

23 January 2017

Mrs E A Parr
PPC Compliance Assistant
Natural Resources Wales
Rivers House
St Mellons Business Park
St Mellons
CARDIFF
CF3 0EY

Our Ref: W:\Environmental\PPC\Environment Agency Reporting\Permit Reporting\New Melt Shop\Annual\2016\TP3639BH
EA Annual Returns 2016.doc,

Dear Mrs Parr,

RE: Melt Shop EPR Permit TP3639BH Annual Returns 2016

In accordance with CELSA Manufacturing UK Ltd Environmental Permitting Regulations (EPR) Melt Shop Permit TP3639BH, please find forms A2, E1, PI1, R1 and S1 duly completed for the annual reporting period 2016.

Should you require any further information regarding these works please do not hesitate to contact me.

Yours sincerely



Richard Lewis
Environmental Manager

Enc

Permit Number: EPR/TP3639BH

Operator:

CELSA Manufacturing (UK) Limited

Facility: Tremorfa Melt Shop

Form Number:

Air 2 / 20/09/13

Reporting of emissions to air for the period from1 January 2016 to 31 December 2016

Emission Point	Substance / Parameter	Emission Limit Value	Reference Period	Result ^[1]	Test Method ^[2]	Sample Date and Times ^[3]	% Uncertainty ^[4]
A1	Particulate Matter	5 mg/m ³		4.74 mg/m ³	BS EN 13284-1:2002	25/05/2016, 11.32-12.32	0.24
	Oxides of Nitrogen (as NO _x)	25 mg/m ³		12.89 mg/m ³	EN 14792:2005	24/05/2016, 10.30-14.30	0.92
	Sulphur Dioxide	25 mg/m ³	15 minute average	4.92 mg/m ³	BS EN 14791	24/05/2016, 09.45-13.45	1.3
	PCDD/F	0.1 ng/m ³		0.057 ng/m ³	BS EN 1948-1:1997	19/10/2016, 13.26-17.06	0.017
	VOC	20 mg/m ³		5.62 mg/m ³	BS EN 12619	24/05/2016, 14.30-15.30	0.17
	PAH	No Limit Set		60.7 ug/m ³	ISO 111338-1:2004	24/05/2016, 14.30-16.30	14
	PCB	No Limit Set		0.063 ng/m ³	BS EN 1948-1:1997	24/05/2015, 14.30-16.30	0.0035
	Total Metals including:			mg/m ³	EN 13211:2001 or BS EN 14385		
	Ni			0.037 mg/m ³		25/05/2016, 10.22-11.22	0.0058
	As			0.0010 mg/m ³		25/05/2016, 10.22-11.22	0.00014
	Cd			0.0044 mg/m ³		25/05/2016, 10.22-11.22	0.00068
	Cr			0.042 mg/m ³		25/05/2016, 10.22-11.22	0.0059
	Cu			0.024 mg/m ³		25/05/2016, 10.22-11.22	0.0036
	Pb			0.085 mg/m ³		25/05/2016, 10.22-11.22	0.014
	Hg			0.0024 mg/m ³		25/05/2016, 10.22-11.22	0.00033

Permit Number: EPR/TP3639BH

Operator: CELSA Manufacturing (UK) Limited

Emission Point	Substance / Parameter	Emission Limit Value	Reference Period	Result ^[1]	Test Method ^[2]	Sample Date and Times ^[3]	% Uncertainty ^[4]
	Fe			0.45 mg/m ³		25/05/2016, 10.22-11.22	0.21
	Zn			0.74 mg/m ³		25/05/2016, 10.22-11.22	0.37
A2	Particulate Matter	10 mg/m ³		0.37 mg/m ³	BS EN 13284-1:2002	23/05/2016, 09.39-10.43	0.13

- [1] The result given is the maximum value (or the minimum value in the case of a limit that is expressed as a minimum) obtained during the reporting period, expressed in the same terms as the emission limit value. Where the emission limit value is expressed as a range, the result is given as the 'minimum – maximum' measured values.
- [2] Where an internationally recognised standard test method is used the reference number is given. Where another method that has been formally agreed with the Environment Agency is used, then the appropriate identifier is given. In other cases the principal technique is stated, for example gas chromatography.
- [3] For non-continuous measurements the date and time of the sample that produced the result is given. For continuous measurements the percentage of the process operating time covered by the result is given.
- [4] The uncertainty associated with the quoted result at the 95% confidence interval, unless otherwise stated.

