ADBRI
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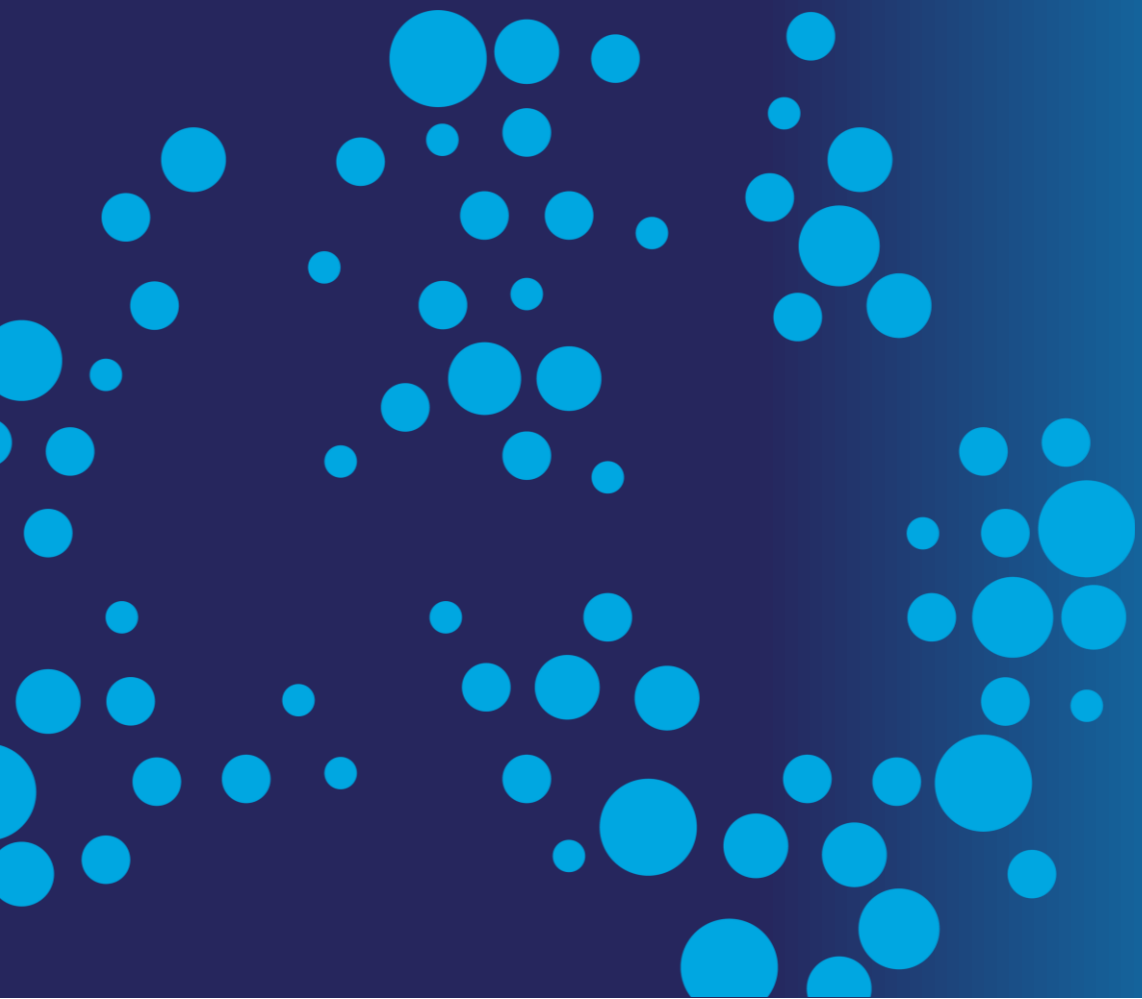
Environment Improvement Programme

Quarterly Progress Report 1 October – 31 December 2024

Version 0

February 2025



Contents

Licence details

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Licensee	Adelaide Brighton Cement Ltd (ABC)
EPA Licence Number	1126
Licence Issued	1 Nov 2022
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Premises Name	Birkenhead (the Site)
Version	0
Version History	

