Annual Compliance Report 2014

Prepared by:

Penrice Quarry & Mineral

256 Penrice Road, Penrice SA 5353

Telephone: 08 8563 8800 Facsimile: 08 8564 3358 Email: mclose@southernquarries.com.au

16th February 2015

Contents

1. Introduction 3
1.1 Identification 3
1.2 Compliance with Environmental Outcomes and Criteria 4
1.3 Operations Summary 13
2. Compliance discussion 15
2.1 Dust Monitoring 16
2.2 Rehabilitation and Environmental Management Activities 17
3. Additional Informtion 18
3.1 Technical Reports 18
3.2 Adjacent Land Use 18
3.3 Complaints Received 18
3.4 Management System Reviews 18
4. Other Information and Stakeholder Feedback 18
Appendix A - BAM Dust Monitoring Locations 19
Appendix B - BAM Data for the Reporting Period 20
Appendix C - Air Blast and Ground Vibration Table 21
Appendix D - External Complaints 22
Appendix E - Elevated Dust Readings 23
Appendix F – Wind Roses relating to Elevated Dust Readings 24

1 Introduction

This document report is an accurate account of compliance against the environmental outcomes for the operations carried out in accordance with the approved Mine Operations Plan/Program for Environment Protection and Rehabilitation (MOP/PEPR) at the Penrice quarry over the past 12 months, for the period from 1st January 2014 – 31st December 2014 inclusive.

On 11 April 2014, Penrice Soda Holdings Limited (PSH), the owners of Penrice Quarry at that time, went into voluntary administration. On 30 July 2014, Adelaide Brighton Cement Ltd (ABCL) acquired the assets of Penrice Quarry. The quarry acquisition represents a strong strategic fit for Adelaide Brighton Limited supplying raw materials for lime, oilwell and white cement manufacture at the Angaston plant. Additionally, Penrice Quarry is also highly complementary to Adelaide Brighton's concrete and aggregates market position in South Australia, providing a significant source of aggregates for the premixed concrete and civil markets to Adelaide's north.

As a consequence of PSH's voluntary administration, the Administrators (McGrathNicol) closed the PSH Osborne plant as a result of failing to secure a buyer for the Osborne plant. Accordingly, limestone previously supplied to the Osborne soda ash plant is no longer mined and railed to Osborne, effectively reducing the output from Penrice Quarry. The consequence of this is that output from the operations will be reduced and based more on physical characteristics rather than chemical properties of the material.

The function of the Penrice Community Consultative Group (PCCG) is a forum to exchange information with stakeholders and the community and obtain feedback on improvements and performance of the mine operations.

1.1 Identification

Mine Name	Penrice Quarry & Mineral (PQM)			**Tenements**	
Owner	Adelaide Brighton Cement Ltd				
Operator	Adelaide Brighton Cement Ltd			PM 86	PM 120
Site Contact	Name	Michael Close		MPL 118	MPL 75
Email	mclose@southernquarries.com.au	Ph	08 83344700	ML 6233	RL109
Site Location Details: PQM is located approximately 2.5 kilometres north of the township of Angaston					

1.2 Compliance with Environmental Outcomes and Criteria

The following environmental outcomes contained in the MOP/PEPR were approved in November 2011. The environmental outcomes were derived from the potential environmental impacts associated with the Penrice operation and categorised for risk. Control and management measures were identified and a final risk assessment undertaken to determine the residual risk.

Review of the environmental outcomes indicates not all measurement criteria, particularly those relating to flora and fauna surveys were completed during the reporting period. These have been identified and will be undertaken by the second quarter 2015, once contractual arrangements with the independent contractor are in place.

An overview of the Environmental Outcomes, Measurement Criteria and Status is provided in the following table.

Environmental Outcome	*Criteria for Measurement*	*Status*	*Notes*
1. Air Quality			
No public health or nuisance impacts to local residents and adjacent land users from dust generated by mining operations	Health Impacts: **1.1 -** Site records for dust measured at the site boundary must show that: where the average PM10 dust entering the site is less than 50 ug/m^3 for any 24 hour period, the average PM 10 dust leaving the site (including both ambient and mine related dust) will not exceed an average of 50 ug/m^3 for that particular 24 hour period	Ongoing	See BAM Data **(Appendix B)**
	1.2 - Where the average PM10 dust entering the site exceeds 50 ug/m3 for any 24 hour period, the average PM10 dust leaving the site must not exceed the measured level entering the site	Ongoing	See BAM Data **(Appendix B)**
	1.3 - Data will be acquired using a minimum of 3 fixed continuous monitors at the site boundaries linked to an onsite weather station. The monitors will be calibrated to measure onsite dust, and to determine reasonable error limits (with adjustment to the compliance limit if necessary) to DMITRE and EPA's satisfaction	Compliant	Three approved BAM monitors installed on agreed sites.
	1.4 - PQM will develop and implement a plan to characterise the site to determine the appropriate number and location of the monitors to EPA and DMITRE satisfaction by 31/12/2011	Compliant	Golder Associates have completed a formal Air Quality Study of the site **Report No.12613029-002-r-Rev1 August 2012** PQM have consulted both DSD and the EPA in relation to report and the finalisation of the location of the BAM dust monitors
	1.5 PQM will provide a summary of the calendar day average data to DMITRE, PCCG and EPA every quarter	Compliant	See Graph **(Appendix B)**

	1.6 - Any exceedance of the daily compliance limits above will be reported to EPA and DMITRE within 1 working day	Compliant	See Table **(Appendix E)**
	1.7 - Compliance with EPA approved Dust Management Plan	Compliant	Dust Management plan has been updated and approved .This is reviewed at the morning management meetings and key points entered into the Mine Manager's diary
Environmental Outcome	***Criteria for Measurement***	***Status***	***Notes***
2. Drag Out			
No drag out onto Penrice Road from the mine site	**2.1 -** No exceedance of compulsory intervention level as defined by the DTEI pavement sweeping maintenance standard	Compliant	Daily check of drag out in place. Street sweeper used a minimum of twice a week
	2.2 - Pavement markings should be visible	Compliant	Pavement markings and drains audited once a month
	2.3 - No interference with natural drainage	Compliant	No interference
	2.4 - Drag out not to exceed $10m^2$ in total on road curves, or >20m length of edge line	Compliant	If the Truck wash is not working photographic evidence will be taken to monitor drag out. Regular road sweeping maintenance in place.

Environmental Outcome	Criteria for Measurement	Status	Notes
3. Blasting			
No impact on public safety, nuisance or damage to third party structures as a result of blasting activities	**3.1** - All blasts to comply with Australian Standard AS 2187.2 (2006) limits for human comfort at any sensitive site external to the mine. The peek sound pressure limits are currently 115dB for 95% of blasts per year. 120 dell maximum for any blast	Compliant	See Table 2. blast compliance (Appendix C)
	3.2 - The ground vibration levels limits are 5 mm/s for 95% of blasts per year, with a maximum vibration of 10 mm/s for any blast.	Compliant	See Table 1. blast (compliance Appendix C)
	3.3 - No blasting outside Monday to Friday 12:00pm to 1:30pm, unless required for safety reasons	Compliant	All blast times recorded
	3.4 - No evidence of fly rock outside mine site due to blasting	Compliant	No evidence of fly rock
Environmental Outcome	***Criteria for Measurement***	***Status***	***Notes***
4. Noise			
No public nuisance impacts from noise emanating from the operating site	**4.1 -** The aggregate plant to operate from 6:00am to 12:00am, Monday to Friday, 6:00am to 4:00pm Saturdays, Sundays and Public Holidays	Compliant	All production times recorded
	4.2 - Load and haul operations to operate from 6:00am to 6:00pm Monday to Friday, 6:00am to 4:00pm Saturdays, Sundays and Public Holidays	Compliant	All production times recorded
	4.3 - Previously imposed limitations on MPL 75 and MPL 118 remain adhered to	Compliant	As above
	4.4 - Rock breaking operations to operate from 7:00am to 7:00pm Monday to Friday, 7:00am to 4:00pm Saturdays, Sundays and Public Holidays	Compliant	As above
	4.5 - Train loading operates between the hours of 7:30am and 6:00pm Monday to Saturday, 8:00am to 6:00pm on Sundays and Public Holidays. Future anticipated landfill projects would be supplied by rail and will likely require one additional train load per day	Compliant	Train movements are currently suspended.

