Compliance Assessment Report

Report ID: CAR_NRW0034621

This form will report compliance with your permit as determined by an NRW officer					
Site	Port Talbot Steel Works	Permit Ref	BL7108IM		
Operator/Permit holder	Tata Steel UK Limited				
Regime	Installations				
Date of assessment	31/12/2019	Time in	N/A	Out	N/A
Assessment type	Check Monitoring/Sampling				
Parts of the permit assessed	3 Emissions and Monitoring; 4 Information				
Lead officer's name	Cowie, Douglas				
Accompanied by					
Recipient's name/position	Claire Grainger/ Environment Manager	Date issued	06/02/2020		

Section 1 – Compliance Assessment Summary

This is based on the requirements of the permit under the Environmental Permitting Regulations or the licence under the Water Resources Act 1991 as amended by the Water Act 2003. A detailed explanation is captured in "Compliance Assessment Report Detail" (Section 2) and any actions you may need to take are given in the "Action(s)" (section 4). This summary details where we believe any non-compliance with the permit has occurred, the relevant condition and how the non-compliance has been categorised using our Compliance Classification Scheme (CCS). CCS Scores can be consolidated or suspended where appropriate, to reflect the impact of some non-compliances more accurately. For more details of our CCS scheme, contact your local office.

Permit conditions and compliance summary	CCS Category	Condition(s) breached
A1 - Specified by permit	A	
C2 - General Management - Management system and operating procedures	A	
E1 - Emissions - Air	C4	3.1.2 Emissions to air
	C3	3.1.2 Emissions to air
	C3	3.1.2 Emissions to air
G1 - Monitoring and Records, Maintenance and Reporting - Monitoring of emissions and environment	X	
G2 - Monitoring and Records, Maintenance and Reporting - Records of activity, site diary/journal/events	A	
G4 - Monitoring and Records, Maintenance and Reporting - Reporting and notification to Natural Resources Wales	X	

KEY: See Section 5 for breach categories, suspended scores will be indicated as such.
A = Assessed or assessed in part (no evidence of non-compliance), **X** = Action only,
O = Ongoing non-compliance, not scored.

Number of breaches recorded	**3**	**Total compliance score** (see section 5 for scoring scheme)	8.1

If the Number of breaches recorded is greater than zero, please see Section 3 for our proposed enforcement response

Section 2 – Compliance Assessment Report Detail

This section contains a report of our findings and will usually include information on:

- The part(s) of the permit that were assessed (eg. Maintenance, training, combustion plant, etc)
- Where the type of assessment was 'Data Review' details of the report/results triggering the assessment
- Any non-compliances identified
- Any non-compliances with directly applicable legislation
- Details of any multiple non-compliances
- Information on the compliance score accrued inc.
- Details of advice given
- Any other areas of concern
- Any actions requested
- Any examples of good practice
- A reference to photos taken

Purpose of visit/assessment

Condition 3.1.2 of Tata Steel's permit requires that the limits given in Schedule 3 of the permit (point source emissions) shall not be exceeded.

Section 4 of Tata Steel's permit contains several conditions in respect of notifications, including notifying breaches of permit conditions and/or emission limits to the regulator.

Schedule 5 of the permit outlines the information that the operator must provide when notifying the regulator and is divided into Part A and Part B. The schedule provides a framework/template for informing and/or notifying NRW in accordance with the requirements of permit condition 4.3.1.

The following operator notifications have been received concerning breaches/exceedances, incidents or accidents which occurred or were notified to us during **Quarter 4 2019** (1 October – 31 December):

