



Adelaide Brighton Cement Ltd

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QUARTERLY NOISE MANAGEMENT REPORT FOR BIRKENHEAD WORKS

COMPLIANCE DATE: 14/02/2021– 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 2021

Version Number: 1

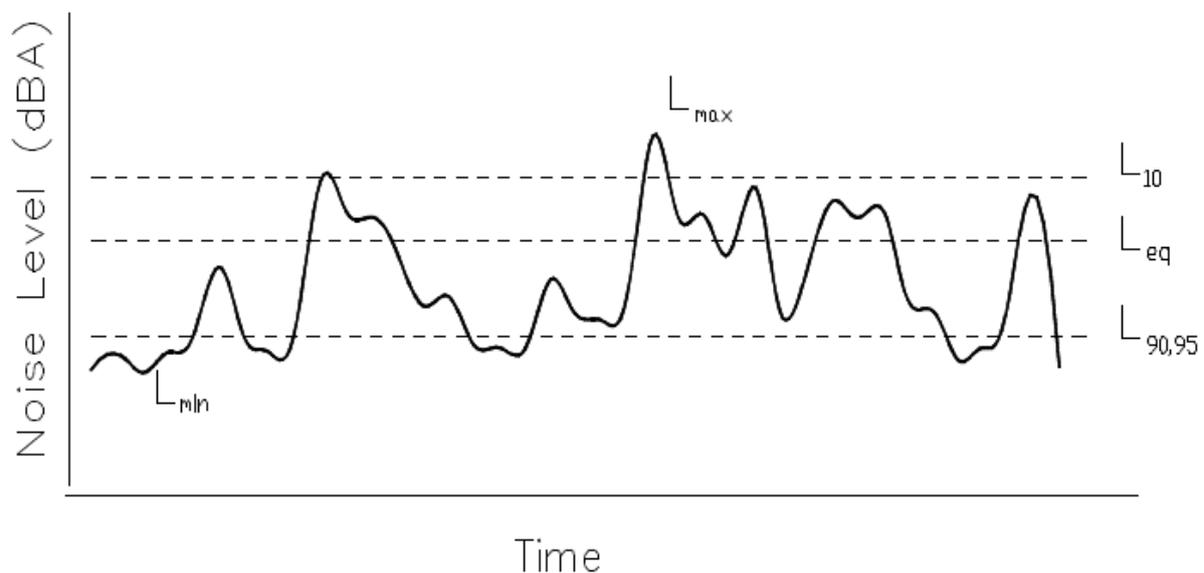


Report Submitted by: Sustainability/Environmental Engineer

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

The quarterly report will include where applicable:

- 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

This monitoring report complies with the Noise Management Plan approved on 16 August 2018 by the SA EPA.

The Plan is available on the ABC Birkenhead Community Website:

<http://www.birkenheadcommunity.com.au>

Noise Complaints Summary

Date and Time	Location	Description	Action Taken
20/10/2020 14:45	Alfred Street, Peterhead	Loud humming noise - been going all day	Checked plant operational activities Plant has been off all day No vacuum truck working in the plant area Walked round to Alfred Street - could not hear anything - approx 5.30pm No source could be found Tried calling the resident twice to verify if the noise was still there - no response.
22/10/2020 06:15	Alfred Street, Peterhead	Whistling noise coming from Plant	Initial onsite and off site investigations could not identify the noise . On 23/10/2020 a low level, continuous high frequency noise, was identified from a cooling water spray nozzle on the 4B Conditioning tower. Insulation blanket was applied around the spray nozzle head which significantly reduced the noise level at source, and resident reported that the noise had stopped. Vipac acoustic engineers undertook a noise assessment to assist in identifying suitable noise abatement solutions. A rubber noise dampening shroud was manufactured and fitted to the spray nozzles, and initial results looked promising. However there have been reoccurrences of the complaint from the same resident. Pyrotech Soundlag 4525C insulation has been ordered, and will be installed on the spray nozzle pipework.
30/12/2020 08:05	Alfred Street, Peterhead	High frequency whistling /ringing noise noise coming from the Plant all night	Response as above

Noise Monitoring Reports	No noise monitoring undertaken in this quarter
Noise Attenuation Projects	<p>Investigation into a resident's complaint of an intermittent whistling noise, identified the source of the noise to be associated with the operation of the 4B Conditioning Tower water sprays.</p> <p>Initial response to the complaint was to wrap the spray nozzles with Kaowool insulation blanket, which addressed the noise complaint at the time.</p> <p>Acoustic treatments are being evaluated to determine a suitable long-term noise abatement solution.</p> <p>Moulded rubber shrouds were manufactured and installed on the spray nozzles, initial results were promising, but reoccurrence of the complaint has occurred.</p> <p>Pyrotech Soundlag 4525C (a highly flexible foam-based composite acoustic pipe lagging product), has been purchased, and will be installed on the spray nozzle pipework and evaluated for effectiveness.</p> <div data-bbox="300 1003 654 1182"><p>Kaowool insulation blanket wrapped nozzle</p><p>Moulded rubber shroud placed around nozzle</p></div> 