ENVIRONMENT PROTECTION AUTHORITY
SOUTH AUSTRALIA

Environmental Authorisation under Part 6 of the Environment Protection Act 1993

LICENCE

EPA 1126

Adelaide Brighton Cement Ltd

PO Box 77
PORT ADELAIDE SA 5015

Location

Victoria & Elder Roads, PETERHEAD 5016 SA

Licensed Activities

The Licensee(s)

- Adelaide Brighton Cement Ltd

is (are) authorised to undertake the following activities of environmental significance under Schedule 1 Part A of the Environment Protection Act 1993 (the Act), subject to the conditions of licence set out in the attached pages:

2(3)	Cement Works
3(4)	Activities Producing Listed Wastes
7(1)	Bulk Shipping Facilities
7(3)(c)	Crushing, Grinding or Milling: rock, ores or minerals
8(2)(a)	Fuel Burning: rate of heat release exceeding 5 megawatts

Term of Licence

Commence Date: 01-NOV-2007

Expiry Date: 31-OCT-2017

Delegate

Environment Protection Authority

28 February 2011

This licence is not valid unless signed

Conditions of licence to follow

Definitions

"THE ACT" means the Environment Protection Act 1993.

"THE AUTHORITY" means the Environment Protection Authority established under Division 1 of Part 3 of the Act.

"THE PREMISES" means, at the time of issue of this authorisation, the whole of the land comprised in Titles Register - Certificate of Title, Crown Lease and Crown Record:

List of Titles

CT 5084/747, CT 5142/401, CT 5142/519, CT 5142/520, CT 5142/522, CT 5142/523, CT 5142/528, CT 5142/531, CT 5142/532, CT 5406/509, CT 5411/669, CT 5485/422, CT 5683/195, CT 5683/196, CT 5683/197, CT 5683/198, CT 5742/581, CT 5742/582, CT 5750/769, CT 5750/770, CT 5813/976, CT 5816/2, CT 5816/637, CT 5841/73, CT 5858/225, CT 5968/732, CT 5980/55, CT 5980/56, CT 5980/68, CT 6007/792, CT 6027/127, CT 6027/128, CT 6053/766, CT 6053/767, CT 6053/768

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

"CONSIGNMENT AUTHORISATION" means an approval which includes a unique identifier granted by an agency or a facility delegated by an agency in the jurisdiction of destination to allow the movement of Controlled Waste.

"CONTROLLED WASTE" Waste as defined in the National Environment Protection (Movement of Controlled Wastes between States and Territories) Measure 1998.

"FACILITY" means a place where Controlled Wastes are received.

"LIQUID WASTE" Waste classified as liquid waste in accordance with the assessment process set out in the guideline Liquid waste classification test, 2003.
Note: Liquid waste that is liquid at 20 degrees Celcius regardless of whether or not it is packaged or otherwise contained, and irrespective of whether or not the packaging or container is to be disposed of together with the liquid that it contains.

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

"POLLUTION CONTROL EQUIPMENT" means equipment which is designed, installed and operated for the primary purpose of reducing air and noise emissions from a stationary source.

Acronyms

"EPA" means Environment Protection Authority.

"EIP" means Environment Improvement Programme.

"AFRM" means Alternative Fuel and/or Raw Material.

"NEPM" means National Environment Protection Measure.

"WTC" means Waste Transport Certificate.

"WTF" means Waste Tracking Form.

Explanatory Notes

(NB. - Explanatory Notes do not constitute a part of this Authorisation)

1. THIS LICENCE IS AMENDED DURING THE TERM OF LICENCE, IN ACCORDANCE WITH SECTION 46 NOTICE DATED 16 FEBRUARY 2011, AND LICENSEES CONSENT GIVEN ON 21 FEBRUARY 2011.

2. The Licensee must report to the Authority on EPA emergency phone number 1800 100 833 all incidents causing or threatening serious or material environmental harm, upon becoming aware of the incident, in accordance with section 83 of the Act.

3. This licence does not permit any activity in breach of any other approval by any other authority. For example, this licence does not permit any activity on the Premises which is not authorised under the Development Act 1993. It is the responsibility of the Licensee to ensure that any action or activity referred to in this licence is permitted by, and is carried out in compliance with, statutory requirements.

4. This licence is subject to the Act.

5. Conditions of this licence can be varied by the Authority in accordance with section 45 of the Act.

6. This licence can be suspended, cancelled or surrendered during the term of the licence in accordance with sections 55 and 56 of the Act.

7. The Licensee must report to the Authority (on EPA emergency phone number 1800 100 833) all incidents causing or threatening serious or material environmental harm, upon becoming aware of the incident, in accordance with section 83 of the Act.

