

Environment Protection Licence



Licence - 1548

Licence Details

Number:	1548
Anniversary Date:	31-December

Licensee

HYDRO ALUMINIUM KURRI KURRI PTY LTD

PO BOX 1

KURRI KURRI NSW 2327

Premises

HYDRO ALUMINIUM KURRI KURRI PTY LTD

HART ROAD

LOXFORD NSW 2327

Scheduled Activity

Metallurgical activities

Fee Based Activity

Scale

Aluminium production (alumina)	> 10000 T processed
Metal waste generation	> 100 T generated or stored

Region

North East - Hunter

Ground Floor, NSW Govt Offices, 117 Bull Street

NEWCASTLE WEST NSW 2302

Phone: (02) 4908 6800

Fax: (02) 4908 6810

PO Box 488G NEWCASTLE

NSW 2300

Environment Protection Licence



Licence - 1548

INFORMATION ABOUT THIS LICENCE	4
Dictionary	4
Responsibilities of licensee	4
Duration of licence	4
Licence review	4
Fees and annual return to be sent to the EPA	4
Transfer of licence	5
Public register and access to monitoring data	5
1 ADMINISTRATIVE CONDITIONS	6
A1 What the licence authorises and regulates	6
A2 Premises or plant to which this licence applies	6
A3 Information supplied to the EPA	6
2 DISCHARGES TO AIR AND WATER AND APPLICATIONS TO LAND	7
P1 Location of monitoring/discharge points and areas	7
3 LIMIT CONDITIONS	7
L1 Pollution of waters	7
L2 Load limits	8
L3 Concentration limits	8
L4 Waste	9
4 OPERATING CONDITIONS	10
O1 Activities must be carried out in a competent manner	10
O2 Maintenance of plant and equipment	10
O3 Dust	10
O4 Effluent application to land	10
O5 Processes and management	10
O6 Waste management	11
5 MONITORING AND RECORDING CONDITIONS	11
M1 Monitoring records	11
M2 Requirement to monitor concentration of pollutants discharged	11
M3 Testing methods - concentration limits	13
M4 Environmental monitoring	13
M5 Weather monitoring	15
M6 Recording of pollution complaints	15
M7 Telephone complaints line	16

Environment Protection Licence



Licence - 1548

6	REPORTING CONDITIONS	16
R1	Annual return documents	16
R2	Notification of environmental harm	17
R3	Written report	18
R4	Other reporting conditions	18
7	GENERAL CONDITIONS	19
G1	Copy of licence kept at the premises or plant	19
8	POLLUTION STUDIES AND REDUCTION PROGRAMS	19
U1	Upgrade to meet Group 5 Fluoride emission limits	19
9	SPECIAL CONDITIONS	20
E1	Condition M2.2 and R4 monitoring points that do not apply during shutdown	20
DICTIONARY		21
	General Dictionary	21

Environment Protection Licence

Licence - 1548



Information about this licence

Dictionary

A definition of terms used in the licence can be found in the dictionary at the end of this licence.

Responsibilities of licensee

Separate to the requirements of this licence, general obligations of licensees are set out in the Protection of the Environment Operations Act 1997 ("the Act") and the Regulations made under the Act. These include obligations to:

- ensure persons associated with you comply with this licence, as set out in section 64 of the Act;
- control the pollution of waters and the pollution of air (see for example sections 120 - 132 of the Act); and
- report incidents causing or threatening material environmental harm to the environment, as set out in Part 5.7 of the Act.

Variation of licence conditions

The licence holder can apply to vary the conditions of this licence. An application form for this purpose is available from the EPA.

The EPA may also vary the conditions of the licence at any time by written notice without an application being made.

Where a licence has been granted in relation to development which was assessed under the Environmental Planning and Assessment Act 1979 in accordance with the procedures applying to integrated development, the EPA may not impose conditions which are inconsistent with the development consent conditions until the licence is first reviewed under Part 3.6 of the Act.

Duration of licence

This licence will remain in force until the licence is surrendered by the licence holder or until it is suspended or revoked by the EPA or the Minister. A licence may only be surrendered with the written approval of the EPA.

Licence review

The Act requires that the EPA review your licence at least every 5 years after the issue of the licence, as set out in Part 3.6 and Schedule 5 of the Act. You will receive advance notice of the licence review.

Fees and annual return to be sent to the EPA

For each licence fee period you must pay:

- an administrative fee; and
- a load-based fee (if applicable).

Environment Protection Licence

Licence - 1548



The EPA publication “A Guide to Licensing” contains information about how to calculate your licence fees. The licence requires that an Annual Return, comprising a Statement of Compliance and a summary of any monitoring required by the licence (including the recording of complaints), be submitted to the EPA. The Annual Return must be submitted within 60 days after the end of each reporting period. See condition R1 regarding the Annual Return reporting requirements.

Usually the licence fee period is the same as the reporting period.