	4.6 - Demonstrate compliance with the noise source measurements in the AECOM report (Doc No 60099270-A9K01RP-4) dated 31/5/10 by an annual independent suitably qualified expert show noise source are equal or less than Appendix B (page B-1 of the AECOM report)	Compliant	**2014 AECOM Report No. A14J01RP 22/10/14** has shown PQM to be compliant
Environmental Outcome	***Criteria for Measurement***	***Status***	***Notes***
5. Storm Water and Erosion			
No contamination of watercourses off site caused by mining related sediment	**5.1 -** All storm water leaving silt retention dam on MPL (during rainfall events) will be tested for turbidity and comply with ANZECC standard of 50 NTU	Not Relevant	No water has left the site during this reporting period
Environmental Outcome	***Criteria for Measurement***	***Status***	***Notes***
6. Native Revegetation and Habitat Clearance			
Maintain existing PQM native revegetation plantings in MPL 75, MPL 118 and ML 6233. Clearance of any native vegetation complies with Native Vegetation Act 1991. Vegetation and sediment in Jaeckeli Creek maintained at 1/1/09 condition or better	**6.1 -** Annual native revegetation survey and photographic monitoring undertaken by independent expert approved by DMITRE demonstrates overall site vegetation health and surface area covered has not decreased from baseline which is to be acquired by 31/12/11 (unless removal is required for operational reasons and included in approved MOP/PEPR) **6.2 -** Annual native re vegetation survey (baseline: Appendix 1 of Appendix 5) and creek profiling at specified locations (Appendix 7 of Appendix 5) undertaken by competent independent expert approved by PIRSA demonstrates vegetation health and creek profile has not deteriorated from baseline (as defined in March, 2009 Management Plan, Appendix 5) **6.3 -** No clearance of native vegetation will occur.	To be completed To be completed Compliant	The last official annual native revegetation survey and Jaeckeli Creek vegetation survey completed by **Donovans Earthcare; Report PSP003 dated 19/12/13,** A survey to be undertaken by 2nd Quarter 2015. No clearance of trees throughout this reporting period

Environmental Outcome	Criteria for Measurement	Status	Notes
7 .Rehabilitation and Visual Amenity Impacts			
Integrate and harmonise final landforms with the natural landform of the adjacent foothills. Visually soften contrasting and reflective landforms which are temporarily 'idle'. Integrate and harmonise revegetation with existing tree cover on adjacent hills. Screen visually prominent built structures (including active product stockpiles) with vegetation screens where practicable	**7.1 -** As per the 3 phases in the Strategic Visual Amenity Plan (SVAP) (Appendix 15) dated 18/10/11. Milestones for phases 1a, 1b, 1c, 2 and 3 and Mine closure **7.2 -** The milestones for stages 2 and 3 are subject to timing reviews based on Mine development and include contingency rehabilitation plans if stages are delayed 6 monthly audits of SVAP progress to be undertaken by a competent independent expert approved by PIRSA **7.3 -** The audits will, as a minimum, report out on progress to the milestones detailed in Section 6 of the SVAP and will provide recommendations on contingency activities to improve the visual amenity of MPL118	Compliant	**Donovans Earthcare** has conducted an audit report **No.PSP003 dated 19/12/13** to provide progress reports to milestones and provide recommendations.
Environmental Outcome	***Criteria for Measurement***	***Status***	***Notes***
8. Light Spill			
Amenity of adjacent residents is not reduced by operational use of direct night time lighting	**8.1** - Compliance with Australian Standard 4282-1997 "Control of the obtrusive effects of outdoor lighting". Light spillage not to exceed 2 lux	Compliant	Lighting survey **Report No. 127613029-001-R-Rev0 by Golder Associates dated 22/3/12** showed PQM to be compliant, lighting configuration has remained the same in 2014.

Environmental Outcome	Criteria for Measurement	Status	Notes
9. Groundwater			
No adverse impact to the quality or quantity of ground water to existing uses caused by mining operations.	**9.1 -** Compliance with WAP license allocation **9.2** - Hydrology modelling by an independent expert approved by DMITRE demonstrates no significant impact from mine operation. To be completed by end 31st December 2012	Compliant Compliant	**Aquaterra** have completed the modelling and the draft report was discussed with DMITRE on the 29th January 2013. Aquaterra presented the report at the PCCG (13th February 2013)
Environmental Outcome	***Criteria for Measurement***	***Status***	***Notes***
10. Weeds and Pests			
Ensure no introduction of new weeds or pests (including feral animals) nor increase in abundance or escape of existing weeds and pest species in the mine area	**10.1 -** Agree by 31st December 2011 a pest control program with neighbours in the Rural and Rural Living zones within 500m of the site boundary and implement. In the event an agreement cannot be reached an independent expert will be appointed to review the suitability of the program **10.2** - Annual pest and weed survey undertaken by independent expert approved by DMITRE shows no increase above previous survey levels	Compliant To be completed	Pest and weed program in place and ongoing. The last official survey completed by **Donovans Earthcare Report no.PSP002, dated 20/12/13,** a survey to be undertaken by 2nd Quarter 2015.
Environmental Outcome	***Criteria for Measurement***	***Status***	***Notes***
11. Aboriginal Heritage			
No disturbance to Aboriginal artefacts unless prior approval under the relevant legislation is obtained	**11.1 -** If any suspected artifacts are discovered as a result of mining, work will cease in the immediate vicinity of the artifact, until the find has been appropriately assessed, and if necessary, approval under the Aboriginal Heritage Act is obtained to disturb the artifact	Not Relevant	No event

Environmental Outcome	Criteria for Measurement	Status	Notes
12. Domestic and Industrial Waste (excluding overburden)			
All domestic and industrial waste disposed of offsite	**12.1 -** Waste tracking and disposal inventory (including type, volume, storage locations and disposal method) demonstrates all domestic and industrial waste disposed of at EPA licensed site (where applicable)	Compliant	Waste tracking certificates in place
Environmental Outcome	***Criteria for Measurement***	***Status***	***Notes***
13. Geotechnical Stability			
No landslide events that cause any injury to the public or damage offsite assets and/or public infrastructure	**13.1 -** No impacts to public safety or offsite assets and public infrastructure caused by unplanned slope failures **13.2 -** Audit by an independent geotechnical engineer confirms that the final dump design (Appendix 8 and 15) is stable and dumps are built to design specifications at the end of each stage referred to in the SVAP	Not Relevant Compliant	No events Report conducted by **Groundwork Plus - Annual Geotechnical Review dated; Oct 2014**
Environmental Outcome	***Criteria for Measurement***	***Status***	***Notes***
14. Topsoil Management			
Ensure that existing topsoil quality and quantity is contained on site and is maintained	**14.1 -** Topsoil inventory demonstrates all available topsoil is conserved for reuse, and is used for rehabilitation on the mine site. Representative composite sampling of topsoil at point of removal and placement for pH, conductivity and nutrients (N, K, and P) demonstrates no decrease in nutrient levels at placement	Compliant	Baseline tests conducted. Audited by DSD. Further tests to be conducted at final stages
Environmental Outcome	***Criteria for Measurement***	***Status***	***Notes***
15. Public Safety			
No public injuries and/or deaths resulting from unauthorised entry to the site that could have been reasonably prevented	**15.1 -** Independent investigation of all recorded injuries from unauthorised access to the site demonstrates that the incident could not have not been reasonably prevented through implementation of precautionary measures	Not Relevant	No events

