

31st January 2024

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

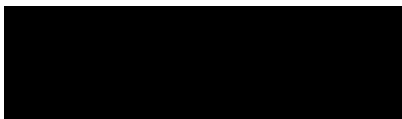
Dear Mrs Parr,

RE: Melt Shop EPR Permit TP3639BH Annual Returns 2023

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 2023.

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

Yours sincerely,



Environmental Advisor

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 2023 to 31 December 2023

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		2.85 mg/m ³	BS EN 13284-1:2017 & MID	24/10/2023 14:25 – 15:35	14
	Oxides of Nitrogen (as NO ₂)	25 mg/m ³		10.57 mg/m ³	BS EN 14792:2017	24/10/2023 13:20 – 14:20	2
	Sulphur Dioxide	25 mg/m ³		10.21 mg/m ³	CEN / TS 17021:2017	24/10/2023 13:20 – 14:20	3
	PCDD/F	0.1 ng/m ³		0.03 ng/m ³	BS EN 1948-1:2006 & MID	15/12/2023 09:00-09:15	20
	VOC	20 mg/m ³		7.57 mg/m ³	BS EN 12619:2013	24/10/2023 13:20 – 14:20	6
	PAH	No Limit Set		80.07 ug/m ³	BS ISO 11338:2003	25/10/2023 09:00 – 12:15	14
	PCB	No Limit Set		12.6210 ng/m ³	BS EN; 1948–1 & 4:2010	24/10/2023 09:35 – 15:55	10
	Heavy Metals	No Limit Set		2.09 mg/m ³	BS EN 14385:2004 & MID	25/10/2023 13:40 – 14:52	9
	Hg	0.05 mg/m ³		0.0027 mg/m ³	BS EN 13211:2001	27/10/2023 10:30 – 14:20	14
A2	Particulate Matter	10 mg/m ³		1.08 mg/m ³	BS EN 13284-1:2017 & MID	24/10/2023 10:30 – 11:34	26

[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.

Signed
(Authorised to sign as representative of Operator)

Date...31st January 2024

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 year2023.....

Energy Source	Energy Usage		CO ₂ Produced (tonnes)
	Quantity	Primary Energy	
Electricity	MWh	992,272*	85,614***
Natural Gas	MWh	18,784.881	3,385**
TOTAL	MWh	1,011,057	88,999

Trends in Energy Usage			
Year	Parameter		
	Primary Energy usage	CO ₂ produced	CO ₂ per unit output
2018	1,124,759	136,109	0.147
2019	1,104,893	127,469	0.132
2020	1,079,248	108,635	0.126
2021	1,133,041	104,114	0.112
2022	1,023,278	87,791	0.105
2023	1,011,057	88,999	0.109

* Conversion factor for delivered electricity to primary energy = 2.4

**UK ETS annual submission (pending verification)

*** UK 2022 electricity conversion factor = 0.207074 kgCO₂e/kWh. Invoiced kWh data used in calculation.

Operator's comments:

Signed
(authorised to sign as representative of the Operator)

Date...31st January 2024

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 year2023.....

Annual Production	
Production of liquid steel	813,667 Tonnes liquid steel

Parameter		
	Quantity	Units
Electrical energy (delivered)	413,446,832	KWh
Particulates	32,727	Kg
Water	505,055	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)
2018	485.01	38.87	0.585
2019	475.40	35.77	0.704
2020	500.17	25.85	0.676
2021	485.38	19.25	0.581
2022	411.74	63.60	0.623
2023	508.126	40.22	0.621

Operator's comments:

Signed

Date...31st January 2024

(authorised to sign as representative of the Operator)

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 2023 to 31 December 2023

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
EAF Dust Total			14,421
Mill scales Total			7,757
Slag Total			72,169
Waste Sump Water			18.00
Oil Contaminated Material			1.75
Waste Oil >0.1%		1.84	
Oily Hoses and Rags			1.00
Waste Oil			16.00
Dry Mixed Recycling			4.77
Fluorescent Tubes			0.06
Food Waste			0.66
General Waste			328.62
Mixed Wood			209.86
Cables			0.74
Rubber Hoses and Belts			2.34
Fire Extinguishers			0.50
WEEE Waste			4.00
Inert Waste			4.10
Tyres			0.50
Total Hazardous Waste		1.84	14,459.59
Total Non-Hazardous Waste			80,520.74

