

Licence No. 35

ADELAIDE BRIGHTON CEMENT LIMITED

Pieces 3 and 4, Stockwell Road, ANGASTON SA 5353

ISSUED:

01 Nov 2019

EXPIRY:

31 Oct 2024

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



Environment Protection Authority

LICENCE NUMBER 35

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): Pieces 3 and 4, Stockwell Road, ANGASTON SA 5353

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

7(3)(c) Crushing, grinding or milling works (rock, ores or minerals)

8(2)(a) Fuel burning not coal or wood

TERMS OF LICENCE

Commencement Date: 01 Nov 2019
Expiry Date: 31 Oct 2024
Amended Date: 25 Nov 2019

Table of Contents

Licence Explanatory Notes – Do Not Form Part of the Licence	
Definitions	6
Acronyms	7
Conditions of Licence	8
Attachments	15

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.

CT5965/584

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.

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

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.

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

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).

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.

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 PREVENTION (S - 264)

The Licensee must:

- 1.1.1 take all reasonable and practicable measures to prevent dust from leaving the Premises.
- 1.1.2 develop a Dust Management Plan to the satisfaction of the EPA by the compliance date listed below; and
- 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: 30-Aug-2019

1.2 NOISE PREVENTION (S - 265)

The Licensee must:

- 1.2.1 take all reasonable and practicable measures to prevent noise from leaving the Premises;
- 1.2.2 develop a Noise Management Plan to the satisfaction of the EPA by the compliance date listed below; and
- 1.2.3 implement the Noise Management Plan approved in writing by the EPA (or any revised plan approved in writing by the EPA).

Compliance Date: 30-Aug-2019

1.3 PARTICULATE EMISSIONS - KILN STACK 3 (U - 853)

The Licensee must:

- 1.3.1 take all reasonable and practicable measures to prevent particulate emissions (as TSP) from Kiln Stack 3 exceeding 25 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 subparagraph 1 of this condition, take immediate action to reduce particulate emissions to below that limit.

NOTES

The Licensee must ensure that any exceedence 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.

1.4 PARTICULATE EMISSIONS - KILN STACKS 1 & 2 (U - 852)

- 1.4.1 take all reasonable and practicable measures to prevent particulate emissions (as TSP) from Kiln Stacks 1 and 2 exceeding a limit of 100 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 immediate action to reduce particulate emissions to below that limit.

NOTES

The Licensee must ensure that any exceedence 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.

1.5 STORMWATER (S - 15)

The Licensee must:

- 1.5.1 take all reasonable and practicable measures to prevent contamination of stormwater at the Premises; and
- 1.5.2 implement appropriate contingency measures to contain any 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.

2 OPERATIONAL MANAGEMENT

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

The Licensee must:

- 2.1.1 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;
- 2.1.2 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;
- 2.1.3 provide public access to the Recovered Products Plan (or any revised plan approved by the EPA);
- 2.1.4 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.

2.2 ALTERNATIVE FUELS - OPERATIONAL REQUIREMENTS (U - 725)

The Licensee must ensure that:

- 2.2.1 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 startup, shut-down, or where the gas flame is not under stable operating conditions;
- 2.2.2 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;
- 2.2.3 records relating to this condition are kept for the term of the Licence, and are made available to an Authorised Officer upon request.

2.3 BUNDING (S - 5)

The licensee must ensure that all chemicals or chemical products are stored, loaded or unloaded in an appropriately bunded area.

NOTES

The EPA will assess the appropriateness of any bund against the EPA's 'Bunding and Spill Management Guidelines'.

2.4 COMPLAINTS REGISTER (S - 1)

The Licensee must:

- 2.4.1 prepare and maintain a register of all complaints concerning environmental issues.
- 2.4.2 ensure the register includes:
 - a the date and time that the complaint was made;
 - b details of the complaint including the likely cause of events giving rise to the complaint;
 - c the contact details of the complainant (if permitted by the complainant); and
 - d details of any action taken in response to the complaint by the Licensee.

2.5 POLLUTION CONTROL EQUIPMENT REGISTER (S - 2)

- 2.5.1 maintain all Pollution Control Equipment to ensure that pollution is minimised; and
- 2.5.2 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.

2.6 SILO FILTER INSTALLATION (S - 89)

The Licensee must ensure that an appropriate filter is connected to each silo so as to minimise dust emissions.

NOTES

The EPA will assess the appropriateness of the filter against the EPA's 'Concrete Batching' Guidelines

2.7 SILO OVERFILLING (S - 91)

The Licensee must use an appropriate high level alarm to prevent the overfilling of silos.

2.8 VEHICLE WASHING (S - 260)

The Licensee must:

- 2.8.1 only wash vehicles at the Premises within an area that directs all water to a wastewater management system;
- 2.8.2 direct vehicles loaded on the Premises to exit the Premises through an operating vehicle wash; and
- 2.8.3 ensure that dragout from all vehicles leaving the Premises is minimised.

