

1<sup>st</sup> March 2017

Dr Gareth Richards  
Pollution and Prevention Control Team  
Natural Resources Wales  
Rivers House  
St Mellons Business Park  
St Mellons  
CARDIFF  
CF3 0EY

Dear Gareth,

**RE: Tremorfa Melt Shop Environmental Permit TP3639BH Formal Notification of Proposed Changes**

In accordance with CELSA Manufacturing UK Ltd Tremorfa Melt Shop Environmental Permit (EPR) TP3639BH, please find below our formal notification of the proposed process changes for the use of a mobile screener in the Mineral Site at the Tremorfa Works, for scale.

**1.0 Introduction**

CELSA Manufacturing UK Ltd is regulated under section 12 of the Environmental Permitting Regulations 2010 (as amended) to operate an installation which carries out activities as defined within section 2.1 A(1)(b) '*Producing, melting or refining iron or steel or any ferrous alloy, including continuous casting*'. As such the company is permitted in accordance to the terms and conditions of EPR Permit TP3639BH.

Section 2.3.6 of EPR TP3639BH states:

*"The operator shall obtain written agreement from Natural Resources Wales prior to any period of use of the mobile crushing and screening plant."*

**2.0 Proposed Changes**

**2.1 Scale Screening**

**2.1.1 General**

CELSA intend to use a mobile plant to enable further processing of the scale which is currently stored at the site. This process change forms part of an ongoing investment programme into the installation and its processes, to improve the scale quality for prospective and current customers. The proposed equipment will be located at the Mineral Site as detailed in *Appendix 1*. The proposed use of the mobile plant for scale screening will be

trialled for a period of 4 weeks and if successful it will be implemented as a process on a permanent basis.

The main driver for this modification is to:

- Initiate the production of different grades of scale available to prospective and current customers
- Increase customer base for re-use of scale

### ***2.1.2 Scrap Screening Process Description***

The proposed trial mobile scale screen will be located at the Mineral Site as detailed in *Appendix 1*.

The mobile plant equipment to be used is as follows:

- Explorer 1500 Screener

The Explorer 1500 screener is designed to provide tremendous fuel economy combined with great productivity. The machine is a multi-purpose heavy duty triple deck screen with a capacity of up to 400 tonnes/hour. The technical specifications of the Explorer 1500 are attached in *Appendix 2*.

The screening machine will be operated by the mobile plant hire company.

## **3.0 Environmental Impact**

CELSA have assessed the environmental impacts in accordance with the requirements of EP TP3639BH, and these are listed below.

### ***3.1 Raw Materials***

Diesel oil and Engine oil will be used by the Explorer 1500. Double skinned tanks are fitted to the vehicle to prevent any losses from the plant machinery. Additionally, load sensing hydraulics will save 4 to 6 l of Diesel fuel an hour. Spill kits will be in place in the event of a spillage. The diesel oil will be supplied by CELSA's service contractors, Harsco, under normal site operating procedures.

### ***3.2 Water Use***

There will be no additional water used during this process.

### ***3.2 Emissions to Water***

No emissions to water will be produced by the proposed mobile plant equipment.

### ***3.3 Emissions to Air***

Due to the nature of the scale material, no particulate matter or dust emissions to air are anticipated.

### **3.4 Odour**

The scale screening operations undertaken are not deemed odorous.

### **3.5 Waste**

No additional waste will be produced from the scale screening activity. All screened material will be sent to various customers, as per the grade of material produced.

### **3.6 Energy**

The main uses of energy at the installation will not change as the Explorer 1500 will be provided by diesel fuel. The load sensing hydraulic system reduces fuel usage by 25%.

### **3.7 Noise and Vibration**

It must be noted that the machinery will be sited within the Mineral Site and only in operation between 6:00am and 6:00pm. Due to the nature of the scale product, no additional noise is anticipated on top of the machinery noise. Therefore, CELSA do not anticipate that the operational activity of the scale screening will give rise to complaints.

CELSA do not anticipate that the scale screening will give rise to any vibration source.

In summary CELSA do not anticipate that the scale screening will cause any additional environmental impact from the site operations.

## **4.0 Timescales**

CELSA intend to operate the proposed plant equipment for 4 weeks from the 3<sup>rd</sup> of March 2017. The operational hours for this activity will be between 6:00am and 6:00pm.

## **5.0 Conclusions**

The above process change form part on an ongoing investment programme into the installation and its processes, broadening our customer base for the sale and re-use of scale.

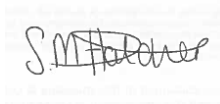
In summary CELSA do not anticipate that scale screening activity will cause any additional environmental impact from the site operations.

We hope that the above text provides enough information for your needs. As detailed above, due to the fact that the environmental impact is minimal we believe that these process

changes are small enough to warrant a formal notification rather than a 'variation' to our process as essentially all of the process operations and authorised release points will remain unchanged.