Internal Approvals

Approved by:
Peter Baker

EPA Approval

Glossary

Term	Definition
µg/m^3	micrograms per cubic metre
µm	micrometre
°C	degrees Celsius
km	kilometre
m	metre
m/s	metres per second
m^2	square metres
m^3	cubic metres
m^3/s	cubic metres per second
dB(A)	A unit of measurement, decibels(A), of sound pressure level with frequency filtered to closely match frequency response of the human ear
Nomenclature	**Definition**
TSP	Total suspended particulates
PM_{10}	particulate matter with a diameter less than 10 micrometres
$PM_{2.5}$	particulate matter with a diameter less than 2.5 micrometres
Abbreviations	Definition
ABC	Adelaide Brighton Cement Ltd
Air EPP	Environment Protection (Air Quality) Policy 2016
Noise EPP	Environment Protection (Commercial and Industrial Noise) Policy 2023
CFD	Computational Fluid Dynamics
CKD	Clinker Kiln Dust
CLG	Community Liaison Group
CM 1, 6, 7	Cement mill 1, cement mill 6, cement mill 7
CS#, CR#, CE#	Clinker Supply, Clinker Reclaim, Clinker Export, conveying system transfer points
BAM	Beta Attenuated Method
EET	Emission Estimation Technique
EIP	Environment Improvement Programme
EP Act	Environment Protection Act 1993
EF	Emission factor
EPA	Environment Protection Authority
ESP	Electrostatic Precipitator
MM	Raw Materials Management System
NPI	National Pollutant Inventory database
RDF/AF	Refuse Derived Fuel is an engineered Alternate Fuel pioneered by Adbri in 2003. It is produced to an approved specification by a third party from industrial waste

Term	Definition
	products and used to reduce the amount of fossil fuels burnt in the cement making process. Its use also diverts this waste from landfill.
SA EPA	South Australian Environment Protection Authority
TARP	Trigger Action Response Plan

List of Figures

1 Purpose

The Environment Improvement Program (EIP) report has been developed for the purpose of informing the regulator and key stakeholders of Adelaide Brighton Cement Pty Ltd (ABC) intentions for delivering improvement to the environment and community.

This quarterly progress report provides an update on the progress and completion of EIP actions, as well as the ongoing commitment to compliance. It also involves the release of quarterly reports on the publicly accessible Adelaide Brighton community webpage.

Compliance actions relevant for this report cover work completed in Quarter 4 2024, summarised below and highlighted by the orange box below shown in Figure 1. Adbri believes the site has met all expectations of the compliance actions as required by the EIP.

Theme	EIP Projects for this Reporting Period
Communication	1, 2
Dust management – clinker and cement	3, 4, 8, 9, 13
Dust monitoring	18, 19, 20
Amenity	23

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Compliance Actions
numbers represent actions and X denotes project or phase completion, specific dates in Section 5
green shading represents project work in preparation compliance

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###	Source	Project	2024 Q4	2025 Q1	Q2	Q3	Q4	2026 Q1	Q2	Q3	Q4	2027 Q1	Q2	Q3	Q4
	COMMUNICATION														
1	**Communication**	In addition to existing process of website updates, provide further communication via email or phone alert to community about operational or environmental matters which may have an impact on the community.	1.1		1.2 X										
2	**Communication**	Provide additional information about Refuse Derived Fuel (RDF) quality controls at a dedicated CLG meeting and upload information to the website.	2.1	.2 X											
	CLINKER SHED, DUST COLLECTORS AND HANDLING														
3	**Clinker Shed**	Develop an approved action plan to implement dust emission mitigation actions from clinker shed.	3.1 ongoing in 2025, 3.2		3.3		3.4	3.5 Implementation of changes determined from 3.4 according to approved plan							
4	**Dust collectors**	Develop an approved action plan to implement dust emission mitigation actions from specified dust collectors.	4.1	.2	4.3		4.4	4.5 Implementation of changes determined from 4.3 according to approved plan							
5		Install bag leak detection systems on specified dust collectors and develop and approve action plan to implement dust emission mitigation actions on the remaining dust collectors.			5.2		5.3	5.1 X	5.4 Implementation of changes determined from 5.3 according to approved plan						
6	**Clinker handling**	Complete upgrade to key clinker dust collector infrastructure to enable return of dust to process.						6.1 X							
7		Complete upgrade of cooler bag filter dust pumping system to transfer dust to cement mill 6.						7.1 X							
8		Complete modification to cooling sprays to minimise dust lift off from CS2 conveyor.	8.1	.2				8.3 X							
9		Complete installation of self-closing doors on critical seal doors.	9.1				9.2 X								
10		Complete installation of dribble chute and belt cleaners for clinker handling and transfer points.				10.1		10.2 X							
11		Complete implementation of program to better seal clinker transfer galleries and cement mill 6 building.			11.1		11.2					11.3 X			
12	**Heat exchanger**	Complete repairs to heat exchanger inlet ducting.		2.1 X											
	STACKS 4A & 4B														
13	**Stack 4A:**	Complete installation of short-term improvements to stack 4A and ensure action plan to implement dust emission mitigation actions from the stack 4A is approved. Apply learnings to stack 4B where applicable.	13.1	3.2	13.3		13.4	13.5 Implementation of changes determined from 13.4 according to approved plan							
	MATERIALS HANDLING AND OTHER BUILDINGS														
14	**Dry Mix Plant (Cement)**	Complete dust collection improvements in dry mix plant.			14.1	14.2		14.3 X							
15	**Dried slag transfer tower**	Complete slag drier transfer tower dust emission improvements.			15.1			15.2 X							
16	**Materials Management System**	Reduce fugitive dust from additive materials management receival hopper.		6.1						16.2		16.3 X			
17	**Limestone Stockpile**	Complete installation of 6m high by 20 m long wind curtains on east side of limestone stockpile.			17.1		17.2 X								
	MONITORING														
18	**Monitoring - CCTV**	Complete installation of additional CCTV cameras to provide visual of key emission sources.	18.1		18.2 X										
19	**Air quality monitoring network**	Complete improvements to air particulate monitoring network to measure larger particles across community and improve small particle monitoring and reporting.	19.1		19.2, 19.3	19.4	19.5	19.6	19.7 Implementation of changes determined from 19.6 according to approved plan						
20		Complete revision of dust dashboard and update action responses, including predictive weather.	20.1		20.2				20.3 Implementation of changes determined from 19.6 according to approved plan						
	NOISE														
21	**Kiln Shell Cooling System**	Complete implementation of noise reduction options for kiln shell cooling fan.			21.1		21.2	21.3 X							
	ODOUR														
22	**Site Odour**	Develop an approved action plan to implement odour emission mitigation actions.			22.1				22.2		22.3 X	22.4 Implementation of changes determined from 22.3 according to plan			
	AMENITY														
23	**Tree planting**	Plant additional trees to provide noise, dust and amenity benefit to commuity	23.1		23.2 X										