8. Any rights of renewal may be lost if the following requirement under the Act is not met:

   The Licensee must lodge with the Authority an application for renewal no less than 60 days prior to the date on which this licence expires. [Regulation 19 - Environment Protection Regulations 2009].

9. The Licensee must be aware of, and comply with:
   1. the requirements of the Environment Protection Policies which operate pursuant to the Act; and
   2. the requirements of any National Environment Protection Measure which operates as an Environment Protection Policy under the Act.
   NB: These requirements govern permissible procedures and protocols, emission or concentration levels, as well as operation and/or maintenance standards of plant and equipment.

10. Should the conditions of this licence require that the Licensee submit a report or other information to the Authority, then that report or that information becomes the property of the Authority.

11. The Authority undertakes to provide written advice within 14 days of receipt of all information required for assessment.

12. Ambient monitoring of particle sizes TSP, PM10 and PM2.5 are used in the licence as a monitoring tool with a view of developing long term trends and identifying the source of fugitive emissions.

13. Upon request the substances listed in Schedule Y-1 will be reviewed as to their usefulness in monitoring impacts upon the local area.

CONDITIONS OF LICENCE

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

Compliance Date

Environment Improvement Programme

1. (310-201) ENVIRONMENT IMPROVEMENT PROGRAMME

The Licensee must:

1. implement and comply with the Adelaide Brighton Cement Ltd document as approved by the Authority, entitled 'Environment Improvement Program 2008 Version 2.1' and dated 2 February 2009 (as revised 30 June 2010); and

2. commencing January 2011, submit quarterly reports to the Authority by the last day of January, April, July and October each year that detail progress towards implementation of the Environment Improvement Programme (EIP).

NOTE 1: The Licensee should ensure the EIP addresses environmental issues raised by the Adelaide Brighton Cement community Liaison Group.

2. (310-205) NOTIFICATION OF FAILURE TO MEET COMPLIANCE DATE(S)

The Licensee must:

1. notify the Authority within 10 business days of being made aware of a failure to meet any of the compliance dates provided in section 4 of the EIP referred to in condition (310-201) of this licence; and

2. submit a summary report to the Authority within a further 10 business days, detailing an updated programme to achieve final compliance, including a revised compliance date(s).

Activity Management Condition(s)

3. (32-4) EMISSION EXCURSIONS

The Licensee must not allow particle emissions from the Dry Process Kiln 4, the Precalciner Plant and associated Electrostatic Precipitators to exceed the prescribed standard in Item 1 of Schedule 1 of the Environment Protection (Air Quality) Policy 1994, other than for the exempted periods and situations described in EPA Exemption Authorisation No. 12368.

4.	(305-634)	AMBIENT PARTICULATE LEVEL MONITORING AND REPORTING PLAN	31-DEC-2010

The licensee must:

1. Develop an ambient particulate monitoring and reporting plan to the satisfaction of the Authority that:

1.1 will determine the sources of fugitive particulate emissions to identify opportunities for improvement;

1.2 sets out how ambient TSP, PM10 and PM2.5 at STP will be monitored; and

1.3 sets out the format of quarterly and annual reports.

2. Submit the monitoring and reporting plan to the Authority for its assessment on or before the date indicated in the compliance date column;

3. If the monitoring and reporting plan is not acceptable to the Authority, resubmit a revised version of the monitoring and reporting plan (incorporating any additions or alterations that are required by the Authority) within 30 days of being advised in writing by the Authority;

4. Implement the monitoring and reporting plan within 14 days of it being approved in writing by the Authority;

5. Prepare and submit quarterly reports to the Authority by the last day of January, April, July and October each year; and

6. Prepare and submit an annual report to the Authority by the last day of October each year.

NOTE 1: The Licensee should ensure that the ambient particulate monitoring and reporting plan has regard to input from the Adelaide Brighton Cement Community Liaison Group.

NOTE 2: Guidance on the preparation of monitoring plans is provided in the EPA Guideline entitled 'Regulatory Monitoring and Testing: Monitoring Plan Requirements' dated 2006.

NOTE 3: Guidance on the preparation of monitoring reports is provided within the EPA Guideline entitled 'Monitoring and Testing - Monitoring report requirements, dated 2006.

5.	(305-635)	STACK PARTICULATE EMISSIONS MONITORING AND REPORTING PLAN	31-DEC-2010

The licensee must:

1. Develop a stack particulate emissions monitoring and reporting plan to the satisfaction of the Authority that:

1.1 will determine the level of stack particulate emissions, incidents resulting in higher emissions and opportunities for improvement; and

1.2 sets out how stack particulate emissions will be monitored and reported.

