



# **Quarterly Compliance Report**

## **1<sup>st</sup> January to 30<sup>th</sup> March 2018**

Prepared by:

Penrice Quarry & Mineral

256 Penrice Road, Penrice SA 5353

Telephone: 08 8563 8800    Facsimile: 08 8564 3358    Email: [mclose@southernquarries.com.au](mailto:mclose@southernquarries.com.au)

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## ***Contents***

1. Introduction
2. Operational Overview
3. Environmental Management
  - 3.1 Dust Management
  - 3.2 Drag Out
  - 3.3 Blast Monitoring
  - 3.4 Noise
  - 3.5 Storm water and Erosion
  - 3.6 Revegetation and Habitat
  - 3.7 Rehabilitation and Visual Amenity
  - 3.8 Light Spill
  - 3.9 Groundwater
  - 3.10 Public Safety
  - 3.11 Traffic
4. Quarry Planning

Appendix A – Site Locations

Appendix B – BAM Monitors 24hr Average PM<sub>10</sub> Concentration

## **1. *Introduction***

Penrice Quarry & Mineral (PQM) operates a limestone quarry at Angaston under a range of different mining leases as follows:

- PM 86
- PM120
- MPL 118
- MPL 75 and
- ML 6233
- RL 109

PQM is located approximately 2.5 kilometres north of the township of Angaston.

DMITRE approved the Program for Environment Protection and Rehabilitation and Mine Operations Plan (MOP/PEPR) on the 28<sup>th</sup> October 2011 (2011/021).

This quarterly compliance report covers the more significant environmental and operational issues undertaken at the site during the period from the 1<sup>st</sup> January 2018 – 30<sup>th</sup> March 2018 inclusive. This report aims to demonstrate that site activities are compliant with the approved objectives and corresponding measurement criteria contained in the MOP/PEPR.

## **2. *Operational Overview***

Operations at the site continued as per normal. Agreements have been put in place to supply significant quantities of material to the Northern Connector Project (NCP) during 2018 – 2019. Provided deliveries continue, significant amounts of material can be expected to be moved off the Eastern mound. During the quarter quarry output increased by approximately 200,000 tonnes, reflecting the increased deliveries to the NCP project.

Progress on the front entrance of the quarry and the re-aligning of Penrice road is ongoing. In March an application for the work to change the front entrance to the quarry was submitted to the Barossa Council, along with the final plans prepared by

design contractors. The prime purpose of the project is to improve safety at this intersection and the work is expected to commence in the second quarter 2018.

Environmentally, “Farmer Johns” is continuing with the weed and pest control program and environmental tasks relating to Outcome 10 in the approved PEPR/MOP. This included no introduction of new weed and pests, or increase in abundance or escape of existing weeds and pest species in the mine area. Weeds (tobacco bush) were observed on the 21<sup>st</sup> February during a Regulatory inspection. Since the inspection, the tobacco bush has largely been eradicated. No fox baiting was undertaken during the quarter, however the situation is being monitored.

Farmer John previously completed the native vegetation surveys and photographic monitoring related to Outcome 6 in the approved MOP/PEPR. Summaries of the survey and photographic monitoring were included in the annual report. Photographic evidence was also gathered to support the integration and harmonisation of the revegetation as per Outcome 7 in the Strategic Visual Amenity Program (SVAP), which is essentially 3 years behind the original approved plan.

There are several reasons for this, firstly the previous owner went into administration and less work was carried out during that period and since taking over the site, production rates have been lower than those used for the original milestones. The milestones and stages outlined in Measurement Criteria 7.2 are being reviewed along with the review of the MOP and new mine plan.

A conceptual visual montage looking back from Nuriootpa towards the quarry, and showing final rehabilitation digital images and the likely height of the western mound was displayed and well received by the PCCG members. The montage helps to explain the proposed visual amenity and milestones which could be expected in the future.

