ANNUAL RETURN

LICENCE NO	**11956**
LICENCE HOLDER	NATIONAL CERAMIC INDUSTRIES AUSTRALIA PTY LTD
REPORTING PERIOD	01-Aug-2017 to 31-Jul-2018

If your licence has been transferred, suspended, surrendered or revoked by the EPA during this reporting period, cross out the dates above and specify the new dates to which this Annual Return relates below:

REVISED REPORTING PERIOD _____ / _____ / _____ **to** _____ / _____ / _____

(Note: the revised reporting period also needs to be entered in Section H)

THIS ANNUAL RETURN MUST BE RECEIVED BY THE EPA BEFORE 30-Sep-2018

Your Annual Return must be completed, including certification in Section H, and submitted to the EPA no later than 60 Days after the end of the reporting period for your licence.

Failure to submit this Annual Return within 60 days after the reporting period ends may result in:

- **the issue of a Penalty Notice for $1500 (individuals) or $3000 (corporations);**

OR

- **prosecution.**

Please send your completed Annual Return by **Registered Post** to:

Regulatory and Compliance Support Unit
Environment Protection Authority
PO Box A290
SYDNEY SOUTH NSW 1232

It is an offence to supply any information in this form to the EPA that is false or misleading in a material respect, or to certify a statement that is false or misleading in a material respect.

THERE IS A MAXIMUM PENALTY OF $250,000 FOR A CORPORATION OR $120,000 FOR AN INDIVIDUAL.

Details provided in this Annual Return will be available on the EPA's Public Register in accordance with section 308 of the *Protection of the Environment Operations Act 1997.*

Annual Return

NATIONAL CERAMIC INDUSTRIES AUSTRALIA PTY LTD

Use the checklist below to ensure that you have completed your Annual Return correctly.

(✓ the boxes)

CHECKLIST		
☐	Section A:	All licence details are correct
☐	Section B1:	You have entered the correct number in the complaints table
☐	Section B2 – B3:	If there are tables, you have provided the required details
☐	Section C:	You have answered question 1, and 2 if applicable
☐	Section D:	If applicable, you have completed all load calculation worksheets
☐	Section E:	You have answered question 1, 2, 3, 4, 5 and 6 if applicable
☐	Section F:	You have answered question 1, 2 and 3 if applicable
☐	Section G:	You have answered question 1 and question 2, 3 and 4 or question 5 through to 11 if applicable
☐	Section H:	The Annual Return has been signed by appropriate person(s) and, if applicable, the revised reporting period entered
☐	Make a copy of the completed Annual Return and keep it with your licence records	

Please send your completed Annual Return by **Registered Post** to:

Regulatory and Compliance Support Unit
Environment Protection Authority
PO Box A290
SYDNEY SOUTH NSW 1232

A Statement of Compliance - Licence Details

ALL licence holders must check that the licence details in Section A are correct

If there are changes to any of these details**you must advise the EPA and apply as soon as possible for a variation to your licence or for a licence transfer.**

Licence variation and transfer application forms are available on the EPA website at: http://www.epa.nsw.gov.au/licensing, or from regional offices of the EPA, or by contacting us on telephone 02 9995 5700.

If you are applying to vary or transfer your licence you must still complete this Annual Return.

A1 Licence Holder

Licence Number	11956
Licence Holder	NATIONAL CERAMIC INDUSTRIES AUSTRALIA PTY LTD
Trading Name *(if applicable)*	
ABN	83 100 467 267

A2 Premises to which Licence Applies (if applicable)

Common Name (if any)	NATIONAL CERAMIC INDUSTRIES AUSTRALIA PTY LTD
Premises	RACECOURSE ROAD RUTHERFORD NSW 2320

A3 Activities to which Licence Applies

Ceramic works

A4 Other Activities (if applicable)

A5 Fee-Based Activity Classifications

Note that the fee based activity classification is used to calculate the administrative fee.

Fee-based activity	Activity scale	Unit of measure
Ceramics production	> 50,000.00 - 200,000.00	T annual production capacity

A6 Assessable Pollutants (if applicable)

Note that the identification of assessable pollutants is used to calculate the **load-based fee.**
The following assessable pollutants are identified for the fee-based activity classifications in the licence:

Ceramics production

Coarse Particulates (Air)
Fine Particulates (Air)
Fluoride (Air)
Nitrogen Oxides (Air)
Sulfur Oxides (Air)

B Monitoring and Complaints Summary

B1 Number of Pollution Complaints

Number of complaints recorded by the licensee during the reporting period. **If no complaints were received enter nil in the attached box, otherwise complete the table below.**	Nil

Pollution Complaint Category	Number of Complaints
Air	
Water	
Noise	
Waste	
Other	

B2 Concentration Monitoring Summary

For each monitoring point identified in your licence complete all the details for each pollutant listed in the tables provided below.

If concentration monitoring is **not** required by your licence, **no tables** will appear below.
Note that this does not exclude the need to conduct appropriate concentration monitoring of assessable pollutants as required by load-based licensing (if applicable).

Discharge & Monitoring Point 1

Discharge to Air, Dust extractor clay preparation CP1 & CP 2 as shown on Figure Titled: Plant Emission Locations and Air Quality Controls dated 17 July 2003.

Pollutant	Unit of measure	No. of samples required by licence	No. of samples you collected and analysed	Lowest sample value	Mean of sample	Highest sample value
Dry gas density	kilograms per cubic metre	1	1		1.29	

Moisture content	percent	1	1		1.8	
Molecular weight of stack gases	grams per gram mole	1	1		28.8	
Solid Particles	milligrams per cubic metre	1	1		4.3	
Temperature	degrees Celsius	1	1		25.8	
Velocity	metres per second	1	1		15	
Volumetric flowrate	cubic metres per second	1	1		11	

Discharge & Monitoring Point 3

Discharge to air, Pressing and Drying PD1 & PD2 as shown on Figure Titled: Plant Emission Locations and Air Quality Controls dated 17 July 2003.

