

1<sup>st</sup> March 2019

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 jaw crusher in the Mineral Site at the Tremorfa Works, for slag.

**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 Slag Crushing**

**2.1.1 General**

CELSA intend to use a mobile plant to enable further processing of the slag which is currently stored at the site, from the week commencing the 11<sup>th</sup> March for a period of four weeks. This process change forms part of an ongoing investment programme into the installation and its processes, to improve customer satisfaction relating to specific slag sizes. The proposed equipment will be located at the Mineral Site as detailed in *Appendix 1*. The proposed

equipment will be used to process 20,000 tonnes of oversize slag (6F5) for a specific customer for a period of four weeks.

### **2.1.2 Scale Crushing Process Description**

The proposed mobile slag crusher (and additional machinery) will be located at the Mineral Site as detailed in *Appendix 1*.

The mobile plant equipment to be used is as follows:

- Terex Finlay

The machines proposed for use are all Finlay, with Euro 4 emissions engines, the models are: x1 883+ Scalping Screen (noise level 98DbA at operator level); x2 694+ Finishing Screen (noise level see attached document); x1 C1540 Crusher (noise level of Scania DC13 83A engine 118DbA). There would also be an excavator and wheel loader working with the aforementioned machinery.

The technical specifications for each model are attached in *Appendix 2*.

## **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 Terex Finlay. Double skinned tanks are fitted to the vehicle to prevent any losses from the plant machinery. 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**

The crusher will use 400 litres/day and the screens approximately 100 litres per machine per day.

### **3.2 Emissions to Water**

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

### **3.3 Emissions to Air**

No particulate matter or dust emissions to air are anticipated, due to the slag jaw crusher being fitted with a dust suppression system.

### **3.4 Odour**

The slag crushing operations undertaken are not deemed odorous.

### **3.5 Waste**

No additional waste will be produced from the slag crushing activity. All crushed oversize slag will be sent to the respective customer.

### **3.6 Energy**

The main uses of energy at the installation will not change as the Keestrack Gieve will be provided by diesel fuel.

### **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, meaning that no additional noise is anticipated on top of the machinery and slag screening noise. Therefore, CELSA do not anticipate that the operational activity of the slag crushing will give rise to complaints.

CELSA do not anticipate that the slag crushing will give rise to any vibration source.

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

### **4.0 Timescales**

CELSA intend to operate the proposed plant equipment for a period of four weeks to crush 20,000 tonnes of oversize slag (6F5) for a specific customer.

### **5.0 Conclusions**

The proposed equipment will be used to process 20,000 tonnes of oversize slag (6F5) for a specific customer, ensure full customer satisfaction.

In summary CELSA do not anticipate that the slag crushing 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



Gabriella Nizam  
**Environment Advisor**

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

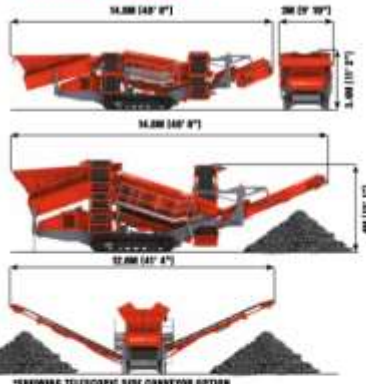


Scrap screening location



## APPENDIX 2: TEREX FINLAY BROCHURE

**TRANSPORT & WORKING**



14.0M (46' 0")  
3.0M (9' 10")  
14.0M (46' 0")  
12.0M (40' 0")  
4.0M (13' 1")

\*SHOWING TELESCOPIC SIDE CONVEYOR OPTION

**WEIGHT**  
31,000 (68,340LBS)  
(STANDARD MACHINE CONFIGURATION)





**883+**

The high performance Terex Finlay 883+ is designed to work after a primary crusher or on it's own as a headline tracked mobile screening machine. Applications include quarrying, mining construction and demolition debris, topsoil, recycling, sand, gravel, coal and aggregates. The plant has the capacity to process at a rate of up to 500 tonnes per hour and can be fed either by a tracked mobile crusher or an excavator.

Now available with dual power technology option. On-board electrical motors allow flexibility to run from an outside power supply or standard on-board engine.

**KEY FEATURES**

- Aggressive screen box can accept roller bars, speed-humps woven mesh, punch plate, toes and cascade fingers.
- Modular configuration screen box with 4.8m x 1.5m (16' x 5') top deck and bottom deck screen.
- Screen box angle can be hydraulically adjusted to an angle between 12° to 19°.
- Screen box discharge end can be hydraulically raised 300mm to facilitate efficient and easy media access and changing.
- All stockpiling conveyors are hydraulic angle adjustable.