Environmental Outcome	***Criteria for Measurement***	***Status***	***Notes***
16. Traffic			
No dust nuisance or safety impacts caused by heavy vehicle traffic at point of entry or exit of the mine site that could have been reasonably prevented	**16.1** - All products trucks leaving the site will have their load covered with compliance of not less that 96% from monthly surveys	Compliant	Monthly tarp surveys ongoing.
	16.2 - Independent investigation of all recorded accidents resulting from mine traffic entry or exit demonstrates that the mine operator could not have reasonably prevented the accident through implementation of precautionary measures	Not Relevant	No Event
Environmental Outcome	***Criteria for Measurement***	***Status***	***Notes***
17. Emergency Response			
Bring the mine back to compliance as soon as practicable and modify management procedures to prevent a recurrence	**17.1** - An independent audit demonstrates that the breach was rectified as soon as practical and that suitable modifications have been made to the management system to prevent recurrence	Not Relevant	No event

1.3 Operations Summary

As mentioned earlier due to the closure of the Solvay operations at Port Adelaide, high grade limestone will no longer be railed, at least in the short term, to Osborne for processing. The consequence of this is that the output from the operations will be smaller and based more on physical characteristics rather than chemical properties of the material. Also the site will continue to quarry and process glass chemical and cement grade limestone from the Angaston operation.

The mine plans will essentially remained unchanged, with the slight change in focus from concentrating on the high grade limestone to having the ability to use more of the lower grade material, in terms of chemical quality, as quarry products. Over the coming months all mine plans including the mine closure plan will be reviewed and if necessary updated or amended.

The reduction in output from the operation resulting from not supplying high grade limestone to Osborne has resulted in a corresponding reduction in the size and number of mobile fleet units.

The move to a 60 tonne fleet of haul trucks as opposed to the 90 tonne fleet is largely due to the reduced extraction tonnages needed with the closure of the soda ash plant and a majority of the overburden campaign being completed.

Rehabilitation and placement of overburden on MPL 118 continued during the year. The area known as Gerlach area, was scanned on 19th August 2014 and the measured tonnages scanned are reported below. The cumulative total overburden placed on MPL 118 currently stands at 2,026,460 tonnes. Rehabilitation has been concentrated on finalising the MPL118 Tier 2 area. Once completed, tube stock will be planted after final battering and topsoiling of the area, expected to be completed sometime during the 3rd Quarter 2015 following the winter rains.

Current workings in the pit during the reporting period, has been at the Northern and Southern ends of the pit as well as the North West benches.

Renewal of Retention Lease 109 was granted on the 17th of October 2013 for a further 5 years. The lease is situated to the north of the quarry boundary, and located on Scott Tolhurst land. A PEPR was developed and approved. Historic drilling, geophysics, geological and geotechnical data will be examined during the next reporting period, to determine what further studies if any, need to be undertaken, and potential markets for materials which may be extracted from RL 109. Discussion with the Barossa Valley Council will be undertaken on the possible development of the lease after all historical data has been assessed.

1.3.1 Mining Tonnage and Product

Mined this reporting period	Forecast Mining (total next Reporting Period)
1,141,311	1,000,000

1.3.2 Resource/Reserve Reporting

Ore Reserve		Mineral Resources		Est. Mine Life
Proved	34 MT	Measured	66.3 MT	23 years
Probable	33 MT	Indicated	84.5 MT	
		Inferred	88.7 MT	

The total mineral reserve is approximately 66.37MT, this gives an estimated mine life of around 23 years plus based on today's estimated demand for both the high and lower grade limestone. The quarry reserves and resources will be reviewed by consultants over the next few months.

1.3.3 Native Vegetation Clearance

Maximum amount approved in PEPR to be cleared	Amount cleared this period	Total amount cleared to date	Forecast clearance for next reporting period
N/A	0	0	0

1.3.4 Disturbance and Rehabilitation

Domain	Last reporting period		Current reporting period		Proposed next 12 months	
	Disturbed	**Rehabilitation**	**Disturbed**	**Rehabilitation**	**Disturbed**	**Rehabilitation**
MPL 118	No new topsoil removed 109,530 tonnes of waste dumped	First tier level completed, Started second tier level.	No new topsoil removed 112,974 tonnes of waste placed	Focused on completing second tier level.	100,000 tonnes forecasted to be placed in 2015.	Complete 2nd Tier, battering, topsoil and planting.
MPL 75	N/A	Salem road slopes	N/A	Brush cutting Salem Road and Kalimna slopes	N/A	Weeds sprayed Salem Road and Kalimna slopes
ML 6233	N/A	N/A	N/A	N/A		
PM 86/PM 120	tonnes blasted 1,536,900	Western side of the eastern mound	tonnes blasted 1,061,200	Western side of the eastern mound	tonnes blasted 1,000,000	Weed Eradication

2. Compliance discussion

As a general comment the operations at the site are compliant when measured against all environmental outcomes using the approved measurement criteria. However, as a result of PSH appointing an Administrator, and ABCL not acquiring the assets of PMQ until 30 July 2014, there have been several instances, particularly those relating to flora and fauna surveys which were not completed during the reporting period. Additionally, there were a number of, as a result of extreme weather conditions, elevated dust reading recorded. The previous compliance report made mention of a meeting between Penrice and DSD were held to discuss whether the PEPR measurement criteria 1.2 can realistically be met when there are extreme weather events, ABCL proposes to continue to facilitate those discussions.

ABCL will be looking at improving measurement criteria 1.2 relating to dust monitoring, so that it is consistent with National Environment Protection (Ambient Air Quality) Measurement or NEPM and so that the quantifiable characteristics of the air against which ambient air quality can be assessed.

All blasts at the site were monitored and all complied with Australian Standard AS 2187.2 (2006) for human comfort. Both air blast overpressure and ground vibration levels for all blasts were within acceptable limits.

The 2014 AECOM Noise report concluded that changes to operations since the last update in 2013, have resulted in a reduction in predicted environmental noise emissions from the quarry. In AECOM's opinion, the revised predicted noise levels for 2014 satisfy the intent of the approved PEPR.

The Penrice Quarry which went into voluntary administration on 11th April 2014, this resulted in the annual native revegetation survey and the annual pest and weed survey not being completed during the reporting period. These surveys will be undertaken by the second quarter 2015, once contractual arrangements with the independent contractor are in place.

Volume measurements were carried out on the 19th August 2014 over the overburden dump situated on MPL 118, also known as the Gerlach area. The cumulative total overburden placed on MPL 118 currently stands at 2,026,460 tonnes, well below the approved total of 2.5 million tonnes.

2.1 Dust Monitoring

Penrice Quarry and Mineral has three approved Dust monitoring units installed, located on PQM property (see Appendix A). These continuous monitors are online and accessible by operational staff to respond proactively and efficiently to weather conditions.

The monitors record the levels of PM10 dust in excess of the National Environment Protection Measurement Standard. All exceedances are reported to DSD and EPA. When an exceedance does occur, the site implements a dust management plan to minimise the impacts. Reported exceedances for the compliance period are listed in Appendix E.
A graph showing the Dust monitor daily mean data for the reporting period is attached in Appendix B.