Transfer of licence

The licence holder can apply to transfer the licence to another person. An application form for this purpose is available from the EPA.

Public register and access to monitoring data

Part 9.5 of the Act requires the EPA to keep a public register of details and decisions of the EPA in relation to, for example:

- licence applications;
- licence conditions and variations;
- statements of compliance;
- load based licensing information; and
- load reduction agreements.

Under s320 of the Act application can be made to the EPA for access to monitoring data which has been submitted to the EPA by licensees.

This licence is issued to:

HYDRO ALUMINIUM KURRI KURRI PTY LTD
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PO BOX 1

KURRI KURRI NSW 2327

subject to the conditions which follow.

Environment Protection Licence



Licence - 1548

1 Administrative Conditions

A1 What the licence authorises and regulates

A1.1 This licence authorises the carrying out of the scheduled activities listed below at the premises specified in A2. The activities are listed according to their scheduled activity classification, fee-based activity classification and the scale of the operation.

Unless otherwise further restricted by a condition of this licence, the scale at which the activity is carried out must not exceed the maximum scale specified in this condition.

Scheduled Activity	Fee Based Activity	Scale
Metallurgical activities	Aluminium production (alumina)	> 10000 T processed
Metallurgical activities	Metal waste generation	> 100 T generated or stored

A2 Premises or plant to which this licence applies

A2.1 The licence applies to the following premises:

Premises Details
HYDRO ALUMINIUM KURRI KURRI PTY LTD
HART ROAD
LOXFORD
NSW 2327
LOT 1 DP 456769, LOT 318 DP 755231, LOT 319 DP 755231, LOT 411 DP 755231, LOT 412 DP 755231, LOT 413 DP 755231, LOT 414 DP 755231, LOT 415 DP 755231, LOT 769 DP 755231, LOT 769 DP 755231
EXCLUDING THE REGAIN SPL PROCESSING FACILITY AS SHOWN CONTAINED WITHIN THE HEAVY LINE ON "PLAN SHOWING SPL BOUNDARY WITHIN HYDRO ALUMINIUM SMELTER AT KURRI KURRI", PREPARED BY DAVID CANT SURVEYORS, REF. 10/57B KURRI HYDRO, 21-7-2010 (CONTAINED ON EPA FILE LIC07/2577-04).

A3 Information supplied to the EPA

A3.1 Works and activities must be carried out in accordance with the proposal contained in the licence application, except as expressly provided by a condition of this licence.

In this condition the reference to "the licence application" includes a reference to:

- the applications for any licences (including former pollution control approvals) which this licence replaces under the Protection of the Environment Operations (Savings and Transitional) Regulation 1998; and
- the licence information form provided by the licensee to the EPA to assist the EPA in connection with the issuing of this licence.

Environment Protection Licence

Licence - 1548



2 Discharges to Air and Water and Applications to Land

P1 Location of monitoring/discharge points and areas

P1.1 The following points referred to in the table below are identified in this licence for the purposes of monitoring and/or the setting of limits for the emission of pollutants to the air from the point.

Air

EPA identification no.	Type of Monitoring Point	Type of Discharge Point	Location Description
3	Air emissions monitoring Discharge to air	Air emissions monitoring Discharge to air	Line 2 North control system discharging via the main stack at 357465E, 6370880N.
4	Air emissions monitoring Discharge to air	Air emissions monitoring Discharge to air	Line 2 South control system stack at 357400E, 6370510N
5	Air emissions monitoring Discharge to air	Air emissions monitoring Discharge to air	Line 3 North control system stack at 357335E, 6370925N
6	Air emissions monitoring Discharge to air	Air emissions monitoring Discharge to air	Line 3 South control system stack at 357275E, 6370540N
8	Air emissions monitoring Discharge to air	Air emissions monitoring Discharge to air	Line 2 roof ventilators
9	Air emissions monitoring Discharge to air	Air emissions monitoring Discharge to air	Line 3 roof ventilators
10	Air emissions monitoring Discharge to air	Air emissions monitoring Discharge to air	Anode plant control system stack at 357839E, 6371155N
12	Weather monitoring		Meteorological monitoring station
13	Total Smelter Emission	Total Smelter Emission	Calculated from the sum of point sources
14	Air emission monitoring Discharge to air Stack	Air emission monitoring Discharge to air Stack	Green mix scrubber stack

P1.2 The following points referred to in the table are identified in this licence for the purposes of the monitoring and/or the setting of limits for discharges of pollutants to water from the point.

P1.3 The following utilisation areas referred to in the table below are identified in this licence for the purposes of the monitoring and/or the setting of limits for any application of solids or liquids to the utilisation area.

Water and land

EPA Identification no.	Type of Monitoring Point	Type of Discharge Point	Location Description
11		Discharge to utilisation area	Irrigation area

3 Limit Conditions

L1 Pollution of waters

L1.1 Except as may be expressly provided in any other condition of this licence, the licensee must comply with

Environment Protection Licence

Licence - 1548



section 120 of the Protection of the Environment Operations Act 1997.

