

Compliance Assessment Report CAR_NRW0042219

Permit being assessed: BT4885IT.

For: Shotton Paper Mill EPR/BT4885IT, **held by:** Shotton Mill Limited

At: WEIGHBRIDGE ROAD SHOTTON , DEESIDE, DEESIDE, CLWYD, CH5 2LL.

Type of assessment: Audit,

Reason: Routine.

On: 10/07/2023 between 10:00 and 15:30.

Parts of permit assessed: Various.

NRW Lead Officer: Stuart Ross, accompanied by Ross Briscoe.

Report sent to: Jamie Hill, Project Manager, on 24/08/2023.

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

Part of permitted activity assessed (compliance criteria)	Assessment result	Permit condition
IR2C - Operations - Operating techniques	C3 Minor	2.3.11
IR1A - Management - General management	C3 Minor	1.1.1(b)
IR1A - Management - General management	C3 Minor	1.1.3
IR1A - Management - General management	C3 Minor	1.1.1(a)
IR4B - Information - Reporting	C3 Minor	4.2.5
IR1A - Management - General management	C3 Minor	1.1.1(a)
IR3B - Emissions and monitoring - Emissions of substances not controlled by emission limits	Action only (X)	

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

Total non-compliances recorded	Total non-compliance score
6	24

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?

Criteria	Action needed	Complete by
IR2C	Refer Details Section	29/09/2023

Criteria	Action needed	Complete by
IR1A	Refer Details Section	29/09/2023
IR1A	Refer Details Section	29/09/2023
IR1A	Refer Details Section	29/09/2023
IR4B	Refer Details Section	29/09/2023
IR1A	Refer Details Section	29/09/2023
IR3B	Refer Details Section	29/09/2023

Compliance criteria codes are listed in the 'Important information' section below.

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.

You are non-compliant with your permit.

At this time, we are issuing you with a warning for the non-compliance recorded above. Warnings may influence future enforcement response for continued or further non-compliance.

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

Shotton Paper Mill - Boiler 7 Waste Audit

This Compliance Assessment Report follows an audit of permit conditions relevant to waste inputs and outputs from Boiler 7 at Shotton Paper Mill.

1. Overview

Boiler 7 currently burns a mix of waste wood, imported de inked paper pulp sludge and forestry residues but is also permitted to burn other waste materials. The onsite pre-processing of waste wood consists of its shredding and the removal of tramp metal (e.g. metal fixings). This gives rise to a number of waste streams including ferrous and non-ferrous metals and other material that is not fit for introduction into the boiler (hammer mill rejects) that require off site disposal.

Post combustion, Boiler 7 gives rise to Incinerator Bottom Ash (IBA) and Air Pollution Control Residues (Fly ash) that are sent off site for recovery or disposal.

Shotton Paper Mill Ltd contract Tilhill to source, receive and prepare wood waste for Boiler 7, including the operation of the wood yard. Two Tilhill employees are present on site, in addition to four Thompsons employees who are contracted to operate the associated wood yard plant and machinery.

ADT are contracted to remove residues from the wood yard, including ferrous and non-ferrous metals. Off site transfers of hazardous waste residues from Boiler 7 are managed by Shotton Mill Ltd.

2. Wood Yard Operations

Waste Receipt, Storage and Processing

Waste wood is delivered to site by a number of waste carriers and deposited on the wood yard that benefits from concrete hardstanding. The driver of each delivery is required to report in at the wood yard site office before depositing the load. The loading shovel operator is reportedly responsible for checking the load matches the description on the waste transfer note although the exact process/procedure was not assessed during the audit.

The unprocessed wood stockpile to the west of the yard was inspected. Broadly speaking the wood consisted of mixed waste wood from construction and demolition activities, municipal waste wood and waste wood from the mechanical treatment of waste at waste management facilities. Stored separately to the east of the yard was a stockpile of de-inked paper sludge and a stockpile of forest residues. Processed (chipped) wood was stored on the yard in large stockpiles, centrally and to the east.

Some wood that is not currently permitted was present in the mixed wood pile, including what appeared to be a treated timber akin to a railway sleeper and at least two sections of telegraph pole. These items of hazardous waste wood are not covered by NRW's Regulatory Decision RD46.6 and should not be present on site.

There is no quarantine area on site for waste that cannot be accepted.

Permit condition 2.3.11(a) requires that *'waste shall only be accepted if its of a type and quantity listed in schedule 2 tables S2.2, S2.3, S2.4 and S2.5'*

The acceptance of hazardous waste that is not permitted by the permit is a breach of permit condition 2.3.11 and attracts a non-compliance score of C3.