The BAM units were calibrated by Lear Sigler in October 2014. Lear Sigler have been re-engaged since administration to complete 6 monthly calibration of the dust monitoring units.

During and after the change of ownership, the SMS notification of early high readings was not operational. The SMS notification is a very effective tool for site supervisors to act early and engage the site dust management plan before a 24hr PM10 exceedance occurs. SMS notification is now operational.

The daily mean data will also highlight a number of BAM unit outages. These outages range from power failure, change of filter paper and other general issues. Once an outage on a BAM unit is identified, it is rectified immediately by site personnel. If site personnel are unable to rectify outage, then Lear Sigler is contacted to investigate and respond.

2.2 Rehabilitation and Environmental Management Activities

Below is a summary of the rehabilitation and environmental management activities that were undertaken throughout the reporting period:

Flora & Fauna

MPL 75

- General tree/shrub maintenance was ongoing during this period
- Brush cutting near Salem and Kalimna road areas
- Additional watering has been implemented due to a dry summer

MPL 118

- General tree/shrub maintenance ongoing
- Brush cutting and slashing
- Weed spraying of slopes and proximity area ongoing
- Additional watering has been implemented
- Tube stock to be planted on Tier 2 once completed.
- Operation and inspection of active irrigation.

Jaeckeli Creek

- General tree/shrub maintenance ongoing
- Rabbit control completed during the period
- Additional watering has been implemented.

PM 86 and PM 120

- General site maintenance activities
- Grass slashing around the boundary perimeter
- Weed spraying ongoing as required.
- Perimeter fire tracks cleared of weeds and obstruction

3. Additional Information

3.1 Technical Reports

Technical reports can be sourced from the DSD website. See link below:

http://www.minerals.dmitre.sa.gov.au/mines_and_developing_projects/approved_mines/penrice_mine

3.2 Adjacent Land Use

No changes to any land use adjacent to the mine have been reported in this current reporting period.

3.3 Complaints Received

Five complaints were received during this reporting period, see Appendix D.

3.4 Management System Reviews

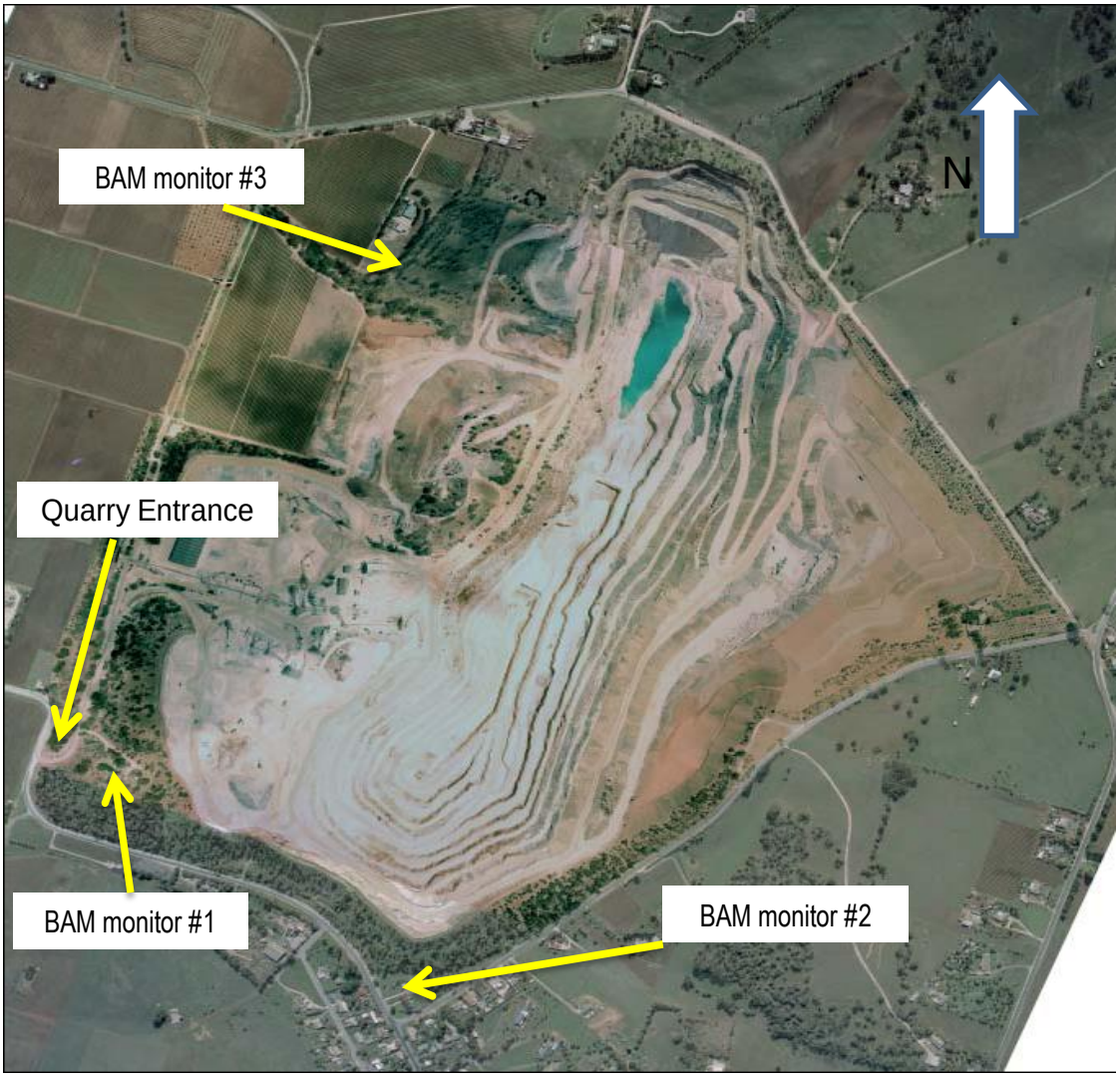
Management systems reviews will take place over the next period, as required under the new ownership and management. No significant impact or change to the current operations is expected from these reviews.

