

Compliance Assessment Report CAR_NRW0041707

Permit being assessed: BP3635MR.

For: Port Talbot Steel Works , held by Harsco Metals Group Ltd

At: Port Talbot Work , Port Talbot, PORT TALBOT, Neath Port Talbot, SA13 2NG.

Type of assessment carried out: Site Inspection, Reason: Routine.

On 19/04/2023 between 10:00 and 15:00.

Parts of permit assessed: Site Inspection

NRW Lead Officer: Rhodri Morgan, accompanied by Douglas Cowie.

Report sent to: Paul Roberts, Environment Health and Safety Manager on 28/04/2023.

1. Summary of our findings (full details in section 4)

Part of permitted activity assessed (criteria)	Assessment result	Permit condition
A1 - Specified by permit	Assessed (A)	
G2 - Monitoring and Records, Maintenance and Reporting - Records of activity, site diary/journal/events	Assessed (A)	

Result types are explained in more detail in the 'Important Information' section below.

Total number of non-compliances recorded	Total non-compliance score
0	0

How we use the non-compliance score to calculate your annual fee is explained in the 'Important Information' section below.

2. What action is required?

No action required.

3. What will happen next?

Any non-compliance we have identified and recorded on this form is an offence. It can result in criminal prosecution and/or suspension or revocation of your permit.

At this time, we do not intend to take any further action.

This statement does not stop us from taking additional enforcement action if further relevant information comes to light or offences continue.

4. Details of our assessment

The main purpose of the Harsco Metals Group (Harsco) activities at the Port Talbot installation are to serve the Tata Steel UK Limited (TSUK) steelworks processes (EPR/ BL7108IM).

These activities are directly associated with iron and steel production and include slag handling, metal recovery, iron plating, scrap metal management, metal cutting and lancing and waste oxide briquetting. The majority of these activities are undertaken within Harsco's ring-fenced permitted area, but some take place within shared areas of responsibility.

This site visit was planned to act as an introductory visit following the allocation of a new NRW regulatory officer.

Attendees

Harsco

Mark Hancock – Business Manager

Paul Roberts – Environment Health & Safety Manager

Paul Morgan – Environmental Health & Safety Advisor

Mark Tilling – Operations Manager

TSUK

Gareth Goss – Environmental Engineer Air Quality

Calum Hughes – Environmental Lead Air Quality

NRW

Douglas Cowie – Lead Specialist – Industry Regulation

Rhodri Morgan – Senior Officer – Industry & Waste Regulation

Site Visit

An introductory meeting was held where NRW officers were provided with a presentation of the activities which are undertaken by Harsco within their ringfenced site. Harsco's role on the Site mainly involves providing support to the BOS Plant (slag pot tipping, scrap management etc.) along with the Blast Furnaces (plating).

There are parts of Harsco's ring-fenced site which interface closely with permitted activities undertaken by Tata Steel and other steelworks contractors. These 'shared' areas are discussed in Section 1 (Management) and displayed in Schedule 7 of the installation permit.

Many of Harsco's activities involve the recovery of valuable materials which can be recovered or recycled within steelworks production activities, in keeping with Best Available Techniques (BAT) for the Iron & Steel industry sector.

Site Tour

NRW Officers were provided with a comprehensive tour of Harsco's ring-fenced area. The following locations were visited during the tour:

1. Scrap Handling Area
2. Bailer Yard
3. Stockyards
4. Slag Pits*

5. Metal Recovery (MR) Plant
6. Lancing Booth
7. Burners Yard
8. Drop Balling Enclosure*
9. Fragmentation Plant (hammer mills & shredder)
10. Plating Pits

*Access to these areas is highly restricted for health & safety reasons. The areas in question were observed from a safe distance during this inspection.

Whilst a detailed inspection was not undertaken, observations made during the site tour did not identify any apparent permit breaches. NRW officers noted some sporadic visible dust lift-off from the main haulage road near the Scrap Handling Area during the site tour. Our concerns were communicated during the visit and shortly afterwards a bowser unit was observed by the inspectors; dampening down the identified area. Water bowsers were also observed elsewhere during our tour of Harsco's permitted activities.

Scrap Handling

Harsco manage the delivery of prepared scrap metal to TSUK's Basic Oxygen Steelmaking (BOS) Plant, including the scrap acceptance checks to ensure the quality of the scrap 'heat' used in the BOS converter vessels. Loads not meeting the criteria are either downgraded in value or if required reloaded onto the vehicle and removed from site.

Scrap deliveries are tipped directly at the BOS Plant to minimise the double handling of material but on occasions may be tipped in the main stockyards. Harsco load the scrap into specific bays within the BOS Plant to meet the requirements of TSUK. Accurate and consistent management of the scrap is a vital process in ensuring TSUK can produce the required quality of Steel.

This inspection did not examine scrap management in detail, but we did observe Harsco personnel challenging a haulage contractor regarding the use of mandatory personal protective equipment.

Iron Plating

Plating pit operations were discussed including the overlapping responsibilities of both Harsco and TSUK. Harsco are responsible for the maintenance and preparation of the six iron plating pits and assist TSUK with the tipping of the torpedoes. Any incidents are investigated jointly with the lead being taken by TSUK.