Signed:

Date: 31st January 2024

(authorised to sign as representative of the Operator)

Facility: Tremorfa Melt Shop

Form Number:

Sewer 1 / 20/09/13

Reporting of emissions to air for the period from1 January 2023... to ...31 December 2023.....

Emission Point	Substance / Parameter	Emission Limit Value	Reference Period	Result ^[1]	Test Method ^[2]	Sample Date and Times ^[3]
S1 (when being discharged) ¹⁵ 1	Oil / grease	5 mg/l	Spot sample	1.25	Material soluble in 1,1,2-trichloro-trifluoroethane	Annual average of monthly sampling
	Suspended Solids	20mg/l		17	The solids shall be separated and dried at 105°C	Annual average of monthly sampling
	pH	6-10		8.9	BS 6068-2.50:1995, ISO 10523:1994	Annual average of monthly sampling
	Nickel	0.5 mg/l		0.002	BS 6068-2.60:1988, BS EN ISO 11885 1998	Annual average of monthly sampling
	Arsenic	0.001 mg/l		0.00044	BS 6068-2.60:1988, BS EN ISO 11885 1998	Annual average of monthly sampling
	Cadmium	0.05 mg/l		0.0014	BS 6068-2.60:1988, BS EN ISO 11885 1998	Annual average of monthly sampling
	Chromium	0.5 mg/l		0.0015	BS 6068-2.60:1988, BS EN ISO 11885 1998	Annual average of monthly sampling
	Zinc	2 mg/l		0.2	BS 6068-2.60:1988, BS EN ISO 11885 1998	Annual average of monthly sampling
	Mercury	0.02 mg/l		0.0002	BS 6068-2.74:2002, BS EN ISO 13506 2002	Annual average of monthly sampling
	Iron Compounds	5 mg/l		0.462	BS 6068-2.60:1988, BS EN ISO 11885 1998	Annual average of monthly sampling
Flow	No Limit Set	Daily total flow	24.64 m ³ /day	Flow Meter	Daily averages from effluent meter	

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Manufacturing (UK) Limited

Operator: CELSA

S2	Oil / grease	5 mg/l	Spot Sample	0.60	Material soluble in 1,1,2-trichloro-trifluoroethane	05/06/2023 11:00
	Suspended Solids	20 mg/l		4	The solids shall be separated and dried at 105°C	05/06/2023 11:00
	pH	6-10		8.4	BS 6068-2.50:1995, ISO 10523:1994	05/06/2023 11:00
	Nickel	0.5 mg/l		0.0011	BS 6068-2.60:1988, BS EN ISO 11885 1998	05/06/2023 11:00
	Arsenic	0.01 mg/l		0.00044	BS 6068-2.60:1988, BS EN ISO 11885 1998	05/06/2023 11:00
	Cadmium	0.05 mg/l		0.00028	BS 6068-2.60:1988, BS EN ISO 11885 1998	05/06/2023 11:00
	Chromium	0.5 mg/l		0.00084	BS 6068-2.60:1988, BS EN ISO 11885 1998	05/06/2023 11:00
	Zinc	2 mg/l		0.0038	BS 6068-2.60:1988, BS EN ISO 11885 1998	05/06/2023 11:00
	Mercury	0.02 mg/l		0.00001	BS 6068-2.74:2002, BS EN ISO 13506 2002	05/06/2023 11:00
	Iron Compounds	5 mg/l		0.594	BS 6068-2.60:1988, BS EN ISO 11885 1998	05/06/2023 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
(Authorised to sign as representative of Operator)

Date...31st January 2024

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Manufacturing (UK) Limited

Operator: CELSA