Pollutant	Unit of measure	No. of samples required by licence	No. of samples you collected and analysed	Lowest sample value	Mean of sample	Highest sample value
Dry gas density	kilograms per cubic metre	1	1		1.29	
Moisture content	percent	1	1		1.5	
Molecular weight of stack gases	grams per gram mole	1	1		28.8	
Solid Particles	milligrams per cubic metre	1	1		4.0	
Temperature	degrees Celsius	1	1		24.8	
Velocity	metres per second	1	1		15	
Volumetric flowrate	cubic metres per second	1	1		10	

Discharge & Monitoring Point 5

Discharge to air, Drier D1 as shown on Figure Titled: Plant Emission Locations and Air Quality Controls dated 17 July 2003.

Pollutant	Unit of measure	No. of samples required by licence	No. of samples you collected and analysed	Lowest sample value	Mean of sample	Highest sample value
Dry gas density	kilograms per cubic metre	1	1		1.29	
Moisture content	percent	1	1		8.6	
Molecular weight of stack gases	grams per gram mole	1	1		29.0	
Solid Particles	milligrams per cubic metre	1	1		13	
Temperature	degrees Celsius	1	1		117	
Velocity	metres per second	1	1		9.9	
Volumetric flowrate	cubic metres per second	1	1		1.2	

Discharge & Monitoring Point 6

Discharge to air, Drier D2 as shown on Figure Titled: Plant Emission Locations and Air Quality Controls dated 17 July 2003.

Pollutant	Unit of measure	No. of samples required by licence	No. of samples you collected and analysed	Lowest sample value	Mean of sample	Highest sample value
Dry gas density	kilograms per cubic metre	1	1		1.29	
Moisture content	percent	1	1		3.8	
Molecular weight of stack gases	grams per gram mole	1	1		28.9	

Solid Particles	milligrams per cubic metre	1	1		14	
Temperature	degrees Celsius	1	1		125	
Velocity	metres per second	1	1		12	
Volumetric flowrate	cubic metres per second	1	1		1.5	

Discharge & Monitoring Point 9

Discharge to air, Glaze line as shown on Figure Titled: Plant Emission Locations and Air Quality Controls dated 17 July 2003.

Pollutant	Unit of measure	No. of samples required by licence	No. of samples you collected and analysed	Lowest sample value	Mean of sample	Highest sample value
Dry gas density	kilograms per cubic metre	1	1		1.29	
Moisture content	percent	1	1		2.6	
Molecular weight of stack gases	grams per gram mole	1	1		28.8	
Solid Particles	milligrams per cubic metre	1	1		2.6	
Temperature	degrees Celsius	1	1		27.0	
Velocity	metres per second	1	1		14	
Volumetric flowrate	cubic metres per second	1	1		9.6	

Discharge & Monitoring Point 10

Discharge to air, Selection SL 1234 as shown on Figure Titled: Plant Emission Locations and Air Quality Controls dated 17 July 2003.

Pollutant	Unit of measure	No. of samples required by licence	No. of samples you collected and analysed	Lowest sample value	Mean of sample	Highest sample value
Dry gas density	kilograms per cubic metre	1	1		1.29	
Moisture content	percent	1	1		1.1	
Molecular weight of stack gases	grams per gram mole	1	1		28.8	
Solid Particles	milligrams per cubic metre	1	1		5.4	
Temperature	degrees Celsius	1	1		25.0	
Velocity	metres per second	1	1		4.3	
Volumetric flowrate	cubic metres per second	1	1		0.74	

Discharge & Monitoring Point 12

Discharge to air, Spray Drier SD1 as shown on Figure Titled: Plant Emission Locations and Air Quality Controls dated 17 July 2003.

Pollutant	Unit of measure	No. of samples required by licence	No. of samples you collected and analysed	Lowest sample value	Mean of sample	Highest sample value
Dry gas density	kilograms per cubic metre	1	1		1.29	
Moisture content	percent	1	1		12.0	
Molecular weight of stack gases	grams per gram mole	1	1		28.9	
Solid Particles	milligrams per cubic metre	1	1		2.0	
Temperature	degrees Celsius	1	1		88.5	

Velocity	metres per second	1	1		19	
Volumetric flowrate	cubic metres per second	1	1		19	

Discharge & Monitoring Point 14

Discharge to air, Kiln KP1 as shown on Figure Titled: Plant Emission Locations and Air Quality Controls dated 17 July 2003.

Pollutant	Unit of measure	No. of samples required by licence	No. of samples you collected and analysed	Lowest sample value	Mean of sample	Highest sample value
Cadmium	milligrams per cubic metre	1	1		0.0051	
Carbon dioxide	percent	1	2	2.8	2.8	2.8
Dry gas density	kilograms per cubic metre	1	2	1.30	1.30	1.30
Hazardous substances	milligrams per cubic metre	1	1		0.14	
Hydrogen fluoride	milligrams per cubic metre	1	1		0.19	
Mercury	milligrams per cubic metre	1	1		0.0052	
Moisture	percent	1	2	4.8	5.3	5.8
Molecular weight of stack gases	grams per gram mole	1	2	29.1	29.1	29.1
Nitrogen Oxides	milligrams per cubic metre	1	1		44	
Oxygen (O2)	percent	1	1		16.3	
Solid Particles	milligrams per cubic metre	1	1		6.0	

Sulfuric acid mist and sulfur trioxide (as SO3)	milligrams per cubic metre	1	1		10	
Velocity	metres per second	1	2	16	16	16
Volumetric flowrate	cubic metres per second	1	2	6.4	6.7	6.9

Discharge & Monitoring Point 15

Discharge to air, Kiln KP2 as shown on Figure Titled: Plant Emission Locations and Air Quality Controls dated 17 July 2003.