2. Submit the monitoring and reporting plan to the Authority for its assessment on or before the date indicated in the compliance date column;

3. If the monitoring and reporting plan is not acceptable to the Authority, resubmit a revised version of the monitoring and reporting plan (incorporating any additions or alterations that are required by the Authority) within 30 days of being advised in writing by the Authority;

4. Implement the monitoring and reporting plan within 14 days of it being approved in writing by the Authority;

5. Prepare and submit quarterly reports to the Authority by the last day of January, April, July and October each year; and

6. Prepare and submit an annual report to the Authority by the last day of October each year.

NOTE 1: The Licensee should ensure that the stack particulate emissions monitoring and reporting plan has regard to input from the Adelaide Brighton Cement Community Liaison Group.

NOTE 2: Guidance on the preparation of monitoring plans is provided in EPA Guideline entitled 'Regulatory Monitoring and Testing: Monitoring Plan Requirements' dated 2006.

NOTE 3: Guidance on the preparation of monitoring reports is provided within the EPA Guideline entitled 'Monitoring and Testing - Monitoring report requirements, dated 2006

6. (32-34) EMISSION TESTING

The Licensee must:

1. test emissions from all exhaust stacks, by the last day of June and October of each year for the following:

1.1 substances included in Schedule Y-1;

1.2 solid particles;

1.3 temperature;

1.4 moisture;

1.5 pressure; and

1.6 exhaust velocity;

2. ensure that the emission testing programme is undertaken in addition to emission testing for each trial of alternate fuels or raw materials;

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' dated March 1995; and

4. submit the emission testing results to the Authority no later than 90 days after the conclusion of the testing programme.

Alternative Fuel and/or Raw Material Trial Conditions

7. (32-15) ALTERNATIVE FUEL AND/OR RAW MATERIAL MANAGEMENT

The Licensee must:

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 (attached to this licence); and

2. comply with the requirements of paragraph 1 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 (attached to this licence).

8. (32-23) ALTERNATIVE FUELS - SHUTDOWN REQUIREMENTS

The Licensee must ensure:

1. that all alternative fuels are burnt in a certified Type B gas appliance; and

2. the certified Type B gas appliance is operated in accordance with the Adelaide Brighton Cement Ltd Burner Management System document entitled 'Instruction BMS Operation BH-WI-5505' and dated 14 December 2010.

Activity Maintenance Condition(s)

9. (330-209) DUST MINIMISATION

The Licensee must:

1. take all reasonable and practicable measures to minimise dust generation during the handling and storage of materials at the Premises;

2. maintain all access roads at the Premises as often as necessary so as to minimise dust generation and build up; and

3. maintain a register for each area housekeeping programme that sets out:

3.1 the time and date that an area was inspected;

3.2 the time and date that an area or piece of equipment was cleaned;

3.3 details of what housekeeping duties need to be carried out;

3.4 the date and time the housekeeping duties were carried out; and

3.5 the result of the housekeeping duty task.

10. (330-162) POLLUTION CONTROL EQUIPMENT REGISTER

The Licensee must:

1. maintain a register for each inspection of pollution control equipment that sets out :

1.1. the date of the inspection;

1.2. the equipment that was inspected;

1.3. whether the equipment was working effectively;

1.4. whether there was any equipment fault or failure;

1.5. any immediate action taken in response to that fault or failure;

1.6. any planned action to be taken in response to that fault or failure;

1.7. the date and nature of any subsequent repairs, modification or replacement of the equipment; and

1.8. the name of the recording officer; and

2. must retain the register for the duration of this licence.

11. (330-210) WHARF - SPILLS

The Licensee must, after loading or unloading is complete, clean up any material spilt onto the wharf, dock, loading/unloading area or work area.

12. (330-211) TRUCK CLEANING

The Licensee must:

1. only wash vehicles at the Premises within a waste water collection system; and

2. direct all bulk tankers loaded on site to exit the site through a vehicle wash.

Specific Condition(s)

13. (300-9) COMPLAINTS

The Licensee must:

1. maintain a register of complaints received regarding the Licensee's operations that sets out:

1.1 the date and time that the complaint was reported;

1.2 details of the complaint;

1.3 the name and address of the complainant (if permitted by the complainant);

1.4 the date and time of the events giving rise to the complaint;

1.5 the likely cause of the events giving rise to the complaint;

1.6 an estimate of the temperature, wind speed, wind direction and rainfall at the time of the events giving rise to the complaint; and

1.7 any action taken by the Licensee in response to the complaint and to prevent a recurrence of the events giving rise to the complaint;

2. respond to complainant within 72 hours;

3. make available a summary report of complaints to the public at the Adelaide Brighton Community Liaison Group meetings; and

4. retain the register for the duration of this licence.