Figure 1: Summary of intent

2 Scope

A quarterly EIP progress report detailing progress and completion of the EIP actions during the quarter is required by Licence condition U-1554.

A quarterly report includes:

- Details of steps taken to progress compliance actions
- Details of proposed next steps to be taken in the following quarter

3 Background

In order to reduce its environmental impact, Adelaide Brighton Cement Ltd, has developed an EIP that contains projects to reduce noise and fugitive particulate emissions. These projects were identified from the following inputs:

Theme	EIP Project
Communication	1, 2
Dust management – clinker and cement	3 - 14
Dust management – raw materials	15 - 17
Dust monitoring	18, 19, 20
Noise and Odour	21, 22
Amenity	23

- Environment improvement Plan version 2 (November 2024) is available on the ABC Birkenhead Community Website: Environmental improvement plan - Adelaide Brighton Community

4 EIP Compliance Actions

PROJECT:	**1** In addition to existing process of website updates, provide further communication via email or phone alert to community about operational or environmental matters which may have an impact on the community.
ACTION:	**1.1** Letter box drop asking people to register for notifications. Offer option for "general news" and / or "operational alerts" by text or email as preferred by the resident.

Compliance Action detail:

Letter box drop asking people to register for notifications. Offer option for "general news" and / or "operational alerts" by text or email as preferred by the resident.

Compliance Action Due Date:

31st December 2024

Achievement:

Local residents have been informed via a letterbox flyer and updates on our website that they can sign up to receive direct text or email of operational and environmental matters at the Birkenhead facility. Twenty-three residents/CLG signed up for alerts for operational/environmental issues.

Flyer and notice placed on Birkenhead community website

Proposed next steps to be taken

The alerts list will continue to be updated moving forward and Adbri will progress engaging a third party to provide the messaging service.

PROJECT:	**2** Provide additional information about Refuse Derived Fuel (RDF) quality controls at a dedicated CLG meeting and upload information to the website.
ACTION:	**2.1** Use Dec CLG to confirm questions from community that need to be addressed. **2.2** Prepare slides and information for RDF CLG meeting in March.

Compliance Action detail:

2.1 Use Dec CLG to confirm questions from community that need to be addressed.

Compliance Action Due Date:

31/12/2024

Achievement:

Several introductory slides were prepared for Dec 24 CLG meeting as a general introduction to RDF and prompt feedback into any further questions the community may have. These align with content already available on the website.