L2 Load limits

- L2.1 The actual load of an assessable pollutant discharged from the premises during the reporting period must not exceed the load limit specified for the assessable pollutant in the table below.
- L2.2 The actual load of an assessable pollutant must be calculated in accordance with the relevant load calculation protocol.

Assessable Pollutant	Load limit (kg)
Coarse Particulates (Air)	100000.00
Fine Particulates (Air)	200000.00
Fluoride (Air)	165000.00
Lead (Air)	
Nitrogen Oxides (Air)	40000.00
Sulfur Oxides (Air)	3800000.00

Note: An assessable pollutant is a pollutant which affects the licence fee payable for the licence.

L3 Concentration limits

- L3.1 For each monitoring/discharge point or utilisation area specified in the table below (by a point number), the concentration of a pollutant discharged at that point, or applied to that area, must not exceed the concentration limits specified for that pollutant in the table.
- L3.2 Where a pH quality limit is specified in the table, the specified percentage of samples must be within the specified ranges.
- L3.3 To avoid any doubt, this condition does not authorise the pollution of waters by any pollutant other than those specified in the table.
- L3.4 Air Concentration Limits

POINT 10

Pollutant	Units of measure	100 percentile concentration limit	Reference conditions	Oxygen correction	Averaging period
Nitrogen Oxides	grams per cubic metre	2.0			
Total Solid Particles	milligrams per cubic metre	100			

Environment Protection Licence

Licence - 1548



POINT 13

Pollutant	Units of measure	100 percentile concentration limit	Reference conditions	Oxygen correction	Averaging period
Total Fluoride	kilograms of Fluoride per tonne of Aluminium produced	1.0			

POINT 14

Pollutant	Units of measure	100 percentile concentration limit	Reference conditions	Oxygen correction	Averaging period
Solid Particles	milligrams per cubic metre	10			
Benzo(a)pyrene	milligrams per cubic metre	0.05			
Total PAHs	milligrams per cubic metre	2.0			

Note: For the purposes of the emissions of Total Fluoride, and in accordance with the Protection of the Environment Operations (Clean Air) Regulation 2010, Point 13 is taken to belong the Group 3 or 4 until 31 December 2015 or unless otherwise approved in writing by the EPA.

L4 Waste

L4.1

Code	Waste	Description	Activity	Other Limits
NA	Fluoridated wastes from Tomago Aluminium		Metallurgical Activities	NA
NA	General or Specific exempted waste	Waste that meets all the conditions of a resource recovery exemption under Clause 51A of the Protection of the Environment Operations (Waste) Regulation 2005	As specified in each particular resource recovery exemption.	NA
NA		Any waste received on site that is below licensing thresholds in Schedule 1 of the POEO Act, as in force from time to time		NA

Environment Protection Licence



Licence - 1548

4 Operating Conditions

O1 Activities must be carried out in a competent manner

O1.1 Licensed activities must be carried out in a competent manner.

This includes:

- a) the processing, handling, movement and storage of materials and substances used to carry out the activity; and
- b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.

O2 Maintenance of plant and equipment

O2.1 All plant and equipment installed at the premises or used in connection with the licensed activity:

- a) must be maintained in a proper and efficient condition; and
- b) must be operated in a proper and efficient manner.

O3 Dust

O3.1 The premises must be maintained in a condition which minimises or prevents the emission of dust from the premises.

O4 Effluent application to land

O4.1 Effluent application must not occur in a manner that causes surface runoff.

O4.2 Spray from effluent application must not drift beyond the boundary of the premises.

O4.3 Livestock access to any effluent application area must be denied during effluent application and until the applied effluent area has dried.

O4.4 The quantity of effluent/solids applied to the utilisation area must not exceed the capacity of the area to effectively utilise the effluent/solids.

For the purpose of this condition, 'effectively utilise' include the use of the effluent/solids for pasture or crop production, as well as the ability of the soil to absorb the nutrient, salt, hydraulic load and organic material.

O5 Processes and management

O5.1 The licensee must ensure that any liquid and/or non-liquid waste generated and/or stored and/or processed at the premises is assessed and classified in accordance with the DECC Waste Classification Guidelines as in force from time to time.

Environment Protection Licence

Licence - 1548



O6 Waste management

- O6.1 The licensee must ensure that hazardous or restricted solid waste is stored or contained in a secure manner so as to prevent any nuisance or hazard and the escape of waste and/or leachate.
- O6.2 The licensee must ensure incompatible wastes are not mixed and transported together on any vehicle used by the person to transport the waste.
- O6.3 The licensee must ensure that a suitable enclosed area is provided at the loading point which will effectively contain any spillage of hazardous or restricted solid waste. Notwithstanding the precautionary measure the licensee must co - operate with the transporter to ensure that loading operations are carried out in such a way as to prevent the spillage of the waste.
- O6.4 The licensee must ensure that arrangements are made with the transporter to ensure that the recyclable materials are collected and removed to a facility where the materials will be recycled or re - used.
- O6.5 Before disposing of any used anode butt wastes, the licensee must prepare, to the satisfaction of the EPA, a written protocol describing the procedures that will be followed for the treatment, storing, transporting, assessing, record keeping and reporting on the management of used anode butt wastes.
- O6.6 Any area(s) used for the storage of hazardous or restricted solid waste at the premises must be provided with physical security to prevent unauthorised access to those wastes.