Waste Management Condition(s)

14. (80-43) LISTED WASTE TO BE TRANSPORTED WITHIN SA

1. The Licensee must not cause or permit any waste on list 1, attached to this licence, to be removed from the Premises for transport to a place within South Australia unless:

1.1 the Licensee has completed Part 1 of a WTC regarding that waste; and

1.2 the transporter has completed Part 2 of that WTC, and

1.3 the transporter has provided the pink and green copy of that WTC (with parts 1 and 2 completed) to the Licensee.

2. The licensee must:

2.1 retain the green copy of WTCs for no less than 12 months; and

2.2 provide the white, yellow and blue copies of the WTC (with parts 1 and 2 completed) to the transporter at the time of collection of the waste; and

2.3 provide the pink copy of the WTC (with parts 1 and 2 completed) to the Authority within seven days of collection of the waste.

3. The Licensee must not cause or permit any waste on list 2, attached to this licence, to be collected from the Premises for transport to a place within South Australia unless a WTF is completed regarding that waste.

4. The Licensee must retain the green copy of WTFs for not less than 12 months.

15. (80-44) PRODUCTION OF CONTROLLED WASTE TO BE TRANSPORTED FROM SA TO ANOTHER STATE OR TERRITORY

1. The Licensee not cause or permit any Controlled Waste, as detailed in the list attached to this licence, to be collected from the Premises for transport to a place outside South Australia unless:

1.1. The licensee has:

1.1.1. obtained a consignment authorisation from the appropriate environmental agency in the state or territory of destination of that waste, and

1.1.2. completed Part 1 of WTC regarding that waste, and

1.2. The transporter has:

1.2.1. completed Part 2 of that WTC, and

1.2.2. has provided the pink and green copy of that WTC (with parts 1 and 2 completed) to the Licensee.

2. The licensee must:

2.1. retain the green copy of WTCs for no less than 12 months, and

2.2. Provide the white, yellow and blue copies of the WTC (with parts 1 and 2 completed) to the transporter at the time of collection of the waste, and

2.3. provide the pink copy of the WTC (with parts 1 and 2 completed) to the Authority within seven days of collection of that waste, and

2.4. complete the green tear off slip at the bottom of the WTC and provide it to the appropriate environmental agency in the state or territory of destination of that waste within seven days of collection of that waste.

16. (80-45) LISTED WASTE MANAGEMENT

The Licensee must:

1. Store listed waste in accordance with the relevant Australian Standards that applies to that waste.

2. Ensure that listed waste is transported to a waste depot licensed by the Authority to receive that waste by:

2.1. A person who is licensed by the Authority to transport that waste, or

2.2. A person who is not transporting that waste for fee or reward.

3. Provide an emergency spill kit at the collection and loading point of listed waste.

4. Store any substances that, by their nature or amount, have the potential to cause environmental harm to surface waters or groundwater, in accordance with the EPA Guideline entitled 'Bunding and Spill Management' updated June 2007.

General Administrative Condition(s)

17. (400-338) If the Licensee's name or postal address (or both) changes, then the Licensee must inform the Authority within 28 days of the change occurring.

18. (400-339) The Licensee must display a copy of this licence on a notice board at the Premises.

19. (400-215) The Licensee must ensure that every employee, agent or contractor responsible for carrying out any task controlled by this licence is properly advised as to the requirements of this licence and the general environmental duty under section 25 of the Act that relate to that person's tasks and responsibilities as employee, agent or contractor.

20. (400-201) IMPOSE OR VARY CONDITIONS

The Authority may during the term of this licence impose or vary conditions:

1. in relation to testing, monitoring and reporting referred to in section 52(1)(a) of the Act;

2. which require the Licensee, in accordance with section 53 of the Act, to prepare a plan of action to be taken in the event of an emergency;

3. which require the Licensee to develop an EIP as set out in section 54 of the Act and to comply with the requirements of the EIP;

4. which relate to provision of information relating to the Licensee or any agent or contractor undertaking any activity on behalf of the Licensee pursuant to this licence; and

5. which relate to provision of information relating to the activity subject to the licence including the levels of inputs and outputs and the amounts of pollutants or waste generated by the activity.

21. (400-347) CHANGE to PROCESS EMISSIONS or WASTE

The Licensee must:

1. not undertake changes to operating processes at the Premises without written approval from the Authority, where such changes:

1.1 have the potential to increase the emissions, or alter the nature, of pollutants or waste currently generated by or from the licensed activity; or

1.2 have the potential to increase the risk of environmental harm; or

1.3 would relocate the point of discharge of pollution or waste at the Premises;

2. ensure that written application is submitted to the Authority on the EPA form entitled 'Application for Change to Process Emissions or Waste', that details the proposed changes; and

3. pay the prescribed application fee indicated on the Application form.