Pollutant	Unit of measure	No. of samples required by licence	No. of samples you collected and analysed	Lowest sample value	Mean of sample	Highest sample value
Cadmium	milligrams per cubic metre	1	1		0.0053	
Carbon dioxide	percent	1	2	3.0	3.1	3.2
Dry gas density	kilograms per cubic metre	1	2	1.30	1.30	1.30
Hazardous substances	milligrams per cubic metre	1	1		0.17	
Hydrogen fluoride	milligrams per cubic metre	1	1		14.3	
Mercury	milligrams per cubic metre	1	1		0.0067	
Moisture	percent	1	2	6.1	7.0	7.8
Molecular weight of stack gases	grams per gram mole	1	2	29.1	29.1	29.1
Nitrogen Oxides	milligrams per cubic metre	1	1		43	
Oxygen (O2)	percent	1	1		15.9	

Solid Particles	milligrams per cubic metre	1	1		15	
Sulfuric acid mist and sulfur trioxide (as SO3)	milligrams per cubic metre	1	1		27	
Velocity	metres per second	1	2	13	13.5	14
Volumetric flowrate	cubic metres per second	1	2	5.4	5.5	5.5

Discharge & Monitoring Point 18

Discharge to air, Hot air cooling HAC1 as shown on Figure Titled: Plant Emission Locations and Air Quality Controls dated 17 July 2003.

Pollutant	Unit of measure	No. of samples required by licence	No. of samples you collected and analysed	Lowest sample value	Mean of sample	Highest sample value
Dry gas density	kilograms per cubic metre	1	1		1.29	
Moisture content	percent	1	1		0.6	
Molecular weight of stack gases	grams per gram mole	1	1		28.8	
Solid Particles	milligrams per cubic metre	1	1		5.8	
Temperature	degrees Celsius	1	1		101	
Velocity	metres per second	1	1		31	
Volumetric flowrate	cubic metres per second	1	1		17	

Discharge & Monitoring Point 19

Discharge to air, Hot air cooling HAC2 as shown on Figure Titled: Plant Emission Locations and Air Quality Controls dated 17 July 2003.

Pollutant	Unit of measure	No. of samples required by licence	No. of samples you collected and analysed	Lowest sample value	Mean of sample	Highest sample value
Dry gas density	kilograms per cubic metre	1	1		1.29	
Moisture content	percent	1	1		1.6	
Molecular weight of stack gases	grams per gram mole	1	1		28.8	
Solid Particles	milligrams per cubic metre	1	1		1.7	
Temperature	degrees Celsius	1	1		82.6	
Velocity	metres per second	1	1		19	
Volumetric flowrate	cubic metres per second	1	1		16	

Monitoring Point 22

Ambient Air Monitoring - PM 10, PM 10 monitoring locations as shown on diagram titled "Proposed ambient air quality monitoring sites - PM 10, HF and meteorological monitoring". Dated 20 January 2004

Pollutant	Unit of measure	No. of samples required by licence	No. of samples you collected and analysed	Lowest sample value	Mean of sample	Highest sample value	
PM10	micrograms per cubic metre	61	61	6.2	22.7	51.6	SE
		61	61	9.3	31.4	92.6	NW

Monitoring Point 23

Ambient Air Monitoring - Fluoride compounds, HF monitoring locations as shown on diagram titled "Proposed ambient air quality monitoring sites - PM 10, HF and meteorological monitoring". Dated 20 January 2004.

Pollutant	Unit of measure	No. of samples required by licence	No. of samples you collected and analysed	Lowest sample value	Mean of sample	Highest sample value

Hydrogen fluoride	micrograms per cubic metre	SE	61	61	0.08	0.34	2.59	24 hour
			52	52	0.04	0.24	0.65	weekly
		NW	61	61	0.04	0.31	3.21	24 hour
			52	52	0.01	0.14	0.54	weekly

B3 Volume or Mass Monitoring Summary

For each monitoring point identified in your licence complete the details of the volume or mass monitoring indicated in the tables provided below.

If volume or mass monitoring is not required by your licence, **no tables** will appear below.

Note that this does not exclude the need to conduct appropriate concentration monitoring of assessable pollutants as required by load-based licensing (if applicable).

C Statement of Compliance - Licence Conditions

C1 Compliance with Licence Conditions

(☑ the boxes)

1 Were all conditions of the licence complied with (including monitoring and reporting requirements)? ☐ Yes ☒ No

(✓ a box)

2 If you answered 'No' to question 1, please supply the following details for each non -compliance in the format, or similar format , provided on the following page.

Please use a separate page for each licence condition that has not been complied with.

a) What was the specific licence condition that was not complied with?

b) What were the particulars of the non -compliance?

c) What were the date(s) when the non -compliance occurred, if applicable?

d) If relevant, what was the precise location where the non -compliance occurred?

Attach a map or diagram to the Statement to show the precise location.

e) What were the registrati on numbers of any vehicles or the chassis number of any mobile plant involved in the non-compliance?

f) What was the cause of the non-compliance?

g) What action has been, or will be, taken to mitigate any adverse effects of the non -compliance?

h) What action has been, or will be, taken to prevent a recurrence of the non -compliance?