Each plating pit is prepared with a layer of hot slag to remove any moisture within the base of the pit. TSUK should provide Harsco with advanced notice of plating requirements, allowing Harsco to prepare each pit accordingly.

In ideal conditions 750 tonnes of Iron (3 torpedoes) are poured into each pit and allowed to air cool before the resulting material is fragmented and removed. A typical pour (250 Tonnes) takes between 30 – 40 minutes and is dependent on the judgement of the operative who controls the rate of each pour. A smooth, controlled molten metal pour allows for any moisture remaining within the pits to evaporate before it is engulfed by the hot iron.

A management Investigation has been initiated following a series of visible emissions from plating activities in the recent months. The visible emissions have generated numerous complaints; including an event on the 4th March 2023, which was witnessed by several members of the Neath Port Talbot County Council (NPTCC) environment team.

NRW have requested a copy of the management investigation from TSUK following completion of the report.

Slag Pot Tipping

Molten slags from the iron desulphurisation and BOS (primary) steelmaking processes are moved in large pots to the slag pits which are located within Harsco's ring-fenced site.

Desulphurisation (slag) Pots

The BOS Plant generates approximately 5 Desulphurisation pots a day which are stood aside to cool for between 24 – 48 hours prior to tipping into the pits. This standing timeframe has been determined to minimise any offsite impact on air quality and neighbouring properties via kish generation. This is managed by measuring the resting time of each pot along with temperature controls. Fugitive emissions from desulphurisation slag pot activities can include fumes, dust and carbon platelets known as 'kish'.

The operator advised that there are 34 desulphurisation pots in the fleet; which are owned by TSUK but managed by Harsco. The size of the fleet provides buffer capacity and allows for tipping to be avoided during days where the fugitive dust risk is high. Harsco require permission from TSUK to tip during these situations and it is only considered when there are no further desulphurisation pots available.

BOS Slag Pots

A BOS Slag Pot is generated each time a "heat" is undertaken within the BOS Plant; approximately every 45 minutes when the BOS Plant is running at full capacity. Approximately 40 tonnes of slag are generated during each "heat" which is poured into one of seven specially designed pots which make up the BOS Slag Pot fleet. The pots are carefully maintained to minimise damage and sustain their service life.

The BOS Slag Pots require immediate tipping to prevent damage to the inner surface of the pots. There are four designated pits for the tipping of the BOS Slag which require preparation with hot slag to drive off moisture before tipping. Approximately 20 pots are poured into each pit before the area is left to cool with the assistance of a water suppression system. The pits are used in rotation so that different slag pot handling activities can take place concurrently.

A small amount of residue is left within each pot after each use which requires removal after 3 – 4 "heats". The pots are knocked to remove the residual material before being prepared with hot slag to prevent any bonding to the internal surface. The preparation of the pots can lead to fugitive dust emissions; the operator is investigating potential abatements solutions to reduce or eliminate the emissions. NRW will review the procedures for the preparation of the slag pots in future visits.

Air Quality Management Plan (AQMP)

A brief discussion was held regarding Harsco's AQMP (V12) with Harsco explaining the procedures which are followed in response to air quality alerts. Whilst a detailed examination of the AQMP was not undertaken, it was clear that Harsco understood their responsibilities. Suitable resources are provided to enable its effective implementation, and to participate in any necessary stakeholder conversations regarding local air quality.

The AQMP is reviewed on an annual basis by TSUK with the assistance of Harsco. Both parties are exploring the installation of an additional air quality monitor (TSP and PM100) in the vicinity of the BOS Plant. The new monitor would allow for localised air quality warnings from emissions potentially arising from the Harsco ringfenced site.

Slag Pit Incident – 15/04/2023

Paul Roberts informed NRW officers of an incident which occurred on the 15th April 2023 which resulted in emissions to the atmosphere. A section of rubber from a conveyor belt entered the slag pits during the dressing of the pits and subsequently ignited.

The fire was immediately extinguished via the activation of the slag pit watering system but not before a visual emission was reported offsite by TSUK employees. No complaints were received via the NRW Incident Hotline or the TSUK Community Support Hotline.

Officers were provided with a copy of the "Harsco Port Talbot Weekly EHS Damage Report" which detailed the incident, along with the steps which were taken and learning opportunities. NRW welcomed the speed at which the incident was investigated and the learning points which have been adopted by the operator to prevent the incident from reoccurring.

No apparent permit breaches were identified during the discussion of the incident and subsequent review of the incident investigation. On this occasion and considering the circumstances of the incident, we do not believe it is necessary to formally notify the regulator under conditions 4.3.1(a) and 4.3.2 using the template in Schedule 5 of Harsco's installation permit.

If you have any queries about this report, or to discuss completion of any actions, please contact the NRW Officer named above.

Important information

Legal status of this report

Your permit is issued to you under the Environmental Permitting Regulations. You have a responsibility to comply with the conditions of your permit and prevent pollution/harm of the environment. You must also ensure that you comply with any other relevant legislation that may apply to your site's operations.