NOTE 1: The Authority may during the term of this licence impose or vary the conditions of this authorisation upon approval of an application made in accordance with this condition.

NOTE 2: The 'Application for Change to Process Emissions or Waste' form is available on the EPA website at - http://www.epa.sa.gov.au/xstd_files/Licensing/Form/06_process_change.pdf.

22. (400-348) ALTERATIONS to PLANT and EQUIPMENT

The Licensee must:

1. not construct or alter a building or structure, or, install or alter any plant or equipment at the Premises, without written approval from the Authority, where such changes:

1.1 have the potential to increase the emissions, or alter the nature of pollutants or waste currently generated by, or from the licensed

activity, or

1.2 have the potential to increase the risk of environmental harm, or

1.3 would relocate the point of discharge of pollution or waste at the Premises;

2. ensure that written application is submitted to the Authority on the EPA form entitled 'Application for Alterations to Plant and Equipment' that details the proposed changes; and

3. pay the prescribed application fee indicated on the Application form.

NOTE 1: The Authority may during the term of this licence impose or vary the conditions of this authorisation upon approval of an application made in accordance with this condition.

NOTE 2: The 'Application for Alterations to Plant and Equipment' form is available on the EPA website at - http://www.epa.sa.gov.au/xstd_files/Licensing/Form/06_equipment_change.pdf.

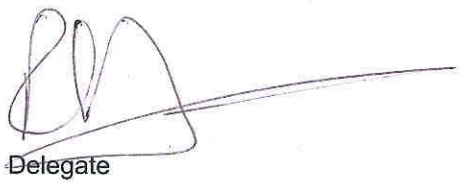
NOTE 3: In some circumstances installation of plant and equipment may be subject to consent under the provisions of the Development Act, which may have priority over the obligations of this condition - check with the licence coordinator for advice prior to completing the Application form.

23. (400-78) The Licensee must:

1. submit an annual return at least 90 days before the authorisation fee payment date, if this licence is for a term of two years or more; and

2. pay the annual authorisation fee by the authorisation fee payment date.

24. (400-79) An application for renewal of this licence must be made at least 90 days before the expiry date of this licence.



Delegate

Environment Protection Authority

Date 28/2/11

There are 6 attachments to this Licence

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 hierarchy;
   - **1.3** the purpose of the trial;
   - **1.4** an assessment of the risks associated with the use of the AFRM and risk mitigating measures including, but not limited to:
     - **1.4.1** the predicted mass balance of the AFRM including predicted emissions to air and baseline emissions for comparison;
     - **1.4.2** the results of previous stack emissions testing using the AFRM, if available; and
     - **1.4.3** any risks associated with on-site storage, handling and feed into the process;
   - **1.5** 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 32-34. If the Licensee proposes to exclude any of the analytes and properties in licence condition 32-34 from testing, the Licensee must highlight this and provide justification in the pre-trial report for EPA approval;
   - **1.6** records to be kept and duration that records will be kept during and after the trial; and
   - **1.7** the proposed dates for trial commencement and completion;
2. submit the pre-trial report to the Authority, 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 Authority, resubmit a revised version of the post trial report (incorporating any additions or alterations that are required by the Authority) within the time period advised by the Authority 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; and
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; and
   - **1.4** an assessment of the suitability of the AFRM for ongoing use.
2. submit the 'Summary of AFRM trial' post -trial report to the Authority within 90 days of the completion of each trial, within 30 days after receipt of stack emissions or modelling results, whichever is greater; and
3. if the post-trial report submitted in accordance with paragraph 2 is not acceptable to the Authority, resubmit a revised version of the post trial report (incorporating any additions or alterations that are required by the Authority) within the time period advised by the Authority 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 hierarchy;
   - **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;
     - **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 Authority at least 60 days before requiring approval; and
3. if the post-trial report submitted in accordance with paragraph 2 is not acceptable to the Authority, resubmit a revised version of the post trial report (incorporating any additions or alterations that are required by the Authority) within the time period advised by the Authority in writing.