QUARTER 4 (October - December) 2019										
Notification reference	Date of event	Date of notification	Emission point	Parameter	Source	Emission limit (including unit)	Reference period	Monitoring frequency	Reported result(s)	Measurement uncertainty
S5N/19/45	02-Oct-19	03-Oct-19	A4A	N/A	BF4 Bleeder Valves	No limit applies	N/A	N/A	(see below)	N/A
S5N/19/47	02-Oct-19	03-Oct-19	A5A	N/A	BF5 Bleeder Valves	No limit applies	N/A	N/A	(see below)	N/A
S5N/19/48	22-Oct-19	23-Oct-19	A16	Particulate Matter	BOS Secondary FEP South	15.00mg/m3	Daily mean	Continuous measurement	23.73mg/m3	+/- 30%
S5N/19/49	31-Oct-19	06-Nov-19	A1	Particulate Matter	Sinter Plant Main Stack	40.00mg/m3	Daily mean	Continuous measurement	(see below)	+/- 30%
S5N/19/50	24-Nov-19	25-Nov-19	A2	Particulate Matter	Sinter Plant Secondary De-Dust	50.00mg/m3	Daily mean	Continuous measurement	51.91mg/m3 62.60mg/m3	+/- 30%
S5N/19/51	24-Nov-19	25-Nov-19	A16	Particulate Matter	BOS Secondary FEP South	15.00mg/m3	Daily mean	Continuous measurement	17.33mg/m3 15.68mg/m3	+/- 30%
S5N/19/52	20-Nov-19	25-Nov-19	A55	Visible Smoke (obscuration)	Morfa Main Stack	Ringelmann 1 (20% obscuration taking into account 95% CI)	Weekly mean	30mins in any day	25.62%	Not defined; inherent uncertainty
S5N/19/53	26-Nov-19	27-Nov-19	A2	Particulate Matter	Sinter Plant Secondary De-Dust	50.00mg/m3	Daily mean	Continuous measurement	56.39mg/m3 54.61mg/m3	+/- 30%
S5N/19/54	28-Nov-19	29-Nov-19	A1	Particulate Matter	Sinter Plant Main Stack	40.00mg/m3	Daily mean	Continuous measurement	(see below)	+/- 30%
UR/19/55	30-Dec-19	09-Dec-19	(BF5)	N/A	BF5 Gas Cleaning System	No limit applies	N/A	N/A	(see below)	N/A
S5N/19/56	07-Dec-19	09-Dec-19	A55	Visible Smoke (obscuration)	Morfa Main Stack	Ringelmann 1 (20% obscuration taking into account 95% CI)	Weekly mean	30mins in any day	25.35%	Not defined; inherent uncertainty
S5N/19/57	30-Nov-19	11-Dec-19	A1	Particulate Matter	Sinter Plant Main Stack	40.00mg/m3	Daily mean	Continuous measurement	(see below)	+/- 30%
UR/19/58	09-May-19	12-Dec-19	(BF5)	N/A	BF5 Gas Cleaning System	No limit applies	N/A	N/A	(see below)	N/A
S5N/19/59	14-Dec-19	16-Dec-19	A55	Visible Smoke (obscuration)	Morfa Main Stack	Ringelmann 1 (20% obscuration taking into account 95% CI)	Weekly mean	30mins in any day	33.85%	Not defined; inherent uncertainty
UR/19/60	12-Dec-19	20-Dec-19	(BF5)	N/A	BF5 Gas Cleaning System	No limit applies	N/A	N/A	(see below)	N/A
S5N/19/61	29-Dec-19	07-Jan-20	A2	Particulate Matter	Sinter Plant Secondary De-Dust	50.00mg/m3	Daily mean	Continuous measurement	57.46mg/m3	+/- 30%
S5N/19/62	31-Dec-19	07-Jan-20	A1	Particulate Matter	Sinter Plant Main Stack	40.00mg/m3	Daily mean	Continuous measurement	(see below)	+/- 30%

Compliance assessment

A1: SINTER PLANT MAIN STACK

S5N/19/49: Schedule 5 Part A received 06/11/19 (by email)

Multiple notifiable breaches of the permitted limit for particulates in October 2019

S5N/19/54: Schedule 5 Part A received 29/11/19 (by email) *

Daily mean (average) for particulates recorded at emission point A1:

28/11/2019: 85.35mg/m3

S5N/19/57: Schedule 5 Part A received 11/12/19 (by email)

Multiple notifiable breaches of the permitted limit for particulates in November 2019

S5N/19/62: Schedule 5 Part A received 07/01/20 (by email)

Multiple notifiable breaches of the permitted limit for particulates in December 2019

A1: Sinter plant main stack

Permitted emission limit value (ELV) is 40.00mg/m3 as a daily mean (+/- 30%)

Schedule 5 Part A operator comment:

Reg 61 in place. Ongoing Maintenance.

Schedule 5 Part B operator comment:

As a result of the Regulation 61 being served on Tata Steel a comprehensive project has been put in place and regular meetings are held with the NRW providing a detailed update on progress to plan.