During the reporting period the company received three complaints. The first complaint was received on the 4<sup>th</sup> January; resident rang the quarry regarding dust being emitted from the North-West of the Quarry. Crushing operations in the area were ceased immediately upon notification. Follow up meeting with the residence the

next day to discuss and actions to install an additional water tank to increase dust suppression on the mobile crushing plant. The second complaint received was on the 9<sup>th</sup> January; resident rang the quarry to provide feedback and inform he could see dust emanating from the aggregate plant area. Follow up meeting with the residence was completed to inform of activities at the time and discuss dust suppression activities at the site. Both of these complainants were happy with the follow up and outcomes from their complaints.

The 3<sup>rd</sup> complaint was received through the Angaston Cement Plant to inform of a speeding road truck on an incorrect freight route. Photos were taken of the truck. In this case, the complainant was directed to contact the Police in this matter. A reminder was given to all trucks leaving the quarry regarding speed limits and correct freight routes.

Approval was granted renewal of Retention lease 109 for a further 5 years. A forward work plan was detailed and provided to DPC outlining the activities and key deliverables in relation to works to be carried out on RL109. In the immediate term, works will only involve evaluating recent and historical drilling, geophysics, geotechnical and physical data to evaluate the resource potential. Also being investigated is the possibility of removal and storage of overburden on RL 109 from the north of the pit. This is desirable for the following reasons;

- Provide additional overburden storage areas
- Provide flexibility for pit access and development
- Increase the volume of marble and schist by about 11 million cubic metres.

Consultation with some landowners regarding the renewal of RL 109 for a further 5 years and the companies proposed work program has taken place.

### **3. *Environmental Management***

Below is a summary of the significant environmental management activities that were undertaken throughout the reporting period.

#### **3.1 Outcome 1. Air Quality**

- BAM unit data showing the 24hr daily mean for the reporting period is attached in Appendix B.
- BAM unit availability for the period as follows, with BAM locations shown in Appendix A, Site Locations:
  - BAM 1 – 92%
  - BAM 2 – 99%
  - BAM 3 – 70%
- BAM unit availability was good during the reporting period for BAM 1 and 2. BAM 3's lower availability was due to filter tap issues that took some time to eventually rectify during March.
- In order to improve the availability of the three BAM dust monitors, discussions were held with a mining company using similar units, but reportedly achieving higher availability of their units. The outcome of the discussions has been to double the calibration frequency of the units at the quarry to determine if a higher availability can be achieved.
- All BAM units were calibrated in February and will again be calibrated in May.
- Three PM<sub>10</sub> 24-hour (rolling average) exceedances was recorded during the quarter:
  - 11/01/18 – BAM1- High PM<sub>10</sub> readings as a result of Quarry operations, with a Northerly wind direction and hot conditions. Actions and controls during the day include starting water truck and stockpile sprays at 5:30am, no production at Aggregate plant or mobile crushing plants, stopping Load and Haul activities and concentrating water trucks in south eastern sales areas.
  - 23/02/18 – BAM1 and BAM 2 – High PM<sub>10</sub> readings as a result of regional visible dust coming onto site and Quarry operations contributing, with a Northerly wind direction and hot conditions.

Crushing operations ceased by 9am and load and haul by 10am. Both water trucks operating throughout the day.

- 22/03/18 – BAM1 and BAM 2 – High PM10 readings as a result of regional visible dust coming onto site and Quarry operations contributing, with a Northerly wind direction and hot conditions. BAM reading started rising from 10:30am resulting in shutting down aggregate plant, relocating mobile crushing, reducing load and haul activity and maintaining both water trucks throughout the day.
- There was one 24-hour daily average exceedance (midnight to midnight) on BAM 1 that occurred on the 27<sup>th</sup> February, but did not trigger the rolling 24-hour average. On this day, it was again hot conditions with a Northerly wind direction. Operations were modified to reduce dust generating activities.