4. Other Information and Stakeholder Feedback.

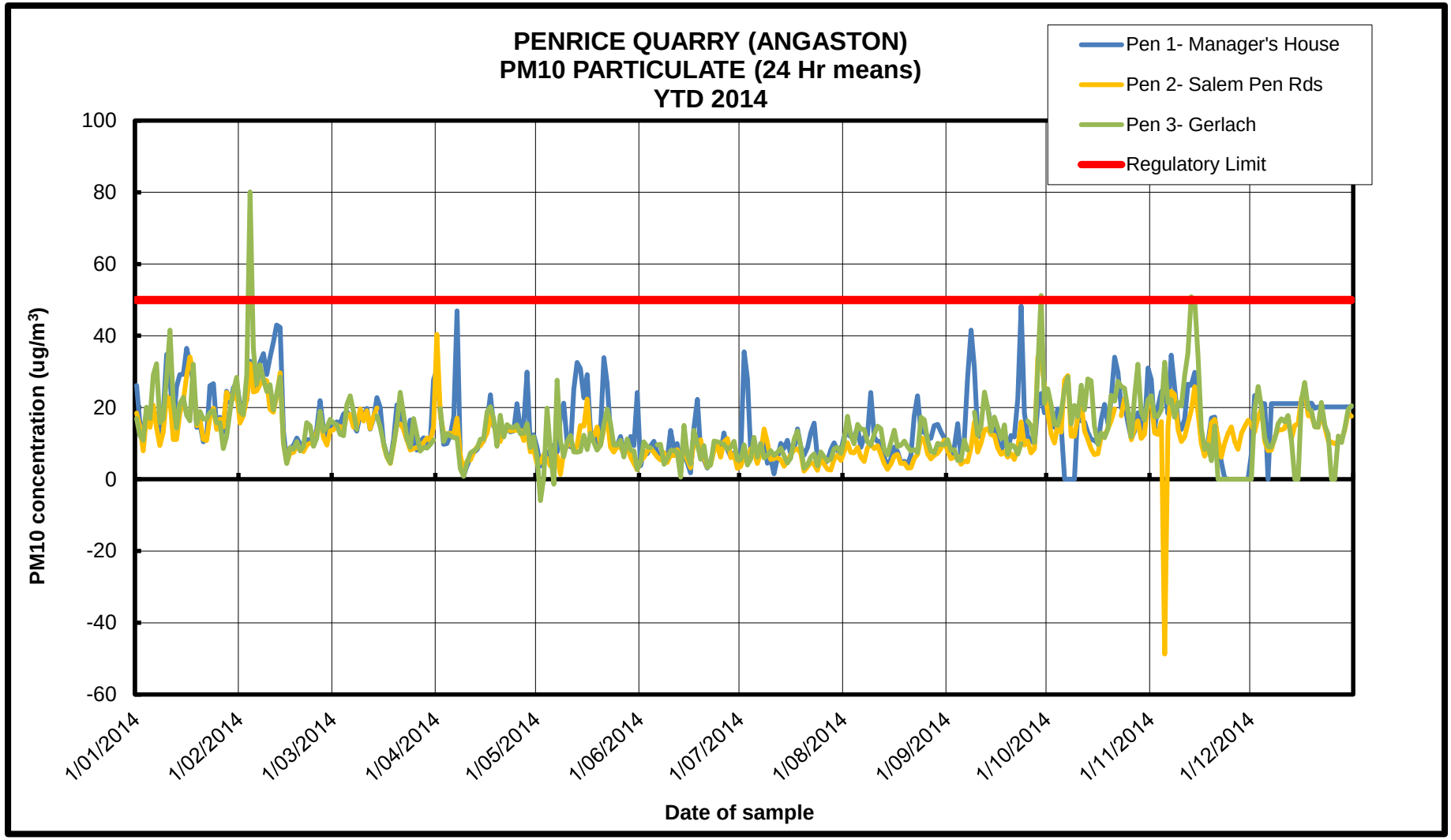
Nothing to report.

Appendix A

BAM Dust Monitor Locations



Appendix B - BAM Data for the Reporting Period



Appendix C - Air Blast and Ground Vibration Table

Table 1. Ground Vibration; measured in mm/sec

	365 days	180 days	90 days	30 days	7 days
Total Number of Shots	77	41	23	7	0
% Shots >5mm/sec	0.0	0.0	0.0	0.0	0.0
No. Shots > 10mm/sec	0.0	0.0	0.0	0.0	0.0

Table 2. Air Blast Overpressure; measured in dB.

	365 days	180 days	90 days	30 days	7 days
Total Number of Shots	77	41	23	7	0
% Shots >115 (dB)	0.0	0.0	0.0	0.0	0.0
No. Shots >120 (dB)	0.0	0.0	0.0	0.0	0.0

Appendix D - External Complaints

Environmental Reports – External Complaints - *Report Period: 1st January 2014 to 31st December 2014*

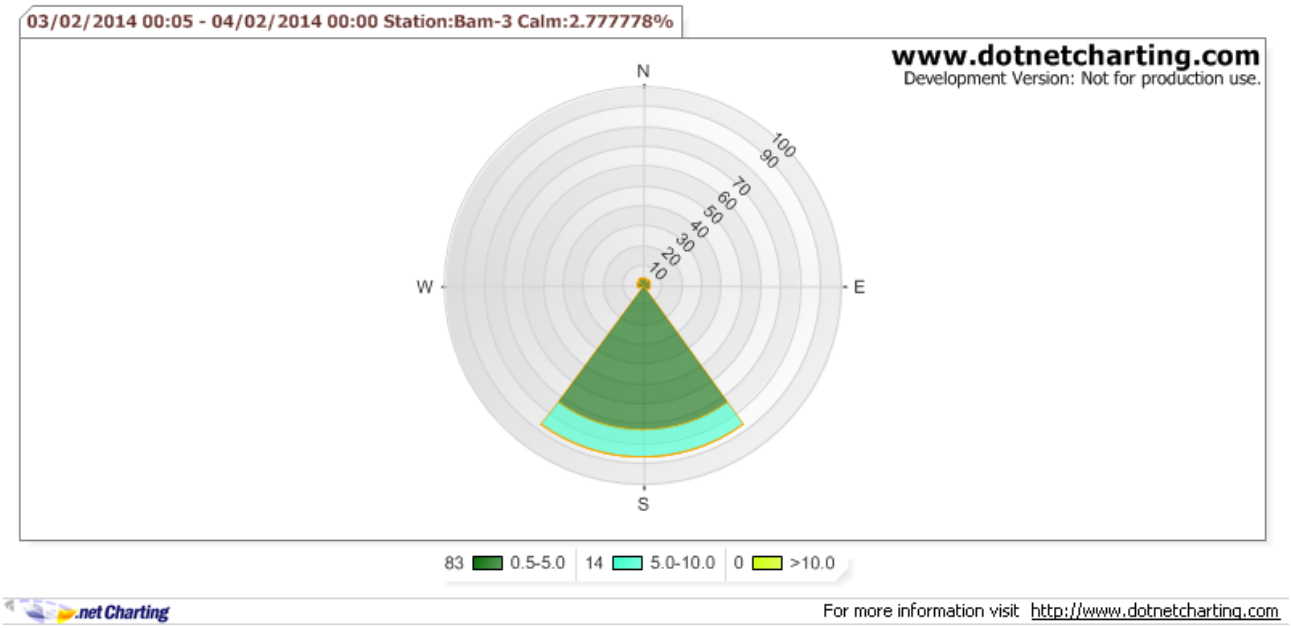
Date	Type	Incident Description	Investigation/ Cause/ Possible cause	Corrective Actions	Responsible	Due by	Completed	Addressed & Signed Off	Notification given to:
16/1/2014	Blast	Neighbour complained about vibration from the blast	⇒ Complaint from neighbor readings within license conditions 1.06 PPV and 108.3dBL ⇒ (95% of blasts below 115dBL never to exceed 120dBL and 95% of blasts below 5MM/s never to exceed 10MM/s)	Spoken to neighbor concerned also forwarded all relevant data from the blast.	C.T.	17-1-14	17-1-14	Completed	DMITRE
13/5/2014	Noise	Reverse beeper	⇒ Front End Loader had incorrect reverse beeper fitted	⇒ A correct low noise emitting beeper was fitted to the Front End Loader	JR	30/5/14	Yes	Yes	DMITRE
13/8/2014	Dust	Neighbour complained about dust emanating from the Aggregate plant area	⇒ Not sufficient dust suppression on the feed stockpile ⇒ BAM notifications not working allowing management to investigate possible sources of dust	James Rowe (Quarry Manager) and Adam Schutz (Manufacturing Supervisor) personally visited the neighbour to understand their concerns, James and Adam then returned to site and informed operators to add more water to the feed stockpile and for operators to be vigilant in minimizing dust emissions from all plants. The incident was highlighted at the weekly toolbox meeting.	James Rowe	13/8/2014	Yes	James Rowe	DSD & EPA
11/10/2014	Dust	Neighbour complained about dust emanating from the quarry	⇒ Discussion with resident and investigation into possible sources ⇒ Severe weather conditions occurring at the time	⇒ Continue to implement dust management plan as required and ensure all operational personnel are aware of site requirement and management	James Rowe	11/10/2014	Yes	James Rowe	None
28/11/2014	Dust	Neighbour Complained while travelling home at 11pm from Kalimna Road (dirt road)	⇒ Complainant was traveling along a dirt road ⇒ Agreed that lights (car and plant) could have made dust appear worse ⇒ Concerned about fine film of dust would potentially ruin fruit product ⇒ BAM monitors did not show any high readings	Discussion with complainant at the time. Agreed to operated the water cart at the time. As production was nearing end of shift, plant was stopped. Attempts made the next following day to follow up with messages left. No return phone call	Michael Close	28/11/2014	Yes	Michael Close	None