5 Monitoring and Recording Conditions

M1 Monitoring records

- M1.1 The results of any monitoring required to be conducted by this licence or a load calculation protocol must be recorded and retained as set out in this condition.
- M1.2 All records required to be kept by this licence must be:
 - a) in a legible form, or in a form that can readily be reduced to a legible form;
 - b) kept for at least 4 years after the monitoring or event to which they relate took place; and
 - c) produced in a legible form to any authorised officer of the EPA who asks to see them.
- M1.3 The following records must be kept in respect of any samples required to be collected for the purposes of this licence:
 - a) the date(s) on which the sample was taken;
 - b) the time(s) at which the sample was collected;
 - c) the point at which the sample was taken; and
 - d) the name of the person who collected the sample.

M2 Requirement to monitor concentration of pollutants discharged

- M2.1 For each monitoring/discharge point or utilisation area specified below (by a point number), the licensee must monitor (by sampling and obtaining results by analysis) the concentration of each pollutant specified in Column 1. The licensee must use the sampling method, units of measure, and sample at the

Environment Protection Licence

Licence - 1548



frequency, specified opposite in the other columns:

M2.2 Air Monitoring Requirements

POINT 3,4,5,6

Pollutant	Units of measure	Frequency	Sampling Method
Nitrogen Oxides	grams per cubic metre	Yearly	TM-11
Sulphur dioxide	milligrams per cubic metre	Yearly	TM-4
Total Fluoride	kilograms of Fluoride per tonne of Aluminium produced	5 times per month	TM-9
Total Solid Particles	milligrams per cubic metre	Yearly	TM-15

POINT 8,9

Pollutant	Units of measure	Frequency	Sampling Method
Total Fluoride	kilograms of Fluoride per tonne of Aluminium produced	5 times per month	TM-10

POINT 10

Pollutant	Units of measure	Frequency	Sampling Method
Nitrogen Oxides	grams per cubic metre	Yearly	TM-11
Sulphur dioxide	milligrams per cubic metre	Yearly	TM-4
Total Fluoride	kilograms of Fluoride per tonne of Aluminium produced	5 times per month	TM-9
Total PAHs	milligrams per cubic metre	Yearly	OM-6
Total Solid Particles	milligrams per cubic metre	Yearly	TM-15

POINT 13

Pollutant	Units of measure	Frequency	Sampling Method
Sulphur dioxide	kilogram	Monthly	Special Method 2
Total Fluoride	kilograms of Fluoride per tonne of Aluminium produced	Monthly	Special Method 1

POINT 14

Pollutant	Units of measure	Frequency	Sampling Method
Solid Particles	milligrams per cubic metre	Yearly	TM-15

Environment Protection Licence

Licence - 1548



Total PAHs	milligrams per cubic metre	Yearly	OM-6
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M2.3 For the purpose of Condition M2.2:

Special Method 1 means the sum of emissions from all roof ventilators, control system stacks and anode plant(s) stacks; and

Special Method 2 means calculated by mass balance based on the average sulphur content of all pitch and coke used during the month.

M3 Testing methods - concentration limits

M3.1 Monitoring for the concentration of a pollutant emitted to the air required to be conducted by this licence must be done in accordance with:

- any methodology which is required by or under the Act to be used for the testing of the concentration of the pollutant; or
- if no such requirement is imposed by or under the Act, any methodology which a condition of this licence requires to be used for that testing; or
- if no such requirement is imposed by or under the Act or by a condition of this licence, any methodology approved in writing by the EPA for the purposes of that testing prior to the testing taking place.

Note: The *Protection of the Environment Operations (Clean Air) Regulation 2010* requires testing for certain purposes to be conducted in accordance with test methods contained in the publication "Approved Methods for the Sampling and Analysis of Air Pollutants in NSW".

M4 Environmental monitoring

M4.1 The licensee must conduct a monitoring program capable of measuring the environmental impact of emissions from the smelter on the surrounding environment.

M4.2 The licensee must maintain a list of the monitoring sites and sampling frequency used to assess the impact of the smelter on the surrounding environment and a map showing the locations of the smelter and the monitoring sites used.

M4.3 Copies of the list of monitoring sites and the map showing their locations must be made available to any authorised officer of the EPA who asks to see them.

