 percent of any privately owned land.</p> <p><i>Table 1: Long Term Impact Assessment Criteria for Particulate Matter</i></p> <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Averaging period</th> <th>Criterion</th> </tr> </thead> <tbody> <tr> <td>Total suspended particulate (TSP) matter</td> <td>Annual</td> <td>90 µg/m³</td> </tr> <tr> <td>Particulate matter < 10 µm (PM₁₀)</td> <td>Annual</td> <td>30 µg/m³</td> </tr> </tbody> </table> <p><i>Table 2: Short Term Impact Assessment Criteria for Particulate Matter</i></p> <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Averaging period</th> <th>Criterion</th> </tr> </thead> <tbody> <tr> <td>Particulate matter < 10 µm (PM₁₀)</td> <td>24 hour</td> <td>50 µg/m³</td> </tr> </tbody> </table> <p><i>Table 3: Long Term Impact Assessment Criteria for Deposited Dust</i></p> <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Averaging period</th> <th>Maximum increase in deposited dust level</th> <th>Maximum total deposited dust level</th> </tr> </thead> <tbody> <tr> <td>Deposited dust</td> <td>Annual</td> <td>2 g/m²/month</td> <td>4 g/m²/month</td> </tr> </tbody> </table> <p><i>Note: Deposited dust is assessed as insoluble solids as defined by Standards Australia, 1991, AS 3580.10.1- 1991: Methods for Sampling and Analysis of Ambient Air - Determination of Particulates - Deposited Matter - Gravimetric Method.</i></p>	Pollutant	Averaging period	Criterion	Total suspended particulate (TSP) matter	Annual	90 µg/m³	Particulate matter < 10 µm (PM ₁₀)	Annual	30 µg/m³	Pollutant	Averaging period	Criterion	Particulate matter < 10 µm (PM ₁₀)	24 hour	50 µg/m³	Pollutant	Averaging period	Maximum increase in deposited dust level	Maximum total deposited dust level	Deposited dust	Annual	2 g/m²/month	4 g/m²/month	<p>Whilst not specifically required by this clause, SFQ have recently (March 2016) recommenced TSP and PM10 monitoring on site, however the EMP has not been updated to reflect this.</p> <p>Generally SFQ is considered to comply with this requirement based on the implementation of the EMP (which identifies depositional dust monitoring only), however it is noted that the Director-General has not approved the EMP.</p> <p>TSP and PM10 testing has recently been conducted. Sighted test report (Work Order No. EN1601354, dated 15/04/2016), with the following results:</p> <p>TSP = 70.8ug/m³</p> <p>PM10 = 32.1ug/m³</p> <p>Sighted Licence Variation No. 4093, which includes background and details into the air monitoring pollution reduction program such as results and removal of the requirement for further monitoring.</p> <p>Dust complaints:</p> <p>15/10/2013 Dust complaint regarding the processing area. Collins report provided to the EPA identified that the source of dust was not</p>	OFI	<p>It is recommended the SFQ qualify the requirements to conduct TSP and PM10 monitoring as there appears to be inconsistencies between the expectations of the NSW DP&E auditor (refer to findings of NSW DP&E Compliance Audit on Collins Spring Farm Quarry as part of State Sands Quarries Campaign (May – August 2015), NSW EPA and SFQ management.</p>
Pollutant	Averaging period	Criterion																										
Total suspended particulate (TSP) matter	Annual	90 µg/m³																										
Particulate matter < 10 µm (PM ₁₀)	Annual	30 µg/m³																										
Pollutant	Averaging period	Criterion																										
Particulate matter < 10 µm (PM ₁₀)	24 hour	50 µg/m³																										
Pollutant	Averaging period	Maximum increase in deposited dust level	Maximum total deposited dust level																									
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Consolidated Consent – DA 75/256 – Notice of Modification (NoM)					
Title	Condition No.	Condition	Evidence / Comment	Compliance Status	Recommendations
			<p>their site. No further correspondence was received on this matter.</p> <p>29/10/2013: Dust complaint from neighbour on 24/10/2013 regarding dust from processing area. Collins noted in their compliant report that operations were stopped during that day due to high winds. The complaint report also notes that water cart and sprinklers were in operation that day. No further correspondence was received on this matter.</p>		
DA 75/256 NoM	S3.15	<p>The Groundwater Monitoring Program must include:</p> <ul style="list-style-type: none"> (a) baseline data on groundwater levels, flows and quality in the 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. 	<p>SFQ maintains monthly ground water monitoring records. Sighted records for January, February and March 2016, and monthly records for 2011-2015</p> <p>Triggers are $>800\mu\text{S}/\text{cm}$ and Depth <5.83 and/or >15.93</p> <p>Records indicate that monthly groundwater results for $\mu\text{S}/\text{cm}$ exceeded the trigger value during months Dec, 2010, Sept, Oct, Nov and Dec 2011.</p> <p>*** There is no evidence of further investigation of any potentially adverse groundwater impacts. OFI to update the WM & ESCP to include details of 'tests' to be completed if triggers exceeded.</p>	OFI	<p>There is no evidence of further investigation(s) being carried out in response to the historical trigger value exceedances.</p> <p>It is recommended that SFQ update the WM & ESCP to include details of what will be investigated and, if applicable, how it will be conducted.</p>
DA 75/256 NoM	S5.5	<p>INDEPENDENT ENVIRONMENTAL AUDIT</p> <p>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</p>	<p>In April 2016, J2M Systems was contacted and subsequently engaged by Collins to conduct this Independent Environmental Audit. As such the requirements of this condition have not been met. The last independent environmental audit was completed in February 2011.</p>	Non-compliant	<p>Recommend that Collins clarifies with NSW DP&E to confirm when the next audit will fall due and then make plans to engage a suitably qualified auditor.</p>