Please see a copy of the plan attached to this notification covering 2019 Q4 (October, November, December 2019)

Description	% Complete	Comments
1. Reduction of Air Ingress		
Wind main repairs and replacement of 18m section	100%	18m section installation May 2019. Ongoing plan for replacement of wind main sections developed for coming years.
Windmain Double Cone Valves replacements	100%	Ongoing change every 4 weeks
ESP Hopper Conveyor repair / sealing	100%	Ongoing inspection & maintenance within works area and managed by SAP (inspection routes and planned maintenance tasks during planned shutdowns).
North & South ESP Structural Repairs	100%	Structural repairs carried out and completed. Future work as required
ESP North & South Hopper Door Sealing	100%	New doors fitted on South precip and upper section of North precip. Lower doors on North repaired. Door mechanisms checked every 4 week cycle. Maintenance of door seals included within shutdown scope of work. Ongoing inspection & maintenance managed by SAP.
North Field Repair	100%	Repairs carried out and completed. Ongoing work as required.
2. Improved Instrumentation and ESP Control Optimisation		
Installation of new CEMS instrumentation into North and South ESP ducting systems, (Inlet and Outlet)	100%	Monitors installed. Indicative results available.
North and South ESP Control Optimisation	100%	Optimisation complete, including power down rapping of fields 1 - 3 North & South ESP. Quarterly Maintenance Schedule Ongoing maintenance managed within works area team via SAP.
3. Waste Gas System Maintenance Strategy		
Double Dome Valve Improved Maintenance Strategy Implementation	100%	Completed Sept 2019. Daily management & maintenance strategy ongoing and managed by works area using SAP. Planned maintenance outages every 4 weeks for 18hrs. Further improvement action identified and underway - Feasibility of installing trace heating on and around double dome valves being investigated
North and South ESP Improved Maintenance Strategy Implementation	100%	Next quarterly maintenance scheduled for Jan 2020, ongoing maintenance strategy managed by works area using SAP. Options of full plant outage vs 2 x single fan periods to be reviewed in conjunction with timescales/costs associated with installation of positive isolation facilities (tenders submitted for same).

4. Reduction of the Chloride Content of the Sinter Feed Material		
Treatment of Sinter Plant ESP dusts and Blast Furnace flue dusts - trial 1	100%	Trial completed report complete
- small scale trial to evaluate the processes and performance, provide specifications and design for further trials	100%	Extended trial completed over 8 weeks started Sept and completed week 44. Detailed report to follow.
Treatment of Sinter Plant ESP dusts and Blast Furnace flue dusts - trial 2	80%	Trial started 23rd Aug 2019, for 2 months, Trial report being written and final samples due to be taken.
5. Subject to outcomes of trial and feasibility study: Full Scale Plant CAPEX Scheme		
Definiton	80%	Work ongoing to develop CAPEX submission for full washing plant to manage ESP abd BFFD arisings. Potential for weathering BFFD and ESP Dust being investigated.
Full Scale Plant CAPEX Submission and approval		Due by 31/03/2020
Implementation of project		
Commissioning and optimisation		
Implementation of scheme and preparation of materials		
6. Compliance With Emission Limit Value		
In the event that the Revert Washing scheme is not viable, alternative options to include fabric bag filter systems will be evaluated, an option selected, developed and installed.		Working with [redacted] to investigate bypass bag filter and end of line solutions.

S5N/19/54: The Sinter Plant had an extended stop on the 27th November. The plant restarted with high waste gas levels after the extended stop. Several issues caused the plant to have an unsettled start-up process with numerous stop / start operations. There were issues with the water at the mixer as well which contributed to high levels though this was rectified by switching pumps. Also, it took some time for the ore bunkers to increase in level and give stable operations. The decision was taken to bring the plant off and rectify the issues identified.

NRW has agreed to accept a monthly written Schedule 5 notification from Tata in the event of continued breaches of the particulate daily mean ELV at A1.

* **S5N/19/54** was notified within 24hrs of detection as per the agreed procedure for breaches greater than twice the permitted emission limit.

After applying the appropriate measurement uncertainty factor, the following exceedance recorded at A1 and notified within **S5N/19/49** remains non-compliant with the permitted limit and Condition 3.1.2:

02/10/2019: 61.95mg/m3

One CCS Category 3 score has been recorded in response to this non-compliance.

We have assessed and consolidated all subsequent notified exceedances of this emission limit during Quarter 4 2019 under a single CCS3 score for **S5N/19/49** confirmed above, in line with our Compliance Classification Scheme [CCS]. The consolidated notifications are listed below:

S5N/19/54 received on 29/11/19

S5N/19/57 received on 11/12/19

S5N/19/62 received on 07/01/20

Sinter Plant improvement plan

Tata Steel has submitted an improvement plan in response to an EPR Regulation 61 (Statutory) Information Notice issued by NRW. This plan outlines the steps Tata Steel will take to achieve compliance with the relevant ELV for particulates at emission point A1. NRW can suspend CCS scores while an operator is working towards compliance (see Principle 5 and Annex 4 of our Compliance Classification Scheme [CCS] (version 3, 26 March 2013).