3. How many pages have you attached?

Each attached page must be initialled by the person(s) who signs Section G of this Annual Retum

C2 Details of Non-Compliance with Licence

Licence condition number not complied with
Condition L3.4, EPL point 18
Summary of particulars of the non-compliance (NO MORE THAN 50 WORDS)
Condition L3.4 - Hot Air Cooler 1 (EPL point 18) solid particles emissions of 5.8 mg/m^3 exceeded limit of 5 mg/m3
If required, further details on particulars of non-compliance
Department of Planning personnel were notified of non-compliance by email on receipt of laboratory analytical results.
Date(s) when the non-compliance occurred, if applicable
Annual testing date - 27 July 2018
If relevant, precise location where the non-compliance occurred (attach a map or diagram)
N/A
If applicable, registration numbers of any vehicles or the chassis number of any mobile plant involved in the non-compliance
N/A
Cause of non-compliance
Variability in process and monitoring results
Action taken or that will be taken to mitigate any adverse effects of the non-compliance
This minor exceedance was the only elevated stack particulate emission monitoring result recorded with all other EPL stack monitoring points returning total particulate results well below their respective EPL limits.
Action taken or that will be taken to prevent a recurrence of the non-compliance

C2 Details of Non-Compliance with Licence

Licence condition number not complied with
Condition L3.4, EPL point 15 and Condition L2.2
Summary of particulars of the non-compliance (NO MORE THAN 50 WORDS)
Condition L3.4 - Kiln 2 (EPL point 15) fluoride emissions of 14.3 mg/m^3 exceeded limit of 5 mg/m3 Condition L2.2 - Fluoride mass emission of 2239 kg exceeded limit of 1850 kg
If required, further details on particulars of non-compliance
As a comparison, fluoride emission result for Kiln 1 (EPL Point 14) on 25 July 2018 using the same source materials was 0.19 mg/m^3 Department of Planning personnel were notified of non-compliance by email on receipt of laboratory analytical results.
Date(s) when the non-compliance occurred, if applicable
Annual testing date - 26 July 2018
If relevant, precise location where the non-compliance occurred (attach a map or diagram)
N/A
If applicable, registration numbers of any vehicles or the chassis number of any mobile plant involved in the non-compliance
N/A
Cause of non-compliance
Variability in process and monitoring results
Action taken or that will be taken to mitigate any adverse effects of the non-compliance
All weekly and 24 hour ambient fluoride monitoring to the north west and south east of the facility returned results below relevant ANZECC guideline values.
Action taken or that will be taken to prevent a recurrence of the non-compliance
NCIA is currently in the process of formalising a Pollution Reduction Program (PRP) in regard to the variability of fluoride emissions

D Statement of Compliance - Load-Based Fee Calculation Worksheets

If you are **not** required to monitor assessable pollutants by your licence, **no worksheets** will appear below. Please go to Section E.

If assessable pollutants have been identified on your licence (see licence condition L2), complete the following worksheets for each assessable pollutant to determine your load-based fee for the licence fee period to which this Annual Return relates.

Loads of assessable pollutants must be calculated using any of the methods provided in the EPA's Load Calculation Protocol for the relevant activity. A Load Calculation Protocol would have been sent to you with your licence. If you require additional copies you can download the Protocol from the EPA's website or you can contact us on telephone 02 9995 5700.

You are required to keep all records used to calculate licence fees for four years after the licence fee was paid or became payable, whichever is the later date.

PENALTIES APPLY FOR SUPPLYING FALSE OR MISLEADING INFORMATION

Reporting loads of NOx (summer) and VOCs (summer) in the Sydney Basin

From 1 July 2007, all licensees in the Sydney Basin that have NOx and/or VOCs as an assessable pollutant must **also** report loads of these pollutants discharged over the summer period (December, January, February).

NOx and VOCs loads discharged over the relevant reporting period (e.g. 12 months) must be reported.

In addition, NOx (summer) and VOCs (summer) and Actual Quantity (summer) must be reported in the appropriate Load-Based Fee Calculation Worksheet to determine any fees payable.

Example: Fee Based Activity [17] Paint Production

Pollutant	Actual Quantity (T produced)	Fee Rate Threshold	Assessable load (kg)	Pollutant Weighting	Critical Zone weighting	Pollutant Fee
Benzene	16,400	3,832	1,800	740	1	$4,895
NOx	**16,400**	**42,573**	**12,440**	**9**	**7**	**$2,880**
NOx (summer)	**4,100**	**42,573**	**3,110**	**9**	**28**	**$2,880**
PM10	16,400	70,955	3,241	125	1	$1,489
VOCs	**16,400**	**123,887**	**88,000**	**6.6**	**7**	**$14,941**
VOCs (summer)	**3,500**	**123,887**	**22,000**	**6.6**	**28**	**$14,941**
					Total	$42,026

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NATIONAL CERAMIC INDUSTRIES AUSTRALIA PTY LTD

Coarse Particulates discharged to Air

D1 Pollutant Load

	actual load (kg)	weight load (kg)	'agreed' load (kg)
Ceramics production	2878		

Actual Load

If applicable, the method used to calculate the **actual load** was:
(Method Numbers must be as per the NSW EPA's publication "Approved Methods for the Sampling and Analysis and Analysis of Air/Water Pollutants in NSW" referred to in the "Load Calculation Protocol".)

Ceramics production

- ☐ Source Monitoring (SM) — Type of SM: PM; Method Number: TM 15
- ☐ Emission Factors (EF) — Type of EF:
- Has the calculation method of the actual load resulted in an underestimation of the amount of the assessable pollutant discharged? ☐ Yes ☐ No
- ☐ Mass Balance (MB)
- ☐ Other EPA Approved Method

Weight Load

If applicable, the **load weighting** measure used was:

Ceramics production

- ☐ Effluent re-use on site
- ☐ Effluent transfer beyond the licensed premises — If so, where to?
- ☐ Flow optimised discharge

Agreed Load

If applicable, the **agreed load** used was agreed under:

Ceramics production

- ☐ Load Reduction Agreement
- ☐ Bubble Licence Arrangement

D2 Assessable Load (AL)

The assessable load for an activity is the smallest of actual, weighted or agreed loads. If you have more than one fee-based activity classification listed in D1, the assessable load for your licence is the sum of the assessable loads of this substance for each activity.