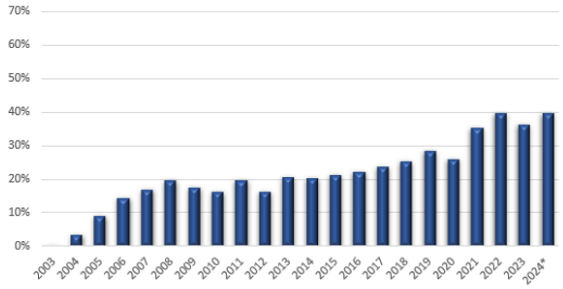
The below content has been shared as part of the CLG.

Birkenhead Plant RDF (Refuse Derived Fuel)

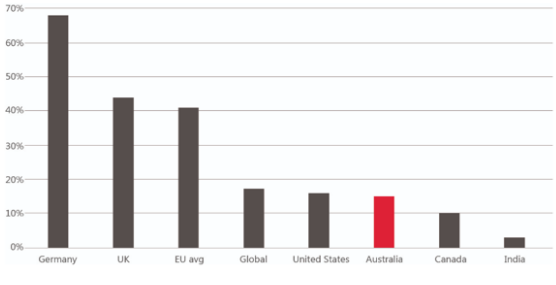
ADBRI Cement

Our Birkenhead facility currently uses RDF produced from construction and demolition (C&D) (primarily timber) and commercial and industrial (C&I) waste, that has been used safely in our operations since 2003.

Birkenhead RDF Substitution Rate



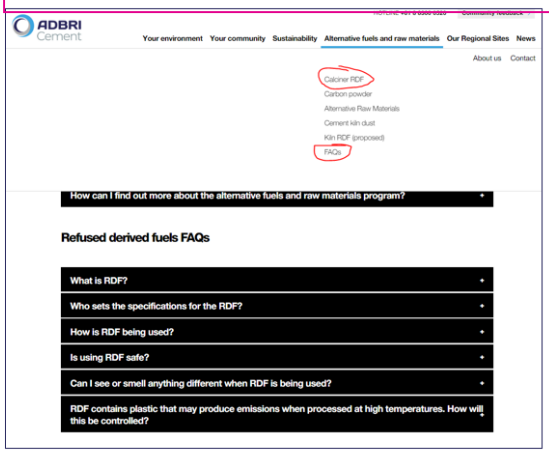
Global Alternative Fuel Substitution Rate



- Each step of our alternative fuels journey has involved extensive evaluation, monitoring and approval by the SA EPA.
- For any fuel used at Birkenhead, we will only consider highly engineered products that are based on well-established technologies and that have been proven internationally to be safe for people and the environment.
- In the March 2025 CLG, Adbri would like to dedicate a session to explaining why consumption of RDF is safe in a cement clinker kiln, and what measures we have in place to ensure this continues.

A good starting point:

Birkenhead Community Website: Home - Adelaide Brighton Community



Questions for the next CLG

What is RDF (Refuse Derived Fuel)?

- How do we make RDF? What is in it?
- How do we control quality?
- How much do we burn?

Why do we use RDF?

- What's the benefit of using RDF
- Why aren't we using green fuel (hydrogen, electricity, etc)
- Are you going to consume more?

Is RDF safe?

- How has use of RDF changed emissions over time
  - Effect on CO2, SO2, NGER/NPI, metals
  - Effect on dust
- How do we monitor and control emissions
- How do we know what's emitted is safe
- Why is burning plastic allowable

Additional questions about RDF use that the community would like answered were captured at the 16 December CLG meeting. Issues included input quality control, and RDF safety issues.

Proposed next steps to be taken

ABC will prepare slides and information on RDF use for the CLG meeting in March 2025. Example questions include (not limited to) “what plastics are being burnt”, “more information on ResourceCo”, “use of RDF in other locations”.

PROJECT:	**3** Develop an approved action plan to implement dust emission mitigation actions from clinker shed
ACTION:	**3.1** Continue existing maintenance on shed, maintain sealing of gaps and clinker transfer points **3.2** Liaise with technology specialists to bring best practice perspective to shed plan.

Compliance Action detail:

3.1 Continue existing maintenance on shed, maintain sealing of gaps and clinker transfer points.

3.2 Liaise with technology specialists to bring best practice perspective to shed plan.

Compliance Action Due Date:

3.1 31st December 2025

3.2 31st December 2024

Achievement:

3.1 Maintenance of the shed is continuing. In addition to initial roof repairs and sealing, one more roof section has been replaced on the eastern side of the shed, with additional sealing between the roof section and the eastern wall completed. Additional sections of roof have been identified for maintenance following structural assessment and are planned for progressive implementation in 2025.