Action 1 – Review and amend waste acceptance procedures to prevent the acceptance of unauthorised waste (including hazardous waste wood not permitted under RD46.6) and where that is not possible the quarantine of such wastes prior to their removal from the installation. Train staff accordingly. Please do so by 29/09/23.

An operative from Tilhill present in the Wood Yard office reported that he did not have access to the Operator's Environmental Permit, procedures relating to fire prevention nor had he received any associated training.

Permit condition 1.1.1 (b) requires that (in summary) that the operator shall manage and operate the activities using sufficient competent persons and resources. NRW considers that this permit condition has been breached and this attracts a non-compliance score of C3.

Please refer to Action 10 in section 5 below.

Permit condition 1.1.3 requires that *'Any person having duties that are or may be affected by the matters set out in this permit shall have convenient access to a copy of it kept at or near the place where those duties are carried out'*.

NRW considers that this permit condition has been breached and this attracts a non-compliance score of C3.

Action 2 – Ensure the requirements of permit condition 1.1.3 are met by 29/09/23.

The Tillhill Operations Manager was present and reported that he had access to the permit and fire prevention procedures, but these were on a laptop in the car. The Operations Manager is not always present on site.

Waste transfer notes for incoming waste streams are kept by Tilhill. The Operator does not have

direct access to these but can obtain records if required.

Fire Prevention

Significant quantities of waste wood and processed waste wood (chipped for Boiler 7), forest residues and de-inked paper pulp sludge were present on site.

The Operator reported that Boiler 7 had only recently gone back online following a planned outage and this had led to the wood yard containing more waste and processed wood than normal.

Following the audit the Operator supplied a copy of the site's fire 'Wood Processing Plant Fire Prevention Plan' Revision 2.

The document requires that biomass is '*Stored in 2 separate piles each [measuring] 40 x 50 x 3 total volume 2,400m³ giving site maximum storage volume of 4,800 m³*'.

During the inspection a single stockpile of chipped (processed) waste wood, with no firebreaks was observed that measured approximately 100 x 40 x 6 metres, significantly exceeding the procedural requirement. This raised concern as to the potential increased fire risk and associated environmental impacts.

Failure to follow procedures is a breach of permit condition 1.1.1(a) and attracts a non-compliance score of C3.

Action 3 - Comply with the requirements of your fire prevention plan. Ensure staff are trained accordingly. Please do so by 29/09/23.

Recommendation 1 - The fire prevention plan should be reviewed against NRW [Guidance Note 16](#), 'Fire Prevention & Mitigation Plan Guidance – Waste Management'. This guidance is considered best practice / BAT.

N.B NRW intends to review fire prevention and mitigation measures in more detail as part of a separate audit.

Fugitive Dust

During the inspection several incoming loads of shredded wood were tipped onto the wood yard via the use of walking floor trailers. Clouds of dust were clearly evident and were carried on the wind. The weather was wet during the inspection and the adjacent misting cannon was not operational.

It was also noted that a significant amount of wood dust was present on the concrete hardstanding area close to the waste wood processing plant. Due to the wet weather on the day of the inspection this was forming a sludge like material that was several centimetres deep in places. During dry weather this could lead to wind-blown fugitive dust emissions.

Action 4 - Review the dust management plan and ensure appropriate measures are in place for the prevention and minimisation of fugitive dust emissions from wood yard operations. Remove spilt dust from the yard surface. Please do so by 29/09/23.

3. Boiler 7 Residues & Hazardous Waste Consignment

IBA and fly ash are both subject to quarterly sampling as required by the permit and are classified as hazardous waste. Sampling procedures are in place for this, and samples are sent to a UKAS accredited laboratory for analysis.

Shotton Mill Ltd is a registered hazardous waste producer.

Two types of fly ash are produced with different size fractions and are consigned as hazardous waste to concrete block and cement manufacture. IBA is sent to hazardous waste landfill. Landfill Waste

Acceptance Criteria (WAC testing) and WM3 assessments were not assessed during this audit.

The 2021 and 2022 annual reports state that 6360 and 1291 tonnes of fly ash were sent to 'non waste recycled outlets' for use in the 'block industry' in England. The operator reported that this material is not transferred off site under a hazardous waste consignment note or waste transfer note.

At face value, NRW would consider that this material should be transferred under a hazardous waste consignment note and the site receiving the material must be suitably permitted to receive it. This may constitute a breach of permit and Hazardous Waste Regulations.

Action 5 - Provide NRW with an explanation as to why fly ash is being transferred off site without the benefit of a hazardous waste consignment, providing evidence as to its end of waste status. Please do so by 29/09/23.