Appendix E – Elevated Dust Readings

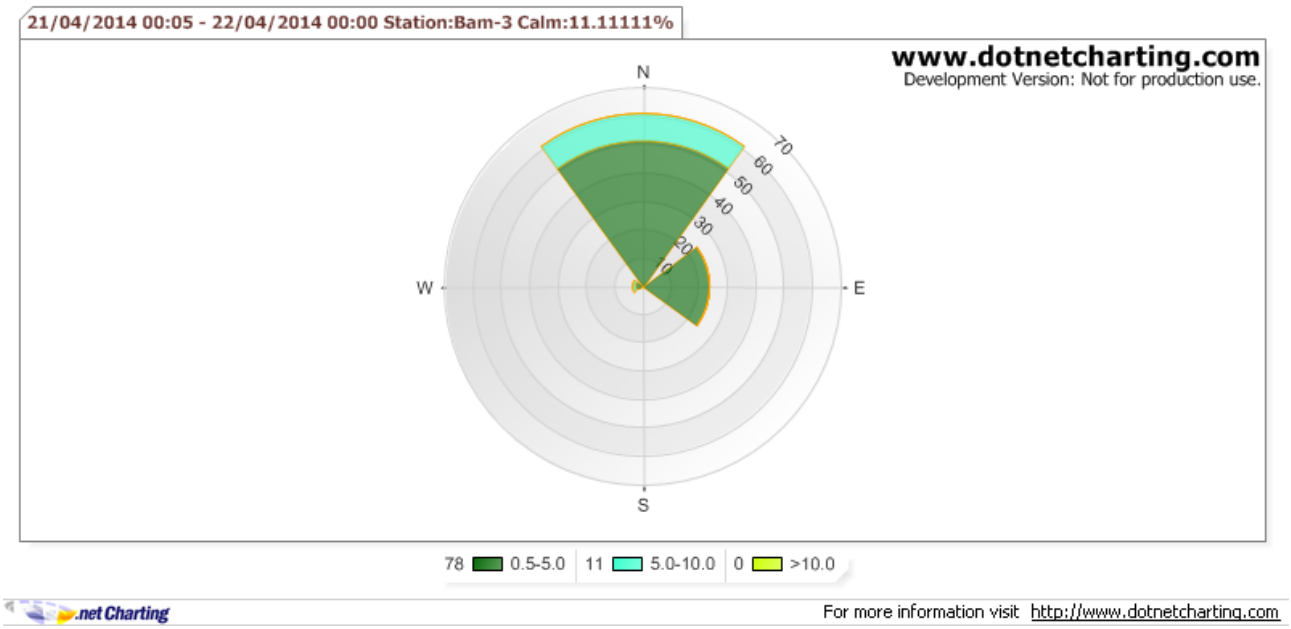
Elevated Dust Readings– *Report Period: 1st January 2014 to 31st December 2014*

Date	Type	Incident Description	Investigation/ Cause/ Possible cause	Dust Management/Corrective Actions	Responsible	Due by	Completed	Addressed & Signed Off	Notification given to:
3/2/2014	High PM10 reading	High reading PQM 3 monitor	⇒ High reading 84.06 Pm 10 24r. Wind speed overnight were between 47 and 66 km/hour SE direction PM 10 reading spiked at 1 am to over 220 ug/m3	**Reported to DMITRE & EPA:** Plant remained off during the day Water trucks were deployed	GT BP	Completed	Completed	Y	DMITRE EPA CCG
21/4/2014	High PM10 reading	High reading PQM 3 monitor	⇒ High reading 70 Pm 10 24r. The unit was giving irregular readings,	Lear Siegler technician was contacted, a quote for the annual maintenance has been received.	GT	Completed	Completed	Y	DMITRE
5/6/2014	High PM10 reading	High reading PQM 3 monitor	⇒ High reading 180Pm 10 24r. The unit was giving irregular readings,	Lear Siegler technician was contacted, after the monitor has been of f for a couple of days it can take while to give accurate readings because the buildup of dust	GT	Completed	Completed	Y	DMITRE
3/7/2014	High PM10 reading	High reading PQM 1 monitor	⇒ High reading 70 Pm 10 24r. The unit needed the filter paper changed,	Changed the filter paper	GT	Completed	Completed	Y	DSD, EPA
14/9/2014	High PM10 reading	High reading PQM 1 monitor	52 ug/m3 gauged at the BAM 1 monitor	Rectify dust monitor issues with notifications not being present	JR	Completed	Completed	Y	DSD, EPA
23/9/2014	High PM10 reading	High reading PQM 1 monitor	50.02ug/m3 exceeded the limit at 2.40am whilst nobody was onsite	**Reported to DSD & EPA** Dust management plan implemented once operational staff where aware of exceedance. Plant turned off and water truck deployed. SMS notification not operational	JR	Completed	Completed	Y	DSD, EPA
28/9/2014	High PM10 reading	High reading PQM 3 monitor	50.02ug/m3 exceeded the limit at 6.25pm whilst nobody was onsite on Sunday the 28th of September	Minimise dust during operational hours where possible to do so. SMS notification not operational	JR	Completed	Completed	Y	DSD, EPA
13/11/2014	High PM10 reading	High reading PQM 3 monitor	BAM 3 exceeded at 7:30am on 13/10. Strong northerly winds contributing to exceedance. No SMS notifications given to operational staff to allow early notification to implement dust management plan.	**Reported to DSD & EPA** Dust management plan implemented once operational staff where aware of exceedance. Plant turned off and water truck deployed. Calibration of all 3 monitors completed on the 18/10. SMS notification of high reading re-instated.	MC	Completed	Completed	Y	DSD, EPA

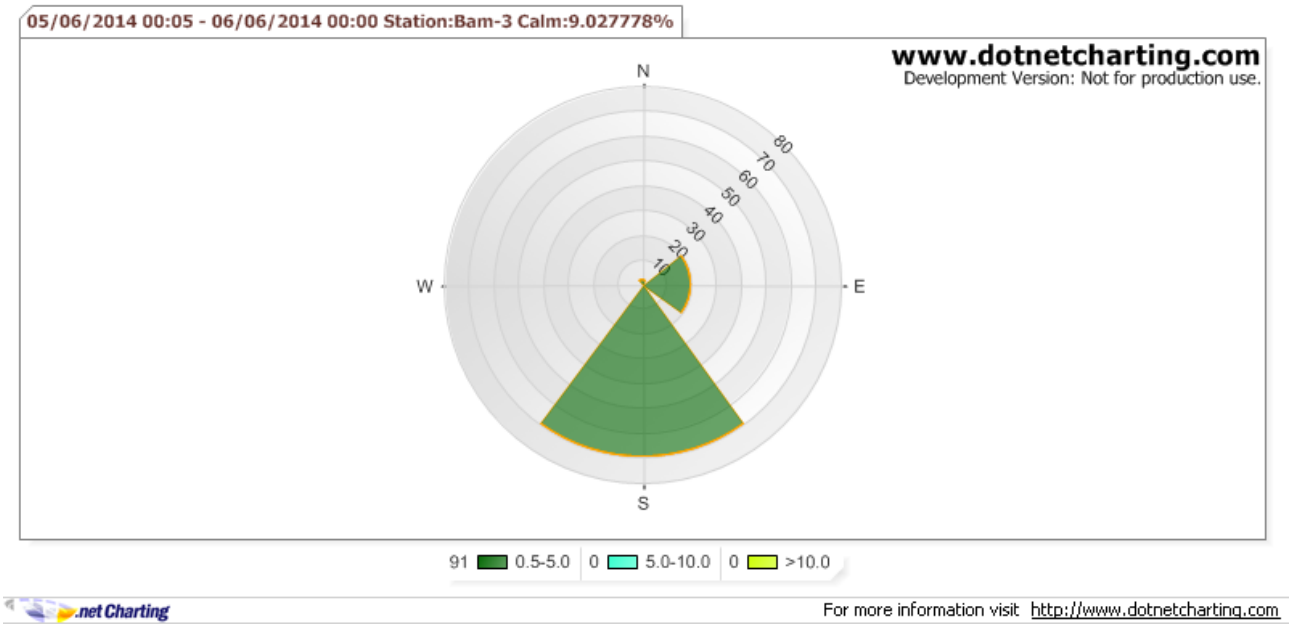
Appendix F- Wind Roses relating to Elevated Dust Readings