M4.4 The environmental monitoring program must include the following:

M4.5 Native vegetation monitoring

The licensee must monitor fluoride levels in native vegetation (understorey and overstorey vegetation) within 10 kilometres of the smelter.

Environment Protection Licence



Licence - 1548

M4.6 Cultivated vegetation monitoring

The licensee must monitor fluoride levels and undertake visual assessment of foliar damage during the growing season at vineyards within 20 kilometres of the smelter.

M4.7 Forage monitoring

The licensee must monitor fluoride levels in pasture grasses and forage crops from commercial grazing properties within 10 kilometres of the smelter.

M4.8 Surface water monitoring

The licensee must take representative samples of surface waters within 7 kilometres of the smelter and analyse them for fluoride, pH and conductivity.

M4.9 Ambient air monitoring

The licensee must monitor ambient fluoride levels continuously at locations within the buffer zone, outside the buffer zone and within the vineyards using the method prescribed in Australian Standard 3580.13.2 - 1991. Particulate and gaseous fluorides must be reported as weekly averages.

M4.10 Animal Monitoring

The licensee must establish and maintain a capacity for a program of sampling and analysis of animals relevant to the discharge of atmospheric emissions. This program must include:.

M4.11 Farm animals

A comprehensive survey of the condition of dairy cattle within 10 km of the smelter must be made once yearly by veterinarians. The survey must include an inspection of teeth for symptoms of fluorosis. In addition, bone samples are to be collected and analysed for fluoride content annually following procedures approved by the EPA. The fluoride content of relevant feed, feed supplements and water must be determined when contamination is suspected or when inspection of analysis indicated effects on animals.

Results must be reported annually.

M4.12 Sample retention

Part of each sample analysed must be carefully stored to the satisfaction of the EPA for a period of not less than 12 months and forwarded to the EPA on request.

M4.13 Ecosystem Monitoring

The licensee must undertake a program of ecosystem monitoring relevant to the discharge of atmospheric emissions. This monitoring program must include an ecological study of the major ecosystems within influence of the smelter to the satisfaction of the EPA.

The ecological study must include an assessment of vegetation species composition and vigour.

Results must be reported annually.

Environment Protection Licence

Licence - 1548



M5 Weather monitoring

M5.1

Parameter	Units of Measure	Averaging Period	Frequency	Sampling Method
Windspeed @ 10 m	m/s	1 hour	Continuously	AM-2 & AM-4
Wind direction @ 10m	degrees	1 hour	Continuously	AM-2 & AM-4
Wind speed @ 30 m	m/s	1 hour	Continuously	AM-2 & AM-4
Wind direction @ 30 m	degrees	1 hour	Continuously	AM-2 & AM-4
Sigma Theta @ 10 m	degrees	1 hour	Continuously	AM-2 & AM-4
Sigma Theta @ 30 m	degrees	1 hour	Continuously	AM-2 & AM-4
Ambient temperature @ 5 m	degrees celsius	1 hour	Continuously	AM-4
Ambient temperature @ 30 m	degrees celsius	1 hour	Continuously	AM-4
Rainfall	mm	Daily	Continuously	AM-4
Additional Requirements				
Sitting				AM-1 & AM-4
Measurement				AM-2 & AM-4

M6 Recording of pollution complaints

M6.1 The licensee must keep a legible record of all complaints made to the licensee or any employee or agent of the licensee in relation to pollution arising from any activity to which this licence applies.

M6.2 The record must include details of the following:

- the date and time of the complaint;
- the method by which the complaint was made;
- any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect;
- the nature of the complaint;
- the action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; and
- if no action was taken by the licensee, the reasons why no action was taken.

M6.3 The record of a complaint must be kept for at least 4 years after the complaint was made.

Environment Protection Licence

Licence - 1548



M6.4 The record must be produced to any authorised officer of the EPA who asks to see them.

M7 Telephone complaints line

M7.1 The licensee must operate during its operating hours a telephone complaints line for the purpose of receiving any complaints from members of the public in relation to activities conducted at the premises or by the vehicle or mobile plant, unless otherwise specified in the licence.

M7.2 The licensee must notify the public of the complaints line telephone number and the fact that it is a complaints line so that the impacted community knows how to make a complaint.

M7.3 The preceding two conditions do not apply until 3 months after:

- a) the date of the issue of this licence or
- b) if this licence is a replacement licence within the meaning of the Protection of the Environment Operations (Savings and Transitional) Regulation 1998, the date on which a copy of the licence was served on the licensee under clause 10 of that regulation.

6 Reporting Conditions

R1 Annual return documents

R1.1 The licensee must complete and supply to the EPA an Annual Return in the approved form comprising:

- a) a Statement of Compliance; and
- b) a Monitoring and Complaints Summary.

At the end of each reporting period, the EPA will provide to the licensee a copy of the form that must be completed and returned to the EPA.

R1.2 An Annual Return must be prepared in respect of each reporting period, except as provided below.