### **3.2 Outcome 2. Drag Out**

- The wheel wash facility has been operating during the quarter. The road sweeper continues to operate three times per week around the quarry entrance and adjacent roads; see Measurement Criteria 2.1.
- Daily checks of drag out in place as per Measurement Criteria 2.2 and no interference with natural drainage has been observed; see Measurement criteria 2.3.
- No complaints were received during the quarter relating to drag out.

### **3.3 Outcome 3. Blasting**

- All blasts are monitored for ground vibration and air blast overpressure in accordance with Australian Standard AS 2187.2 (2006).
- All blast complied with the Australian standards, with the maximum recorded reading during the quarter being 114.6db for Air Blast Over Pressure (limit 120db) and 4.51mm/m for Ground Vibration (limit 10mm/m).

### **3.4 Outcome 4. Noise**

- A noise assessment for the Penrice Quarry was undertaken by AECOM last year. The results demonstrated that the Quarry remains compliant with the Noise measurement criteria 4.6 as set out in the approved MOP/PEPR.

### **3.5 Outcome 5: Storm water and Erosion**

- Silt trap locations are shown in Appendix A.
- No storm water left the site during the reporting period; all runoff was contained in the silt retention dam.

### **3.6 Outcome 6. Native Revegetation and Habitat Clearance**

- Maintenance of the native revegetation plantings in MPL 75, MPL 118 and ML 6233 is ongoing. This included maintenance of irrigation systems and drippers. No clearance of any native vegetation occurred during the reporting period, see Criteria for Measurement 6.3.

### **3.7 Outcome 7. Rehabilitation and Visual Amenity Impacts**

- Maintenance and irrigation systems used for the earlier planting of native trees continued during the quarter.
- During the next quarter the company will be trialling a Flexterra hydro-mulching spray, from a company called Ecodynamics to control the possibility of erosion on some of the more difficult and visible outer slopes and growth of ground cover. This will be used in conjunction with hand seeding as previously completed around the site.

### **3.8 Outcome 8. Light Spill**

- AECOM were engaged to undertake an assessment of light spill from the Penrice Quarry. This was completed last year. The results indicated compliance with the most stringent recommended maximum illuminance criterion from AS 4282-1997.
- Following on from the PCCG meeting held in February and feedback from community members on lighting spill, certain lights were adjusted in response to this feedback. Follow up on the outcome of these adjustment were positive and reduced the effect to the surrounding community.

### **3.9 Outcome 9. Groundwater**

- It was suggested at an earlier Penrice Community Consultative Group (PCCG) meeting held 19<sup>th</sup> August 2015, that it would be desirable to include additional ground water bores on the western side to establish whether the



future operations will impact on the groundwater aquifers in the Barossa Basin. This has now been implemented.

- The groundwater bore monitoring data collected for last year was tabled at the last annual PCCG meeting. The company intends to report a water summary annually to determine if any meaningful trends became apparent over time.

### **3.10 Outcome 15. Public Safety**

- During the quarter, it was reported through the company's online safety reporting system, that trespassers were found walking through the quarry, up from the pit lake towards the rear fence line. As an action from this, additional signage has been installed, along with security camera's to further deter trespassers from entering the Quarry.

### **3.11 Outcome 16. Traffic**

- Monthly TARP survey continued throughout the quarter. Installed security cameras from the weigh bridge to the wheel wash are able to monitor trucks for tarp loads as they exit the quarry; as an additional compliance measure. Tarping compliance was at 96%.

## **4. Quarry Planning**

The consultants Groundwork Plus have finalised staged Development Plans for the quarry showing the current short term extraction and rehabilitation plans for the site, along with conceptual and long term plans. These plans will be included in the MOP/PEPR review due in 2018.

Site management have met with DPC during the reporting period to discuss the process and expected outcomes of the 2018 MOP/PEPR review. Planning at this stage is too have a draft document of some form to present to the PCCG in August outlining the proposed changes.

## Appendix A – Site Locations



## Appendix B – BAM Monitors 24hr Average PM<sub>10</sub> Concentration