Previously we agreed to suspend compliance scores for particulates ELV breaches at emission point A1 - see **CAR_NRW0033268**, **CAR_NRW0034618** & **CAR_NRW0034619**.

CCS scores can only be suspended for a maximum of six months; after this time, NRW will recommence active scoring to reflect our ongoing regulatory effort at the site (CCS Principle 5). This approach has been followed in respect of the permit breaches identified during Quarter 4 2019.

Whilst NRW must recommence active CCS scoring in response to identified ELV breaches at A1, it is also recognised that Tata Steel has improved the overall environmental performance of the sinter plant main stack abatement systems and continues to work towards sustainable compliance in accordance with its agreed improvement plan.

Should we find that progress towards compliance falters, stagnates or regresses we will review our regulatory approach to ensure Tata Steel takes all appropriate steps to ensure compliance with its Environmental Permit.

Compliance with this ELV has since been reviewed at regular intervals by NRW during 2019, and our assessments captured in relevant compliance assessment reports.

The **Summary and actions required** section of this report (below) also discusses Tata Steel's improvement plan.

A2: SINTER PLANT SECONDARY DE-DUST

S5N/19/50: Schedule 5 Part A received 25/11/2019 (by email)

Daily mean (average) for particulates recorded at emission point A2:

23/11/2019: 51.91mg/m3

24/11/2019: 62.60mg/m3

S5N/19/53: Schedule 5 Part A received 27/11/2019 (by email)

Daily mean (average) for particulates recorded at emission point A2:

25/11/2019: 56.39mg/m3

26/11/2019: 54.61mg/m3

S5N/19/61: Schedule 5 Part A received 07/01/2020 (by email)

Daily mean (average) for particulates recorded at emission point A2:

29/12/2019: 57.46mg/m3

A2: Sinter Plant Secondary De-dust

Permitted limit is 50.00mg/m3 as a daily mean (+/- 30%)

Schedule 5 Part A operator comment:

S5N/19/50: Issues reported with Dedust Fields 2+3. Fault finding being carried out. Planned

maintenance stop due on Wednesday 27/11/19

S5N/19/53: Issues reported with Dedust Fields 2+3. Fault finding being carried out. Planned maintenance stop due on Wednesday 27/11/19.

S5N/19/61: Investigation ongoing

Schedule 5 Part B operator comment:

S5N/19/50 & S5N/19/53: The second field in the Dedust failed and was split leading to higher emissions. All discharge end sprays were checked and optimised. Extra water was installed via temporary pipework to help improve conditioning of gas. Continuous Emissions Monitor was checked, the filter removed and cleaned but was working correctly. A stop was taken and the insulators on field 2 were cleaned and Field 2 was brought back into operation on the 27th November 2020.

S5N/19/61: Issues were identified with No.3 Field Kilo Volts (KV's). The No.3 Field was put into manual which raised the KV's on No.3. Discharge sprays were checked and found to be operational with no issues.

After applying the appropriate measurement uncertainty factor, these exceedances remain within the permitted limit of 50.00mg/m3. No non-compliance (CCS) scores have been applied to these events.

IRONMAKING

S5N/19/45: Schedule 5 Part A received 03/10/2019 (by email).

Release of particulates and blast furnace gas from No.4 Blast Furnace bleeder valves (emission point A4A)

01/10/2019 23.04hrs

02/10/2019 01.18hrs, 02.04hrs, 02.36hrs, 06.29hrs, 08.56hrs, 08.53hrs

A4A: Blast Furnace 4 bleeders

No emission limit values (ELVs) apply to emissions/releases from A4A

S5N/19/47: Schedule 5 Part A received 03/10/2019 (by email).

Release of particulates and blast furnace gas from No.5 Blast Furnace bleeder valves (emission point A5A)

02/10/2019 03.29hrs

A5A: Blast Furnace 5 bleeders

No emission limit values (ELVs) apply to emissions/releases from A5A

Schedule 5 Part A operator comment:

S5N/19/45: Gas surge resulting in numerous bleeder openings. Snort opened as per procedures.

S5N/19/47: Gas surge resulting in bleeders opening. Snort opened as per procedures.

Schedule 5 Part B operator comment:

During the nightshift and dayshift of 1st and 2nd October 2019 both Blast Furnace 4+5's process stability deteriorated resulting in the bleeders opening on several occasions. On No.4 Blast Furnace they opened at 23:04 (1st Oct), 01:18, 02:04, 02:36, 06:29 & 08:57 (2nd Oct). There was also a bleeder opening on No.5 Blast Furnace on the 2nd October at 03:29.