3.2 A structural engineer attended Birkenhead site and provided a report on condition of the shed. The report noted no major re-cladding was considered necessary for the walls of the clinker shed. The report noted the need for maintenance of eves and ridge flashings, retaining walls and build up on roof blocking the rainwater drainage system. Recommended actions included annual maintenance/repairs of ridge and eaves, implementing actions to avoid overfilling, annual cleaning program to deal with dust build up and re-establishing proper rainwater collection system.

Proposed next steps to be taken

Temporary ridge and eaves (flashings) are now in place. A review is underway to consider how to prevent build up in the rainwater drainage system. A procedure will be established to avoid overfilling of the clinker shed. With the structural report of shed now complete, the remaining two studies outlined in action 3.3 will be undertaken. This will involve conducting a Computational Fluid Dynamics (CFD) simulation to analyse the existing airflow, as well as reviewing material handling options for internal shed clinker movement to determine any improvement to current handling practice.

PROJECT:	**4** Develop an approved action plan to implement dust emission mitigation actions from specified dust collectors
ACTION:	**4.1** Complete independent review and prioritise dust collectors

Compliance Action detail:

Complete independent review and prioritise dust collectors.

Compliance Action Due Date:

31st December 2024

Achievement:

External consultants have completed independent performance review of dust collectors and identified the following as requiring rectification work.

a. Fixing, removing or replacing Silo FP4 dust collector

b. Raw materials Silo 1, 2, 9 dust collector

c. Central Tower CS1/CS2 dust collector #3

d. CR2/CR3 dust collector

e. Removal of buildup around dust collectors

f. Where measurement indicates that the emission concentration of dust is above best available technology economically achievable concentration of 10mg/Nm3

Inskip Dust and Fume, (OEM providers for these dust collectors), were engaged to undertake an inspection of the dry pack centre dust collectors a) and b). An inspection report was provided, and a scope of work has been prepared, with work orders raised, and rectification work is in progress from 2025.

Adbri, has replaced the filter media in dust collectors c) and d). Independent performance testing on CR2/CR3 dust collector was conducted by Airlabs, following the filter media change with TSP test results of 0.5 mg/Nm^3 confirming effectiveness of filter media change, and meeting best available technology economically achievable guideline of <10 mg/Nm^3 TSP.

Proposed next steps to be taken

Maintenance rectification works have commenced and will progress over the next quarter. This includes fabrication of new external ducting and ongoing removal of buildup around dust collectors.

PROJECT:	**8** Complete modifications to cooling sprays to minimise dust lift off from CS2 conveyor.
ACTION:	**8.1** Complete engineering scope

Compliance Action detail:

8.1 Complete engineering scope

Compliance Action Due Date:

31st December 2024

Achievement:

The Adbri engineering team reviewed the CS2 conveyor cooling spray related dust issues. It noted optimisation opportunity with water activation temperatures and dust layering. Improvement to piping design could also reduce water shutoff control. The engineering team deem focusing on these areas will improve the efficiency of the cooling sprays and mitigate or reduce the dust issues on the CS2 conveyor. The result was a scope of work has been prepared and rectification work is currently in progress and described in next steps.

Proposed next steps to be taken

1. Adjust water activation temperatures to significantly reduce runtime (target <20%).
2. Re-instate material rake as trial to migrate dust below surface and avoiding contact with water/steam.
   a. If successful, modify design to optimise.
   b. Once optimised, create maintenance plan to ensure rake remains in good working condition.
3. Investigate water runout of system. If creating an impact, modify pipework design to reduce/eliminate.

PROJECT:	**9** Complete installations of self-closing doors on critical seal doors
ACTION:	**9.1** Develop scope of work (includes roller doors, PA door, mill access doors)

Compliance Action detail:

9.1 Develop scope of work (includes roller doors, PA door, mill access doors)

Compliance Action Due Date:

31st December 2024

Achievement:

The door audit is 75% complete. The audit consists of picture of each door, location and condition. Condition is defined by 6 key areas;

1. Door is in good working order
2. Door is out of alignment / will not close
3. Door has hinge issue
4. Door frame has issue
5. Cement build up under door
6. Door handle has issues

This information is provided to the maintenance planners to schedule work orders and remedy issues. Work will be completed by the production service team, maintenance and contractors. The maintenance planners will track progress.

Proposed next steps to be taken in the following quarter

Further audits on the remaining 25% of doors will be completed. Scheduling of works will be completed based on audit results. Works will be tracked and progressively completed.

