



Adelaide Brighton Cement Ltd

ABN 96 007 870 199

QUARTERLY NOISE MANAGEMENT REPORT FOR BIRKENHEAD WORKS

COMPLIANCE DATE: 14/02/20 – Quarter 4, 2020 **EPA Licence 1126: Noise Management Plan (U-787)**

Licensed site: Adelaide Brighton Cement, Birkenhead Works

62 Elder Road, Birkenhead, SA 5015

Date of Submission: 14 February 2020

Version Number: 1

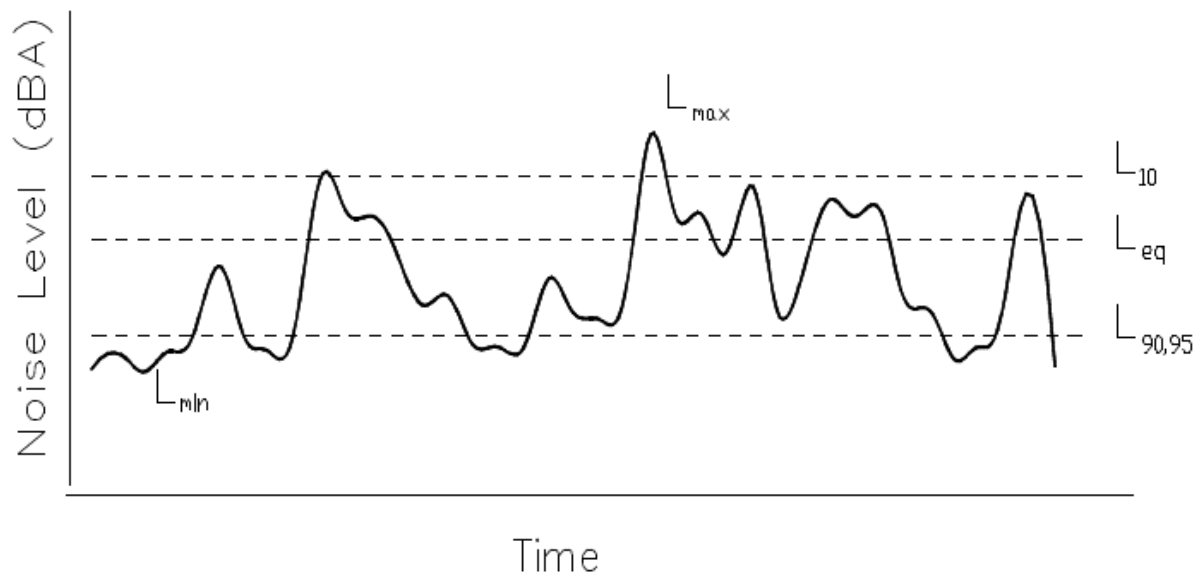


Report Submitted by: Environmental Engineer

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 the 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 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="284 591 427 696">Date and Time</th> <th data-bbox="432 591 571 696">Location</th> <th data-bbox="576 591 863 696">Description</th> <th data-bbox="868 591 1497 696">Action Taken</th> </tr> </thead> <tbody> <tr> <td data-bbox="284 707 427 1043">8/10/2019 22:27 PM</td> <td data-bbox="432 707 571 1043">No address provided</td> <td data-bbox="576 707 863 1043">Buzzing noise from factory - no other details provided</td> <td data-bbox="868 707 1497 1043">Investigated - unable to identify a source - difficult to pinpoint and confirm a source as no contact details provided. 4 subsequent complaints all from same resident in Alfred Street. Likely source was a noisy gear box/drive on 4B raw meal elevator. A noise barrier put in place, which reduced noise (confirmed by resident).</td> </tr> <tr> <td data-bbox="284 1055 427 1182">9/10/2019 14:22 PM</td> <td data-bbox="432 1055 571 1182">Alfred Street, Peterhead</td> <td data-bbox="576 1055 863 1182">Louder than normal humming noise at night 7th & 8th October</td> <td data-bbox="868 1055 1497 1182">See comments on 8/10/2019</td> </tr> <tr> <td data-bbox="284 1193 427 1397">10/10/2019 18:18 PM</td> <td data-bbox="432 1193 571 1397">Gilbert Street Birkenhead</td> <td data-bbox="576 1193 863 1397">High pitched noise from Limestone Reclaimer shed</td> <td data-bbox="868 1193 1497 1397">Source found to be from limestone reclaimer drive end bearing. Reclaimer shut down at 18:34 for repairs. Resident called back and thanked for bringing the noise to our attention.</td> </tr> <tr> <td data-bbox="284 1408 427 1480">12/10/2019 11:11 AM</td> <td data-bbox="432 1408 571 1480">Alfred Street Peterhead</td> <td data-bbox="576 1408 863 1480">buzzing noise from plant</td> <td data-bbox="868 1408 1497 1480">See comments on 8/10/2019</td> </tr> <tr> <td data-bbox="284 1491 427 1563">29/10/2019 19:30 PM</td> <td data-bbox="432 1491 571 1563">Alfred Street Peterhead</td> <td data-bbox="576 1491 863 1563">buzzing noise from plant</td> <td data-bbox="868 1491 1497 1563">See comments on 8/10/2019</td> </tr> <tr> <td data-bbox="284 1574 427 1646">29/10/2019 18:40 PM</td> <td data-bbox="432 1574 571 1646">No address provided</td> <td data-bbox="576 1574 863 1646">Buzzing noise from plant</td> <td data-bbox="868 1574 1497 1646">See comments on 8/10/2019</td> </tr> <tr> <td data-bbox="284 1657 427 1729">18/11/2019 11:58 AM</td> <td data-bbox="432 1657 571 1729">Alfred Street Peterhead</td> <td data-bbox="576 1657 863 1729">Rattling noise from ABC Community dog park signs</td> <td data-bbox="868 1657 1497 1729">Signs removed from gate and fixed to Community dog park fence</td> </tr> <tr> <td data-bbox="284 1740 427 1834">19/11/2019 05:30 AM</td> <td data-bbox="432 1740 571 1834">Alfred Street Peterhead</td> <td data-bbox="576 1740 863 1834">Humming noise from plant</td> <td data-bbox="868 1740 1497 1834">Possibly from 4B EP fan running- damper at 15% during plant shutdown.</td> </tr> <tr> <td data-bbox="284 1845 427 1962">26/11/2019 8:33 PM</td> <td data-bbox="432 1845 571 1962">Alfred Street Peterhead</td> <td data-bbox="576 1845 863 1962">Excessive loud noise from plant. 14 complaints received</td> <td data-bbox="868 1845 1497 1962">Kiln feed rotary valve failed- extremely loud squealing noise. Plant shut down within 30 min to repair valve. All complainants contacted and advised.