



Licence No. 1126

**ADELAIDE BRIGHTON CEMENT
LIMITED**

Victoria & Elder Roads, PETERHEAD SA 5016

ISSUED:

01 Nov 2017

EXPIRY:

31 Oct 2022

ACN:

007 870 199

Environmental Authorisation
under Part 6 of the
*Environment Protection
Act 1993*

**South Australian
Environment
Protection Authority**
GPO Box 2607
Adelaide SA 5001
Tel: 08 8204 2004

EPA

Environment Protection Authority

LICENCE NUMBER 1126

LICENSEE DETAILS

Licence Holder: ADELAIDE BRIGHTON CEMENT LIMITED
ACN: 007 870 199
Registered Address: Level 1, 157 Grenfell Street, ADELAIDE SA 5001

Premises Address(es): Victoria & Elder Roads, PETERHEAD SA 5016

LICENSED ACTIVITIES

The Licensee is authorised to undertake, at the location(s) shown above, the following prescribed activities of environmental significance under Schedule 1 Part A of the Act, subject to the conditions in this Licence.

2(3)	Cement works
3(5)(a)	Activity producing listed waste
7(1)	Bulk shipping facilities
7(3)(c)	Crushing, grinding or milling works (rock, ores or minerals)
8(2)(a)	Fuel burning coal or wood
8(2)(a)	Fuel burning not coal or wood

TERMS OF LICENCE

Commencement Date: 01 Nov 2017
Expiry Date: 31 Oct 2022
Amended Date: 09 Nov 2020

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Licence Explanatory Notes – Do Not Form Part of the Licence

Compliance with this licence

The EPA seeks to ensure that all reasonable and practicable measures are taken to protect, restore and enhance the quality of the environment according to the principles of ecologically sustainable development. To achieve this objective, the EPA uses a number of regulatory decision making principles and actions outlined in the 'Compliance and enforcement regulatory options and tools' document available on the EPA website.

Notification – serious or material environmental harm caused or threatened

If serious or material environmental harm from pollution is caused or threatened in the course of an activity, the licence holder must, as soon as reasonably practicable after becoming aware of the harm or threatened harm, notify the EPA (preferably on EPA emergency phone number 1800 100 833) of the harm or threatened harm, its nature, the circumstances in which it occurred and the action taken to deal with it in accordance with section 83 of the [Environment Protection Act 1993](#) (the Act). In the event that the primary emergency phone number is out of order, the licence holder should phone (08) 8204 2004.

Variations, transfers and surrender of a licence

The EPA may impose or vary the conditions of a licence by notice in writing to the licence holder in accordance with sections 45 and 46 of the Act. Public notice may be required where the variation of licence conditions results in a relaxation of the requirements imposed for the protection or restoration of the environment and results in an adverse effect on any adjoining land or its amenity.

If a licence holder wishes to vary the conditions of a licence, transfer a licence to another entity, or surrender a licence, the licence holder must submit an application to the EPA in accordance with the applicable provisions of the Act (sections 45, 49 and 56, respectively). A licence remains in effect and in its original form until such time as any proposed variation, application for surrender, or transfer has been made and approved in writing by the EPA.

Suspension or cancellation of a licence

The EPA may suspend or cancel a licence by notice in writing to the licence holder in accordance with section 55 of the Act if satisfied the licence holder has either obtained the licence improperly, contravened a requirement under the Act or if the holder is a body corporate, a director of the body corporate has been guilty of misconduct of a prescribed kind (whether in this State or elsewhere).

Responsibilities under Environment Protection legislation

In addition to the conditions of any licence, a licence holder must comply with their obligations under all State and Federal legislation (as amended from time to time) including: the [Environment Protection Act 1993](#); the [Environment Protection Regulations 2009](#); all Environment Protection Policies made under the [Environment Protection Act 1993](#); and any National Environment Protection Measures not operating as an Environment Protection Policy under the [Environment Protection Act 1993](#)

Public Register Information

The EPA maintains and makes available a Public Register of details related to its determinations and other information it considers appropriate (i.e. excluding trade processes or financial information) in accordance with section 109 of the Act. These details include, but are not limited to:

- licensing and beverage container applications and approvals
- enforcement actions
- site contamination
- serious or material environmental harm caused or threatened in the course of an activity
- environment improvement programmes and environment performance agreements
- environment assessment reports; results of testing, monitoring or evaluation required by a licence
- EPA advice or direction regarding development approvals referred to the EPA by a planning authority

Definitions

Unless the contrary intention appears, terms used in this licence that are defined in the Act (including any regulations or environment protection policies made pursuant to the Act) have the respective meanings assigned to those terms by the Act.

THE ACT: The *Environment Protection Act 1993*

PREMISES: The whole of the land comprised in Titles Register - Certificate of Title, Crown Lease and Crown Record.

CT5142/523
CT5142/522
CT5485/422
CT5411/669
CT5750/769
CT5750/770
CT5742/582
CT5742/581
CT5813/976
CT5816/637
CT5816/2
CT5841/73
CT5683/198
CT5968/732
CT6057/913
CT6057/917
CT6057/918
CT6057/920
CT6057/921
CT6057/922
CT6057/914
CT6087/695
CT6087/694
CT6087/700
CT6087/696
CT6087/697
CT6087/698
CT6087/701
CT6087/702
CT6126/858
CT6057/936
CT6057/933
CT6057/931
CT6057/929
CT6057/927
CT6057/925
CT6057/924
CT6145/889
CT6145/895
CT6146/576

24 HOUR AVERAGE: Calendar day average

AUTHORISATION FEE PAYMENT DATE: means the anniversary of the grant or renewal of this authorisation.

CERTIFIED TYPE B GAS APPLIANCE: means an appliance with a gas consumption in excess of 10 megajoules per hour which has been certified under the Gas Act 1997 as meeting the requirements of AS3814 and AS/NZS5601.

