



Adelaide Brighton Cement Ltd

ABN 96 007 870 199

QUARTERLY NOISE MANAGEMENT REPORT FOR BIRKENHEAD WORKS

COMPLIANCE DATE: 31/10/18 – Quarter 3, 2018 **EPA Licence 1126: Noise Management Plan (U-787)**

Licensed site: Adelaide Brighton Cement, Birkenhead Works

62 Elder Road, Birkenhead, SA 5015

Date of Submission: 31 October 2018

Version Number: 1



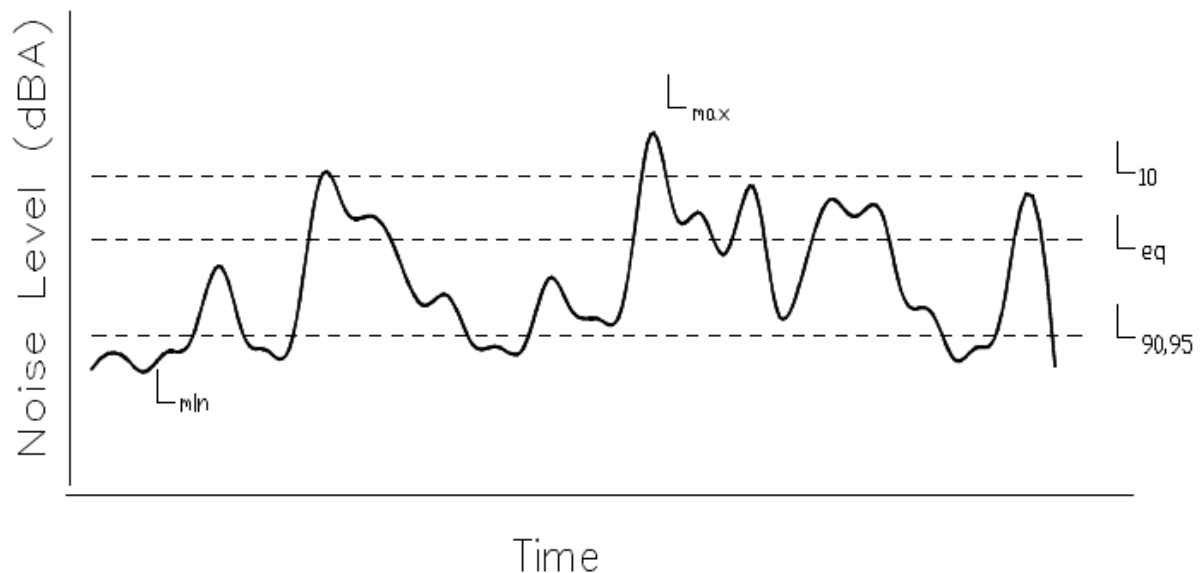
Report Submitted by: Environmental Engineer

Certified by: Compliance Manager

I certify that to the best of my knowledge and ability all the information in this report is a true and accurate reflection of the regulatory monitoring performed.


Glossary of acoustic terminology

- dB(A)** A unit of measurement, decibels(A), of sound pressure level which has its frequency characteristics modified by a filter ("A-weighted") so as to more closely approximate the frequency response of the human ear.
- L₁** The noise level which is equalled or exceeded for 1% of the measurement period. L₁ is an indicator of the impulse noise level, and is used in Australia as the descriptor for intrusive noise (usually in dBA).
- L₁₀** The noise level which is equalled or exceeded for 10% of the measurement period. L₁₀ is an indicator of the mean maximum noise level, and is used in Australia as the descriptor for intrusive noise (usually in dBA).
- L₉₀** The noise level which is equalled or exceeded for 90% of the measurement period. L₉₀ is an indicator of the mean minimum noise level, and is used in Australia as the descriptor for background or ambient noise (usually in dBA).
- L_{eq}** The equivalent continuous noise level for the measurement period. L_{eq} is an indicator of the average noise level (usually in dBA).
- L_{max}** The maximum noise level for the measurement period (usually in dBA).



Note: *The subjective reaction or response to changes in noise levels can be summarised as follows:*

A 3 dB(A) increase in sound pressure level is required for the average human ear to notice a change; a 5 dB(A) increase is quite noticeable and a 10 dB(A) increase is typically perceived as a doubling in loudness