PROJECT:	**13** Complete installation of short-term improvements to stack 4A and ensure action plan to implement dust emission mitigation actions from the stack 4A is approved. Apply learnings to stack 4B where applicable.
ACTION:	**13.1** – Complete internal assessment including stack tests and confirm preferred short-term improvements. • Stack test of different process stream inputs into 4A stack (completed) • Review data from stack 4A and 4B to understand opportunities for improvement (completed by external consultant as part of options assessment) • New rappers for 4A Electrostatic Precipitator (ESP) (devices to clean dust off the ESP fields) • Ensure inspections for studies in 13.3 are scoped and planned with expert oversight

Compliance Action detail:

13.1 Complete internal assessment including stack tests and confirm preferred short-term improvements.

- Stack test of different process stream inputs into 4A stack (completed prior to EIP)
- Review data from stack 4A and 4B to understand opportunities for improvement (completed by external consultant as part of options assessment prior to EIP)
- New rappers for 4A Electrostatic Precipitator (ESP) (devices to clean dust off the ESP fields)
- Ensure inspections for studies in 13.3 are scoped and planned with expert oversight.

Compliance Action Due Date:

31st December 2024

Achievement:

Process Setting:

In all kiln systems, the exhaust gases are passed through an air pollution control device for separation of dust before being released to atmosphere via stacks. In the Birkenhead plant 4A stack combines three process streams each with its own pollution control device. The Kiln and bypass streams are fitted with ESP and the clinker cooler has a bag filter. Additionally, an ESP is used on 4B stack which receives process stream from the calciner. 4A Stack combines three process streams each with its own pollution control device. The Kiln and bypass streams are fitted with ESP's and the clinker cooler has a bag filter.

Bag filters make use of a fabric filter system, the fabric "bags" separate dust particles from the exhaust gas. The dust particles are captured on the bag surface, while exhaust

gas passes through the bag fabric. The bags are periodically cleaned by using a reverse pulse of compressed air which dislodges the collected dust into collection hoppers.

ESP use electrostatic forces to separate dust from the exhaust gas. Discharge electrodes are used to negatively charge dust particles, which are collected on corresponding collecting electrodes (collecting plates). The collected dust particles are then released from the collecting plates by electrode rapping (vibration) into collection hoppers. To increase dedusting efficiency, the ESP contains a number of electric fields.

The Birkenhead plant uses the kiln exhaust gases, which are hot and low in humidity, to dry raw materials in the raw material mill, when the mill is in operation. When the raw mill is off, the hot exhaust gases must be cooled down by spraying water into a gas conditioning tower. This brings the gas temperature down to a level suitable for the ESP. The different process conditions can affect ESP performance.

Stack test different process stream inputs into 4A stack:

Simultaneous particulate emissions tests were undertaken in the clinker cooler bag filter waste air duct and 4A stack at different waste air fan operating conditions in late 2024.

The test was to check if during significant increase in air flow (such as start-up), particulate levels in the waste air fan duct increase contributing to slightly higher particulate levels in 4A stack for short periods of time.

The testing indicated that potential build-up of clinker in the air duct is unlikely. This confirms that the condition of the cooler bag filter is the main contributor to stack emissions from this part of the input into 4A stack.

Review of stack particulate emissions:

A review of 4A stack particulate emissions was undertaken as part of the revised abatement options assessment – refer Revised Abatement Options Analysis Report, (Katestone, September 2024).

Summary of Review:

Whilst the clinker kiln 4A stack is the largest particulate emission source at the Birkenhead Facility, it is not a major contributor to ground-level concentrations of dust or dust deposition rates due to emission parameters that support increased dispersion, (nominally, the elevated discharge point, significant exhaust velocity and elevated discharge temperature). Additionally, over 95% of emissions are below the required level of 1-hourly TSP average concentration of 50mg/Nm3.

Opportunities for improvement included recommendations for site to

- Assess causes for stoppages (main cause for elevated stack levels) and methods to reduce their occurrence
- Assess reasons for elevated emissions due to
    - Bypass ESP and 4A ESP variable performance

- Cooler bag filter bag failures and seal failures on the frame.
- Cooler heat exchanger during cooler upsets and positive pressure.
- Raw mill stoppages resulting in flow disturbances that change ESP performance.

Summary of improvement opportunities from assessment of emissions

The following opportunities have been identified for more detailed investigation to reduce transient particulate emissions in 2025.