CONTAMINATED STORMWATER: is as defined in the Environment Protection (Water Quality) Policy 2015.

CONTROLLED WASTE: means any wastes of a category listed in Column 1 of the Table in Schedule 1 that has 1 or more characteristics listed in the Table in Schedule 2 of the Environment Protection (movement of Controlled Waste) Policy 2014.

DESTINATION FACILITY: 'Destination Facility' in relation to a consignment of controlled waste means the depot, facility or works to which the waste is, or is to be delivered under the consignment.

ENVIRONMENTAL HARM: means the same as is defined in section 5 of the Environment Protection Act 1993.

LISTED WASTE: means wastes listed in Part B of Schedule 1 of the Environment Protection Act 1993.

PM10: means 'particles with an equivalent aerodynamic of less than 10 micrometres, as passed by a size selective inlet'.

PM2.5: means 'particles with an equivalent aerodynamic of less than 2.5 micrometres, as passed by a size selective inlet'.

POLLUTION CONTROL EQUIPMENT: means 'control equipment' as defined in the Environment Protection (Air Quality) Policy: any device that controls, limits, measures, records or indicates air pollution.

RECOVERED PRODUCTS PLAN: means a written document that is approved by the EPA in accordance with Section 6 of the EPA 'Standard for the Production and Use of Refuse Derived Fuel,' dated February 2010.

REFUSE DERIVED FUEL: A fuel material produced from waste that is otherwise destined to landfill and which will not cause harm to the environment or human health when used to beneficially replace or supplement a fossil or other standard commercial fuel in an industrial process. RDF must be produced to an approved consistent and fit for purpose specification with sufficiently high net calorific value by segregating, targeting and processing specific wastes.

SUITABLY QUALIFIED EXPERT: means a person who holds relevant qualifications, has demonstrated professional experience and expertise encompassing an appropriate range of competencies, and is either a full member or is eligible for full membership of one or more of the following or equivalent professional organisations:

1. The Institution of Engineers Australia
2. The Association of Consulting Engineers Australia

WASTE: means -

1. As defined under the Environment Protection Act 1993,

1(a) any discarded, dumped, rejected, abandoned, unwanted or surplus matter, whether or not intended for sale or for purification or resource recovery by a separate operation from that which produced the matter; or

1(b) any matter declared by regulation to be waste for the purposes of this Act (following consultation by the Minister on the regulation with prescribed bodies in accordance with the regulations); or

1(c) any matter declared by an environment protection policy to be waste for the purposes of this Act,

whether or not of value.

2. However, waste does not include—

2(a) an approved recovered resource whilst it is being dealt with in accordance with the declaration of that resource—see section 4A; or

2(b) anything declared by regulation or an environment protection policy not to be waste for the purposes of this Act,

even though the resource or the thing so declared might otherwise, but for the declaration, fall within the definition of waste in subsection (1).

WASTEWATER: as defined in the Environment Protection (Water Quality) Policy 2015.

WATERS: is as defined in the Environment Protection (Water Quality) Policy 2015.

Acronyms

EPA: means Environment Protection Authority

AFRM: means Alternative Fuel and/or Raw Material.

STP: means standard temperature and pressure (zero degrees Celsius and 101.3 kiloPascals absolute).

TSP: means Total Suspended Particles.

WTC: means Waste Transport Certificate.

Conditions of Licence

The Licensee is authorised to conduct the prescribed activities as described in this Licence at the Premises nominated, subject to the following conditions:

1 CONTROL OF EMISSIONS

1.1 DUST MANAGEMENT PLAN (U - 755)

The Licensee must:

- 1.1.1 develop and submit to the satisfaction of the EPA a Dust Management Plan by the date listed below;
- 1.1.2 ensure that the Dust Management Plan includes, but is not limited to:
 - a specification of trigger values to prevent and minimise particulate emissions;
 - b specification of trigger values required by sub paragraph 2(a) of this condition should have regard to the following items:
 - i existing monitoring data;
 - ii data collected as part of conditions U-729, U-749;
 - iii meteorological conditions; and
 - iv visual observations;
 - c detailed action and response strategies that will be taken when the trigger values, identified under sub paragraph 2(a) of this condition are reached, to prevent and minimise particulate emissions;
 - d a methodology and framework for the provision of quarterly reports on the implementation of the Dust Management Plan to the EPA that includes but is not limited to:
 - i the date, time and trigger value exceeded;
 - ii action and response strategies implemented;
 - iii summary of events notified under condition U-765;
 - e a methodology and framework for the provision of an annual report to the EPA which includes the following but is not limited to:
 - i a review of all the trigger values identified in sub paragraph 2(a) of this condition;
 - ii a review of the effectiveness of all action and response strategies identified in sub paragraph 2(c) of this condition;
 - iii a trend analysis of data collected;
 - iv a review and analysis of community complaints recorded in condition 300-9 with the exceedance of trigger values reported under sub paragraph 2(d) of this condition; and
 - v opportunities for improvement in dust management;
 - f a methodology and framework for providing public access to the Dust Management Plan (or any revised plan approved by the EPA) and to quarterly and annual reporting;

- 1.1.3 implement the Dust Management Plan approved in writing by the EPA (or any revised plan approved in writing by the EPA).

Compliance Date: 28-Feb-2018

1.2 GROUND LEVEL PARTICULATE NOTIFICATION (U - 765)

The Licensee must:

- 1.2.1 provide notification to the EPA, within 48 hours, when the following particulate limits are exceeded at any of its monitoring locations outside the Premises:
- a a PM10 concentration of 50 micrograms per cubic metre over a 24 hour averaging period; or
 - b a PM2.5 concentration of 25 micrograms per cubic metre over a 24 hour averaging period;
- 1.2.2 ensure any notification provided under sub paragraph 1 of this condition includes but is not limited to:
- a the date;
 - b the cause;
 - c the measured particulate concentration over the 24 hour averaging period; and
 - d remedial actions taken to reduce particulate emissions from the Premises.