Assessable Load (AL) (kg)	2878

D3 Calculate Fee Rate Threshold (FRT)

The Fee Rate Threshold is the amount of an assessable pollutant that may be discharged during the licence fee period before the fee rate for any further discharges of the assessable pollutant increases.

E.g. If you are a Cement Producer and you produced 500,000 tonnes of cement during the licence fee period, your calculated FRT for coarse particulates is:

FRT = 500,000 tonnes procedured x 0.23 (FRT factor for coarse particulates is 0.23 kg/tonne produced)
= 115,000 kg

	Actual quantity of activity (expressed in units of measure specified at A5)				calculated FRT
Ceramics production	85747	X	0.0850000	=	7288

If more than one activity, add calculated FRTs for each activity to obtain the total FRT for the pollutant

FRT 7288

D4 Apply Fee Rate Threshold

Is the Assessable Load (D2) greater than the Fee Rate Threshold (D3)?

☐ Yes, calculate AL1 below

☒ No, go to D5

2 x AL (D2)		FRT (D3)		AL1
	–		=	

D5 Calculate Pollutant Fee for Coarse Particulates discharged to Air

Calculation Factor, CF = [pollutant fee unit amount x pollutant weighting x critical zone] / 10,000

= 48.23 x 18 x 1/10,000

Assessable Load AL or AL1		Calculation Factor (CF)		Pollutant Fee (PF)
2878	x	0.0868140	=	$ 249.85

Copy Pollutant Fee (PF) for this assessable pollutant to the summary page at D6

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NATIONAL CERAMIC INDUSTRIES AUSTRALIA PTY LTD

Fine Particulates discharged to Air

D1 Pollutant Load

	actual load (kg)	weight load (kg)	'agreed' load (kg)
Ceramics production	10145		

Actual Load

If applicable, the method used to calculate the **actual load** was:
(Method Numbers must be as per the NSW EPA's publication "Approved Methods for the Sampling and Analysis and Analysis of Air/Water Pollutants in NSW" referred to in the "Load Calculation Protocol".)

Ceramics production

- ☐ Source Monitoring (SM) — Type of SM: PM; Method Number: OM 15
- ☐ Emission Factors (EF) — Type of EF:
- Has the calculation method of the actual load resulted in an underestimation of the amount of the assessable pollutant discharged? ☐ Yes ☐ No
- ☐ Mass Balance (MB)
- ☐ Other EPA Approved Method

Weight Load

If applicable, the **load weighting** measure used was:

Ceramics production

- ☐ Effluent re-use on site
- ☐ Effluent transfer beyond the licensed premises — If so, where to?
- ☐ Flow optimised discharge

Agreed Load

If applicable, the **agreed load** used was agreed under:

Ceramics production

- ☐ Load Reduction Agreement
- ☐ Bubble Licence Arrangement

D2 Assessable Load (AL)

The assessable load for an activity is the smallest of actual, weighted or agreed loads. If you have more than one fee-based activity classification listed in D1, the assessable load for your licence is the sum of the assessable loads of this substance for each activity.

Assessable Load (AL) (kg)	10145

D3 Calculate Fee Rate Threshold (FRT)

The Fee Rate Threshold is the amount of an assessable pollutant that may be discharged during the licence fee period before the fee rate for any further discharges of the assessable pollutant increases.

E.g. If you are a Cement Producer and you produced 500,000 tonnes of cement during the licence fee period, your calculated FRT for coarse particulates is:

FRT = 500,000 tonnes procedured x 0.23 (FRT factor for coarse particulates is 0.23 kg/tonne produced)
= 115,000 kg

	Actual quantity of activity (expressed in units of measure specified at A5)				calculated FRT
Ceramics production	85747	x	0.1100000	=	9432

If more than one activity, add calculated FRTs for each activity to obtain the total FRT for the pollutant

FRT 9432

D4 Apply Fee Rate Threshold

Is the Assessable Load (D2) greater than the Fee Rate Threshold (D3)?

☒ Yes, calculate AL1 below

☐ No, go to D5

2 x AL (D2)		FRT (D3)		AL1
20290	—	9432	=	10858

D5 Calculate Pollutant Fee for Fine Particulates discharged to Air

Calculation Factor, CF = [pollutant fee unit amount x pollutant weighting x critical zone] / 10,000

= 48.23 x 125 x 1/10,000

Assessable Load AL or AL1		Calculation Factor (CF)		Pollutant Fee (PF)
10858	x	0.6028750	=	$ 6546.02

Copy Pollutant Fee (PF) for this assessable pollutant to the summary page at D6

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NATIONAL CERAMIC INDUSTRIES AUSTRALIA PTY LTD

Fluoride discharged to Air

D1 Pollutant Load

	actual load (kg)	weight load (kg)	'agreed' load (kg)
Ceramics production	2239		

Actual Load

If applicable, the method used to calculate the **actual load** was:
(Method Numbers must be as per the NSW EPA's publication "Approved Methods for the Sampling and Analysis and Analysis of Air/Water Pollutants in NSW" referred to in the "Load Calculation Protocol".)