Hazardous Waste consignment notes are completed and signed by the operator's security contractor who do not have any written procedures in place for this activity, nor have they received any training. Failure to consign hazardous waste with a suitable consignment note is a breach of the Hazardous Waste Regulations.

A number of consignment notes were reviewed, and some issues were identified with absent and/or incorrect information.

Examples include.

1. Consignment Note Code CAU401/CM 0040, section A3 – full address not used, Section B3 - inaccurate quantities '<30t' and details not aligned under container type column, Section C time missing.
2. Consignment Note Code CAU401/H, section A1 – not an appropriate consignment note code, section B3 - inaccurate quantities '<30t', section C time missing. Section D – consignor name illegible, date and time missing.
3. Consignment Note Code CAU401/CM 048, section B3 - inaccurate quantities '<30t' and details not aligned under container type column, section C time missing, Section D1 – consignor name missing
4. Consignment Note Code CAU401/CM 0042, section A3 missing, Section B3 - inaccurate quantities '<30t' and details not aligned under container type column, section D1 – consignor name missing

Action 6 – Implement a hazardous waste consignment procedure and ensure staff are suitably trained. Please do so by 29/09/23.

During the audit it was observed that ferrous metal separated from IBA was being discharged into a skip that contained a significant quantity of what the Operator believed to be sand. It is not known if this was used sand from the fluidised bed or a surplus virgin material following the recent shut down.

The waste streams should not be mixed as this may lead to waste classification issues and does not facilitate the application of the waste hierarchy.

4. Reporting - Waste Returns

Permit condition 4.2.5 requires the quarterly submission of information relating to the waste accepted and removed from the site during the previous quarter.

Prior to the audit, NRW had reviewed previously submitted data which identified a number of apparent discrepancies.

Prior to permit transfer to Shotton Mill Ltd, waste wood was all being coded in as EWC 19 12 07 (Waste from mechanical treatment of wastes (for example sorting, crushing, compacting, pelletising) not otherwise specified) wood other than that mentioned in 19 12 06. Following the permit transfer this then changed to 17 02 01 (Construction and demolition wastes - wood).

It was evident from reviewing transfer notes on site and from reviewing NRW waste return data that a mixture of waste codes are being received onto site and should be logged according to the code recorded upon the Waste Transfer Note. At no stage must the assigned waste code be changed when the incoming waste is being recorded on onsite documentation.

It is assumed that the following waste codes are most likely to be utilised for incoming waste wood

19 12 07 (Waste from mechanical treatment of wastes (for example sorting, crushing, compacting, pelletising) not otherwise specified) wood other than that mentioned in 19 12 06

17 02 01 (Construction and demolition wastes - wood)

20 01 38 Wood other than that mentioned in 20 01 37

Therefore, these codes should then be used through the reporting processes and upon the submission of data to NRW with the appropriate quantities allocated to each.

During the audit a selection of waste transfer notes for waste wood received on site that day were reviewed. Each incoming load is logged onto a Tilhill waste tracking programme 'RMPMS', not necessarily on receipt but based on anticipated/planned deliveries.

It became apparent that, in some circumstances, the waste tracking programme is automatically assigning a different EWC code to the waste to that assigned by the waste producer. This data is then used for waste returns and therefore the returns are not accurate.

No written procedures are in place for compiling and reporting waste return data to NRW. The RMPMS system has been developed and operated in a manner that does not result in accurate waste return reporting.

This is a breach of permit condition 4.2.5 and 1.1.1(a) and this attracts a non compliance score of C3.

Action 7 - Develop and implement a procedure for the accurate collation and reporting of the waste accepted and removed from the installation as required by permit condition 4.2.5. Ensure staff are suitably trained. Please do so by 29/09/23.

Action 8 - Ensure the waste return submitted for the period April - June 2023 (and all returns thereafter) accurately reflects the waste accepted and removed from the installation.

During the audit it was noted that the quality of many of the waste transfer notes provided by waste producers was poor and did not meet the required standard.

Permit condition 2.3.11(b) requires that *'waste shall only be accepted if it conforms to the description in the documentation supplied by the producer and holder'*, therefore it is important that Shotton Mill Ltd is furnished with suitably completed waste transfer notes to ensure it does not breach this permit requirement.

Action 9 - For the purposes of ensuring compliance with permit condition 2.3.11(b), review waste transfer notes upon receipt of waste at the installation and reject loads that are not accompanied by a suitable waste transfer note.

5. Environmental Management Systems

It is ultimately the responsibility of Shotton Mill Ltd to implement and maintain a suitable

Environmental Management System to ensure the requirements of the environmental permit are met. The use of contractors to provide services at the installation is acceptable, but the responsibility for permit compliance cannot be delegated.