(Note: Guidance on the use of refuse derived fuel is provided in the EPA 'Standard for the production and use of refuse derived fuel' dated June 2009]

Schedule X-1

Adelaide Brighton Cement Ltd – EPA Environmental Authorisation 1126

Schedule X-1

AFRM	APPROVED FEED RATE
Natural Gas	Unlimited
Carbon Powder (processed anodes)	Maximum - 2.5 tonnes per hour
Demolition Wood Waste	15 tonnes per hour (Note: max. 10% plastic contamination by weight)
Black Sand **(processed Blast Furnace Slag)**	Maximum - 6250 kilograms per hour
Blast Furnace Slag **(unprocessed 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

Schedule Y-1

Adelaide Brighton Cement Ltd – EPA Environmental Authorisation 1126

SUBSTANCE	AVERAGING TIME	DESIGN CRITERIA mg/m^3 [1]	DESIGN CRITERIA ppm [2]
CLASS 1			
Carbon monoxide	1-hour	29	25
Nitrogen dioxide	1-hour	0.113	0.0625
Sulphur dioxide	1 hour	0.45	0.17
CLASS 2 (toxicity based)			
Antimony and compounds	3-minute	0.017	-
Barium (soluble compound)	3-minute	0.017	-
Chlorine	3-minute	0.1	0.033
Chromium (III) compounds	3-minute	0.017	-
Copper fume	3-minute	0.0067	-
Fluoride	24-hours 7-days 90-days	0.0029 0.0017 0.0005	0.0034 0.002 0.00059
Hydrogen chloride	3-minute	0.25	0.17
Iron oxide fume	3-minute	0.17	-
Magnesium oxide fume	3-minute	0.33	-
Manganese and compounds	3-minute	0.033	-
Mercury - organic - inorganic	 3-minute 3-minute	 0.00033 0.0033	 - -
Zinc oxide fume	3-minute	0.17	-

Schedule Y-1 (continued)

Adelaide Brighton Cement Ltd – EPA Environmental Authorisation 1126

SUBSTANCE	AVERAGING TIME	DESIGN CRITERIA mg/m ^{3} [1]	DESIGN CRITERIA ppm [2]
CLASS 3			
Arsenic and compounds	3-minute	0 00017	-
Benzene	3-minute	0.053	0.017
Beryllium and beryllium compounds	3-minute	0.000007	-
Cadmium and cadmium compounds	3-minute	0.000033	-
Chromium VI compounds	3-minute	0.00017	-
Nickel and nickel compounds	3-minute	0.00033	0.00017
PAH (as BaP)	3-minute	0.00073	-

1 gas volumes are expressed at 25° C and at an absolute pressure of one atmosphere (101.325 kPa)

2 parts per million (volume/volume)

Schedule X (WTC Requirements for Waste Producers)

Producer to insert in Part 1

- Description of the waste(s) - Use proper shipping name/technical name if applicable for Dangerous Goods
- The physical nature of the waste
- Waste code(s) - As specified in List 1(a)
- Contaminant(s)
- UN Number(s)
- UN Code(s)
- Dangerous Goods Class(es) (UN Class(es)) - and Subsidiary Risk if applicable for Dangerous Goods Packaging Group number
- Amount of waste(s)
- Waste origin code - ANZ Standard Industry Code
- Type of package (eg bulk) - and number of packages of each type if applicable for Dangerous Goods
- Facility name
- Facility address
- Facility EPA Licence Number
- State/Territory of destination
- Name of Waste Producer
- Address of waste source (Producer)
- Producer's telephone number
- Emergency contact number in the event of accident or spillage
- Consignment authorisation number - when waste is to be transported to another State or Territory
- Producer EPA Licence Number
- Date of dispatch
- Signature of the Waste Producer or authorised agent

Producer to insert in 'tear-off'

- Name of Waste Producer
- Address of waste source (Producer)
- Description of the waste(s) - Use proper shipping name/technical name if applicable for Dangerous Goods
- Waste Producer EPA Licence Number
- Quantity of waste

Schedule Y (WTC Requirements for Transporters)

Transporter to insert in Part 2

- Name of Waste Transporter
- Address of Waste Transporter
- Vehicle registration number(s)
- Type of transport eg road, rail
- Waste Transporter EPA Licence Number
- Date of transport
- Signature of the Waste Transporter

Transporter to insert in 'tear-off'

- Name(s) of transit State(s)/Territory or Territories
- Name of Waste Transporter
- Waste Transporter EPA Licence Number

Schedule A (WTF Requirements for Producers)

Producer to insert in Part A of the following:

- Name of Waste Producer
- Address of waste source (Producer)
- Type of waste collected by marking one of the boxes in Part A of the form
- Amount of liquid waste in litres or numbers of tyres
- Signature of the Waste Producer - or authorised agent
- Date of collection from the Waste Producer

Schedule B (WTF Requirements for Transporters)

Transporter to insert in Part B of the following:

- Name of the Licensed Waste Transporter
- Waste Transporter EPA Licence Number
- Waste Transporter Vehicle registration number
- Signature and name of the Waste Transporter
- Date of collection by the Waste Transporter

List 1(a)