</td> </tr> </tbody> </table>	Date and Time	Location	Description	Action Taken	8/10/2019 22:27 PM	No address provided	Buzzing noise from factory - no other details provided	Investigated - unable to identify a source - difficult to pinpoint and confirm a source as no contact details provided. 4 subsequent complaints all from same resident in Alfred Street. Likely source was a noisy gear box/drive on 4B raw meal elevator. A noise barrier put in place, which reduced noise (confirmed by resident).	9/10/2019 14:22 PM	Alfred Street, Peterhead	Louder than normal humming noise at night 7th & 8th October	See comments on 8/10/2019	10/10/2019 18:18 PM	Gilbert Street Birkenhead	High pitched noise from Limestone Reclaimer shed	Source found to be from limestone reclaimer drive end bearing. Reclaimer shut down at 18:34 for repairs. Resident called back and thanked for bringing the noise to our attention.	12/10/2019 11:11 AM	Alfred Street Peterhead	buzzing noise from plant	See comments on 8/10/2019	29/10/2019 19:30 PM	Alfred Street Peterhead	buzzing noise from plant	See comments on 8/10/2019	29/10/2019 18:40 PM	No address provided	Buzzing noise from plant	See comments on 8/10/2019	18/11/2019 11:58 AM	Alfred Street Peterhead	Rattling noise from ABC Community dog park signs	Signs removed from gate and fixed to Community dog park fence	19/11/2019 05:30 AM	Alfred Street Peterhead	Humming noise from plant	Possibly from 4B EP fan running- damper at 15% during plant shutdown.	26/11/2019 8:33 PM	Alfred Street Peterhead	Excessive loud noise from plant. 14 complaints received	Kiln feed rotary valve failed- extremely loud squealing noise. Plant shut down within 30 min to repair valve. All complainants contacted and advised.
Date and Time	Location	Description	Action Taken																																						
8/10/2019 22:27 PM	No address provided	Buzzing noise from factory - no other details provided	Investigated - unable to identify a source - difficult to pinpoint and confirm a source as no contact details provided. 4 subsequent complaints all from same resident in Alfred Street. Likely source was a noisy gear box/drive on 4B raw meal elevator. A noise barrier put in place, which reduced noise (confirmed by resident).																																						
9/10/2019 14:22 PM	Alfred Street, Peterhead	Louder than normal humming noise at night 7th & 8th October	See comments on 8/10/2019																																						
10/10/2019 18:18 PM	Gilbert Street Birkenhead	High pitched noise from Limestone Reclaimer shed	Source found to be from limestone reclaimer drive end bearing. Reclaimer shut down at 18:34 for repairs. Resident called back and thanked for bringing the noise to our attention.																																						
12/10/2019 11:11 AM	Alfred Street Peterhead	buzzing noise from plant	See comments on 8/10/2019																																						
29/10/2019 19:30 PM	Alfred Street Peterhead	buzzing noise from plant	See comments on 8/10/2019																																						
29/10/2019 18:40 PM	No address provided	Buzzing noise from plant	See comments on 8/10/2019																																						
18/11/2019 11:58 AM	Alfred Street Peterhead	Rattling noise from ABC Community dog park signs	Signs removed from gate and fixed to Community dog park fence																																						
19/11/2019 05:30 AM	Alfred Street Peterhead	Humming noise from plant	Possibly from 4B EP fan running- damper at 15% during plant shutdown.																																						
26/11/2019 8:33 PM	Alfred Street Peterhead	Excessive loud noise from plant. 14 complaints received	Kiln feed rotary valve failed- extremely loud squealing noise. Plant shut down within 30 min to repair valve. All complainants contacted and advised.																																						

**Noise
Monitoring
Reports &
Minimisation
Activities**

Noise monitoring by external acoustic engineers not undertaken in this quarter.

In response to resident complaints about a buzzing noise, a noise barrier constructed around 4B raw meal elevator drive and gearbox, which resolved the noise complaint.



wooden barrier lined with noise attenuation fabric (Wavebar)