Monitoring Objective	<p>The quarterly report will include where applicable:</p> <ul style="list-style-type: none"> • Details of noise complaints (excluding complainant name and identifying address details (for reasons of confidentiality), received during the quarter, including outcomes of the complaint investigation and where applicable corrective actions implemented • Details on the progress of noise attenuation projects including effectiveness • Details of noise monitoring reports • Details of other noise minimisation activities 																				
Monitoring Plan	<p>This monitoring report complies with the Noise Management Plan approved on 16 August 2018 by the SA EPA.</p> <p>The Plan is available on the ABC Birkenhead Community Website: http://www.birkenheadcommunity.com.au/</p>																				
Noise Complaints Summary	<table border="1"> <thead> <tr> <th data-bbox="316 573 472 645">Date & Time</th> <th data-bbox="472 573 612 645">Location</th> <th data-bbox="612 573 975 645">Description</th> <th data-bbox="975 573 1495 645">Action taken</th> </tr> </thead> <tbody> <tr> <td data-bbox="316 645 472 790">27/07/2018, 16:15</td> <td data-bbox="472 645 612 790">Hilton st Birkenhead</td> <td data-bbox="612 645 975 790">Resident rang in the afternoon to complain about a constant droning noise coming from the staff car park area.</td> <td data-bbox="975 645 1495 790">Inspected plant - Vacuum truck cleaning limestone spillage in gallery/tower. Cleaning of spillage finalised and complainant notified at approximately 4.40 pm.</td> </tr> <tr> <td data-bbox="316 790 472 976">7/09/2018, 08:20</td> <td data-bbox="472 790 612 976">No address provided</td> <td data-bbox="612 790 975 976">Resident emailed regarding a dull humming noise that they felt was coming from the plant during the night/early morning.</td> <td data-bbox="975 790 1495 976">Investigation conducted: Cold/still night, plant stable and no obvious source identified. Resident did not require a follow up call.</td> </tr> <tr> <td data-bbox="316 976 472 1122">20/09/2018, 23:57</td> <td data-bbox="472 976 612 1122">No address provided</td> <td data-bbox="612 976 975 1122">Resident complained of noise they felt was coming from the stack area throughout the night.</td> <td data-bbox="975 976 1495 1122">Investigation conducted: APA owned main gas train adjacent Victoria rd. was audible from Hargrave st./On the Run . No obvious source identified.</td> </tr> <tr> <td data-bbox="316 1122 472 1267">22/09/2018, 06:50</td> <td data-bbox="472 1122 612 1267">No address provided</td> <td data-bbox="612 1122 975 1267">Resident called regarding a site alarm.</td> <td data-bbox="975 1122 1495 1267">Fire alarm activated in 4A electrical load centre due to overheating cable. Fire brigade attended, inspected area & deactivated alarm.</td> </tr> </tbody> </table>	Date & Time	Location	Description	Action taken	27/07/2018, 16:15	Hilton st Birkenhead	Resident rang in the afternoon to complain about a constant droning noise coming from the staff car park area.	Inspected plant - Vacuum truck cleaning limestone spillage in gallery/tower. Cleaning of spillage finalised and complainant notified at approximately 4.40 pm.	7/09/2018, 08:20	No address provided	Resident emailed regarding a dull humming noise that they felt was coming from the plant during the night/early morning.	Investigation conducted: Cold/still night, plant stable and no obvious source identified. Resident did not require a follow up call.	20/09/2018, 23:57	No address provided	Resident complained of noise they felt was coming from the stack area throughout the night.	Investigation conducted: APA owned main gas train adjacent Victoria rd. was audible from Hargrave st./On the Run . No obvious source identified.	22/09/2018, 06:50	No address provided	Resident called regarding a site alarm.	Fire alarm activated in 4A electrical load centre due to overheating cable. Fire brigade attended, inspected area & deactivated alarm.
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Noise Attenuation Projects	<p>Completion of ABC Environmental Improvement Program 1126 EIP Version 3: 31 January – 30 June 2018.</p> <p><u>Project completion summary</u></p> <p>1. In June 2018, the APA Group installed a prefabricated wider spool to reduce restrictions within the Gas Train system as their preferred noise abatement measure.</p>  <p>Noise intensity reduced by 6 dB(A) at the source (Vipac Engineers report: 50B-18-0036-TRP-805631-2)</p>																				

2. ABC designed, manufactured and installed a new 75 dB rated silencer in April 2018.



Noise intensity reduced by 4 dB(A) at the source (Vipac Engineers report: 50B-18-0036-TRP-805631-2)

Note: measurement included several background sources within the vicinity

3. ABC refurbished internal silencer, sealed all openings and coated the fan housing with Decidamp, a constrained layer/visco-elastic damping material, designed to reduce structural vibration and sound transmission within light gauge materials during the March 2018 shutdown.



Noise intensity reduced by 7 dB(A) at the source (Vipac Engineers report: 50B-18-0036-TRP-805631-2)

Note: measurement included several background sources within the vicinity.

4. In late 2017, ABC replaced the entire gearbox assembly on the 4B Air slide transport system located at the top of 20,000 T Blending silo (adjacent main plant tower).



Noise intensity reduced by 9 dB(A) at the source (Vipac Engineers report: 50B-18-0036-TRP-805631-2)

Note: measurement included several background sources within the vicinity.

Noise Monitoring reports	Birkenhead Noise Emissions Profile Summary (ref: Vipac - 50B-18-0036-TPR-805507-2, 10 August 2018) <ul style="list-style-type: none"><li data-bbox="363 174 1506 237">• This report was prepared and submitted as part of the approved 'Noise Management Plan' and provides a summary of ABC noise emissions profile.
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