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		<p>shall:</p> <ul style="list-style-type: none"> (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 <p>review the adequacy of any strategy/plan/program required under this approval, and, if necessary, recommend measures or actions to improve the environmental performance of the development, and/or any strategy/plan/program required under this approval.</p>		Orange	
DA 75/256 NoM	S5.7	<p>Revision of Strategies, Plans & Programs</p> <p>Within three months of:</p> <ul style="list-style-type: none"> (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), 	<p>SFQ Manager reported that plans are continually reviewed for improvements, however this process is not recorded. The revisions registers within the plans only capture details of when a change to the documentation is made as a result of a review.</p> <p>There is evidence that management plans are updated following identification of improvements.</p>	Non-compliant	<p>In accordance with this clause, SFQ is required to review, revise if necessary, the strategies, plans, and programs required under this approval to the satisfaction of the Director-General.</p> <p>It is recommended that SFQ submit the current suite of strategies, plans, and programs to NSW</p>

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		<p>the Applicant shall review, and if necessary revise, the strategies, plans, and programs required under this approval to the satisfaction of the Director-General.</p> <p><i>Note: This is to ensure the strategies, plans and programs are updated on a regular basis, and incorporate any recommended measures to improve the environmental performance of the project.</i></p>		DP&E.	
DA 75/256 NoM	S5.8	<p>ACCESS TO INFORMATION</p> <p>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:</p> <p>(a) provide a copy of the relevant document/s to the relevant agencies and to members of the general public upon request; and</p> <p>ensure that a copy of the relevant document/s is made publicly available on its website</p>	<p>Not yet available online.</p> <p>This is an open non-conformance from the NSW DP&E Compliance audit (July 2015).</p>	Non-compliant	<p>SFQ to provide relevant agencies with the current suite of management plans.</p> <p>SFQ to make documents publicly available on the website, as required by this condition.</p>
SoC	-	<p>TRAFFIC AND TRANSPORTATION</p> <p>Limit the impact of development-related traffic</p> <p>1. Laden truck movements from the Spring Farm Quarry to public roads will not exceed 36 per day (when averaged over any working week) or 80 on any working day.</p> <p>The total annual dispatches of extractive material products from the Spring Farm Quarry will not</p>	<p>Annual environmental audit period:</p> <ul style="list-style-type: none"> - 01/07/2011 – 30/06/2012: 15.6 trucks per day and 77 maximum loads on any given day. - 01/01/2012 – 30/12/2012: 11.6 trucks per day and 61 maximum loads on any given day (dates in AMER state 01/07/2011 – 30/06/2012). - 01/01/2013 – 31/12/2013: 34 trucks per 	Unable to determine - OFI	<p>It is recommended that SFQ determine a method to identify split loading of truck and trailer combinations (i.e. a truck and trailer combination with split loading (two different materials)), in order to accurately report compliance against this</p>

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		exceed 300,000 tonnes per annum.	<p>day and 121 maximum loads on any given day.</p> <p>*** In total there was 12 exceedances of the 80 maximum loads on any given day, with all 12 of these occurring in the month of December 2013.</p> <ul style="list-style-type: none"> - 21/10/2013 90 load - 28/10/2013 – 92 loads - 02/12 – 86 loads - 04/12 - 86 loads - 12/12 - 86 loads - 13/12 91 loads - 14/12 85 loads - 16/12 95 loads - 17/12 – 108 loads - 19/12 – 114 loads - 20/12 - 121 loads <p>- 01/01/2014 – 31/12/2014 37 trucks per day and 95 maximum loads on any given day.</p> <p>*** Exceedance of the average trucks per day</p> <p>*** Exceedance of number of trucks on any given day (10 in total).</p> <ul style="list-style-type: none"> - 13/01 – 95 loads - 13/02 – 85 loads - 14/02 – 83 loads - 26/02 – 92 loads - 27/02 – 89 loads - 04/03- 90 loads - 13/10 – 90 loads - 27/10 – 82 loads 	condition.	