This report explains the findings of our assessment and any action you are required to take. We categorise non-compliance using our guidance for assessing non-compliance at regulated sites.

When we find potential non-compliance/s we will normally give you advice on how to maintain compliance.

To correct non-compliance, we may:

- require you to take specific actions
- issue a notice
- review the conditions of your permit.

Any advice and guidance we give will be without prejudice to any other enforcement response that we consider may be required.

Assessment results and non-compliance categories (used in section 1):

Assessment result	Description
Assessed (A)	Assessed or assessed in part, no evidence of non-compliance found
Action only (X)	Action only relating to the activity assessment
Ongoing (O)	Ongoing non-compliance, not scored

Non-compliance category	Description	Score
C1 Major	Potential to have a major, serious, persistent and/or extensive impact or effect on the environment, people and/or property	60
C2 Significant	Potential to have a significant impact or effect on the environment, people and/or property	31
C3 Minor	Potential to have a minor or minimal impact or effect on the environment, people and/or property	4
C4 No environmental impact	Non-compliance at a regulated site that cannot foreseeably have any impact on the environment, people and/or property	0.1

How we use assessment scores

The number and severity of non-compliances recorded in a year will affect your annual subsistence fee the following year. A non-compliance factor is added to your site's Operator

Performance Risk Appraisal (OPRA) score when we calculate your fee to reflect the additional resource we use to assess permit compliance.

What are suspended scores?

In line with our guidance, we may suspend scores for up to six months to allow time for remedial action to be taken. Suspended scores will be re-instated if the action is not completed.

Full list of Industry and Waste action criteria (used in section 1 and 2):

A: Permitted activities

- A1 Specified by permit

B: Infrastructure

- B1 Infrastructure – Engineering for prevention and control of emissions
- B2 Infrastructure – Closure and decommissioning
- B3 Infrastructure – Site drainage engineering (clean and foul)
- B4 Infrastructure – Containment of stored materials
- B5 Infrastructure – Plant and equipment

C: General management

- C1 General management – Staff competency/training
- C2 General management – Management system and operating procedures
- C3 General management – Materials acceptance
- C4 General management – Storage, handling, labelling and segregation

D: Incident management

- D1 Incident management – Site security
- D2 Incident management – Accidents, emergency and incident planning

E: Emissions

- E1 Emissions – Air
- E2 Emissions – Land and groundwater
- E3 Emissions – Surface water
- E4 Emissions – Sewer
- E5 Emissions – Waste

F: Amenity

- F1 Amenity – Odour
- F2 Amenity – Noise
- F3 Amenity – Dust/fibres/particulates and litter
- F4 Amenity – Pests/birds and scavengers
- F5 Amenity – Deposits on road

G: Monitoring and records, maintenance and reporting

- G1 Monitoring and records, maintenance and reporting – Monitoring of emissions and environment
- G2 Monitoring and records, maintenance and reporting – Records of activity, site diary/journal/events
- G3 Monitoring and records, maintenance and reporting – Maintenance records
- G4 Monitoring and records, maintenance and reporting – Reporting and notification to Natural Resources Wales

H: Resources efficiency

- H1 Resource efficiency – Efficient use of raw materials
- H2 Resource efficiency – Energy efficiency

Enforcement response

Any permit condition non-compliance is an offence and we may take legal action against you. Action we take can include prosecution, serving a notice on you and/or suspension or revocation of your permit. See our Enforcement and Sanctions Guidance for further information.

Data protection notice

You should make sure that anyone named in this report knows that the information it contains will be processed by Natural Resources Wales to fulfil its regulatory and monitoring functions and to maintain the relevant public register(s).

We may also use and/or disclose the report in connection with:

- offering or providing you with our literature or services relating to environmental matters
- consulting with the public, public bodies and other organisations (e.g. 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 our service
- Freedom of Information Act or Environmental Information Regulations requests.

We may also pass it on to our agents or representatives to do these things on our behalf.

Disclosure of information – this report will be available to view on-line

If you think this report contains commercially confidential information that should not be placed on our public register, you must contact your local Natural Resources Wales office within **fifteen working days** of receiving this report, using the contact details in the accompanying email or letter. You must give a full explanation of why it should not be added to our public register, including specifying which information is commercially confidential. We will assess your request and respond to you within 20 working days to let you know if we agree to your request.

What do I do if I disagree with the report or have a complaint?

If you disagree with this compliance assessment report, you should contact the lead officer without delay to discuss your concerns.

If you are unable to resolve the issue with the lead officer or their line manager you should contact our Customer Contact team on 0300 065 3000 (Monday to Friday 08:00 – 18:00), or email enquiries@naturalresourceswales.gov.uk for details of how to raise your dispute further through our Complaints and Commendations procedure.

If you are dissatisfied with our response, you can contact the Public Services Ombudsman for Wales by phone on 0300 7900203 or by email at ask@ombudsman.wales

Welsh Language Standards

We are committed to establishing Natural Resources Wales as a naturally bilingual organisation. We will provide compliance reports in your preferred language.