The Sinter Plant had been on a planned maintenance stop from the 23rd September which was due to last for 8 days. The Sinter Plant had been delayed in returning to service, so all available stock sinter had been reclaimed. The stock sinter quality deteriorated as the planned maintenance stop progressed, as all the newer / better quality sinter was reclaimed first. Furthermore, due to the exceptionally heavy rain experienced in the days leading up to the bleeder opening incidents, the direct charge yards were flooded, meaning the raw materials charged to the furnace were saturated in water.

Actions were taken to minimise the effects of the deterioration in raw material quality. Sinter percentage of the burden was reduced to control stock levels and minimise the effects of the deteriorating quality. Reclaim of pellet and lump ore was moved from the direct charge yards to Yard 4 to reduce the amount of water being sent to the furnaces. Top gas temperatures were controlled to 110°C or greater to drive off any incoming moisture.

Conclusions

1. *The Sinter plant had been on a planned maintenance stop from 23rd September which was due to last for 8 days. Unfortunately the Sinter plant was delayed in returning to service, so all available stock sinter was reclaimed. The stock sinter quality deteriorated as the planned maintenance stop progressed, as all the newer / better quality sinter is prioritised for reclaim first.*
2. *Due to the heavy rain experienced in the days leading up to the bleeder opening incidents, the direct charge yards were flooded, meaning the raw materials charged to the furnace were saturated in water.*

Recommendations

1. *Review stock sinter management and reclaim for extended sinter plant stops – Blast Furnace Senior Management Team*

Further Information

The drainage within the yards has been reviewed whereby there is now a Statutory Mandatory SAP job in place in ensuring that the drains are cleaned on a regular frequency. Extra pumps have also been deployed within the stock yard area to ensure that if in the future we have exceptionally heavy rainfall, additional mitigation measures are available if necessary.

Targeted compliance interventions are undertaken periodically by NRW to understand the root cause(s) of any notifiable blast furnace bleeder valve releases.

An additional intervention has been carried out in response to this specific period of releases from both blast furnaces, which NRW understands was attributable to a common set of factors. Our inspection report **CAR_NRW0036102** addresses this matter in more detail. A further intervention may be necessary to fully assess the root cause(s) of these releases.

UR/19/55: Schedule 5 Part A received 09/12/2019 (by email).

Unauthorised release of >500kg blast furnace gas to atmosphere from No.5 Blast Furnace

30/11/2019 07.30hrs (approx.)

UR/19/58: Schedule 5 Part A received 12/12/2019 (by email).

Unauthorised release of >500kg blast furnace gas to atmosphere from No.5 Blast Furnace

09/05/2019 13.43hrs (approx.)

UR/19/60: Schedule 5 Part A received 20/12/2019 (by email).

Unauthorised release of >500kg blast furnace gas to atmosphere from No.5 Blast Furnace

12/12/2019 08.40hrs (approx.)

These events are subject to an ongoing investigation under the Control of Major Accident Hazards (COMAH) Regulations 2015.

The COMAH Competent Authority (CA) in Wales – comprising the Health & Safety Executive (HSE) and Natural Resources Wales – is leading this investigation. Please refer to our inspection report **CAR_NRW0036222** for further details.

BASIC OXYGEN STEELMAKING (BOS) PLANT

S5N/19/48: Schedule 5 Part A received 23/10/2019 (by email).

Daily mean (average) for particulates recorded at emission point A16:

22/10/2019: 23.73mg/m3

S5N/19/51: Schedule 5 Part A received 25/11/2019 (by email).

Daily mean (average) for particulates recorded at emission point A16:

23/11/2019: 17.33mg/m3

24/11/2019: 15.68mg/m3

A16: BOS Plant Secondary FEP South

Permitted limit is 15.00mg/m3 as a daily mean (+/- 30%)

Schedule 5 Part A operator comment:

Issues being investigated. Currently maintenance being undertaken on A14 Secondary Fume Extraction North

NRW is awaiting further information (Schedule 5 Part B) from the operator in relation to these notifications. It is recognised that this may not yet be available due to an ongoing investigation. The operator should forward a Part B notification to the regulator as soon as practicable. **Action – see section 4 below**

After applying the appropriate measurement uncertainty factor, the following exceedance recorded at A1 and notified within **S5N/19/48** remains non-compliant with the permitted limit and Condition 3.1.2:

22/10/2019: 23.73mg/m3

One CCS Category 3 score has been recorded in response to this non-compliance.