Ceramics production

- ☐ Source Monitoring (SM) — Type of SM: PM; Method Number: TM 9
- ☐ Emission Factors (EF) — Type of EF:
- Has the calculation method of the actual load resulted in an underestimation of the amount of the assessable pollutant discharged? ☐ Yes ☐ No
- ☐ Mass Balance (MB)
- ☐ Other EPA Approved Method

Weight Load

If applicable, the **load weighting** measure used was:

Ceramics production

- ☐ Effluent re-use on site
- ☐ Effluent transfer beyond the licensed premises — If so, where to?
- ☐ Flow optimised discharge

Agreed Load

If applicable, the **agreed load** used was agreed under:

Ceramics production

- ☐ Load Reduction Agreement
- ☐ Bubble Licence Arrangement

D2 Assessable Load (AL)

The assessable load for an activity is the smallest of actual, weighted or agreed loads. If you have more than one fee-based activity classification listed in D1, the assessable load for your licence is the sum of the assessable loads of this substance for each activity.

Assessable Load (AL) (kg)	2239

D3 Calculate Fee Rate Threshold (FRT)

The Fee Rate Threshold is the amount of an assessable pollutant that may be discharged during the licence fee period before the fee rate for any further discharges of the assessable pollutant increases.

E.g. If you are a Cement Producer and you produced 500,000 tonnes of cement during the licence fee period, your calculated FRT for coarse particulates is:

FRT = 500,000 tonnes procedured x 0.23 (FRT factor for coarse particulates is 0.23 kg/tonne produced)
= 115,000 kg

	Actual quantity of activity (expressed in units of measure specified at A5)				calculated FRT
Ceramics production	85747	x	0.1200000	=	10290

If more than one activity, add calculated FRTs for each activity to obtain the total FRT for the pollutant

FRT 10290

D4 Apply Fee Rate Threshold

Is the Assessable Load (D2) greater than the Fee Rate Threshold (D3)?

☐ Yes, calculate AL1 below

☒ No, go to D5

2 x AL (D2)		FRT (D3)		AL1
	–		=	

D5 Calculate Pollutant Fee for Fluoride discharged to Air

Calculation Factor, CF = [pollutant fee unit amount x pollutant weighting x critical zone] / 10,000

= 48.23 x 84 x 1/10,000

Assessable Load AL or AL1		Calculation Factor (CF)		Pollutant Fee (PF)
2239	x	0.4051320	=	$ 907.09

Copy Pollutant Fee (PF) for this assessable pollutant to the summary page at D6

Annual Return

NATIONAL CERAMIC INDUSTRIES AUSTRALIA PTY LTD

Nitrogen Oxides discharged to Air

D1 Pollutant Load

	actual load (kg)	weight load (kg)	'agreed' load (kg)
Ceramics production	25165		

Actual Load

If applicable, the method used to calculate the **actual load** was:
(Method Numbers must be as per the NSW EPA's publication "Approved Methods for the Sampling and Analysis and Analysis of Air/Water Pollutants in NSW" referred to in the "Load Calculation Protocol".)

Ceramics production

- ☐ Source Monitoring (SM) — Type of SM: PM; Method Number: TM 11
- ☐ Emission Factors (EF) — Type of EF:
- Has the calculation method of the actual load resulted in an underestimation of the amount of the assessable pollutant discharged? ☐ Yes ☐ No
- ☐ Mass Balance (MB)
- ☐ Other EPA Approved Method

Weight Load

If applicable, the **load weighting** measure used was:

Ceramics production

- ☐ Effluent re-use on site
- ☐ Effluent transfer beyond the licensed premises — If so, where to?
- ☐ Flow optimised discharge

Agreed Load

If applicable, the **agreed load** used was agreed under:

Ceramics production

- ☐ Load Reduction Agreement
- ☐ Bubble Licence Arrangement

D2 Assessable Load (AL)

The assessable load for an activity is the smallest of actual, weighted or agreed loads. If you have more than one fee-based activity classification listed in D1, the assessable load for your licence is the sum of the assessable loads of this substance for each activity.

Assessable Load (AL) (kg)	25165

D3 Calculate Fee Rate Threshold (FRT)

The Fee Rate Threshold is the amount of an assessable pollutant that may be discharged during the licence fee period before the fee rate for any further discharges of the assessable pollutant increases.

E.g. If you are a Cement Producer and you produced 500,000 tonnes of cement during the licence fee period, your calculated FRT for coarse particulates is:

FRT = 500,000 tonnes procedured x 0.23 (FRT factor for coarse particulates is 0.23 kg/tonne produced)
= 115,000 kg

	Actual quantity of activity (expressed in units of measure specified at A5)				calculated FRT
Ceramics production	85747	X	0.2200000	=	18864

If more than one activity, add calculated FRTs for each activity to obtain the total FRT for the pollutant

FRT 18864

D4 Apply Fee Rate Threshold

Is the Assessable Load (D2) greater than the Fee Rate Threshold (D3)?

☒ Yes, calculate AL1 below

☐ No, go to D5

2 x AL (D2)		FRT (D3)		AL1
50330	—	18864	=	31466

D5 Calculate Pollutant Fee for Nitrogen Oxides discharged to Air

Calculation Factor, CF = [pollutant fee unit amount x pollutant weighting x critical zone] / 10,000

= 48.23 x 9 x 2/10,000

Assessable Load AL or AL1		Calculation Factor (CF)		Pollutant Fee (PF)
31466	x	0.0868140	=	$ 2731.69

Copy Pollutant Fee (PF) for this assessable pollutant to the summary page at D6

Annual Return

NATIONAL CERAMIC INDUSTRIES AUSTRALIA PTY LTD

Sulfur Oxides discharged to Air

D1 Pollutant Load

	actual load (kg)	weight load (kg)	'agreed' load (kg)
Ceramics production	6059		

Actual Load

If applicable, the method used to calculate the **actual load** was:
(Method Numbers must be as per the NSW EPA's publication "Approved Methods for the Sampling and Analysis and Analysis of Air/Water Pollutants in NSW" referred to in the "Load Calculation Protocol".)