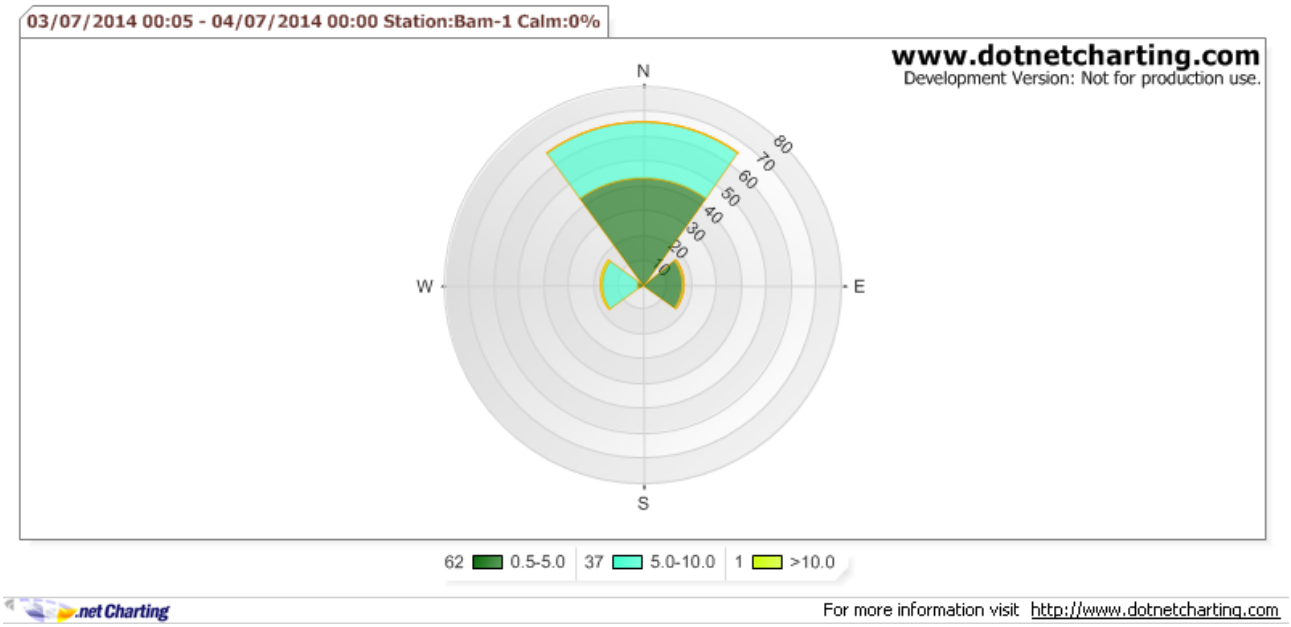
No. 1 Wind Rose relating to BAM 3 on 3rd February 2014



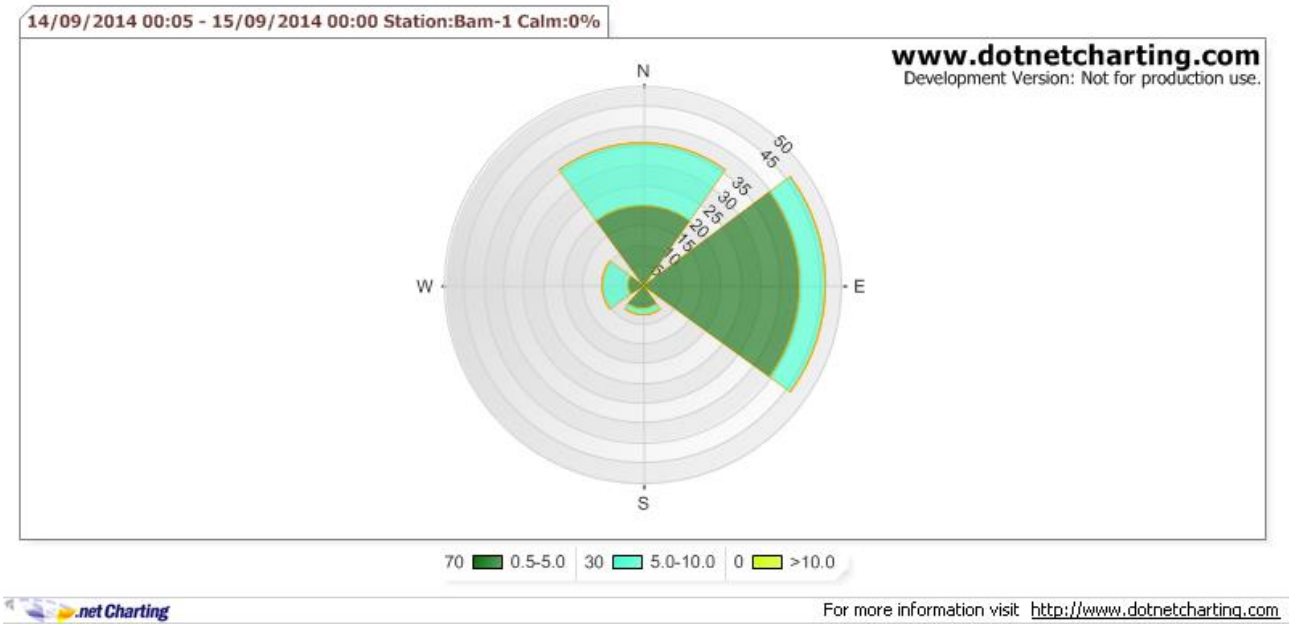
No. 2 Wind Rose relating to BAM 3 on 23rd April 2014