1.3 PARTICULATE EMISSIONS - KILN STACK 4A (U - 718)

The Licensee must:

- 1.3.1 take all reasonable and practicable measures to prevent particulate emissions (as TSP) from Kiln Stack 4A exceeding a limit of 100 milligrams per cubic metre at STP, dry basis, based on a 1 hour average;
- 1.3.2 where particulate emissions exceed the limit specified under sub paragraph 1 of this condition, take all reasonable and practicable immediate action to reduce particulate emissions to below that limit;
- 1.3.3 provide notification to the EPA as soon as reasonably practicable of any exceedance of the limit specified under sub paragraph 1 of this condition and include the reason(s) for the exceedance, and the corrective actions implemented to reduce particulate emissions to below that limit.

1.4 PARTICULATE EMISSIONS - PRECALCINER STACK 4B (U - 754)

The Licensee must:

- 1.4.1 take all reasonable and practicable measures to prevent particulate emissions (as TSP) from Precalciner Stack 4B exceeding a limit of 60 milligrams per cubic metre at STP, dry basis, based on a 1 hour average;

- 1.4.2 where particulate emissions exceed the limit specified under sub paragraph 1 of this condition, take all reasonable and practicable immediate action to reduce particulate emissions to below that limit;
- 1.4.3 provide notification to the EPA as soon as reasonably practicable of any exceedance of the limit specified under sub paragraph 1 of this condition and include the reason(s) for the exceedance, and the corrective actions implemented to reduce particulate emissions to below that limit.

1.5 PREMISES STORMWATER MANAGEMENT (S - 160)

The Licensee must:

- 1.5.1 take all reasonable and practicable measures to prevent contamination of stormwater resulting from prescribed activities undertaken at the Premises; and
- 1.5.2 implement appropriate contingency measures to contain the contaminated stormwater at the Premises unless and until the contaminated stormwater is treated to remove the contamination, or is disposed of at an appropriately licensed facility.

1.6 SITE NOISE MINIMISATION (U - 787)

The licensee must:

- 1.6.1 take all reasonable and practicable measures to minimise noise generated at the Premises;
- 1.6.2 develop a Noise Management Plan to the satisfaction of the EPA by the date listed below;
- 1.6.3 ensure that the Noise Management Plan includes, but is not limited to:
 - a detailed action and response strategies that will be taken to prevent and minimise noise emissions;
 - b a methodology and framework for the provision of quarterly reports and an annual report on the implementation and effectiveness of the Noise Management Plan;
 - c a methodology and framework for providing public access to the Noise Management Plan (or any revised plan approved by the EPA) and to quarterly and annual reporting;
- 1.6.4 implement the Noise Management Plan approved in writing by the EPA (or any revised plan approved in writing by the EPA).

Compliance Date: 31-Jan-2018

1.7 WASTEWATER (S - 18)

The Licensee must take all reasonable and practicable measures to prevent wastewater or contaminated stormwater from discharging onto land and/or into waters.

2 WASTE MANAGEMENT

2.1 LISTED WASTE AND/OR CONTROLLED WASTE PRODUCER (S - 166)

The Licensee must:

- 2.1.1 prior to the interstate transport of any waste specified in the Listed Waste attachment and/or Controlled Waste attachment to this licence, obtain a Consignment Authorisation from the relevant authority in the state or territory of destination of that waste;
- 2.1.2 ensure a WTC is generated for any waste specified in the Listed Waste and/or Controlled Waste attachments to this licence before that waste is transported to a Destination Facility in South Australia or interstate;
- 2.1.3 provide a copy or copies of the WTC to the transporter of the waste and the EPA; and
- 2.1.4 retain a copy of all manually generated WTC's for not less than 12 months.

3 OPERATIONAL MANAGEMENT

3.1 ALTERNATIVE FUEL AND/OR RAW MATERIAL MANAGEMENT (U - 703)

The Licensee must:

- 3.1.1 ensure that the only types of AFRM to be burned in the industrial fuel burning equipment on the Premises are those defined in Schedule X-1 of this licence, at the approved rates identified in that schedule;
- 3.1.2 ensure that where the AFRM is a Refuse Derived Fuel (RDF), only receive RDF which complies with a Recovered Products Plan approved by the EPA in writing;
- 3.1.3 provide public access to the Recovered Products Plan (or any revised plan approved by the EPA);
- 3.1.4 comply with the requirements of sub paragraphs 1 and 2 of this condition, except during the events of trial burning of AFRM in the industrial fuel burning equipment on the Premises whereby the trial is undertaken in accordance with Schedule W-1 of this licence.

3.2 ALTERNATIVE FUELS - OPERATIONAL REQUIREMENTS (U - 725)

The Licensee must ensure that:

- 3.2.1 all alternative fuels listed in Schedule X-1 of this licence are:
 - a completely combusted in a certified Type B gas appliance;
 - b not admitted into the certified Type B gas appliance during start-up, shut-down, or where the gas flame is not under stable operating conditions;
- 3.2.2 the following parameters are monitored and recorded whenever alternative fuels listed in Schedule X-1 of this licence are used:
 - a the alternative fuel type and usage rate;
 - b the temperature in degrees Celcius of the combustion gases exiting the Type B gas appliance;
 - c the composition of the combustion gases exiting the Type B gas appliance, including but not limited to the percentage of oxygen, carbon monoxide and methane;
 - d the temperature in degrees Celcius of the combustion gases entering the electrostatic precipitators;
- 3.2.3 records relating to this condition are kept for the term of the Licence, and are made available to an Authorised Officer upon request.