Note: The term "reporting period" is defined in the dictionary at the end of this licence. Do not complete the Annual Return until after the end of the reporting period.

R1.3 Where this licence is transferred from the licensee to a new licensee:

- a) the transferring licensee must prepare an Annual Return for the period commencing on the first day of the reporting period and ending on the date the application for the transfer of the licence to the new licensee is granted; and
- b) the new licensee must prepare an Annual Return for the period commencing on the date the application for the transfer of the licence is granted and ending on the last day of the reporting period.

Note: An application to transfer a licence must be made in the approved form for this purpose.

R1.4 Where this licence is surrendered by the licensee or revoked by the EPA or Minister, the licensee must prepare an Annual Return in respect of the period commencing on the first day of the reporting period and ending on:

- a) in relation to the surrender of a licence - the date when notice in writing of approval of the surrender is given; or

Environment Protection Licence



Licence - 1548

b) in relation to the revocation of the licence - the date from which notice revoking the licence operates.

- R1.5 The Annual Return for the reporting period must be supplied to the EPA by registered post not later than 60 days after the end of each reporting period or in the case of a transferring licence not later than 60 days after the date the transfer was granted (the 'due date').
- R1.6 Where the licensee is unable to complete a part of the Annual Return by the due date because the licensee was unable to calculate the actual load of a pollutant due to circumstances beyond the licensee's control, the licensee must notify the EPA in writing as soon as practicable, and in any event not later than the due date. The notification must specify:
- a) the assessable pollutants for which the actual load could not be calculated; and
 - b) the relevant circumstances that were beyond the control of the licensee.
- R1.7 The licensee must retain a copy of the Annual Return supplied to the EPA for a period of at least 4 years after the Annual Return was due to be supplied to the EPA.
- R1.8 Within the Annual Return, the Statement of Compliance must be certified and the Monitoring and Complaints Summary must be signed by:
- a) the licence holder; or
 - b) by a person approved in writing by the EPA to sign on behalf of the licence holder.
- R1.9 A person who has been given written approval to certify a certificate of compliance under a licence issued under the Pollution Control Act 1970 is taken to be approved for the purpose of this condition until the date of first review of this licence.
- R1.10 A Waste Management Report is to be provided with the Annual Return. The Waste Management Report must contain the following information:
- a) the quantity and the production and process sources of hazardous and/or restricted solid wastes kept on the premises during the licence year;
 - b) the quantity and the production and process sources of hazardous and/or restricted solid wastes generated at the premises during the licence year;
 - c) details of investigations into methods of recycling and treatment of hazardous and restricted solid wastes carried out by the Licensee or reported by others on behalf of the Licensee during the licence year;
 - d) the amount of hazardous and/or restricted solid waste disposed of during the licence year;
 - e) details of the disposal method and location of disposal for hazardous and/or restricted solid wastes;
 - f) the results of any monitoring carried out to detect the occurrence of environmental contamination potentially resulting from the disposal of any hazardous or restricted solid waste; and
 - g) any other details required by this licence

R2 Notification of environmental harm

- R2.1 Notifications must be made by telephoning the Environment Line service on 131 555.
- R2.2 The licensee must provide written details of the notification to the EPA within 7 days of the date on which the incident occurred.

Note: The licensee or its employees must notify all relevant authorities of incidents causing or threatening

Environment Protection Licence



Licence - 1548

material harm to the environment immediately after the person becomes aware of the incident in accordance with the requirements of Part 5.7 of the Act.

R3 Written report

- R3.1 Where an authorised officer of the EPA suspects on reasonable grounds that:
- where this licence applies to premises, an event has occurred at the premises; or
 - where this licence applies to vehicles or mobile plant, an event has occurred in connection with the carrying out of the activities authorised by this licence, and the event has caused, is causing or is likely to cause material harm to the environment (whether the harm occurs on or off premises to which the licence applies), the authorised officer may request a written report of the event.
- R3.2 The licensee must make all reasonable inquiries in relation to the event and supply the report to the EPA within such time as may be specified in the request.
- R3.3 The request may require a report which includes any or all of the following information:
- the cause, time and duration of the event;
 - the type, volume and concentration of every pollutant discharged as a result of the event;
 - the name, address and business hours telephone number of employees or agents of the licensee, or a specified class of them, who witnessed the event;
 - the name, address and business hours telephone number of every other person (of whom the licensee is aware) who witnessed the event, unless the licensee has been unable to obtain that information after making reasonable effort;
 - action taken by the licensee in relation to the event, including any follow-up contact with any complainants;
 - details of any measure taken or proposed to be taken to prevent or mitigate against a recurrence of such an event; and
 - any other relevant matters.
- R3.4 The EPA may make a written request for further details in relation to any of the above matters if it is not satisfied with the report provided by the licensee. The licensee must provide such further details to the EPA within the time specified in the request.