1. *Reduction in 4A Conditioning tower bottom temperature during 4A Raw Mill stoppage periods.*
   - This process control strategy is being trialled to evaluate effectiveness and ongoing suitability. There are some process limitations that need to be considered to avoid flooding in the bottom of the gas conditioning tower.
2. *Investigate clinker cooler over pressure control to minimise potential disturbance to cooler bag filter sock seating/sealing arrangement and potential for particulate leakage.*
   - A process control strategy is currently being trialled to minimise occurrences of clinker cooler over pressurisation.
   - This trial contributes to reduction of stack particulate emissions, by reducing small pressure variations in the downstream equipment.
   - Feedback from Redecam (cooler bag filter design /manufacturer), has indicated that pressure variations may disturb cooler filter bag seating arrangements potentially resulting in small amounts of particulate leakage into waste air stream to 4A stack.
   - The trial is currently in progress to evaluate effectiveness and ongoing suitability.

New rappers for 4A ESP

A capex has been approved to trial the replacement of existing mechanical rappers with electric rappers on one of 4A ESP fields.

The purpose of the trial is to determine if there is an improvement in rapper reliability. Improved rapper reliability may result in improved performance and uptime, potentially improving dust particulate collection and reducing stack particulate emissions.

The new rappers have been ordered, and delivery is not expected until after the annual plant shutdown. However, it is anticipated they will be able to be installed during other planned maintenance throughout Q1 to Q2 2025.

Planning for inspections for studies in 13.3

- Discussions with Redecam (cooler bag filter design /manufacturer) have been held. Redecam have been provided drawings and operational data. They also requested old bags and photos to be provided following the Jan 2025 shut.
- Development of a scope of work to investigate improvement opportunities has commenced.

Proposed next steps to be taken

The site has prepared a scope of work, to be undertaken during the annual plant shutdown in January 2025, with a focus on improving filter bag installation and sealing within the cooler bag filter housing to reduce bag leakage and improve bag filter performance.

Install new rappers on 4A ESP (during other planned maintenance throughout Q1 to Q2 2025) and complete OEM inspections for studies.

Monitor stack emissions to determine effectiveness of short-term improvement trials.

PROJECT:	**18** Complete Installation of additional CCTV cameras to provide visual of key emission sources
ACTION:	**18.1** Procure and install additional CCTV cameras to provide better visibility of dust prone areas

Compliance Action detail:

Procure and install additional CCTV cameras to provide better visibility of dust prone areas.

Compliance Action Due Date:

31st December 2024

Achievement:

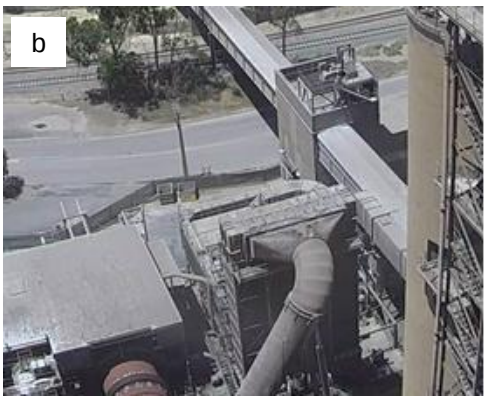
Additional CCTV cameras have been procured and installed. The following areas are permanently monitored and recorded:

a. Clinker shed

b. Kiln 4 cooler bag filter

c. 4A stack

d. RDF in-load building



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The cameras are visible 24 hours a day via the control room and able to be accessed by site personnel via a dedicated computer on the engineering floor. Historic data can be accessed for up to 50 days.

Control room photos

Proposed next steps to be taken

Further information will be provided regarding action 18.2 Complete assessment of the effectiveness of installed cameras including a review of other technologies that may assist in monitoring footage as part of Q2.25 report.

PROJECT:	**19** AQ Monitoring Network
ACTION:	**19.1** Install short term solution of 2x trailer mounted air quality units with depositional dust units in the community.

Compliance Action Due Date:

31st December 2024

Achievement:

ABC has installed and commissioned trailer mounted monitoring stations at two locations in the local community. One of these was co-located at the ABC Community Park (Birkenhead), and the other was located on the corner of Walton Street and Mary Street, Peterhead, and is a replacement for the former Gunn Street monitor until a long-term monitoring station can be established.

The trailer mounted monitoring stations have been set up to measure PM2.5, PM10 and TSP particulate sizes using the following equipment:

- Thermo Scientific Model 5028i Beta Attenuated Method (BAM) which consistently measure PM2.5 and PM10.
- Thermo Scientific Model 5014i BAM which consistently measures TSP.
- 10m pump up mast 86000 Wind Speed/Direction Sensor.
- Wind speed and direction at each particulate monitor is measured continuously by a RM Young 86000 windspeed and direction sensor, mounted on a 10m pump up mast.