We have assessed and consolidated all subsequent notified exceedances of this emission limit during Quarter 4 2019 under a single CCS3 score for **S5N/19/48** confirmed above, in line with our

Compliance Classification Scheme [CCS]. The consolidated notifications are listed below:

S5N/19/51 received on 25/11/19

COKE OVENS

S5N/19/52: Schedule 5 Part A received 25/11/2019 (by email).

Weekly mean (average) for visible smoke obscuration recorded at emission point A55:

19/11/2019: 24.43% Obscuration

20/11/2019: 32.07% Obscuration

Weekly average: 25.62%

S5N/19/56: Schedule 5 Part A received 09/12/2019 (by email).

Weekly mean (average) for visible smoke obscuration recorded at emission point A55:

05/12/2019: 27.33% Obscuration

06/12/2019: 34.26% Obscuration

07/12/2019: 36.52% Obscuration

Weekly average: 25.35%

S5N/19/59: Schedule 5 Part A received 16/12/2019 (by email).

Weekly mean (average) for visible smoke obscuration recorded at emission point A55:

08/12/2019: 43.47% Obscuration

09/12/2019: 35.77% Obscuration

10/12/2019: 29.65% Obscuration

11/12/2019: 26.93% Obscuration

12/12/2019: 27.99% Obscuration

13/12/2019: 37.32% Obscuration

14/12/2019: 35.82% Obscuration

Weekly average: 33.85%

A55: Morfa Main Stack

Permitted limit is 20% obscuration (Ringelmann 1) over a maximum of 30 minutes in any day, expressed as a weekly mean value

The Ringelmann Smoke Chart (BS 2742) is used to measure the smoke density or opacity (obscuration) of stack emissions. The method allows visual comparison of emissions against a five-step graduated chart with progressively darker shades of grey between white and black. The method has limitations in that it relies on empirical measurements, the judgement of the observer and can be influenced by variations in physical conditions e.g. weather. Therefore, there is inherent uncertainty (which is difficult to quantify) when obtaining measurements using

Ringelmann.

NRW understands that Ringelmann 1 corresponds to 20% obscuration according to the five-step scale outlined in the current published version of BS 2742 (2009).

Schedule 5 Part A operator comment:

S5N/19/52: Investigation ongoing.

S5N/19/56: Return to Blast Furnace Gas under firing as soon as reasonably practicable.

S5N/19/59: Return to Blast Furnace Gas under firing as soon as reasonably practicable.

Schedule 5 Part B operator comment:

S5N/19/52: Stack obscuration reading above 25% for a period. Issue with reading equipment, base line not resetting below 20% on both battery's. Lens cleaned and baseline reset.

S5N/19/56: Stack obscuration reading above 25% for a period.

Issues encountered while under-firing on Coke Oven Gas fuel. Investigated and partially resolved, further work required, plan to be developed to rectify issues when under-firing on COG.

During this time there were operational issues which caused the decrease of blast furnace gas.

S5N/19/59: The issues began while the Morfa coke ovens were underfiring on Coke Oven Gas Fuel. The Fuel source was then changed to Blast Furnace Gas underfiring.

During the period of COG underfiring, surveys were undertaken to identify flues that were burning in the wrong areas. These flues have then been isolated and remedial work has been planned to repair. Additionally, the wall draught settings were adjusted to increase the air to gas ratio.

We note that the weekly mean obscuration value has been included in accordance with the permit reporting requirements. This value has been used to assess compliance with the permitted limit.

The exceedance notified within **S5N/19/52** appears to be associated with a monitoring instrument issue, as described within the relevant Part B submission. This exceedance has not been scored.

The following exceedance recorded at A55 and notified within **S5N/19/56** remains non-compliant with the permitted limit and Condition 3.1.2:

Weekly average: 25.35%

One CCS Category 4 score has been recorded in response to this non-compliance.

We have assessed and consolidated all subsequent notified exceedances of this emission limit during Quarter 4 2019 under a single CCS4 score for **S5N/19/56** confirmed above, in line with our Compliance Classification Scheme [CCS]. The consolidated notifications are listed below:

S5N/19/59 received on 16/12/19

In our previous reports we highlighted that the monitoring and reporting arrangements for visible smoke obscuration at emission point A55 require clarification. Table S3.1 of the installation permit and Form Coke CEMS Smoke may also require updating to ensure this emission limit and monitoring standard is accurately and correctly reflected in the permit. A targeted compliance intervention will be arranged to address this issue initially, with any agreed changes being incorporated in a future permit variation. **Action – see section 4 below**

Summary and actions required

Permit compliance

Natural Resources Wales (NRW) has consolidated permit compliance scores within this calendar quarter where appropriate and in line with our Compliance Classification Scheme (CCS).

