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_17A
Date Part A submitted	10/03/2022

Any more accurate information on the matters notified under Part A

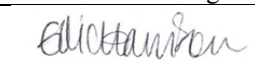
- A spot sample was taken in 4 separate vials on the 14th February 2022. Table 1 below shows the results from these vials.
- The first result was 93 ug/l, and the retest result on the same vial was 4.6 ug/l. Whilst the average of the two results is under the permitted limit (48.8 ug/l, or 0.0488 mg/l) the results were not thought to be accurate due to the significant difference in the results. The low sample had results below the LOD of ug/l for all BAT-AEL compounds other than Fluoranthene.
- The second vial was also tested and retested (non-accredited), with similar disparities in results (4.36 ug/l, and 41.23 ug/l).

Table 1: PAH Results.

Sample	Result (µg/l)	95% uncertainty level of BAT-AEL (µg/l)
Original Result no.1 (accredited)	93.41	5.18
Original Result no.2 (accredited)	4.62	0.28
Repeat from original vial no.1 (non-accredited)	4.36	0.26
Repeat from spare vial no.1 (non-accredited)	41.23	2.41
Repeat from original vial no.2 (non-accredited)	40.69	2.36
Repeat from spare vial no.2 (non-accredited)	14.00	0.84

- Tata Steel Sheffield (TSS) Laboratory take responsibility for arranging the PAH sampling and sending off to an external lab for PAH analysis. The BAT-AEL PAH's all have low solubilities in water and are mainly associated with suspended matter. Consequently, if the sample isn't well mixed the PAHs will be under sampled. The higher-solubility PAH's tend to have better agreement between the samples in the results provided, and hence the issue is likely to be a failure to adequately mix the sample. Additionally, the comments submitted by the laboratories indicate that there was an oil layer on the sample which made it challenging to get a representative aliquot for

	analysis. This is likely to have caused the unreproducible results.	
Measures taken, or intended to be taken, to prevent a recurrence of the incident	• The PAH sample is usually taken once per week, via a spot sample. There are plans to start using the LSO autosampler for the weekly sample, which has been approved by Natural Resources Wales (NRW). This may help to alleviate issues with sampling due to oil and solids in the sample and improve representativeness of the sampling.	
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	• Ongoing work is planned with the Morfa Coke Ovens to improve the output of the Biological Effluent Treatment (BET) Plant, which will reduce PAH concentrations. The rake in the clarifier at the BET Plant is currently broken, which is allowing increased suspended solids to spill over into Sump 6. As PAH's tend to adhere to solids, this is elevating the PAH concentrations. When the BET Plant and clarifier is working optimally the suspended solids output is expected to be ~50ppm; at present a concentration of approx. 250-300 ppm is being observed.	
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	05/05/2022
Reference	S5N_22_17B