This monitoring arrangement allows for analysis of the new BAM equipment capability and suitability, and to address concerns raised by the EPA with the PM2.5, PM10 and PM2.5/PM10 ratio measured by the DustTrak monitors, that have been in service.

Since installation there have been no air quality exceedances, and the good alignment with EPA Le Fevre1 PM10 and PM2.5 Particulate monitoring data.

Dust deposition gauges have been co-located at both community monitoring stations.

A comprehensive review of the current particulate monitoring system is currently under way.

Photographs of the two trailer mounted monitoring stations below:

Community Park

Walton Street

Proposed next steps to be taken

Work towards compliance actions 19.2 and 19.3 is in progress and will be included in the Q2.25 progress report.

PROJECT:	**20** Complete revision of dust dashboard and update action responses, including predictive weather.
ACTION:	**20.1** Initial update of website with new trailer information

Compliance Action detail:

20.1 Initial update of website with new trailer information.

Compliance Action Due Date:

31st December 2024

Achievement:

The website has been updated to display PM10 and PM2.5 monitoring data from the new trailer mounted monitoring stations, and new site location information. https://abcmonitoring.katestone.com.au/public/

There has been good correlation with monitoring data from the local (LeFevre1) EPA monitoring station, typical graphs below.

Note: Issue with EPA monitoring station data for PM2.5 on 25 Nov 2024

Proposed next steps to be taken

Action complete. Work towards compliance actions 20.2 is in progress and will be included in the Q2.25 progress report.

PROJECT:	**23** Complete planting of additional trees to provide dust and amenity benefit to community.
ACTION:	**23.1** Prepare plan for additional tree/vegetation planting around parts of fence line with vegetation gaps and in places to provide better shielding to community.

Compliance Action detail:

Prepare plan for additional tree/vegetation planting around parts of fence line with vegetation gaps and in places to provide better shielding to community.

Compliance Action Due Date:

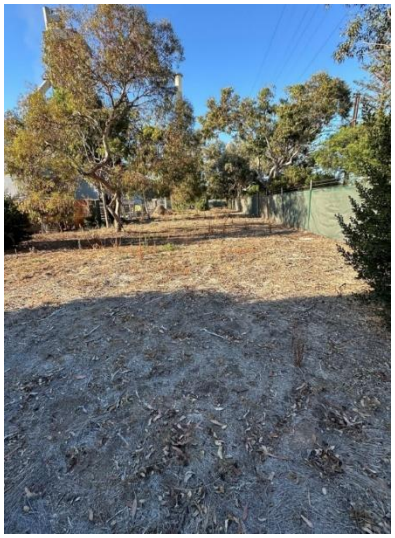
31st December 2024

Achievement:

The below vegetation improvements have been completed since the May dust event and in support of the EIP.

Note that approximately 30 trees have been recently planted in the Victoria Rd northwest boundary as part of the site initiative towards this EIP project and close to 100 native trees were planted on the boundary around Schroder Park.

Northwest Victoria Rd before and after tree planting



Proposed next steps to be taken

In 2025 we plan to complete further densification along the Victoria Rd boundary to help reduce fugitive dust emissions from site. However, due to weather conditions in the next quarter, no planting is proposed.

5 Public Access

A copy of the current version of this EIP, as approved by the EPA, will be made available on the Adelaide Brighton Community website within 14 days of receiving approval.

6 References

- *Katestone Environmental Response letter, October 2024, re EPA's approval of the "Assessment of Options Report Birkenhead site – September 2024"*
- *Adelaide Brighton Cement Limited Report, September 2024, 'Assessment of Options Report'*
- *Katestone Environmental Report, September 2024 "Revised Abatement Options Analysis"*
- *Katestone Environmental Report, September 2024 'Dust Collector Report"*
- *Adelaide Brighton Cement Limited Report, April 2024, 'Assessment of Options Report'*
- *Katestone Environmental Report, April 2024 "Abatement Options Assessment Report"*
- *Katestone Environmental Report 2023 "Birkenhead Cement Plant Air Emissions inventory and Dispersion Modelling"*
- *Vipac Engineers and Scientists Report, July 2023 "Site Noise Mitigation assessment"*
- *Adelaide Brighton Cement Limited Report, July 2023, 'Assessment of Noise Mitigations Options Report'*
- *Resonate Report, May 2024 "Noise model Update and Abatement Options Assessment"*