Our assessment of notifications received during Quarter 4 2019 has concluded **two CCS Category 3 breaches** and **one CCS Category 4 breach** of the operator's permit conditions have occurred in response to notified exceedances of permitted emission limit values (ELVs) at the following emission points:

- A1 Sinter Plant Main Stack (particulates)
- A16 BOS Plant Secondary FEP South (particulates)
- A55 Morfa Main Stack (visible smoke)

This CAR form includes a **Warning** in response to the CCS breaches identified at emission points A1, A16 and A55.

The EC Industrial Emissions Directive (IED) introduces a stricter environmental compliance regime for Tata Steel's operations at Port Talbot and reflects a wider effort to improve the environmental performance of industry across Europe. NRW has a duty to enforce these new emission limits (BAT-AELs and BAT-AEPLs) in Wales, but we remain committed to working with Tata Steel to improve the environmental performance of Port Talbot steelworks.

Emission point A1

Tata Steel currently has an agreed improvement plan in place in relation to ongoing breaches of the permitted emission limit (ELV) at A1. This plan outlines a pathway towards sustained compliance with the limit for particulates. Progress against this plan has been captured and recorded in subsequent inspection reports during 2018-19.

While this improvement plan was active, we agreed to suspend previous compliance scores for particulates ELV breaches at emission point A1 - see **CAR_NRW0033268, CAR_NRW0034618 & CAR_NRW0034619.**

CCS scores can only be suspended for a maximum of six months; after this time, NRW will recommence active scoring to reflect our ongoing regulatory effort at the site (CCS Principle 5). This approach has been followed in respect of the permit breaches identified during Quarter 4 2019, and the CCS3 score confirmed in this report.

Whilst NRW must recommence active CCS scoring in response to identified ELV breaches at A1, it is also recognised that Tata Steel has improved the overall environmental performance of the sinter plant main stack abatement systems and continues to work towards sustainable compliance in accordance with its agreed improvement plan.

Should we find that progress towards compliance falters, stagnates or regresses we will review our regulatory approach to ensure Tata Steel takes all appropriate steps to ensure compliance with its Environmental Permit.

Emission points A4A & A5A

Targeted compliance interventions are undertaken periodically by NRW to understand the root cause(s) of any notifiable blast furnace bleeder valve releases. The outcomes from these interventions are confirmed separately.

An additional intervention has been carried out in response to a specific period of releases from both blast furnaces in early October 2019, which NRW understands was attributable to a common set of factors. Our inspection report **CAR_NRW0036102** addresses this matter in more detail. A further intervention may be necessary to fully assess the root cause(s) of these releases.

Unauthorised blast furnace gas releases

Three events notified during 2019 (**UR/19/55, UR/19/58** & **UR/19/60**) are subject to an ongoing investigation under the Control of Major Accident Hazards (COMAH) Regulations 2015. The COMAH Competent Authority (CA) in Wales – comprising the Health & Safety Executive (HSE) and Natural Resources Wales – is leading this investigation. Please refer to our inspection report **CAR_NRW0036222** for further details.

Emission point A16

NRW is awaiting further information (Schedule 5 Part B) from the operator in relation to the breaches identified at this emission point. It is recognised that this may not yet be available due to an ongoing investigation. The operator should forward Part B notifications for **S5N/19/48** and **S5N/19/51** to NRW as soon as practicable. **(Action)**

Areas requiring further attention/action

In our previous reports we highlighted that the monitoring and reporting arrangements for visible smoke obscuration at emission point A55 require clarification. Table S3.1 of the installation permit and Form Coke CEMS Smoke may also require updating to ensure this emission limit and monitoring standard is accurately and correctly reflected in the permit.

A targeted compliance intervention will be arranged to address this issue initially, with any agreed changes being incorporated in a future permit variation. **(Action re-confirmed in this report with new date)**

[END OF SECTION 2]

Cyfoeth Naturiol Cymru Natural Resources Wales	**EPR Compliance Assessment Report**	**Report ID: CAR_NRW0034621**

This form will report compliance with your permit as determined by an NRW officer

Site	Port Talbot Steel Works	Permit Ref	BL7108IM
Operator/Permit holder	Tata Steel UK Limited	Date	31/12/2019

Section 3 – Enforcement Response

You must take immediate action to rectify any non-compliance and prevent repetition.
Non-compliance with your permit conditions constitutes an offence and can result in criminal prosecutions and/or suspension or revocation of a permit. Please read the detailed assessment in Section 2 and the steps you need to take in Section 4 below.