R4 Other reporting conditions

Note: The pollution control equipment specified in this requirement includes all scrubber systems installed on authorised discharge points 1,2,3,4,5,6,10, and 14 for the purpose of removing fluoride, solid particles and polycyclic aromatic hydrocarbons from emissions to atmosphere.

Note: For the purpose of this condition an outage means any period of time exceeding 20 minutes when the pollution control equipment is not available for its intended purpose, for any reason.

- R4.1 Within four weeks of the end of each month the licensee must forward to the EPA a monthly fluoride emissions report that contains:-
- The total smelter, potline stacks, anode plant stacks, and roof vent fluoride emission monitoring results for that month. The data for each emission source must be presented as a time series that shows the

Environment Protection Licence

Licence - 1548



level of emissions and the trend for each emission source and the total smelter emissions. The time series for total smelter emission must show the licence limit. The monthly mass and cumulative mass emission must be calculated and reported.

Emission Sources to be Reported

Line 3 Roof Vents
 Line 3 Scrubber Stacks
 Anode Plant Stacks
 Total Smelter Emissions

Every exceedence of the licence limit for total smelter emissions must be investigated and the results of that investigation included in the monthly emission report. The investigation should identify the reason for the exceedence and indicate the remedial action taken.

- R4.2 The licensee must monitor and record the availability of pollution control equipment installed on the premises and report the results this monitoring as part of the monthly emission report.

The report must include the date, time, duration and reason for every outage of pollution control equipment, a cumulative total of outage times for each piece of equipment during the licence period and details of any action taken to prevent a recurrence of the pollution control equipment outage.

7 General Conditions

G1 Copy of licence kept at the premises or plant

- G1.1 A copy of this licence must be kept at the premises to which the licence applies.
- G1.2 The licence must be produced to any authorised officer of the EPA who asks to see it.
- G1.3 The licence must be available for inspection by any employee or agent of the licensee working at the premises.

8 Pollution Studies and Reduction Programs

U1 Upgrade to meet Group 5 Fluoride emission limits

- U1.1 The Licensee has requested an exemption from Group 5 emission standards for Total Fluoride as prescribed by the Protection of the Environment Operations (Clean Air) Regulation 2010, until staged environmental upgrades are completed in 2015.

For the purposes of emissions at Point 13, the licensee must reduce Total Fluoride to meet Group 5 emission limits of no greater than 0.8 kgs of fluoride per tonne of Aluminium produced by 31 December 2015.

Environment Protection Licence

Licence - 1548



9 Special Conditions

E1 Condition M2.2 and R4 monitoring points that do not apply during shutdown

E1.1 From 14 September 2012 the monitoring requirements specified in condition M2.2 for Points 3,4,5,6,8 and 9 do not apply.

Note: Please refer to this Special Condition when completing the Annual Return.

E1.2 Reporting required under condition R4 and relating to Monitoring Points 1, 2, 3, 4, 5, 6, 8, and 9 will not be required from four(4) weeks after Potlines 2 and 3 cease operating.

Note: Please refer to this Special Condition when completing the Annual Return.

Environment Protection Licence



Licence - 1548

Dictionary

General Dictionary

3DGM [in relation to a concentration limit]	Means the three day geometric mean, which is calculated by multiplying the results of the analysis of three samples collected on consecutive days and then taking the cubed root of that amount. Where one or more of the samples is zero or below the detection limit for the analysis, then 1 or the detection limit respectively should be used in place of those samples
Act	Means the Protection of the Environment Operations Act 1997
activity	Means a scheduled or non-scheduled activity within the meaning of the Protection of the Environment Operations Act 1997
actual load	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
AM	Together with a number, means an ambient air monitoring method of that number prescribed by the <i>Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales</i> .
AMG	Australian Map Grid
anniversary date	The anniversary date is the anniversary each year of the date of issue of the licence. In the case of a licence continued in force by the Protection of the Environment Operations Act 1997, the date of issue of the licence is the first anniversary of the date of issue or last renewal of the licence following the commencement of the Act.
annual return	Is defined in R1.1
Approved Methods Publication	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
assessable pollutants	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
BOD	Means biochemical oxygen demand
CEM	Together with a number, means a continuous emission monitoring method of that number prescribed by the <i>Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales</i> .
COD	Means chemical oxygen demand
composite sample	Unless otherwise specifically approved in writing by the EPA, a sample consisting of 24 individual samples collected at hourly intervals and each having an equivalent volume.
cond.	Means conductivity
environment	Has the same meaning as in the Protection of the Environment Operations Act 1997
environment protection legislation	Has the same meaning as in the Protection of the Environment Administration Act 1991
EPA	Means Environment Protection Authority of New South Wales.
fee-based activity classification	Means the numbered short descriptions in Schedule 1 of the Protection of the Environment Operations (General) Regulation 2009.
general solid waste (non-putrescible)	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997