Signed *R. Cheni*
 (Authorised to sign as representative of Operator)

Date...23 January 2017

Permit Reference Number: TP3639BH

Operator : CELSA Manufacturing (UK) Ltd

Installation: Tremorfa New Melt Shop

Form Number: E1 [11/05/05]

Reporting of Energy Usage for the year2016.....

Energy Source	Energy Usage		CO ₂ Produced (tonnes)**
	Quantity	Primary Energy (MWh)	
Electricity *	MWh	1149380	
Natural Gas	MWh	49033	8,887
TOTAL		1198413	

* Conversion factor for delivered electricity to primary energy = 2.4

**EU ETS annual submission

Trends in Energy Usage			
Year	Parameter		
	Primary Energy usage	CO ₂ produced	CO ₂ per unit output
2011	1,433,752	11,629	0.0103
2012	1,235,708	10,492	0.0095
2013	1,235,708	11212	0.0108
2014	1,094,013	8,422	0.0087
2015	1,235,726	9,428	0.0076
2016	1,198,413	8,887	0.0074

Operator's comments :

Signed*R. Cheni*.....
(authorised to sign as representative of the Operator)

Date...23 January 2017.

Permit Reference Number : TP3639BH

Operator : CELSA Manufacturing (UK) Ltd

Installation : Tremorfa New Melt Shop

Form Number : PI1 [11/05/05]

Reporting of Performance Indicators for the year2016.....

Annual Production	
Production of liquid steel	1,022,489 Tonnes liquid steel

Parameter	Quantity	Units
Electrical energy (delivered)	478,908,306	KWh
Particulates	53,267	Kg
Water	615,531	m ³

Trends in Environmental Performance			
Year	Parameter		
	Electricity consumption (KWh / t LS)	Particulates Released (g / t LS)	Towns / Commercial Water used (m ³ / t LS)
2011	490.35	30.09	0.481
2012	465.62	25.88	0.502
2013	459.94	7.78	0.521
2014	470.96	20.82	0.600
2015	460.87	54.00	0.591
2016	468.37	52.09	0.602

Operator's comments

Signed*R. Cheni*.....
(authorised to sign as representative of the Operator)

Date...23 January 2017

Permit Reference Number: TP3639BH Operator: CELSA Manufacturing (UK) Ltd

Installation: Tremorfa New Melt Shop Form Number: R1 [11/05/05]

Reporting of Waste and By-Product Generation

for the period from 01 January 2016 to 31 December 2016

Parameter (tonnes)	Tonnes sent for off-site disposal as special waste	Tonnes sent for off-site disposal as controlled waste	Tonnes sent for off-site recovery or recycling
Ferrous scrap metal			
Non-ferrous scrap metal			
Steel making slag			166322.27
Melting Shop filter dust			18499.27
Other filter dusts including shot-blasting dusts			
General waste			127
Waste oils			27.12
Waste PPE 15.02.02 *			21.5
Waste solvents			
Metallic scale/iron oxide			2330.7
Refractory waste			
Sludge from waste water treatment			
Aqueous waste			
Other wastes: Paper/Card			4.8
Wood			74.96
Scrap screening fines		3123.48	
Scrap screening fines			3727.705
Fluorescent tubes			1.04
WEEE			4.3

Signed: *R. Cheni*

(authorised to sign as representative of the Operator)

Date: 23 January 2017.

Facility: Tremorfa Melt Shop

Form Number:

Sewer 1 / 20/09/13

Reporting of emissions to air for the period from1 January 2016... to ...31 December 2016.....