In respect of the above non-compliance you have been issued with a warning. At present we do not intend to take further enforcement action. This does not preclude us from taking additional enforcement action if further relevant information comes to light or offences continue.

Section 4 – Action(s)

This section summarises the actions identified during the assessment along with the timescales for when they will need to be completed.

Criteria Ref.	CCS Category	Action required/advised	Due Date
See Section 1 above			
G1	X	The monitoring and reporting arrangements for visible smoke obscuration at emission point A55 require clarification. Table S3.1 of the installation permit and Form Coke CEMS Smoke may also require updating to ensure this emission limit and monitoring standard is accurately and correctly reflected in the permit. (Action reconfirmed from CAR_NRW0033267)	31/03/2020
E1	C4	Bring permitted operations back into compliance with ELV. IGNORE ACTION DATE - not applicable	31/03/2020
E1	C3	Bring permitted operations back into compliance with ELV. IGNORE ACTION DATE - not applicable	31/03/2020
E1	C3	Bring permitted operations back into compliance with ELV. IGNORE ACTION DATE - not applicable	31/03/2020
G4	X	The operator should forward Part B notifications for S5N/19/48 and S5N/19/51 to NRW as soon as practicable.	31/03/2020

Section 5 – Compliance notes for the Operator

To ensure you correct actual or potential non-compliance we may

- Advise on corrective actions verbally or in writing
- Require you to take specific actions verbally or in writing
- Issue a notice
- Require you to review your procedures or management system
- Change some of the conditions of your permit
- Decide to undertake a full review of your permit

Any breach of a permit condition is an offence and we may take legal action against you

- We will normally provide advice and guidance to assist you to come back into compliance either after an offence is committed or where we consider that an offence is likely to be committed. This is without prejudice to any other enforcement response that we consider may be required.
- Enforcement action can include the issue of a formal caution, prosecution, the service of a notice and/or suspension or revocation of the permit.

See our Enforcement and Civil Sanctions guidance for further information

This report does not relieve the site operator of the responsibility to

- Ensure you comply with the conditions of the permit at all times and prevent pollution of the environment
- Ensure you comply with other legislative provisions which may apply

Non-compliance scores and categories

CCS category	Description	Score
C1	A non-compliance that could have a major environmental effect	60
C2	A non-compliance which could have a significant environmental effect	31
C3	A non-compliance which could have a minor environmental effect	4
C4	A non-compliance which has no potential environmental effect	0.1

Operational Risk Appraisal (Opra) - Compliance assessment findings may affect your Opra score and/or your charges. This score influences the resource we use to assess permit compliance.

Section 6 – General information

Data protection notice

The information on this form will be processed by the Natural Resources Wales (NRW) to fulfil its regulatory and monitoring functions and to maintain the relevant public register(s). The NRW may also use and/or disclose it in connection with:

- Offering/providing you with its literature/services relating to environmental matters
- Consulting with the public, public bodies and other organisations (eg. Health and Safety Executive, local authorities) on environmental issues
- Carrying out statistical analysis, research and development on environmental issues
- Providing public register information to enquirers
- Investigating possible breaches of environmental law
- Assessing customer service satisfaction and improving its service
- Freedom of Information Act/Environmental Regulations request

The NRW may pass it on to its agents/representatives to do these things on its behalf. You should ensure that any persons named on this form are informed of the contents of this data protection notice.

Disclosure of information

The NRW will provide a copy of this report to the public register(s). However, if you consider that any information contained in this report should not be released to the public register(s) on the grounds of commercial confidentiality, you must write to your local area office within fifteen working days of receipt of this form indicating which information it concerns and why it should not be released, giving your reasons in full.

Customer charter

What can I do if I disagree with this compliance assessment report?

If you are unable to resolve the issue with your site officer, you should firstly discuss the matter with officer's line managers using the informal appeals procedure. If you wish to raise your dispute further through our official Complaints and Commendations procedure, phone our general enquiry number 0300 065 3000 (Mon to Fri 08.00 – 18.00) and ask for the Customer Contact team or send an email to enquiries@naturalresourceswales.gov.uk. If you are still dissatisfied you can make a complaint to the Public Services Ombudsman for Wales. For advice on how to complain to the Ombudsman phone their helpline on 0845 607 0987.

Welsh Language
If you would like this form in Welsh please contact your Regulatory Officer.