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			<ul style="list-style-type: none"> - 28/10 – 95 loads - 20/11 – 90 loads <p>01/01/2015 – 31/12/2015</p> <ul style="list-style-type: none"> - 33 trucks per day and 118 maximum loads on any given day. <p>*** 6 exceedances of max loads</p> <ul style="list-style-type: none"> - 09/11 – 91 loads - 10/11 – 118 loads - 11/11 – 95 loads - 26/11 – 96 loads - 30/11 – 96 loads - 01/12 – 84 load <p>2015 tonnes generated 285, 974</p> <ul style="list-style-type: none"> • Note: the numbers reflected above refer to the laden loads removed from site and these don't take into account split loading of truck and trailer combinations (i.e. a truck and trailer combination with split loading (two different materials) is recorded in the above figures as two separate truck movement, however it is actually only one laden truck movement from the Quarry). 		
SoC	-	SALINITY AND GROUNDWATER Implement appropriate management measures 19. Salinity Management Plan and Groundwater Management Protocols prepared by Harvest	Sighted Water Management Plan and ground water monitoring data – monthly. Refer to findings under DA 75/256 NoM S3.15.	OFI	It is recommended that SFQ update the WM & ESCP to include details of what will be investigated and, if applicable, how it

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		<p>Scientific Services will be complied with.</p> <p>20. The current Water Management Plan, including the Groundwater Monitoring Program, will be updated to include the impact mitigation measures proposed in EA (Mod 3).</p>			<p>will be conducted.</p> <p>Refer to findings under DA 75/256 NoM S3.15.</p>
SoC	-	<p>DUST MONITORING</p> <p>Undertake dust monitoring</p>	Refer to finding under DA 75/256 NoM S3.8	OFI	<p>It is recommended the SFQ qualify the requirements to conduct TSP and PM10 monitoring as there appears to be inconsistencies between the expectations of the NSW DP&E auditor (refer to findings of NSW DP&E Compliance Audit on Collins Spring Farm Quarry as part of State Sands Quarries Campaign (May – August 2015), NSW EPA and SFQ management.</p> <p>Finding raised under DA 75/256 NoM S3.8.</p>
DA 75/256 NoM	S5.5 (e)	<p>INDEPENDENT ENVIRONMENTAL AUDIT</p> <p>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:</p> <p>(a) be conducted by a suitably qualified, experienced, and independent person(s)</p>	<p>The auditor identified the following recommendations for improvement in the EMP:</p> <ul style="list-style-type: none"> • The current EMP be submitted to NSW DP&E. • Section 8.3 Training, awareness and competence does not identify the training and competency requirements in relation to environmental monitoring (i.e. for dust monitoring as required by 	OFI	

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		<p>whose appointment has been approved by the Director-General;</p> <p>(b) include consultation with the relevant agencies;</p> <p>(c) assess the environmental performance of the development, and its effects on the surrounding environment;</p> <p>(d) assess whether the development is complying with the relevant standards, performance measures and statutory requirements; and</p> <p>(e) review the adequacy of any strategy/plan/program required under this approval, and, if necessary, recommend measures or actions to improve the environmental performance of the development, and/or any strategy/plan/program required under this approval.</p>	<ul style="list-style-type: none"> • the EPL and DA 75/256 Mod 3). • Section 9.1 (Overview) provides a narrative on SFQ's commitment to achieving environmental management objectives, however the EMP does not further define what these objectives are, the timeframe from achieving them, the resources required or the personnel responsible for the management of them. Additionally, whilst Section 10.1 (Environmental Targets) of the EMP outlines environmental targets for the facility, these targets are all lag indicators. It is recommended that environmental objectives be defined in the EMP, and that these objectives and targets also consider and set lead (positive) indicators to ensure continual improvement. • Section 11 (Emergency Preparedness and Response) does not include provisions or planning for the conduct of drills on emergency scenarios. <p>The auditor identified the following recommendations for improvement in the Water Management Plan:</p> <ul style="list-style-type: none"> • The groundwater-monitoring plan does not provide adequate detail on what measures/investigations/actions will be taken in response to an identified exceedance(s) of groundwater salinity levels. It is recommended that the plan 		

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			be updated to define actions to be implemented and the roles and responsibilities for completing them.		

Disclaimer:

- This report does not and should not be seen as advice. Please consult a qualified advisor or consultant for advice.
- The findings of the compliance audit are based upon visual observations of the site and its vicinity, interviews with site personnel and interpretation of documentation provided by SFQ.
- Due to the sampling nature of this audit, the time available and samples size, some issues, non-compliances or improvements might not have been identified in the present report. This does not imply that these issues do not exist, or are in compliance. Employees, management and other stakeholders of the organization need to be and are responsible for, continuously identifying and taking necessary action to ensure continued compliance with the project requirements, and legislation.
- Opinions presented herein apply to the site as it existed at the time of the audit and are derived from information provided by SFQ's representatives and government agencies. Any changes to this information or any additional information which has not been brought to the attention of the auditors at the time of the audit is not considered in this report.
- Readers of this report should make judgment taking the above into account.