Environment Protection Licence



Licence - 1548

flow weighted composite sample	Means a sample whose composites are sized in proportion to the flow at each composites time of collection.
general solid waste (putrescible)	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
grab sample	Means a single sample taken at a point at a single time
hazardous waste	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
licensee	Means the licence holder described at the front of this licence
load calculation protocol	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
local authority	Has the same meaning as in the Protection of the Environment Operations Act 1997
material harm	Has the same meaning as in section 147 Protection of the Environment Operations Act 1997
MBAS	Means methylene blue active substances
Minister	Means the Minister administering the Protection of the Environment Operations Act 1997
mobile plant	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
motor vehicle	Has the same meaning as in the Protection of the Environment Operations Act 1997
O&G	Means oil and grease
percentile [in relation to a concentration limit of a sample]	Means that percentage [eg.50%] of the number of samples taken that must meet the concentration limit specified in the licence for that pollutant over a specified period of time. In this licence, the specified period of time is the Reporting Period unless otherwise stated in this licence.
plant	Includes all plant within the meaning of the Protection of the Environment Operations Act 1997 as well as motor vehicles.
pollution of waters [or water pollution]	Has the same meaning as in the Protection of the Environment Operations Act 1997
premises	Means the premises described in condition A2.1
public authority	Has the same meaning as in the Protection of the Environment Operations Act 1997
regional office	Means the relevant EPA office referred to in the Contacting the EPA document accompanying this licence
reporting period	For the purposes of this licence, the reporting period means the period of 12 months after the issue of the licence, and each subsequent period of 12 months. In the case of a licence continued in force by the Protection of the Environment Operations Act 1997, the date of issue of the licence is the first anniversary of the date of issue or last renewal of the licence following the commencement of the Act.
restricted solid waste	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
scheduled activity	Means an activity listed in Schedule 1 of the Protection of the Environment Operations Act 1997
special waste	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
TM	Together with a number, means a test method of that number prescribed by the <i>Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales</i> .

Environment Protection Licence



Licence - 1548

TSP	Means total suspended particles
TSS	Means total suspended solids
Type 1 substance	Means the elements antimony, arsenic, cadmium, lead or mercury or any compound containing one or more of those elements
Type 2 substance	Means the elements beryllium, chromium, cobalt, manganese, nickel, selenium, tin or vanadium or any compound containing one or more of those elements
utilisation area	Means any area shown as a utilisation area on a map submitted with the application for this licence
waste	Has the same meaning as in the Protection of the Environment Operations Act 1997
waste type	Means liquid, restricted solid waste, general solid waste (putrescible), general solid waste (non - putrescible), special waste or hazardous waste

Mr Bernie Weir

Environment Protection Authority

(By Delegation)

Date of this edition: 31-January-2000

Environment Protection Licence



Licence - 1548

End Notes

- 1 Licence varied by notice V/M upgrade, issued on 08-Jul-2000, which came into effect on 08-Jul-2000.
- 2 Licence transferred through application 140008, approved on 18-Sep-2000, which came into effect on 16-Oct-2000.
- 3 Licence varied by notice Prem.Change, issued on 01-Dec-2000, which came into effect on 16-Oct-2000.
- 4 Licence varied by notice Prem.change, issued on 01-Dec-2000, which came into effect on 16-Oct-2000.
- 5 Licence varied by notice 1004851, issued on 07-Mar-2001, which came into effect on 01-Apr-2001.
- 6 Licence varied by notice 1015709, issued on 27-Mar-2002, which came into effect on 21-Apr-2002.
- 7 Licence varied by notice 1017479, issued on 26-Feb-2003, which came into effect on 23-Mar-2003.
- 8 Licence varied by notice 1036145, issued on 14-Apr-2004, which came into effect on 09-May-2004.
- 9 Licence varied by notice 1042130, issued on 09-Nov-2004, which came into effect on 12-Nov-2004.
- 10 Licence varied by notice 1061583, issued on 09-Aug-2006, which came into effect on 09-Aug-2006.
- 11 Licence varied by notice 1084666, issued on 28-Apr-2008, which came into effect on 28-Apr-2008.
- 12 Condition A1.3 Not applicable varied by notice issued on <issue date> which came into effect on <effective date>
- 13 Licence varied by notice 1097917, issued on 31-Mar-2009, which came into effect on 31-Mar-2009.
- 14 Licence varied by admin. corrections to archived record, issued on 01-Apr-2009, which came into effect on 01-Apr-2009.
- 15 Licence varied by notice 1102749, issued on 28-Jul-2009, which came into effect on 28-Jul-2009.
- 16 Licence varied by notice 1105168, issued on 21-Aug-2009, which came into effect on 21-Aug-2009.
- 17 Licence varied by notice 1118364, issued on 24-Sep-2010, which came into effect on 24-Sep-2010.
- 18 Licence varied by notice 1501281 issued on 17-Nov-2011

Environment Protection Licence

Licence - 1548



19 Licence varied by notice 1505741 issued on 11-Oct-2012