3.3 CLEAN UP OF SPILLS (S - 218)

The Licensee must, as soon as practicable, cause any material spilt onto the wharf, dock, loading or work area to be removed and reused, or disposed of to an appropriately licensed facility.

NOTES

Material is as described in Clause 7(1) of Schedule 1 of the Environment Protection Act 1993.

3.4 COMMUNITY ENGAGEMENT PLAN (U - 722)

The Licensee must:

- 3.4.1 develop and implement a Community Engagement Plan in consultation with key stakeholders; and
- 3.4.2 provide public access to the Community Engagement Plan (and any subsequent amended version) by the compliance date listed below.

Compliance Date: 30-Mar-2018

3.5 COMPLAINTS (300 - 9)

The Licensee must:

- 3.5.1 maintain a register of complaints received regarding the Licensee's operations that sets out:
 - a the date and time that the complaint was reported;
 - b details of the complaint;
 - c the name and address of the complainant (if permitted by the complainant);
 - d the date and time of the events giving rise to the complaint;
 - e the likely cause of the events giving rise to the complaint;
 - f an estimate of the temperature, wind speed, wind direction and rainfall at the time of the events giving rise to the complaint; and
 - g any action taken by the Licensee in response to the complaint and to prevent a recurrence of the events giving rise to the complaint;
- 3.5.2 respond to the complainant within 72 hours;
- 3.5.3 make available a summary report of complaints received at the Adelaide Brighton Cement Community Liaison Group meetings; and
- 3.5.4 retain the register for the duration of this licence.

3.6 Environment Improvement Programme (U - 925)

The Licensee must:

- 3.6.1 develop and submit to the EPA an Environment Improvement Programme (EIP) to the satisfaction of the EPA by the date listed below;
- 3.6.2 undertake public consultation in the course of developing the EIP;
- 3.6.3 ensure that the EIP includes, but is not limited to:
 - a a summary of the results of public consultation undertaken in developing the EIP;
 - b details of actions, timeframes and milestones to be undertaken by the Licensee to address noise abatement options, taking into consideration the Vipac Engineers and Scientists Report, August 2018 'Environmental Noise Model Update';
 - c details of actions, timeframes and milestones to be undertaken by the Licensee to address options identified in the Adelaide Brighton Cement Limited Report, August 2018, 'Assessment of Options Report';
 - d a methodology and framework for reporting to the EPA three quarterly reports and one annual report, which demonstrate progression and completion of the EIP actions;
 - e a methodology and framework to assess the effectiveness of the actions detailed in the EIP; and
 - f a methodology and framework for providing public access to the EIP, quarterly and annual reporting;
- 3.6.4 implement the EIP upon approval in writing by the EPA.

Compliance Date: 28-Feb-2019

3.7 POLLUTION CONTROL EQUIPMENT REGISTER (S - 2)

The Licensee must:

- 3.7.1 maintain all Pollution Control Equipment to ensure that pollution is minimised; and
- 3.7.2 keep a written record of all inspections of Pollution Control Equipment, which includes:
 - a the name of the recording officer;
 - b the date of each inspection of the equipment;
 - c details of the equipment that was inspected;
 - d an assessment of whether the equipment was working effectively; and
 - e the action taken (if required) to rectify any faults or failures.

3.8 TRUCK CLEANING (330 - 211)

The Licensee must:

- 3.8.1 only wash vehicles at the Premises within a waste water collection system; and
- 3.8.2 direct all bulk tankers loaded on site to exit the site through a vehicle wash.

4 MONITORING AND REPORTING

4.1 ASSESSMENT OF OPTIONS (U - 730)

The Licensee must:

- 4.1.1 ensure a suitably qualified expert:
 - a undertakes a detailed assessment of options to prevent or minimise particulate emissions from the following sources at the Premises:
 - i exposed and unsealed areas;
 - ii external material stockpiles;
 - iii vehicle movements;
 - iv material conveyor and transfer systems; and
 - v dust collector units associated with processing and storage facilities.

- 4.1.2 submit to the EPA for its approval, by the date listed below, an 'Options Assessment Report', ensuring the report contains but is not limited to:
- a the details of the options assessed under sub paragraph 1 of this condition;
 - b a feasibility assessment of each option;
 - c the expected environmental outcomes of the options identified;
 - d the methodology used and considerations made in selecting the preferred measure(s) or action(s); and
 - e recommendation(s) of proposed options to be taken to prevent or minimise particulate emissions.

Compliance Date: 30-Mar-2018

4.2 GROUND LEVEL PARTICULATE MONITORING AND REPORTING PLAN (U - 729)

The Licensee must:

- 4.2.1 develop and submit to the satisfaction of the EPA by the date listed below a Ground Level Particulate Monitoring and Reporting Plan;
- 4.2.2 ensure that the Ground Level Particulate Monitoring and Reporting Plan includes, but is not limited to:
- a measurement and monitoring of ground level particulate concentrations (as TSP, PM10 and PM2.5) at various locations within the Premises and outside the Premises;
 - b a methodology and framework for the provision of public access to real-time monitoring data of PM10 and PM2.5 from monitoring stations located outside the Premises;
 - c a methodology for providing public access to an explanation within 48 hours of why the following particulate limits are exceeded at monitoring locations outside the Premises;
 - i a PM10 concentration of 50 micrograms per cubic metre over a 24 hour averaging period; and
 - ii a PM2.5 concentration of 25 micrograms per cubic metre over a 24 hour averaging period;
 - d a methodology and framework for reporting to the EPA, including submission dates of quarterly and annual reports;
 - e a methodology and framework for providing public access to the Ground Level Particulate Monitoring and Reporting Plan (or any revised plan approved by the EPA) and to quarterly and annual reporting;
- 4.2.3 implement the Ground Level Particulate Monitoring and Reporting Plan approved in writing by the EPA (or any revised plan approved in writing by the EPA).

