

29<sup>th</sup> 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:\Environment Agency\Permit Reporting\Rod and Bar Mill>Returns\EA\Annual\2020\BV0759IC 4.1.4 Annual Returns 2020.doc

Dear Mrs Parr,

**RE: Rod and Bar Mill EPR Permit BV0759IC 4.1.4 Annual Returns 2020**

In accordance with CELSA Manufacturing UK Ltd Environmental Permitting Regulations (EPR) Rod and Bar Mill Permit BV0759IC, permit condition 4.1.4 requires the following:

*4.1.4 The Operator shall review fugitive emissions, having regard to the application of Best Available Techniques, on an annual basis, or such other period as shall be agreed in writing by the Agency, and a summary report on this review shall be sent to the Agency detailing such releases and the measures taken to reduce them within 3 months of the end of such period.*

Principle sources of fugitive emissions from the Rod & Bar Mill are from:

- Roof vents located over the cooling beds, rolling mill and furnace areas, which release direct to air from within the building and contain water vapour from the cooling circuit and any dust emitted from the process activities. Process contributions to the building air are minimised through the use of LEVs and through operating procedures aimed to minimise dust.
- The two water treatment system clarifiers will also give rise to fugitive emissions, principally water vapour.

Operations that may give rise to fugitive emissions of dust to air and do not have LEVs are:

- Furnace refractory works
- Scale removal from the furnace

Both operations are undertaken within the main rolling mill building.

Operations that may give rise to fugitive emissions to surface water, sewer and groundwater are:

- Leaks and Spills

## **1.0 Control of Fugitive Emissions to Air**

### **1.1 Furnace Refractory Works**

During 2020, there have been no fugitive releases to air from the permitted activities or any complaints regarding fugitive emissions related to the furnace refractory works at the Rod and Bar Mill.

During refractory works the furnace is kept under negative pressure thus preventing the escape of dust. Replacement of refractories is only undertaken during plant shutdown periods and the waste is placed into skips, which is in the form of large solid pieces and therefore does not generate fugitive emissions. Ceramic fibres are dealt with under specific health and safety requirements, double bagged and sealed prior to being disposed of offsite.

The furnace refractory replacement is undertaken when the furnace is not in operation. However, the furnace extraction system is in operation during refractory repairs/replacement to provide a more comfortable working environment for the refractory engineers. The extraction applied isn't significant as it only provides fresh cool air and does not lead to any release from the process. Any dust arising settles within the furnace and is collected by vacuum when removing scale from the hearth.

Any waste which accumulates in the furnace flue-ways is periodically removed by a specialist waste contractor using a vacuum to extract the dust into closed skips for subsequent off-site disposal. There have been no changes to the above activities during 2020.

### **1.2 Scale Removal from the Furnace**

No complaints have been received regarding scale removal from the furnace at the Rod and Bar Mill during 2020. Every week, scale is removed from the furnace hearth via the furnace access doors. The scale is manually scraped into purpose handling bins before being emptied into a dedicated scale skip. Fugitive dust is not typical from the scale, as the flakes are typically large, dense particles.

Scale accumulating on the floor of the furnace is removed during shutdown periods. Again, the scale flakes are large dense particles which are not prone to dust generation.

## **2.0 Control of Fugitive Emissions to Surface Water, Sewer and Groundwater**

### **2.1 Leaks and Spills**

#### **Surfacing**

Activities that may give rise to fugitive emissions are conducted on areas with concrete hard standing.

There have been no changes to these activities or any complaints received during 2020.

#### **Drainage and Other Sub-Surface Structures**

The sub-surface structures on site comprise of the basement lubricating oil and oil storage areas and an underground rainwater surge tank; additionally, there are no underground storage tanks at the Rod and Bar Mill. The cellars were constructed as part of the foundations of the process and consist of reinforced concrete, which provides an impervious layer with an average thickness of 300mm, with all floor levels below ground level and no drains are present in any of the cellars. The cellars are significantly larger in volume than the sum of the individual tanks within them, and as such any spillage would be contained. A penstock valve has been fitted to the RBM discharge point to East Bute Dock, and is closed except for discharge under controlled conditions.

There are no other underground storage tanks on site. Surface drainage from areas of hard standing runs to the combined surface/foul sewer.

There have been no changes to these activities however; CELSA received a few complaints and issued several Schedule 5's.

A complaint was received on 25<sup>th</sup> February 2020, for oil seen in East Bute Dock. CELSA investigated the complaint and checked the water monitor, which found that the oil in the water was below the 5mg/l threshold during discharge.

A Schedule 5 was issued on 1<sup>st</sup> July 2020 due to an instrumental failure. The data logger failed which therefore made it unable to accurately determine effluent discharge to the dock. On the 3<sup>rd</sup> August 2020, a replacement part repaired the issue. There were no known emissions into the dock, and the engineers calculated an approximate discharge for the period.

A Schedule 5 was issued on 24<sup>th</sup> July 2020 due to there being missing data in the water quality analysis. Dissolved nickel, free chlorine and dissolved iron were missing. An investigation found that it was a lab error, and CELSA spoke to the lab to confirm extra checks were put in place to ensure correct analysis is conducted for W1 returns. There were no emissions to dock as the water is analysed before release to ensure the levels are within permitted limit.

A Schedule 5 was issued on 10<sup>th</sup> November 2020 due to an analysis report being received for water sampled on 19<sup>th</sup> October 2020. The free chlorine limit was breached (0.11mg/l measured value, versus 0.10mg/l limit) on 19<sup>th</sup> October. Conversations were had with the water contractors to ensure they understood the environmental impact of chlorine on wildlife. There were no emissions to dock.

A Schedule 5 was issued on 10<sup>th</sup> November 2020 due to an analysis report being received for water sampled on 19<sup>th</sup> October 2020. The hydrocarbon limit was breached (6.2mg/l measured value, versus 5.0mg/l limit) on 19<sup>th</sup> October. Conversations with water contractors and engineers decided to draw further samples in the future to ensure there were no equipment issues, and determine if it will be a recurring issue. There were no emissions to dock.

### **Secondary Containment**

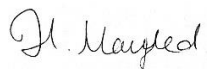
No changes have been made to the secondary containment. All storage containers of oils and chemicals are stored with containment in place. Following the publishing of Water Resources (Control of Pollution) (Oil Storage) (Wales) Regulations 2016 and following best practice guidance (Pollution Prevention Guidelines: PPG 2 — Above Ground Oil Storage Tanks), all tanks, drums or other containers of more than 200 litres are inspected on a monthly basis during internal environmental audits, where bund inspections are also conducted. All fill points are within the bunded areas.

There have been no changes to these activities or any complaints received during 2020.

In conclusion, as there have been no changes to any of the above activities relating to secondary containment or any complaints received during 2020. Additionally, the current controls for fugitive emissions are deemed relevant and up to date.

Should you require any further information regarding permit condition 4.1.4 and these works please do not hesitate to contact me.

Yours sincerely



**Hannah Mayled**  
**Environmental Graduate**