Waste Stream or wastes having as constituents:

Acidic solutions or acids in solid form	B100
Antimony; antimony compounds	D170
Arsenic; arsenic compounds	D130
Asbestos	N220
Barium compounds (excluding barium sulphate)	D290
Basic solutions or bases in solid form	C100
Beryllium; beryllium compounds	D160
Boron compounds	D310
Cadmium; cadmium compounds	D150
Ceramic-based fibres with physico-chemical characteristics similar to those of asbestos	N230
Chlorates	D350
Chromium compounds (hexavalent and trivalent)	D140
Clinical and related wastes	R100
Cobalt compounds	D200
Containers contaminated with residues of substances referred to in this list	N100
Copper compounds	D190
Cyanides (inorganic)	A130
Cyanides (organic)	M210
Encapsulated, chemically-fixed, solidified or polymerised wastes	N160
Ethers	G100
Filter cake	N190
Fire debris and fire washwaters	N140
Fly ash	N150
Halogenated organic solvents	G150
Highly odorous organic chemicals (including mercaptans and acrylates)	M260
Inorganic fluorine compounds (excluding calcium fluoride)	D110
Inorganic sulphides	D330
Isocyanate compounds	M220
Lead; lead compounds	D220
Mercury; mercury compounds	D120
Metal carbonyls	D100
Nickel compounds	D210

List 1(a) (continued)

Waste Stream or wastes having as constituents:

Organic phosphorus compounds	H110
Organic solvents excluding halogenated solvents	G110
Organohalogen compounds (other than substances referred to in this list)	M160
Perchlorates	D340
Phenols, phenol compounds (including chlorophenols)	M150
Phosphorus compounds (excluding mineral phosphates)	D360
Polychlorinated dibenzo-furan (any congener)	M170
Polychlorinated dibenzo-p-dioxin (any congener)	M180
Residues from industrial waste treatment/disposal operations	N205
Selenium; selenium compounds	D240
Soils contaminated with a controlled waste	N120
Surface active agents (surfactants), containing principally organic constituents and which may contain metals and inorganic materials	M250
Tannery wastes (including leather dust, ash, sludges and flours)	K140
Tellurium; tellurium compounds	D250
Thallium; thallium compounds	D180
Triethylamine catalysts for setting foundry sands	M230
Vanadium compounds	D270
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	T100
Waste containing peroxides (other than hydrogen peroxide)	E100
Waste from heat treatment and tempering operations containing cyanides	A110
Waste from the manufacture, formulation and use of wood-preserving chemicals	H170
Waste from the production, formulation and use of biocides and phytopharmaceuticals	H100
Waste from the production, formulation and use of inks, dyes, pigments, paints, lacquers and varnish	F100
Waste from the production, formulation and use of organic solvents	G160
Waste from the production, formulation and use of photographic chemicals and processing materials	T120
Waste from the production, formulation and use of resins, latex, plasticisers, glues and adhesives	F110
Waste from the production and preparation of pharmaceutical products	R140
Waste pharmaceuticals, drugs and medicines	R120

List 1(a) (continued)

Waste Stream or wastes having as constituents:

Waste resulting from surface treatment of metals and plastics	A100
Waste tarry residues arising from refining, distillation, and any pyrolytic treatment	J160
Waste, substances and articles containing or contaminated with polychlorinated biphenyls (PCBs), polychlorinated napthalenes (PCNs), polychlorinated terphenyls (PCTs) and/or polybrominated biphenyls (PBBs)	M100
Waste of an explosive nature not subject to other legislation	E120
Zinc compounds	D230

List 1(b)

Waste Stream or wastes having as constituents:

Animal effluent and residues (abattoir effluent, poultry and fish processing waste)	K100
Grease trap waste	K110
Non-toxic salts	D300
Tyres	T140
Waste mineral oils unfit for their original intended use	J100
Waste oil/water, hydrocarbons/water mixtures or emulsions	J120
Wool scouring waste	K190