Emission Point	Substance / Parameter	Emission Limit Value	Reference Period	Result ^[1]	Test Method ^[2]	Sample Date and Times ^[3]	Uncertainty ^[4]
S1 (when being discharged) ^[5]	Oil / grease	5 mg/l	Spot sample	<0.6	Material soluble in 1,1,2-trichloro-trifluoroethane	23/12/2016, 18.00	
	Suspended Solids	20 mg/l		3.0	The solids shall be separated and dried at 105°C	23/12/2016, 18.00	
	pH	6-10		8.8	BS 6068-2.50:1995, ISO 10523:1994	23/12/2016, 18.00	
	Nickel	0.5 mg/l		<0.003	BS 6068-2.60:1988, BS EN ISO 11885 1998	23/12/2016, 18.00	
	Arsenic	0.01 mg/l		<0.001	BS 6068-2.60:1988, BS EN ISO 11885 1998	23/12/2016, 18.00	
	Cadmium	0.05 mg/l		<0.0006	BS 6068-2.60:1988, BS EN ISO 11885 1998	23/12/2016, 18.00	
	Chromium	0.5 mg/l		<0.002	BS 6068-2.60:1988, BS EN ISO 11885 1998	23/12/2016, 18.00	
	Zinc	2 mg/l		0.02	BS 6068-2.60:1988, BS EN ISO 11885 1998	23/12/2016, 18.00	
	Mercury	0.02 mg/l		<0.0001	BS 6068-2.74:2002, BS EN ISO 13506 2002	23/12/2016, 18.00	
	Iron Compounds	5 mg/l		<0.23	BS 6068-2.60:1988, BS EN ISO 11885 1998	23/12/2016, 18.00	
	Flow	No Limit Set	Daily total flow	249 m ³ /day	Flow Meter		

Permit Number: EPR/TP3639BH

Operator: CELSA Manufacturing (UK) Limited

S2	Oil / grease	5 mg/l	Spot Sample	<0.6	Material soluble in 1,1,2-trichloro-trifluoroethane	23/12/2016, 18.00	
	Suspended Solids	20 mg/l		3.0	The solids shall be separated and dried at 105°C	23/12/2016, 18.00	
	pH	6-10		8.8	BS 6068-2.50:1995, ISO 10523:1994	23/12/2016, 18.00	
	Nickel	0.5 mg/l		<0.003	BS 6068-2.60:1988, BS EN ISO 11885 1998	23/12/2016, 18.00	
	Arsenic	0.01 mg/l		<0.0010	BS 6068-2.60:1988, BS EN ISO 11885 1998	23/12/2016, 18.00	
	Cadmium	0.05 mg/l		<0.0006	BS 6068-2.60:1988, BS EN ISO 11885 1998	23/12/2016, 18.00	
	Chromium	0.5 mg/l		<0.002	BS 6068-2.60:1988, BS EN ISO 11885 1998	23/12/2016, 18.00	
	Zinc	2 mg/l		0.02	BS 6068-2.60:1988, BS EN ISO 11885 1998	23/12/2016, 18.00	
	Mercury	0.02 mg/l		<0.00010	BS 6068-2.74:2002, BS EN ISO 13506 2002	23/12/2016, 18.00	
	Iron Compounds	5 mg/l		<0.23	BS 6068-2.60:1988, BS EN ISO 11885 1998	23/12/2016, 18.00	

[1] The result given is the maximum value (or the minimum value in the case of a limit that is expressed as a minimum) obtained during the reporting period, expressed in the same terms as the emission limit value. Where the emission limit value is expressed as a range, the result is given as the 'minimum – maximum' measured values.

[2] Where an internationally recognised standard test method is used the reference number is given. Where another method that has been formally agreed with the Environment Agency is used, then the appropriate identifier is given. In other cases the principal technique is stated, for example gas chromatography.

[3] For non-continuous measurements the date and time of the sample that produced the result is given. For continuous measurements the percentage of the process operating time covered by the result is given.

[4] The uncertainty associated with the quoted result at the 95% confidence interval, unless otherwise stated.

[5] A record of the hourly flow at the time the sample of S1 is taken shall be maintained in the Plant records.

Signed *R. Cheni*
(Authorised to sign as representative of Operator)

Date...23 January 2017.