3 MONITORING AND REPORTING

3.1 STACK EMISSION TESTING (U - 952)

- 3.1.1 test emissions from all exhaust stacks, by the last day of July 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
- 3.1.2 ensure that the emission testing programme is undertaken when the plant is under stable operating conditions;
- 3.1.3 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
- 3.1.4 submit a report to the satisfaction of 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.

3.2 STACK PARTICULATE MANAGEMENT PLAN (U - 854)

The Licensee must:

3.2.1 develop and submit a Stack Particulate Management Plan to the satisfaction of the EPA by the date listed below;

- 3.2.2 ensure that the Stack Particulate Management Plan includes, but is not limited to:
 - a continuous monitoring of particulate emissions from Kiln Stacks 1, 2 and 3 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 actions to be taken when stack particulate emission trigger values listed in Schedule Z-1 are exceeded;
 - d 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:
 - for each exceedence of the stack particulate emission trigger values listed in Schedule Z-1;
 - A the date, time and duration;
 - B the cause:
 - C the measured particulate concentration as milligrams per cubic metre at STP, dry basis;
 - D immediate actions taken to reduce particulate emissions:
 - E corrective actions taken to prevent future events of the same kind:
 - ii a trend analysis of exceedence events and associated details provided under sub-paragraph 2 of this condition for Kiln Stacks 1, 2 and 3 with;
 - A community complaints recorded under condition S-1; and
 - B the preceding 1,3 and 5 years of stack emission data;
 - C the identification of any opportunities for improvement in order to decrease the frequency, duration and magnitude of future exceedence events, based on the trend analysis;
 - iii a methodology and framework for providing access to the Stack Particulate Management Plan (or any revised plan approved by the EPA in writing) and to annual reporting.
- 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 exceedence 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: 30-Aug-2019

4 ADMINISTRATION

4.1 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

4.1.1 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.

4.2 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:

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

4.3 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:

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

4.4 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.

4.5 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.

4.6 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.

4.7 VARIATION OF CONDITIONS (pursuant to Section 45(3) of the Environment Protection Act 1993) (U - 946)

The EPA may:

- 4.7.1 impose conditions or vary conditions of this Licence at any time by notice in writing to the Licensee in relation to noise, particulate and other air emissions from fugitive sources and/or point sources based on:
 - a Stack Management Plan submissions and reports;
 - b Dust Management Plan submissions and reports;
 - c Noise Management Plan submissions and reports; and
 - d stack monitoring data, including but not limited to continuous particulate monitoring data and annual stack emission testing results and reports.

Attachments

Schedule X-1.doc"

Schedule Z-1.doc"

SCHEDULEW-1.docx"

SCHEDULEY-1.docx"

Schedule X-1

Schedule X-1

AFRM	Approved Feed Rate	
Carbon Powder	Kiln 1: Maximum – 2.5 kilograms per hour Kiln 3: Maximum – 335 kilograms per hour	
Winery Washwater	Maximum 50 megalitres per annum	
Grey Sand	Maximum – 4 tonnes per hour per kiln Maximum – 8.8 tonnes per hour per mill	
Recycled Used Oil	Maximum - 500 litres per hour	
Used Foundry Sand	Maximum – 2 tonnes per hour	

Schedule Z-1

Schedule Z-1

STACK PARTICULATE EMISSION TRIGGER VALUES			
Averaging Period	Kiln Stack 1	Kiln Stack 2	Kiln Stack 3
1 hour	100 mg/m ³	100 mg/m ³	25 mg/m ³

Schedule W-1

Schedule W-1 AFRM Trial Management

Adelaide Brighton Cement Ltd - EPA Environmental Authorisation 35

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-952. If the Licensee proposes to exclude any of the analytes and properties in licence condition U-952 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

- 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 35

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 trialled 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 Y-1

Schedule Y-1

SUBSTANCE	AVERAGING TIME	MAXIMUM DESIGN CRITERIA mg/m ³ ¹	MAXIMUM DESIGN CRITERIA ppm ²
Carbon monoxide	1-hour		
Nitrogen dioxide	1-hour	the Environment Protection (Air Quality) the Environment P	per the limits specified in Schedule 2 of the Environment Protection (Air Quality) Policy 2016
Sulphur dioxide	1 hour	1 Olley 2010	Tolley 2010
Antimony and compounds	3-minute		
Barium (soluble compound)	3-minute		per the limits specified in Schedule 2 of
Chlorine	3-minute	the Environment Protection (Air Quality) the Environment Protection	
Chromium (III) compounds	3-minute		
Copper fume	3-minute		the Environment Protection (Air Quality) Policy 2016
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)

SUBSTANCE	AVERAGING TIME	MAXIMUM DESIGN CRITERIA mg/m ^{3 1}	MAXIMUM DESIGN CRITERIA ppm²
Arsenic and compounds	3-minute		
Benzene	3-minute		
Beryllium and beryllium compounds	3-minute	per the limits specified in Schedule 2 of	per the limits specified in Schedule 2 of
Cadmium and cadmium compounds	3-minute	the Environment Protection (Air Quality) Policy 2016	the Environment Protection (Air Quality) Policy 2016
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

¹STP, dry basis

² parts per million (volume/volume)

³ ITEQ: International Toxic Equivalent