Compliance Date: 31-Jan-2018

4.3 STACK EMISSION TESTING (U - 748)

The Licensee must:

- 4.3.1 test emissions from all exhaust stacks, by the last day of April and October of each year for the following:
 - a substances included in Schedule Y-1 of this licence;
 - b temperature;
 - c moisture;
 - d pressure; and
 - e exhaust velocity
- 4.3.2 ensure that the emission testing programme is undertaken when the plant is under stable operating conditions;
- 4.3.3 carry out the emission testing programme in accordance with the methods specified in the EPA document entitled 'Emission Testing Methodology for Air Pollution Manual version 2', dated August 2012; and
- 4.3.4 submit a report to the EPA within 90 days after the conclusion of the emission testing programme, which includes but is not limited to:
 - a an assessment of whether the tested emissions comply with Schedule Y-1 of this licence;
 - b the type and mass feed rate of any utilised alternative fuels and/or raw materials listed under Schedule X-1 of this licence that were used during the testing that is required under sub paragraph 1 of this condition; and
 - c how the requirements outlined in Section 2.6 of the EPA document entitled 'Emission Testing Methodology for Air Pollution Manual version 2', dated August 2012 were complied with.

4.4 STACK PARTICULATE MANAGEMENT PLAN (U - 749)

The Licensee must:

- 4.4.1 develop and submit a Stack Particulate Management Plan to the satisfaction of the EPA by the date listed below;
- 4.4.2 ensure that the Stack Particulate Management Plan includes, but is not limited to:
 - a continuous monitoring of particulate emissions from Kiln Stack 4A and Precalciner Stack 4B in accordance with the EPA document entitled "Emission Testing Methodology for Air Pollution Manual Version 2" dated August 2012;
 - b how the continuous monitors will be calibrated in accordance with Appendix B of the EPA document entitled "Emission Testing Methodology for Air Pollution Manual Version 2" dated August 2012;
 - c what actions will be taken when stack particulate emission trigger values listed in Schedule Z-1 are exceeded;

- 4.4.3 ensure the Stack Particulate Management Plan includes a methodology and framework for the submission of quarterly reports to the EPA on the last day of January, April, July and October of each year, which includes but is not limited to:
- a details of exceedance notifications to the EPA as required by conditions U-718 or U-754, such details to include but not be limited to;
 - i the date, time and duration;
 - ii the cause;
 - iii the measured particulate concentration;
 - iv immediate actions taken to reduce particulate emissions;
 - v corrective actions taken to prevent future events of the same kind; and
 - vi reporting of particulate concentrations as milligrams per cubic metre at STP, dry basis;
- 4.4.4 ensure that the Stack Particulate Management Plan includes a methodology and framework for annual reporting to the EPA on the last day of October of each year, which includes but is not limited to:
- a a trend analysis of notifications and associated details provided under sub paragraph 3 of this condition;
 - b a trend comparison of information analysed under sub paragraph 4(a) of this condition with:
 - i community complaints recorded under condition 300-9; and
 - ii the preceding 12 months of stack emission data;
 - c identification of any opportunities for improvement in order to decrease the frequency, duration and magnitude of any notified events;
- 4.4.5 ensure that the Stack Particulate Management Plan includes a methodology and framework for providing public access to the Stack Particulate Management Plan (or any revised plan approved by the EPA) and to quarterly and annual reporting;
- 4.4.6 implement the Stack Particulate Management Plan approved in writing by the EPA (or any revised plan approved in writing by the EPA).

NOTES

The Licensee must ensure that any exceedance event that results in environmental harm as defined under Sections 79 and 80 of the Environment Protection Act 1993, is notified pursuant to Section 83 of the Environment Protection Act 1993.

Compliance Date: 28-Feb-2018

5 ADMINISTRATION

5.1 ANNUAL RETURN AND PAYMENT OF ANNUAL FEES (A - 4)

For the purposes of section 48(2)(a) of the Act, the date in each year for the lodgement of the Annual Return is no later than 90 days before the anniversary of the grant or renewal of the Licence; and

- 5.1.1 For the purposes of section 48(2)(b) of the Act, the date in each year for the payment of Annual Authorisation Fee is the anniversary of the grant of the Licence.

5.2 APPROVAL OF OPERATING PROCESSES (A - 6)

The Licensee must not undertake changes to operating processes conducted pursuant to the Licence at the Premises without written approval from the EPA, where such changes:

- 5.2.1 have the potential to increase emissions or alter the nature of pollutants or waste currently generated by, or from the licensed activity; or
- 5.2.2 have the potential to increase the risk of environmental harm; or
- 5.2.3 would relocate the point of discharge of pollution or waste at the Premises.

5.3 APPROVAL OF WORKS (A - 5)

The Licensee must not construct or alter a building or structure, or install or alter any plant or equipment, for use of an activity undertaken pursuant to the Licence at the Premises without written approval from the EPA, where such changes:

- 5.3.1 have the potential to increase the emissions or alter the nature of pollutants or waste currently generated by, or from the licensed activity; or
- 5.3.2 have the potential to increase the risk of environmental harm; or
- 5.3.3 would relocate the point of discharge of pollution or waste at the Premises.

5.4 CHANGE OF LICENSEE DETAILS (A - 3)

If the Licensee's name or postal address (or both) changes, the Licensee must inform the EPA within 28 days of the change occurring.

5.5 LICENCE RENEWAL (A - 2)

For the purposes of section 43(3) of the Act, an application for Renewal of the Licence must be made no later than 90 days before the expiry date of the Licence.

