Building 58, Castle Works, East Moors Road
CARDIFF CF24 5NN
Tel: 029 2035 1800
Fax: 029 2035 1801

31 January 2020

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\IPPC\Environment Agency Reporting\Permit Reporting\New Melt Shop\Annual\2019\TP3639BH EA Annual Returns 2019.doc,

Dear Mrs Parr,

RE: Melt Shop EPR Permit TP3639BH Annual Returns 2019

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 2019.

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

Yours sincerely

Gabriella Nizam
Environmental Advisor

Facility: Tremorfa Melt Shop Form Number: Air 2 / 20/09/13

Reporting of emissions to air for the period from ……1 January 2019 to 31 December 2019

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		3.32 mg/m^3	BS EN; 13284-1:2002 & MID	13/08/2019 10:32 – 12:38	6
	Oxides of Nitrogen (as NO_x)	25 mg/m^3		7.32 mg/m^3	BS EN 14792:2017	24/07/2019 14:07 – 15:06	2
	Sulphur Dioxide	25 mg/m^3	15 minute average	9.24 mg/m^3	EA TGN M21:V1.1 Jan 2010 (AM for BS EN 14791)	24/07/2019 14:07 – 15:06	3
	PCDD/F	0.1 ng/m^3		0.097 ng/m^3	BS EN 1948-1:1997	24/07/2019 10:40 – 16:48	18
	VOC	20 mg/m^3		1.89 mg/m^3	BS EN 12619:2013	24/07/2019 14:35 – 15:34	3
	PAH	No Limit Set		25.18 ug/m^3	BE ISO 11338:2003	25/07/2019 10:00 – 14:06	15
	PCB	No Limit Set		3.80 ng/m^3	BS EN; 1948–1 & 4:2010	25/07/2019 10:00 – 14:06	9
	Total Metals including:	No Limit Set		1.60 mg/m^3	BS EN 14385:2004 & MID	13/09/2019 13:10-15:16	8
	Hg	0.05 mg/m^3		0.022 mg/m^3	BS EN 13211:2001	13/08/2019 13:10 – 15:16	13
A2	Particulate Matter	10 mg/m^3		0.26 mg/m^3	BS EN 13284-1:2002	25/07/2019, 11:30 – 12:34	87

[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.

* Schedule 5 Notification to be submitted alongside this report that is due on the 31st January 2019. Testing for PCDD/F will be done again by the end of Q1 to assess whether or not this result is anomalous.

Signed …… …… Date…31 January 2020

(Authorised to sign as representative of Operator)

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 year ……2019……

Energy Source	Energy Usage		CO_2 Produced (tonnes)**
	Quantity	Primary Energy (MWh)	
Electricity *	MWh	1,104,893	
Natural Gas	MWh	51,808	9,704
TOTAL		1,156,700.8	

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
2017	1,167,208	8,644	0.0074
2018	1,124,759	8,646	0.0077
2019	1,104,893	9,704	0.0100

* Conversion factor for delivered electricity to primary energy = 2.4

**EU ETS annual submission

Operator's comments :

Signed …… …… Date…31 January 2020
(authorised to sign as representative of the Operator)

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 year ……2019…….

Annual Production	
Production of liquid steel	968,387 Tonnes liquid steel

Parameter	Quantity	Units
Electrical energy (delivered)	460,372,000	KWh
Particulates	34636.4	Kg
Water	681,410	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
2017	476.15	5.83	0.797
2018	485.01	38.87	0.585
2019	475.40	35.77	0.704

Operator's comments:

Signed …… …… Date…31 January 2020

(authorised to sign as representative of the Operator)

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 2019 to 31 December 2019

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			149782.1
Melting Shop filter dust			21435.18
Other filter dusts including shot-blasting dusts			
General waste			329.8
Antifreeze			20
Contaminated Packaging			
Waste PPE 15.02.02 *			8.2
Waste oil			11.9
Oil /Water			24
Metallic scale/iron oxide			2220.33
Refractory waste			
Sludge from waste water treatment			
Batteries			
Other wastes: Paper/Card			5.8
Wood			211.8
Scrap screening fines		16909	
Scrap screening fines			17764
Fluorescent tubes			
WEEE			3.5

Signed: …… ……... Date: 31 January 2020

(authorised to sign as representative of the Operator)

Reporting of emissions to air for the period from ……1 January 2019… to …31 December 2019……

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	1.21	Material soluble in 1,1,2-trichloro-trifluoroethane	09/12/2019, 11.00	
	Suspended Solids	20mg/l		5.0	The solids shall be separated and dried at 105°C	09/12/2019, 11.00	
	pH	6-10		7.8	BS 6068-2.50:1995, ISO 10523:1994	09/12/2019, 11.00	
	Nickel	0.5 mg/l		0.006	BS 6068-2.60:1988, BS EN ISO 11885 1998	09/12/2019, 11.00	
	Arsenic	0.01 mg/l		0.00053	BS 6068-2.60:1988, BS EN ISO 11885 1998	09/12/2019, 11.00	
	Cadmium	0.05 mg/l		0.001	BS 6068-2.60:1988, BS EN ISO 11885 1998	09/12/2019, 11.00	
	Chromium	0.5 mg/l		<0.002	BS 6068-2.60:1988, BS EN ISO 11885 1998	09/12/2019, 11.00	
	Zinc	2 mg/l		0.349	BS 6068-2.60:1988, BS EN ISO 11885 1998	09/12/2019, 11.00	
	Mercury	0.02 mg/l		<0.00001	BS 6068-2.74:2002, BS EN ISO 13506 2002	09/12/2019, 11.00	
	Iron Compounds	5 mg/l		1.58	BS 6068-2.60:1988, BS EN ISO 11885 1998	09/12/2019, 11.00	
	Flow	No Limit Set	Daily total flow	44.6 m^3/day	Flow Meter	Daily averages from effluent meter	

S2	Oil / grease	5 mg/l	Spot Sample	1.21	Material soluble in 1,1,2-trichloro-trifluoroethane	09/12/2019, 11.00	
	Suspended Solids	20 mg/l		5.0	The solids shall be separated and dried at 105°C	09/12/2019, 11.00	
	pH	6-10		7.8	BS 6068-2.50:1995, ISO 10523:1994	09/12/2019, 11.00	
	Nickel	0.5 mg/l		0.006	BS 6068-2.60:1988, BS EN ISO 11885 1998	09/12/2019, 11.00	
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[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 .... Date...31 January 2020
(Authorised to sign as representative of Operator)