List 2 – Characteristics of Controlled Waste

Dangerous Goods Class (UN Class*)	UN Code	
1	H1	**Explosive**
		An explosive substance or waste is a solid or liquid substance or waste (or mixture of substances or wastes) which is in itself capable by chemical reaction of producing gas at such a temperature and pressure and at such a speed as to cause damage to the surroundings
3	H3	**Flammable Liquids**
		The word 'flammable' has the same meaning as 'inflammable'. Flammable liquids are liquids, or mixtures of liquids, or liquids containing solids in solution or suspension (for example, paints, varnishes, lacquers, etc., but not including substances or wastes otherwise classified on account of their dangerous characteristics) which give off flammable vapour at temperatures of not more than 60.5 degrees Celsius, closed-cup test, or not more than 65.6 degrees Celsius, open-cup test. (Since the results of open-cup tests and of closed cup tests are not strictly comparable and even individual results by the same test are often variable, regulations varying from the above figures to make allowances for such differences would be within the spirit of the definition)
4.1	H4.1	**Flammable Solids**
		Solids or waste solids, other than those classified as explosives, which under conditions encountered in transport are readily combustible, or may cause or contribute to fire through friction
4.2	H4.2	**Substances or wastes liable to spontaneous combustion**
		Substances or wastes which are liable to spontaneous heating under normal conditions encountered in transport, or to heating up in contact with air, and being then liable to catch fire
4.3	H4.3	**Substances or wastes which, in contact with water, emit flammable gases**
		Substances or wastes which, by interaction with water, are liable to become spontaneously flammable or to give off flammable gases in dangerous quantities
5.1	H5.1	**Oxidising**
		Substances or wastes which, while in themselves not necessarily combustible, may, generally by yielding oxygen, cause or contribute to, the combustion of other materials
5.2	H5.2	**Organic peroxides**
		Organic substances or wastes which contain the bivalent-O-O-structure are thermally unstable substances which may undergo exothermic self-accelerating decomposition
6.1	H6.1	**Poisonous (acute)**
		Substances or wastes liable either to cause death or serious injury or to harm human health if swallowed or inhaled or by skin contact
6.2	H6.2	**Infectious substances**
		Substances or wastes containing viable micro-organisms or their toxins which are known or suspected to cause disease in animals or humans

List 2 – Characteristics of Controlled Waste (continued)

Dangerous Goods Class (UN Class*)	UN Code	
8	H8	**Corrosives**
		Substances or wastes which, by chemical action, will cause severe damage whin in contact with living tissue, or in the case of leakage, will materially damage, or even destroy, other goods or the means of transport; they may also cause other hazards
9	H10	**Liberation of toxic gases in contact with air or water**
		Substances or wastes which, by liberation with air or water, are liable to give off toxic gases in dangerous quantities
9	H11	**Toxic (delayed or chronic)**
		Substances or wastes which, if they are inhaled or ingested or if they penetrate the skin, may involve delayed or chronic effects, including carcinogenicity
9	H12	**Ecotoxic**
		Substances or wastes which if released present or may present immediate or delayed adverse impacts to the environment by means of bioaccumulation and/or toxic effects upon biotic systems
9	H13	**Capable of yielding another material which possesses H!-H12**
		Capable by any means, after disposal, of yielding another material, eg leachate, which possesses any of the characteristics listed above
		Other Reasons
		Potential to have a significant adverse impact on ambient air quality
		Potential to have a significant adverse impact on ambient marine, estuarine or fresh water quality
*UN Class and Code relates to the hazard classification system included in the United Nations Recommendations on the Transport of Dangerous Goods as used in Australia		

List 1

Listed Waste – Part B of Schedule 1 to the Environment Protection Act 1993

Requiring provision of Waste Tracking Certificate (WTC)

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.*

Mercaptans
Mercury compounds and equipment containing mercury
Nickel compounds and solutions

List 1 (continued)

Listed Waste – Part B of Schedule 1 to the Environment Protection Act 1993
Requiring provision of Waste Tracking Certificate (WTC)

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

List 2

Wastes Requiring provision of Waste Tracking Form (WTF)

Water based paints
Waste oil
Oil/water mixtures
Wool scouring waste
Grease trap waste
Intermediate landfill cover (contaminated soil)
Waste tyres

Controlled Waste

Controlled Waste – per the National Environment Protection (Movement of Controlled Waste between States and Territories) Measure

Requiring provision of Waste Transport Certificate (WTC) from the State 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)
Encapsulated, chemically-fixed, solidified or polymerised wastes
Ethers
Filter cake
Fire debris and fire washwaters
Fly ash
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

Controlled Waste (continued)

Controlled Waste – per the National Environment Protection (Movement of Controlled Waste between States and Territories) Measure

Requiring provision of Waste Transport Certificate (WTC) from the State where waste originates

Waste stream or wastes having as constituents:

Nickel compounds
Non toxic salts
Organic phosphorus compounds
Organic solvents excluding halogenated solvents
Organohalogen compounds - other than substances referred to in this list
Perchlorates
Phenols, phenol compounds including chlorophenols
Phosphorus compounds excluding mineral phosphates
Polychlorinated dibenzo-furan (any congener)
Polychlorinated dibenzo-p-dioxin (any congener)
Residues from industrial waste treatment/disposal operations.
Selenium; selenium compounds
Sewage sludge and residues including nightsoil and septic tank sludge
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