

## SCHEDULE 5 Notification


### Part B

Permit Number:	BL7108IM
Name of Operator:	Tata Steel UK Ltd
Location of Facility:	Port Talbot Works
Part A details	S5N/22/24A; S5N/22/26A, S5N/22/29A
Date Part A submitted	14/03/2022 (24A); 21/03/2022 (26A); 29/03/2022 (29A).

Any more accurate information on the matters notified under Part A

- This Part B applies to Part A notifications S5N\_22\_24A, S5N\_22\_26A and S5N\_22\_29A.
- 06/03/2022 – 12/03/2022 the weekly average for sulphides at the LSO was 0.12 mg/l (measured value).
- 13/03/2022 – 19/03/2022 the weekly average for sulphides at the LSO was 0.15 mg/l (measured value).
- 20/03/2022 – 26/03/2022 the weekly average for sulphides at the LSO was 0.12 mg/l (measured value).
- The internal sump sulphide concentrations, taking into account flow rates, indicate that the origin of the sulphides is Sump 1 (the Blast Furnaces). The furnaces have had a period of instability recently, with on and off operations over the latter part of the week and high top temperatures.
- Sulphur enters the furnaces primarily through coal injection. Due to current global supply issues with Russian coal the business has recently had to move to using increased quantities of local coals, which are higher in sulphur. Sulphur then leaves the furnaces via the slag, which is removed at a fairly consistent rate via tapholes. Much of this slag is sent for granulation, and the water used in this process is recirculated (top-ups are needed due to evaporation). However if the granulation is down for maintenance, more slag is sent to the slag pools. The slag in the slag pools is quenched and watered, and the water from this is collected via a series of sumps and drains into Sump 1.
- Both slag pits were watered at the same time on two separate occasions during March, which does not occur very often. When BF5 slag pit is watered, ~500m<sup>3</sup>/hr is used in the watering process. Even accounting for some evaporation, this will increase the quantity of water to Sump 1.
- Furthermore, the presence of sulphate reducing bacteria has been identified across multiple sumps across the Port Talbot site. This is a naturally occurring organism which reduces sulphates to sulphides.

Measures taken, or intended to be taken, to prevent a recurrence of the incident	<ul style="list-style-type: none"> <li>• Blast Furnace team to arrange for additional water samples on slag pools when casting to determine fully whether there is correlation between casting to slag pools and sulphides levels.</li> <li>• Blast Furnace team are to hold problem solving session to understand what operations feed into Sump 1 and root causes.</li> <li>• Blast Furnace team are to hold problem solving session to understand sulphides issues when casting to the slag pools.</li> </ul>
Measures to be taken, or intended to be taken, to rectify, limit or prevent any pollution of the environment or harm which has been or may be caused by the emission	<ul style="list-style-type: none"> <li>• Exploring hypochlorite dosing to BETSI corner sump in order to remove sulphate reducing bacteria, thereby reducing the sulphides levels.</li> </ul>
The dates of any Part A notifications in the previous 24 months	Please see attached Excel sheet.

Name*	Ellie Harrison
Post	Environmental Engineer
Signature	
Date	12/05/2022
Reference	S5N_22_24B