5.6 OBLIGATIONS TO EMPLOYEES, AGENTS AND CONTRACTORS (A - 1)

The Licensee must ensure that every employee, agent or contractor responsible for undertaking any activity regulated by the Licence, is informed as to the conditions of the Licence.

5.7 VARIATION OF CONDITIONS OF LICENCE (pursuant to section 45(3) of the Environment Protection Act, 1993) (U - 753)

The EPA may:

- 5.7.1 Impose conditions or vary conditions of this licence at any time by notice in writing to the Licensee in the following circumstances:
 - a in relation to noise emissions, particulate emissions from fugitive sources and/or point sources, including a condition requiring revision of the EIP, based on:
 - i the progress of the implementation of the EIP;
 - ii the reporting required under the EIP;
 - iii the ground level particulate monitoring data and information;
 - iv the stack monitoring data and information;
 - v Stack Management Plan reports;
 - vi Dust Management Plan reports;
 - vii Noise Management Plan reports; and
 - viii outcomes of the Options Assessment Report.

Attachments

CONTROLLED WASTE.pdf"

LISTED WASTE.pdf"

SCHEDULE Y-1.pdf"

SCHEDULE Z-1.pdf"

SCHEDULE W-1.pdf"

Schedule X1_November2020.pdf"



Controlled Waste Attachment

Controlled Waste

– per the National Environment Protection (Movement of Controlled Waste between States and Territories) Measure 1998, requiring provision of Waste Transport Certificate (WTC) from State or Territory where waste originates

Waste stream or wastes having as constituents:

Acidic solutions or acids in solid form
Animal effluent and residues (abattoir effluent, poultry and fish processing waste)
Antimony; antimony compounds
Arsenic; arsenic compounds
Asbestos
Barium compounds (excluding barium sulphate)
Basic solutions or bases in solid form
Beryllium; beryllium compounds
Boron compounds
Cadmium; cadmium compounds
Ceramic-based fibres with physico-chemical characteristics similar to those of asbestos
Chlorates
Chromium compounds (hexavalent and trivalent)
Clinical and related wastes
Cobalt compounds
Containers which are contaminated with residues of substances referred to in this list
Copper compounds
Cyanides (inorganic)
Cyanides (organic)
Cyanides (organic) / nitriles
Encapsulated, chemically-fixed, solidified or polymerised wastes referred to in this list
Ethers
Filter cake contaminated with residues of substances referred to in this list
Fire debris and fire washwaters
Fly ash, excluding fly ash generated from Australian coal fired power stations
Grease trap waste
Halogenated organic solvents
Highly odorous organic chemicals (including mercaptans and acrylates)
Inorganic fluorine compounds excluding calcium fluoride
Inorganic sulfides
Isocyanate compounds
Lead; lead compounds
Mercury; mercury compounds
Metal carbonyls
Nickel compounds
Non-toxic salts

Controlled Waste Licence Attachment (continued)

– *per the National Environment Protection (Movement of Controlled Waste between States and Territories) Measure 1998, requiring provision of Waste Transport Certificate (WTC) from State or Territory where waste originates*

Waste stream or wastes having as constituents:

Organic phosphorus compounds
Organic solvents excluding halogenated solvents
Organohalogen compounds - other than substances referred to in this list
Oxidising agents
Perchlorates
Phenols, phenol compounds including chlorophenols
Phosphorus compounds excluding mineral phosphates
Polychlorinated dibenzo-furan (any congener)
Polychlorinated dibenzo-p-dioxin (any congener)
Reactive chemicals
Reducing agents
Residues from industrial waste treatment/disposal operations.
Selenium; selenium compounds
Soils contaminated with a controlled waste
Surface active agents (surfactants), containing principally organic constituents and which may contain metals and inorganic materials
Tannery wastes (including leather dust, ash, sludges and flours)
Tellurium, tellurium compounds
Thallium; thallium compounds
Triethylamine catalysts for setting foundry sands
Tyres
Vanadium compounds
Waste chemical substances arising from research and development or teaching activities including those which are not identified and/or are new and whose effects on human health and/or the environment are not known
Waste containing peroxides other than hydrogen peroxide
Waste from heat treatment and tempering operations containing cyanides
Waste from the manufacture, formulation and use of wood-preserving chemicals
Waste from the production, formulation and use of biocides and phytopharmaceuticals
Waste from the production, formulation and use of inks, dyes, pigments, paints, lacquers and varnish
Waste from the production, formulation and use of organic solvents
Waste from the production, formulation and use of photographic chemicals and processing materials
Waste from the production, formulation and use of resins, latex, plasticisers, glues and adhesives
Waste from the production and preparation of pharmaceutical products
Waste mineral oils unfit for their original intended use
Waste oil/water, hydrocarbons/water mixtures or emulsions
Waste pharmaceuticals, drugs and medicines
Waste resulting from surface treatment of metals and plastics
Waste tarry residues arising from refining, distillation, and any pyrolytic treatment
Waste, substances and articles containing or contaminated with polychlorinated biphenyls (PCBs), polychlorinated naphthalenes (PCNs), polychlorinated terphenyls (PCTs) and/or polybrominated biphenyls (PBBs)
Waste of an explosive nature not subject to other legislation
Wool scouring waste
Zinc compounds



Listed Waste Attachment

Listed Waste

– per part B of Schedule 1 to the Environment Protection Act 1993, requiring provision of Waste Transport Certificate (WTC) for all transport movements

Waste stream or wastes having as constituents:

- Acids and acidic solutions
 - Adhesives (excluding solid inert polymeric materials)
 - Alkali metals and alkaline earth metals
 - Alkalis and alkaline solutions
 - Antimony and antimony compounds and solutions
 - Arsenic and arsenic compounds and solutions
 - Asbestos
 - Barium compounds and solutions
 - Beryllium and beryllium compounds
 - Boron and boron compounds
 - Cadmium and cadmium compounds and solutions
 - Calcium carbide
 - Carbon disulphide
 - Carcinogens teratogens and mutagens
 - Chlorates
 - Chromium compounds and solutions
 - Copper compounds and solutions
 - Cyanides or cyanide solutions and cyanide complexes
 - Cytotoxic wastes
 - Dangerous substances within the meaning of the *Dangerous Substances Act 1979*
 - Distillation residues
 - Fluoride compounds
 - Halogens
 - Heterocyclic organic compounds containing oxygen, nitrogen or sulphur
 - Hydrocarbons and their oxygen, nitrogen and sulphur compounds (including oils)
 - Isocyanate compounds (excluding solid inert polymeric materials)
 - Laboratory chemicals
 - Lead compounds and solutions
 - Lime sludges or slurries
 - Manganese compounds
 - Medical waste consisting of—
 - (a) a needle, syringe with needle, surgical instrument or other article that is discarded in the course of medical*, dental or veterinary practice or research and has a sharp edge or point capable of inflicting a penetrating injury on a person who comes into contact with it; or
 - (b) human tissue, bone, organ, body part or foetus; or
 - (c) a vessel, bag or tube containing a liquid body substance; or
 - (d) an animal carcass discarded in the course of veterinary or medical* practice or research; or
 - (e) a specimen or culture discarded in the course of medical*, dental or veterinary practice or research and any material that has come into contact with such a specimen or culture; or
 - (f) any other article or matter that is discarded in the course of medical*, dental or veterinary practice or research and that poses a significant risk to the health of a person who comes into contact with it.
- medical practice** includes the practice of pathology and the operation of an immunisation clinic.

Listed Waste Licence Attachment

– *per part B of Schedule 1 to the Environment Protection Act 1993, requiring provision of Waste Transport Certificate (WTC) for all transport movements*

Waste stream or wastes having as constituents (*continued*):

Mercaptans

Mercury compounds and equipment containing mercury

Nickel compounds and solutions

Nitrates

Organic halogen compounds (excluding solid inert polymeric materials)

Organic phosphates

Organic solvents

Organometallic residues

Oxidising agents

Paint sludges and residues

Perchlorates

Peroxides

Pesticides (including herbicides and fungicides)

Pharmaceutical wastes and residues

Phenolic compounds (excluding solid inert polymeric materials)

Phosphorus and its compounds

Polychlorinated biphenyls

Poisons within the meaning of the *Drugs Act 1908*

Reactive chemicals

Reducing agents

Selenium and selenium compounds and solutions

Silver compounds and solutions

Solvent recovery residues

Sulphides and sulphide solutions

Surfactants

Thallium and thallium compounds and solutions

Vanadium compounds

Zinc compounds and solutions



Schedule Y-1

Schedule Y-1

Adelaide Brighton Cement Ltd – EPA Environmental Authorisation 1126

SUBSTANCE	AVERAGING TIME	MAXIMUM DESIGN CRITERIA mg/m ³ ¹	MAXIMUM DESIGN CRITERIA ppm ²
Carbon monoxide	1-hour	per the limits specified in Schedule 2 of the <i>Environment Protection (Air Quality) Policy 2016</i>	per the limits specified in Schedule 2 of the <i>Environment Protection (Air Quality) Policy 2016</i>
Nitrogen dioxide	1-hour		
Sulphur dioxide	1 hour		
Antimony and compounds	3-minute	per the limits specified in Schedule 2 of the <i>Environment Protection (Air Quality) Policy 2016</i>	per the limits specified in Schedule 2 of the <i>Environment Protection (Air Quality) Policy 2016</i>
Barium (soluble compound)	3-minute		
Chlorine	3-minute		
Chromium (III) compounds	3-minute		
Copper fume	3-minute		
Fluoride	24-hours 7-days 90-days		
Hydrogen chloride	3-minute		
Iron oxide fume	3-minute		
Lead (as particles)	3-minute		
Magnesium oxide fume	3-minute		
Manganese and compounds	3-minute		
Mercury - organic - inorganic	3-minute 3-minute		
Zinc oxide fume	3-minute		

Schedule Y-1 (continued)

Adelaide Brighton Cement Ltd – EPA Environmental Authorisation 1126

SUBSTANCE	AVERAGING TIME	MAXIMUM DESIGN CRITERIA mg/m ³ ¹	MAXIMUM DESIGN CRITERIA ppm ²
Arsenic and compounds	3-minute	per the limits specified in Schedule 2 of the <i>Environment Protection (Air Quality) Policy 2016</i>	per the limits specified in Schedule 2 of the <i>Environment Protection (Air Quality) Policy 2016</i>
Benzene	3-minute		
Beryllium and beryllium compounds	3-minute		
Cadmium and cadmium compounds	3-minute		
Chromium VI compounds	3-minute		
Nickel and nickel compounds	3-minute		
PAH (as BaP)	3-minute		
Particles (as PM10)	24 hour		
Particles (as PM2.5)	24 hour		

SUBSTANCE	MAXIMUM STACK CONCENTRATION	UNITS
Chlorinated dioxins and furans	0.1 ITEQ ³	nanograms per cubic metre, STP, dry basis

¹ STP, dry basis

² parts per million (volume/volume)

³ ITEQ: International Toxic Equivalent



Schedule Z-1

Schedule Z-1

Adelaide Brighton Cement Ltd – EPA Environmental Authorisation 1126

Schedule Z-1

STACK PARTICULATE EMISSION TRIGGER VALUES		
Averaging Period	Kiln Stack 4A mg/m ³ ¹	Precalciner Stack 4B mg/m ³ ¹
10 minute	125	90
1 hour	100	60