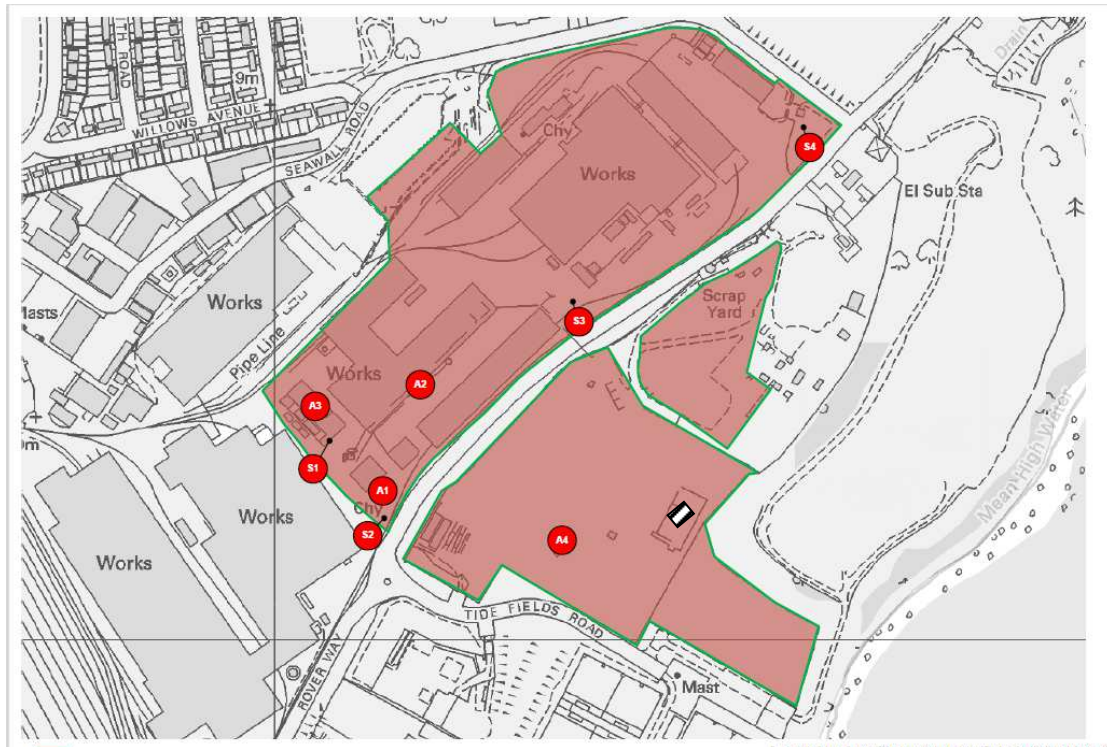
Should you require any further information regarding these works please do not hesitate to contact me.

Yours sincerely



Sioned Hatcher  
**Environment Advisor**

## **APPENDIX 1: TP3639BH SITE BOUNDARY**



Scrap screening location



## **APPENDIX 2: Explorer 1500 INFORMATION BROCHURE**

### **Explorer 1500**



The Explorer 1500 is specifically designed for high production capacity, available in 3 or 4 split versions, with a capacity of up to 400 tonnes/hour. The machine also provides easy service and maintenance access, with electric versions available. The Explorer 1500 is user friendly, with simple but intelligent controls.

#### **ECO-FS (Fuel Saving)**

The Diesel engine with low emission norms combined with the load sensing hydraulic system ensures minimum impact on the environment. Load sense hydraulic saves 4 to 6 l of Diesel fuel an hour. With 1000 annual operational hours your savings can exceed 5.000 l of Diesel fuel.

#### **Benefits:**

- Optimum flexibility and mobility, no support legs

- High performance and reliability
- Perfect results at the lowest costs
- Robust and smart design with good access for maintenance, repair and exchanging wear parts
- Easy to transport
- Up to 25% greater fuel efficiency by using 'load sensing' hydraulics
- Operational in 30 minutes
- Excellent access for screen change
- Low loading/feeding height
- Steel hydraulic lines where possible (safer, easier and quicker to repair)
- Protected greasing nipples
- Condensate drain on the fuel tank
- Heavy duty quality water absorbing filters
- User friendly controls
- Perfect accessible engine compartment

|                                          |                            |
|------------------------------------------|----------------------------|
| <b>Transport width</b>                   | 2.800mm                    |
| <b>Transport length</b>                  | 13.675mm                   |
| <b>Transport height</b>                  | 3.325mm                    |
| <b>Screen box (length x width)</b>       | 3.600mm, 1.500mm           |
| <b>Effective screen area</b>             | 2 or 3 x 5,4m <sup>2</sup> |
| <b>Belt feeder full adjustable speed</b> | 0 to 6,1 m/min             |
| <b>Belt feeder capacity</b>              | 400t/h                     |