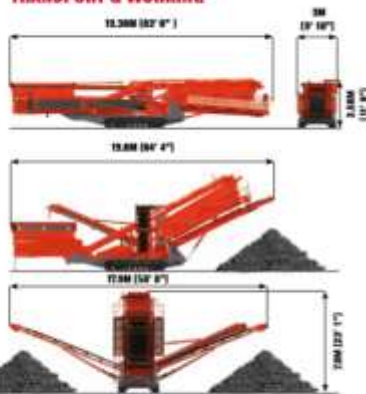
**694+**

With 'best in class' production levels, set up time and ease of operation, the Terex Finlay 694+ is the industry's leading tracked mobile inclined screen. A high capacity belt feed hopper is available with remote tipping grid or double deck vibrating grid. The triple deck screen configuration provides three full sized 6.1m x 1.53m (20' x 5') screens. An innovative hydraulically folded fourth conveyor allows simple adjustment with variable tilt and slow discharge for recirculation or stockpiling of finished material. Washing equipment can be fitted to the screenbox if required between 18 degrees and 30 degree.

**KEY FEATURES**

- The triple deck 6.1m x 1.53m (20' x 5') screen box with full catwalk access is the largest and most accessible in its class.
- A combination of quick wedge tensioning, convenient access holes, and hydraulic loosening on the bottom deck ensure mesh set up and change out times are kept to an absolute minimum.
- Maximum utilisation of three 6.1m x 1.53m (20' x 5') decks provide ultra-efficient screening capacities even at small aggregate sizes.
- The fourth (oversize plus) conveyor provides hydraulic variable tilt and side slow capability to accurately discharge material for recirculation to crushers or for stockpiling.
- Screen box angle can be hydraulically adjusted to an angle between 18° and 30°

**TRANSPORT & WORKING**

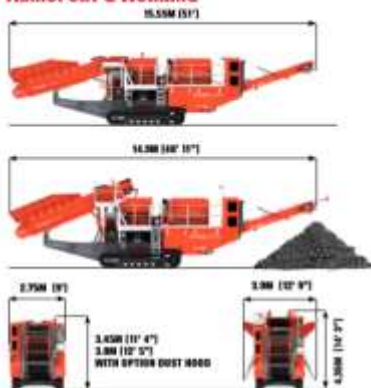


11.30M (37' 0")  
3.0M (9' 10")  
14.0M (46' 0")  
11.30M (37' 0")  
3.0M (9' 10")

**WEIGHT**  
35,250KG (77,511LBS)  
(WITH TIPPING GRID)



## TRANSPORT & WORKING



## WEIGHT

33,300KG (73,540LBS)  
WITHOUT OPTIONS



The fuel efficient direct drive Terex Finlay C-1540 cone crusher is the optimum machine for medium sized producers and contract crushing operators.

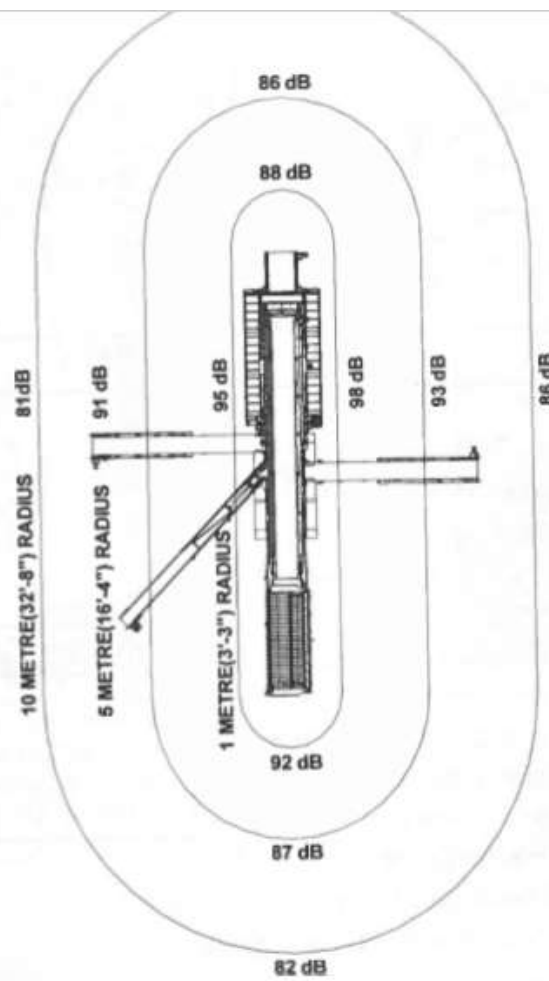
This efficient and productive machine features the proven Terex 1000 cone crusher that is choke fed with integrated level sensor, automatic tramp relief and hydraulic closed side setting (CSS) adjustment.

The large hopper/feeder has an automated metal detection and a purge system to protect the cone and reduce downtime by removing metal contaminants via the purge chute.

Additional benefits include, rapid set up time, ease of maintenance, high reduction ratio, high output capacity and advanced electronic control system.

## KEY FEATURES

- Fuel efficient direct drive transmission via a clutch.
- Hydraulic Tramp Relief System with automatic reset protects the chamber and minimises downtime.
- Metal detection system on feed belt with 'auto-stop' protects the cone from tramp metal and the purge system removes contaminants from the machine.
- Advanced load sensing auxiliary hydraulics maximizes plant efficiency.



|  |                                                                 |
|--|-----------------------------------------------------------------|
|  | <b>WARNING</b>                                                  |
|  | CONSTANT HIGH<br>NOISE LEVELS<br>EAR PROTECTION<br>MUST BE WORN |