Ceramics production

- ☐ Source Monitoring (SM) — Type of SM: PM; Method Number: TM 3
- ☐ Emission Factors (EF) — Type of EF:
- Has the calculation method of the actual load resulted in an underestimation of the amount of the assessable pollutant discharged? ☐ Yes ☐ No
- ☐ Mass Balance (MB)
- ☐ Other EPA Approved Method

Weight Load

If applicable, the **load weighting** measure used was:

Ceramics production

- ☐ Effluent re-use on site
- ☐ Effluent transfer beyond the licensed premises — If so, where to?
- ☐ Flow optimised discharge

Agreed Load

If applicable, the **agreed load** used was agreed under:

Ceramics production

- ☐ Load Reduction Agreement
- ☐ Bubble Licence Arrangement

D2 Assessable Load (AL)

The assessable load for an activity is the smallest of actual, weighted or agreed loads. If you have more than one fee-based activity classification listed in D1, the assessable load for your licence is the sum of the assessable loads of this substance for each activity.

Assessable Load (AL) (kg)	6059

D3 Calculate Fee Rate Threshold (FRT)

The Fee Rate Threshold is the amount of an assessable pollutant that may be discharged during the licence fee period before the fee rate for any further discharges of the assessable pollutant increases.

E.g. If you are a Cement Producer and you produced 500,000 tonnes of cement during the licence fee period, your calculated FRT for coarse particulates is:

FRT = 500,000 tonnes procedured x 0.23 (FRT factor for coarse particulates is 0.23 kg/tonne produced)
= 115,000 kg

	Actual quantity of activity (expressed in units of measure specified at A5)				calculated FRT
Ceramics production	85747	x	0.5300000	=	45446

If more than one activity, add calculated FRTs for each activity to obtain the total FRT for the pollutant

FRT 45446

D4 Apply Fee Rate Threshold

Is the Assessable Load (D2) greater than the Fee Rate Threshold (D3)?

☐ Yes, calculate AL1 below

☒ No, go to D5

2 x AL (D2)		FRT (D3)		AL1
	—		=	

D5 Calculate Pollutant Fee for Sulfur Oxides discharged to Air

Calculation Factor, CF = [pollutant fee unit amount x pollutant weighting x critical zone] / 10,000

= 48.23 x 2.20 x 1/10,000

Assessable Load AL or AL1		Calculation Factor (CF)		Pollutant Fee (PF)
6059	x	0.0106106	=	$ 64.29

Copy Pollutant Fee (PF) for this assessable pollutant to the summary page at D6

D6 Load-Based Fee

Assessable pollutants	Pollutants fee from D5 for each pollutant
Coarse Particulates (Air)	249.85
Fine Particulates (Air)	6546.02
Fluoride (Air)	907.09
Nitrogen Oxides (Air)	2731.69
Sulfur Oxides (Air)	64.29
Total of Assessable Pollutant Fees	$ 10498.94
Less the administrative fee you paid last year to cover this reporting period. This amount would have been paid at the beginning of the licence period.	$ 8385.00

NOTE: If you varied your licence during the reporting period and your administrative fee changed, enter the total administrative fee paid for the period. Please use your invoice for the upcoming reporting period which shows payment and the fee details for the last twelve months as a reference for determining your administrative fee. If you are unsure about the administrative fee you paid last year, please contact us on telephone 02 9995 5700.

Load-based Fee (if negative, write zero)	$ 2113.94

It is important to note that the load-based fee must **not** be paid at this time. A separate invoice for the load-based fee will be issued once the EPA receives the Annual Return and load data. This load-based fee must be submitted to the EPA by **120 days after 31-Jul-2018**

E Statement of Compliance - Requirement to Prepare Pollution Incident Response Management Plan (PIRMP) Under Section 153A of the POEO Act 1997

1 Have you prepared a PIRMP as required under s153A of the Protection of the Environment Operations Act 1997?

(✓ a box) ☑ Yes ☐ No

If you answered 'Yes' to question 1, please tick the appropriate box to indicate the following:

2 Is the PIRMP available at the premises?

(✓ a box) ☑ Yes ☐ No

3 Is the PIRMP available in a prominent position on a publicly accessible web site?

(✓ a box) ☑ Yes ☐ No

If the PIRMP is available on a publicly accessible web site please indicate clearly below the address of the web site where the PIRMP can be accessed:

Web site Address: www.ncia.com.au

4 Has the PIRMP been tested in the last 12 months?

(✓ a box) ☑ Yes ☐ No

If you answered 'Yes' to question 4 please indicate clearly below the date that the PIRMP was last tested:

The PIRMP was last tested on: 21 / 9 / 2018

5 Has the PIRMP been updated?

(✓ a box) ☐ Yes ☑ No

If you answered 'Yes' to question 5 please indicate clearly below the date that the PIRMP was last updated:

The PIRMP was last updated on: __ / __ / ____

6 How many times has the PIRMP been activated in this reporting period?

If the PIRMP has been activated, please indicate clearly below the date/s when the PIRMP was activated:

The PIRMP was activated on: __ / __ / ____

The EPA's guidelines for preparation of pollution incident response management plans are available at

http://www.epa.nsw.gov.au/legislation/20120227egpreppirmp.htm

F Statement of Compliance - Requirement to Publish Pollution Monitoring Data Under Section 66(6) of the POEO Act 1997

1 Are there any conditions attached to your licence that require pollution monitoring to be undertaken?

(✓ a box) ☑ Yes ☐ No

If you answered 'Yes' to question 1, please tick the appropriate box to indicate the following:

2 Do you operate a web site?

(✓ a box) ☑ Yes ☐ No

3 Is the pollution monitoring data published on your web site in accordance with the EPA's written requirements for publishing pollution monitoring data?