¹ STP, dry basis



Schedule W-1

Schedule W-1 AFRM Trial Management

Adelaide Brighton Cement Ltd – EPA Environmental Authorisation 1126

W-1.1 Pre-Trial Report

The Licensee must:

1. prepare a pre-trial report for the use of AFRM, which must contain, but not be limited to, the following:
 - 1.1 demonstration of beneficial purposes;
 - 1.2 demonstrated support for the waste management hierarchy, as outlined in the Environment Protection (Waste to Resources) Policy 2010;
 - 1.3 the purpose of the trial;
 - 1.4 the physical and chemical specifications of the AFRM;
 - 1.5 an assessment of the risks associated with the use of the AFRM and risk mitigating measures including, but not limited to:
 - 1.5.1 the predicted mass balance of the AFRM including predicted emissions to air and baseline emissions for comparison;
 - 1.5.2 the results of previous stack emissions testing using the AFRM, if available; and
 - 1.5.3 any risks associated with on-site storage, handling and feed into the process.
 - 1.6 tests proposed to be undertaken during the trial (for example stack emissions testing, including the analytes to be tested);

Note: It is recommended that, as a minimum, the stack emissions testing is consistent with licence condition U-748. If the Licensee proposes to exclude any of the analytes and properties in licence condition U-748 from testing, the Licensee must highlight this and provide justification in the pre-trial report for EPA approval.
 - 1.7 records to be kept and duration that records will be kept during and after the trial; and
 - 1.8 the proposed dates for trial commencement and completion;
2. submit the pre-trial report to the EPA, at least 30 days before the commencement of a trial, for approval.
3. if the pre-trial report submitted in accordance with paragraph 2 is not acceptable to the EPA, resubmit a revised version of the pre-trial report (incorporating any additions or alterations that are required by the EPA) within the time period advised by the EPA in writing.

W-1.2 Trial Record

The Licensee must:

1. keep a record at the Premises of the details listed in the pre-trial report and any records required by EPA condition of approval.
2. ensure that the records, described in paragraph 1 hereof, are made available to an Authorised Officer upon request at any time during or after the trial taking into account the duration that records will be retained as specified in the pre-trial report.

Schedule W-1 AFRM Trial Management (continued)

Adelaide Brighton Cement Ltd – EPA Environmental Authorisation 1126

W-1.3 Post-Trial Report - Summary of AFRM Trial

The Licensee must:

1. prepare a post-trial report 'Summary of AFRM Trial' including, but not limited to, the following information:
 - 1.1 the total quantity of AFRM used during the trial;
 - 1.2 the dates and times when the trial commenced and concluded;
 - 1.3 the results of stack emissions testing for the analytes and properties specified in any relevant pre-trial reports and baseline emissions for comparison, where applicable;
 - 1.4 a final proposed chemical and physical specification of the material based on the trial results; and
 - 1.5 an assessment of the suitability of the AFRM for ongoing use.
2. submit the 'Summary of AFRM trial' post -trial report to the EPA within 90 days of the completion of each trial, within 30 days after receipt of stack emissions or modelling results, whichever is greater.
3. if the post-trial report submitted in accordance with paragraph 2 is not acceptable to the EPA, resubmit a revised version of the post-trial report (incorporating any additions or alterations that are required by the EPA) within the time period advised by the EPA in writing.

W-1.4 Post-Trial Report - Summary of AFRM Trial

If the AFRM has been found to be suitable for ongoing use, the Licensee must:

1. prepare a post-trial report 'Request for Ongoing Use of AFRM' for EPA approval. The Report must contain, but is not limited to, the following information:
 - 1.1 demonstration of beneficial purposes;
 - 1.2 demonstrated support for the waste management hierarchy as outlined in the Environment Protection (Waste to Resources) Policy 2010; and
 - 1.3 an assessment of the risks associated with the use of the AFRM and risk mitigating measures including, but not limited to:
 - 1.3.1 the results of stack emissions testing for the analytes and properties specified in any relevant pre-trial reports and baseline emissions for comparison;
 - 1.3.2 air dispersion modelling and ground level concentrations for each substance analysed, as specified in any relevant pre-trial reports, as well as ground level concentrations for baseline emissions for comparison;
 - 1.3.3 any risks associated with on-site storage and handling; and
 - 1.3.4 any relevant complaints or enquiries received during the trial.
2. submit the 'Request for ongoing use of AFRM' post -trial report to the EPA at least 60 days before requiring approval.
3. if the post-trial report submitted in accordance with paragraph 2 is not acceptable to the EPA, resubmit a revised version of the post-trial report (incorporating any additions or alterations that are required by the EPA) within the time period advised by the EPA in writing.

Note 1: Where any 'ARFM' to be trialed fits the definition of 'refuse derived fuel', the EPA 'Standard for the production and use of refuse derived fuel' dated February 2010 is also considered to apply.

Note 2: In the event that any AFRM proposal fits the criteria specified in Schedule W-1 and a request for the ongoing use is to be sought a submission to the EPA under Conditions A-5 and/or A-6 of this licence is required.



Schedule X-1

Schedule X-1

Adelaide Brighton Cement Ltd – EPA Environmental Authorisation 1126

AFRM	Approved Feed Rate
Carbon Powder (processed anodes)	Maximum – 2.5 tonnes per hour
Refuse Derived Fuel	25 tonnes per hour (Note: Maximum 20% plastic contamination by weight)
Black Sand (processed Blast Furnace Slag)	Maximum – 6250 kilograms per hour
Blast Furnace Slag (processed from One Steel)	Maximum – 15 tonnes per hour
Blended Mill Scale (iron oxide by-product from the recycling of scrap steel)	Maximum – 4 tonnes per hour
Alox	Maximum 1 tonne per hour
Used Foundry Sand	Maximum – 4 tonnes per hour