

31st January 2021

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\2020\TP3639BH EA Annual Returns 2020.doc,

Dear Mrs Parr,

RE: Melt Shop EPR Permit TP3639BH Annual Returns 2020

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 2020.

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

Yours sincerely



Hannah Mayled
Environmental Graduate

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 2020 to 31 December 2020

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		4.8 mg/m ³	BS EN; 13284-1:2002 & MID	01/12/2020 12.50-13.56	10
	Oxides of Nitrogen (as NO _x)	25 mg/m ³		14.79 mg/m ³	BS EN 14792:2017	01/12/2020 13.20-14.20	2
	Sulphur Dioxide	25 mg/m ³	15 minute average	8.80 mg/m ³	EA TGN M21:V1.1 Jan 2010 (AM for BS EN 14791)	01/12/2020 13.20-14.20	3
	PCDD/F	0.1 ng/m ³		0.023 ng/m ³	BS EN 1948-1:1997	03/12/2020 09.15-15.30	20
	VOC	20 mg/m ³		1.64 mg/m ³	BS EN 12619:2013	01/12/2020 13.20-14.20	3
	PAH	No Limit Set		100.64 ug/m ³	BE ISO 11338:2003	04/12/2020 08.45-15.00	18
	PCB	No Limit Set		0.4449 ng/m ³	BS EN; 1948-1 & 4:2010	03/12/2020 09.15-15.30	9
	Total Metals including:	No Limit Set		0.52 mg/m ³	BS EN 14385:2004 & MID	01/12/2020 14.20-16.36	8
	Hg	0.05 mg/m ³		0.0024 mg/m ³	BS EN 13211:2001	01/12/2020 14.30-16.36	13
A2	Particulate Matter	10 mg/m ³		1.52 mg/m ³	BS EN 13284-1:2002	03/12/2020, 10.30-11.34	28

[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.

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Limited

Operator: CELSA Manufacturing (UK)

[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 
(Authorised to sign as representative of Operator)

Date...31 January 2021

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 year2020.....

Energy Source	Energy Usage		CO ₂ Produced (tonnes)**
	Quantity	Primary Energy (MWh)	
Electricity *	MWh	1,036,042.56	
Natural Gas	MWh	43,205.454	7,920.05
TOTAL		1,079,248.01	

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
2020	1,079,248	7,920	0.0092

* Conversion factor for delivered electricity to primary energy = 2.4

**EU ETS annual submission

Operator's comments :

Signed 
(authorised to sign as representative of the Operator)

Date...31 January 2020

Permit Number: EPR/TP3639BH
Limited

Operator: CELSA Manufacturing (UK)

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 year2020.....

Annual Production	
Production of liquid steel	863,079 Tonnes liquid steel

Parameter	Quantity	Units
Electrical energy (delivered)	431,684,442	KWh
Particulates	22308.30	Kg
Water	583,627	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
2020	500.17	25.85	0.676

Operator's comments:

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

Date...31 January 2020

Permit Number: EPR/TP3639BH
Limited

Operator: CELSA Manufacturing (UK)

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 2020 to 31 December 2020

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			133070.5
Melting Shop filter dust			17313.65
Other filter dusts including shot-blasting dusts			
General waste		112.86	365.02
Antifreeze			34.88
Contaminated Packaging			0.37
Waste PPE 15.02.02 *			4
Waste oil			2.0
Oil /Water			
Metallic scale/iron oxide			2354.8
Refractory waste			
Sludge from waste water treatment			14
Batteries			
Other wastes: Paper/Card			4.96
Wood			169.26
Scrap screening fines		419	
Scrap screening fines			317
Fluorescent tubes			17.0
WEEE			5.04

Signed: 
(authorised to sign as representative of the Operator)

Date: 31 January 2020

Facility: Tremorfa Melt Shop

Form Number:

Sewer 1 / 20/09/13

Reporting of emissions to air for the period from1 January 2020... to ...31 December 2020.....

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	0.60	Material soluble in 1,1,2-trichloro-trifluoroethane	14/12/2020, 11.00	
	Suspended Solids	20mg/l		6.0	The solids shall be separated and dried at 105°C	18/12/2020, 11.00	
	pH	6-10		8.7	BS 6068-2.50:1995, ISO 10523:1994	03/12/2020, 11.00	
	Nickel	0.5 mg/l		<0.0010	BS 6068-2.60:1988, BS EN ISO 11885 1998	10/12/2020, 11.00	
	Arsenic	0.01 mg/l		0.00059	BS 6068-2.60:1988, BS EN ISO 11885 1998	21/12/2020, 11.00	
	Cadmium	0.05 mg/l		0.00021	BS 6068-2.60:1988, BS EN ISO 11885 1998	10/12/2020, 11.00	
	Chromium	0.5 mg/l		0.00096	BS 6068-2.60:1988, BS EN ISO 11885 1998	10/12/2020, 11.00	
	Zinc	2 mg/l		0.036	0.036	10/12/2020, 11.00	
	Mercury	0.02 mg/l		0.00002	BS 6068-2.74:2002, BS EN ISO 13506 2002	16/12/2020, 11.00	
	Iron Compounds	5 mg/l		0.556	BS 6068-2.60:1988, BS EN ISO 11885 1998	10/12/2020, 11.00	
	Flow	No Limit Set	Daily total flow	37.0 m ³ /day	Flow Meter	Daily averages from effluent meter	

Permit Number: EPR/TP3639BH
Manufacturing (UK) Limited

Operator: CELSA

S2	Oil / grease	5 mg/l	Spot Sample	0.60	Material soluble in 1,1,2-trichloro-trifluoroethane	14/12/2020, 11.00	
	Suspended Solids	20 mg/l		6.0	The solids shall be separated and dried at 105°C	18/12/2020, 11.00	
	pH	6-10		8.7	BS 6068-2.50:1995, ISO 10523:1994	03/12/2020, 11.00	
	Nickel	0.5 mg/l		<0.0010	BS 6068-2.60:1988, BS EN ISO 11885 1998	10/12/2020, 11.00	
	Arsenic	0.01 mg/l		0.00059	BS 6068-2.60:1988, BS EN ISO 11885 1998	21/12/2020, 11.00	
	Cadmium	0.05 mg/l		0.00021	BS 6068-2.60:1988, BS EN ISO 11885 1998	10/12/2020, 11.00	
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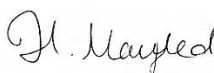
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[3] For non-continuous measurements the date and time of the sample that produced the result is given. For continuous measurements the percentage of the process operating time covered by the result is given.

[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 
(Authorised to sign as representative of Operator)

Date...31 January 2020

Permit Number: EPR/TP3639BH
Manufacturing (UK) Limited

Operator: CELSA