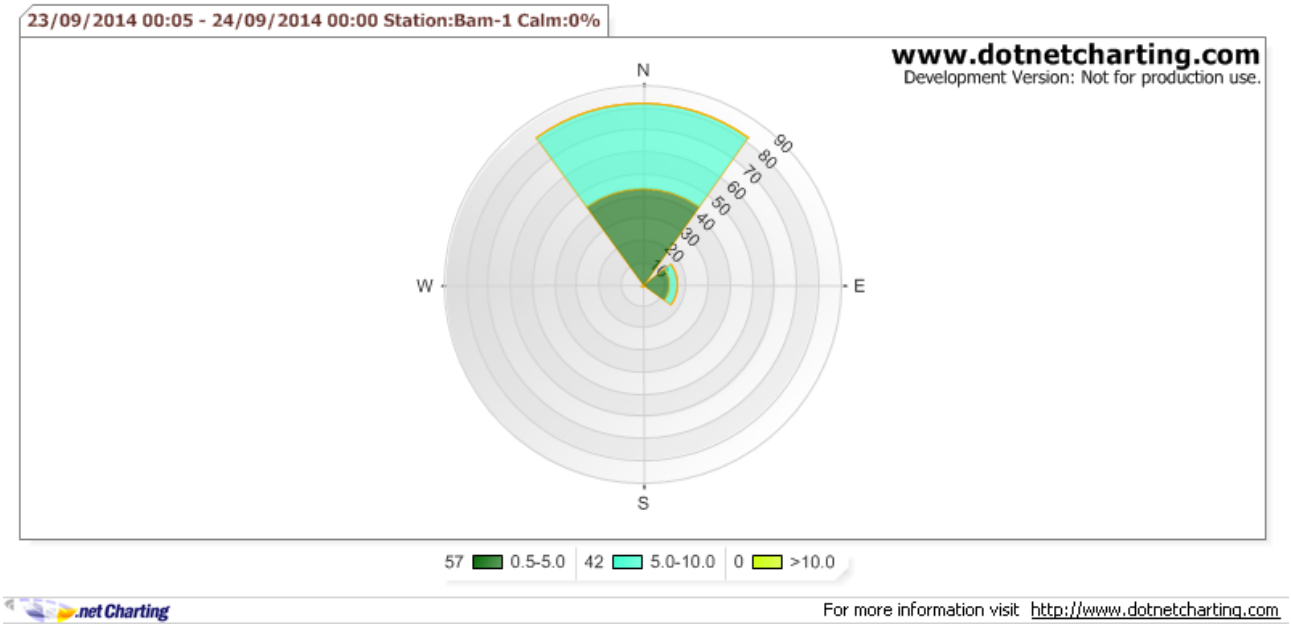
No. 3 Wind Rose relating to BAM 3 on 5TH June 2014



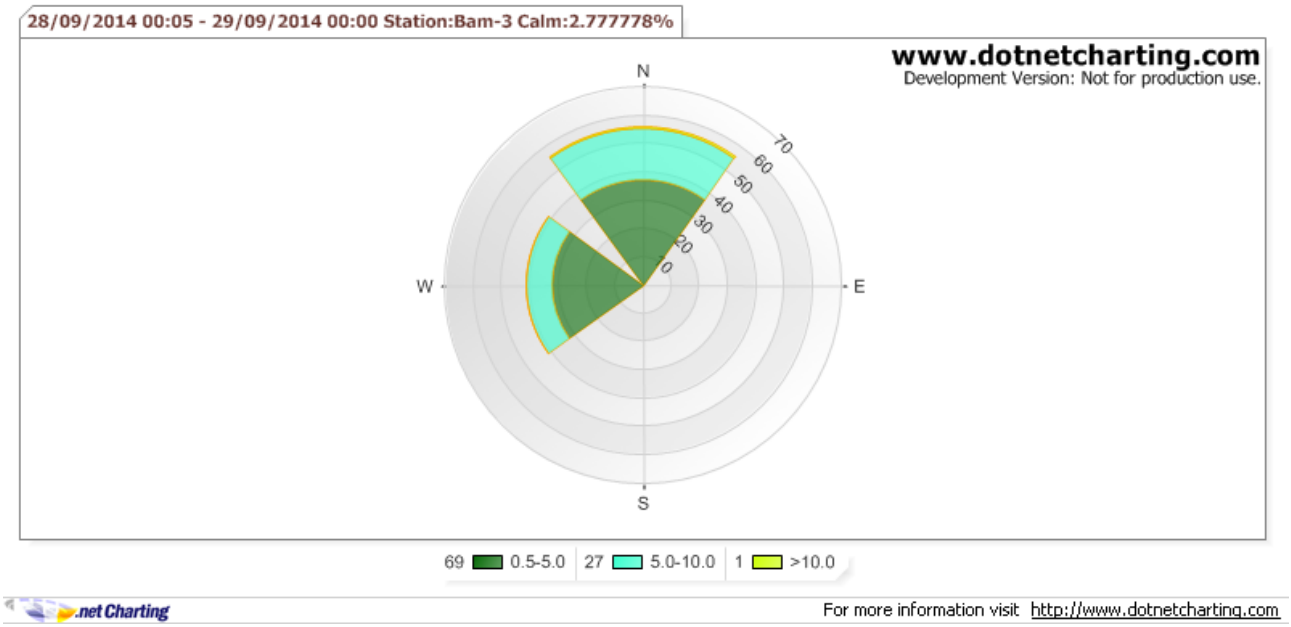
No. 4 Wind Rose relating to BAM 1 on 3rd July 2014



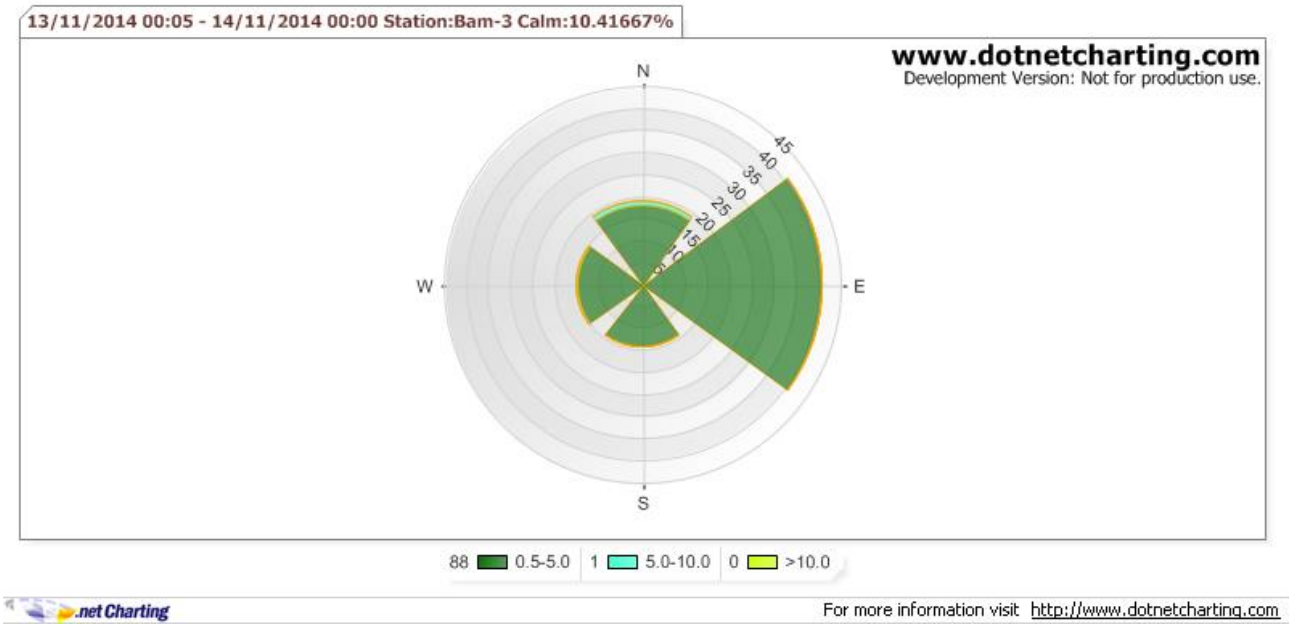
No. 5 Wind Rose relating to BAM 1 on 14th September 2014



No. 6 Wind Rose relating to BAM 1 on 23rdSeptember 2014



No. 7 Wind Rose relating to BAM 3 on 28th September 2014



No. 8 Wind Rose relating to BAM 3 on 13th November 2014