(✓ a box) ☑ Yes ☐ No

If you publish pollution monitoring data on a web site please indicate clearly below the address of the web site where the pollution monitoring data can be accessed:

Web site address www.ncia.com.au

The EPA's written requirements for publishing pollution monitoring data are available at http://www.epa.nsw.gov.au/legislation/20120263reqpubpmdata.htm

Note - if you do not maintain a web site, you must provide a copy of any monitoring data that relates to pollution, to any person requests a copy of the data at no charge to the person requesting the data.

G Statement of Compliance - Environmental Management Systems and Practices

1 Do you have an environmental management system (EMS) certified to IS0 14001 or any other demonstrated equivalent system[1]? (see note below on demonstrated equivalent)

(✓ a box) ☐ Yes ☑ No

If your answer to question 1 is 'No', please proceed to question 5. If your answer to question 1 is 'Yes', please proceed to question 2.

2 When was the last check of the EMS[2] completed (see note below on check of EMS)? __ / __ / ____

3 Were there any non-conformances related to environmental issues identified in the last check of the EMS?

(✓ a box) ☐ Yes ☐ No

4 If there were non-conformances identified, were these non-conformances rectified?

(✓ a box) ☐ Yes ☐ No

If you answered 'No' to question 1, please answer questions 5 - 11. If you answered 'Yes' to question 1 please proceed to section H. Questions 5-11 relate to any documented environmental practices, procedures and systems in place. Refer to http://www.epa.nsw.gov.au/licensing/EMCP.htm for guidance on how to complete questions 5 to 11. If unsure of the answer, tick No.

5 Have you conducted an assessment of your activities and operations to identify the aspects that have a potential to cause environmental impacts and implemented operational controls to address these aspects?

(✓ a box) ☑ Yes ☐ No

6 Have you established and implemented an operational maintenance program, including preventative maintenance?

(✓ a box) ☑ Yes ☐ No

7 Do you keep records of regular inspections and maintenance of plant and equipment?

(✓ a box) ☑ Yes ☐ No

8 Do you conduct regular site audits to assess compliance with environmental legal requirements and assess conformance to the requirements of any documented environmental practices, procedures and systems in place?

(✓ a box) ☑ Yes ☐ No

9 Are the audits of documented environmental practices, procedures and systems undertaken by a third party?

(✓ a box) ☑ Yes ☐ No

10 Have you established and implemented an environmental improvement or management plan?

(✓ a box) ☑ Yes ☐ No

11 Do you train staff in environmental issues that may arise from your activities and operations and keep records of this

(✓ a box) ☑ Yes ☐ No

[1] Demonstrated equivalent refers to an environmental management system that the EPA considers is equivalent to the accountability, procedures, documentation and record keeping requirements of an ISO 14001 system. For further information go to:
http://www.epa.nsw.gov.au/resources/licensing/150402-environmental-management-systems-guidelines.pdf

[2] Undertaking a 'check of an EMS' refers to the ISO 14001 requirements that an organisation demonstrates conformity to the requirements of its EMS and to the standard, these checks require third-party certification that requirements have been met.

Annual Return

NATIONAL CERAMIC INDUSTRIES AUSTRALIA PTY LTD

H Signature and Certification

This Annual Return may only be signed by a person(s) with legal authority to sign it as set out in the categories below. **Please tick (✓) the box** next to the category that describes how this Annual Return is being signed.

If you are uncertain about who is entitled to sign or which category to tick, please contact us on telephone 02 9995 5700.

If the licence holder is:	the Annual Return must be signed and certified by one of the following:
an individual	☐ the individual licence holder, or ☐ a person acting on behalf of the individual licence holder in accordance with a power of attorney for the individual. A copy of the power of attorney must be submitted with the Annual Return.
a company	☐ by two directors, or ☑ by a director and a company secretary, or ☐ if a proprietary company that has a sole director who is also the sole company secretary - by that director, or ☐ by a person delegated to sign a copy of the Annual Return on the company's behalf in accordance with the Corporations Act 2001. Delegation of authority must be submitted with the Annual Return, or. ☐ by affixing the common seal, in accordance with the Corporations Act 2001
a public authority other than a Council	☐ by the Chief Executive Officer of the public authority, or ☐ by a person delegated to sign on the public authority's behalf in accordance with its legislation.
a local Council	☐ by the General Manager in accordance with s377 of the Local Government Act 1993 , or ☐ by affixing the seal of the Council in a manner authorised under the Local Government Act 1993.

It is an offence to supply any information in this form that is false or misleading in a material respect, or to certify a statement that is false or misleading in a material respect. There is a maximum penalty of $250,000 for a corporation or $120,000 for an individual.

I/We

- *declare that the information in the Monitoring and Complaints Summary in section B of this Annual Return is correct and not false or misleading in a material respect, and*
- *certify that the information in the Statement of Compliance in sections A, C, D, E, F and G and any pages attached to Section C is correct and not false or misleading in a material respect.*

If your licence has been transferred, suspended, surrendered or revoked by the EPA during this reporting period, cross out the dates below and specify the new dates to which this Annual Return relates below:

For the reporting period 01-Aug-2017 to 31-Jul-2018 or ____/____/____ to ____/____/____

SIGNATURE: _____

NAME: (printed) CHRIS SCHNEIDER

POSITION: DIRECTOR

DATE: 24 / 9 / 2018

SIGNATURE: _____

NAME: (printed) BELINDA FORRESTER

POSITION: SECRETARY

DATE: 24 / 9 / 2018

SEAL(if signing under seal)

PLEASE ENSURE THAT ALL APPROPRIATE BOXES HAVE BEEN COMPLETED AND THAT THE CHECKLIST ON PAGE 2 OF THE ANNUAL RETURN HAS BEEN COMPLETED