



Schedule 1

Notification of Unauthorised Release

Operator:	Tata Steel UK Ltd		
Authorisation:	BS3905IP	Location:	Llanwern Works Newport South Wales NP19 4QZ
Date Submitted:	21/09/2021		

PART B

- Further details of the release and results of any investigations carried out**

This Part B is a follow-up to the Part A Notification for a breach of permit conditions at Llanwern at W1. The breach was a failure to analyse for mercury (Hg) for three consecutive weeks at W1 Lagoon 14. The weeks affected by this are as follows:

Weeks commencing the 05/07/2021 (Week 27), 12/07/2021 (Week 28) and 19/07/2021 (Week 29).

The Analytical Lab team is responsible for preparing a weekly composite sample for W1 by pouring off a portion of each daily sample. The composite is then left for collection by the Energy mobile ops team, who deliver it to Harbourside lab where it is analysed for Hg. The composite is made available for collection every Sunday morning and is should be picked up by Energy on Sunday evening for delivery to Harbourside lab on Monday.

Daily samples had been collected by the lab as per process, but on three successive occasions the weekly composite was discarded incorrectly prior to collection. The superficial root cause is that new personnel were not aware of the sample handling requirements. The ultimate root cause is that there was no written procedure and competency assessment in place for the collection of weekly composite samples. There is a log book in the Analytical lab to record sample movements but this had either not been completed or was not checked.

This incident is a failure to test as per the requirements of the Labs / Environment Service Level Agreement. Further, the issue was not detected for 3 weeks for two main reasons: (1) visual management & daily management processes in the Analytical lab were not sufficiently robust to confirm if samples had been sent; (2) there had been a long-standing issues with reliability of sample delivery by Energy and was not unusual for samples to arrive late - this led to a lost opportunity to escalate the non-arrival of samples at Harbourside.

- Measures taken or intended to be taken to prevent a recurrence of the incident**

Laboratories investigation was conducted and root cause analysis was carried out. Corrective and preventative actions as follows:

- 1: additional sample recording process established at Laboratory where composite sample is prepared. Visual management has been updated. Sample recording book is



now being reviewed weekly to ensure that sample is being delivered to Harbourside Labs accordingly.

- 2: new escalation process established in Daily Stand Up Meeting for if weekly composite sample does not arrive at analysing laboratory.
- 3: Training to be cascaded at Analytical lab and Harbourside lab (by end of September) to educate teams on the permit requirements and consequences of failure
- 4: Simplify sample transport process to minimise risk of failure. Proposal to introduce an additional sample at Llanwern that is sent directly to the analysing lab (Harbourside Lab). At present just the one sample goes to PT, heading to BOS Labs first for analysis before being taken to Harbourside for Hg analysis.

• **Measures taken, or intended to be taken, to: rectify, limit or prevent any pollution of the environment or harm which has been caused by the emission**

- This issues primarily concerns sample collection and transport. Data through 2021 shows consistent values for Hg which are at or below the limit of detection.
- From the 10th May 2021, a new dedicated mercury analyser (FIMS) has been purchased and commissioned which improves limit of detection (LOD) compared with previous method (ICPMS). This has halved the LOD, from 0.1 ppb to 0.05 ppb.

• **The dates of any PART A notifications within the previous 24 months**

- 20th June 2021 – Hydrocarbons W1 consent point
- 29th Dec 2020 – Suspended Solids W1 consent point
- 4th Aug 2020 – Suspended Solids W1 consent point
- 11th Mar 2020 – HCl stack emissions
- 16th , 17th , 18th Feb 2020 – Suspended solids at W1 consent point.
- w/c 22nd Dec 2019 – Elevated Cu W1 consent point
- 1st & 16th Nov 2019 – Suspended Solids W1 consent point

Name: [REDACTED]

Position: Environmental Engineer

Signature: [REDACTED]

[Signed on behalf of Tata Steel Strip Products UK]