As per comments in other sections of this report, the audit identified a lack of procedure and training in several areas and it appears that Shotton Mill Ltd lacks sufficient control and oversight of its contractors.

There is no internal auditing of waste contractors to ensure they are following procedures.

In addition to the specific actions listed in this report, Shotton Mill Ltd need to take steps to ensure the management system robustly controls all waste activities to ensure compliance with the requirements of the permit and other relevant legislation. In addition, Shotton Mill Ltd need to ensure that its staff and contractors are suitably trained and are subject to adequate management oversight and periodic internal audit.

Action 10 - Complete a comprehensive review of the site's Environmental Management System with respect the management of the installations waste activities (and contractors) to ensure the requirements of the permit are met.

A summary of the review findings and actions taken shall be submitted to NRW by 31/10/23.

Note. Potential breaches of the Hazardous Waste Regulations may also have occurred with reference to the off site transfer of fly ash without the benefit of a hazardous waste consignment note - this will be reviewed following a review of information requested in this report.

6. Waste Wood Classification

As discussed on site during the audit, the classification of waste wood remains an ongoing issue across the sector.

Over recent years, the Wood Recyclers Association have led (on behalf of the wider UK waste wood industry) a project focussing upon the classification of waste wood. The aims of the project being to ensure that waste wood is properly classified at its origin, waste wood is not mis described and is processed into appropriate end uses and that there is a clear understanding of which items of waste wood are hazardous.

The UK environmental regulators have been involved within this project and to support the work being undertaken, provided a relaxation of the regulatory requirements relating to the classification.

Within Wales this relaxation was and still is provided by our Regulatory Decision 46.6. In summary, this Regulatory Decision allows mixed waste wood from Household Waste Recycling Centres and construction and demolition sites, which do not contain specified items, to be managed using specific non-hazardous waste codes provided that the wood is destined for an Industrial Emissions Directive (IED) Chapter IV compliant permitted incinerator or co-incinerator or for the manufacture of engineered or composite board.

Within England the Environment Agency provided a similar relaxation by their Regulatory Position Statement RPS 250.

Following the work undertaken by the project and the findings to date, the Environment Agency have confirmed that they will now be withdrawing their RPS at the end of August 2023.

This means that appropriate classification and coding of waste wood will need to take place in line with regulatory requirements (WM3).

Given that a significant volume of waste wood is accepted at Shotton Paper Mill which originates from England and Shotton Mill Ltd are not currently permitted to receive, treat or burn hazardous waste wood, once the RPS is withdrawn, Shotton Mill Ltd will need to ensure robust checks are in place to prevent hazardous waste wood being accepted at the site.

Should Shotton Mill Ltd wish accept hazardous waste wood a substantial variation for the incineration of hazardous waste will be required to the current permit. This may potentially be incorporated into the forthcoming substantial variation for the ongoing site transformation project.

Within Wales, NRW are currently considering our approach and will communicate the outcome once a decision has been approved.

The Wood Recycler's Website contains further information - [Wood Recyclers Association \(WRA\) | Wood Recycling](#)

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.

If your assessment result in Section 1 is suspended, what does this mean?

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 compliance criteria (used in section 1 and 2):

1. Management

- IR1A – General management
- IR1B – Finance (only applicable to Landfill)
- IR1C – Energy efficiency
- IR1D - Efficient use of raw materials
- IR1E - Avoidance, recovery and disposal of wastes produced by the activities
- IR1F - Multiple operator installations

2. Operations

- IR2A – Permitted activities
- IR2B – The site
- IR2C – Operating techniques
- IR2D – Technical requirements
- IR2E – Improvement programme
- IR2F – Pre-operational conditions
- IR2G – Landfill engineering (only applicable to Landfill)
- IR2H – Waste acceptance (only applicable to Landfill)
- IR2I – Leachate levels (only applicable to Landfill)
- IR2J – Closure and aftercare (only applicable to Landfill)
- IR2K – Landfill gas management (only applicable to Landfill)

3. Emission and Monitoring

- IR3A – Emissions to water, air or land
- IR3B – Emissions of substances not controlled by emission limits
- IR3C – Odour
- IR3D – Noise and vibration
- IR3E – Monitoring
- IR3F – Pests
- IR3G – Air quality management plans
- IR3H – Monitoring for the purposes of the Industrial Emissions Directive (this heading includes Large Combustion Plants)
- IR3I – Fire

4. Information

- IR4A – Records
- IR4B – Reporting
- IR4C – Notification

Enforcement response

Any non-compliance with a permit condition 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 twenty 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 to 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.