

Compliance Assessment Report CAR_NRW0044339

Permit being assessed: BW9999IG.

For: Chirk Particleboard Factory, **held by:** Kronospan Ltd

At: Chirk Particleboard Holyhead Road , Chirk, Wrexham, Clwyd, LL14 5NT.

Type of assessment: Report/Data Review,

Reason: Routine.

On: 17/05/2024.

Parts of permit assessed: 2024 Q1 Monitoring Returns, Schedule 5 Notifications, Improvement Conditions IC37, IC41 and IC49 .

NRW Lead Officer: Ian Oakes.

Report sent to: Chris Emery, Director, on 21/05/2024.

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

Part of permitted activity assessed (compliance criteria)	Assessment result	Permit condition
IR3A - Installations - Emissions and monitoring - Emissions to water, air or land	C3 Minor	3.1.2
IR3A - Installations - Emissions and monitoring - Emissions to water, air or land	C3 Minor	3.1.2
IR2E - Installations - Operations - Improvement programme	Action only (X)	

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

Total non-compliances recorded	Total non-compliance score
2	8

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
IR3A	NRW permitting shall be made aware of any significant improvements in K7 NOx emissions performance by 28 June 2024.	28/06/2024

Criteria	Action needed	Complete by
IR3A	Action from CAR_NRW0043325 to undertake further CEN/TS 17638:2021 formaldehyde monitoring (scope to be agreed) of MDF1 & 2 to better quantify the emissions and submit the findings to NRW with options and timescales to comply is extended to 27 September 2024.	27/09/2024
IR2E	Kronospan to confirm to NRW that IC49 Action Timeline has been completed by 27 September 2024.	27/09/2024

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

2024 Q1 Monitoring returns, Schedule 5 Notifications, IC37 K7 Emissions to air, Revisions of IC41 Emissions Management Plan and IC49 Control of dust filter units B01 - B31.

1. 2024 Q1 Monitoring Returns and Schedule 5 Notifications

Reference permit BW9999IG V010 issued 15 September 2023.

The monitoring results were within the emission limit values specified in the permit with the exception of the two emission limit value exceedances below. These are in breach of condition 3.1.2. The limits given in schedule 3 shall not be exceeded.

1.1 Schedule 3, Table S3.3 Point source emissions to air - Biomass Boiler oxides of nitrogen as NO & NO₂ expressed as NO₂ (nitrogen dioxide) emission limit value (ELV). A Schedule 5 Notification was submitted by Kronospan dated 1 May 2024.

- Monitoring 12 February 2024, A26 K7 Biomass Boiler NO_x (nitrogen dioxide) of 616 mg/m³ versus 250 mg/m³ ELV, and attracts a non - compliance score of C3.

K7 Biomass Boiler ELVs for oxides of nitrogen, carbon monoxide, particulate matter and sulphur dioxide became effective on 1 January 2024. The latter three parameters met the ELVs.

Schedule 5 Notification: *'The K7 Biomass Boiler is currently subject to review under*

improvement condition IC37 and is under determination of Best Available Techniques (BATc) Conclusions reference document for waste incineration, which is currently with NRW permitting. A programme of work is currently underway with OEM the boiler and combustion experts to optimise the performance of the boiler in an effort to reduce thermal NOx.'

Action 1: NRW permitting shall be made aware of any significant improvements in K7 NOx emissions performance by 28 June 2024.

1.2 Schedule 3, Table S3.4 Point source emissions to air - Board manufacturing emission limits and monitoring requirements, Formaldehyde emission limit value (ELV). A Schedule 5 Notification was submitted by Kronospan dated 1 May 2024.

- Monitoring 5 March 2024, A30 MDF1, 2 cyclones - Formaldehyde extractive test result cyclone 2 at 26.4 versus 15 mg/m³ ELV, and attracts a non - compliance score of C3.

A29 MDF2, 4 cyclones - Formaldehyde extractive test result cyclone 3 at 10.9 versus 15 mg/m³ so met the ELV.

As of 30 June 2023 all formaldehyde monitoring to air is to use the most recent standard CEN/TS 17638:2021. In being more accurate it was expected that the results may likely be higher than the results from the former standard CEN/TS 13649:2014.

Results submitted indicate that in Q3 2023 MDF1 & 2 met the ELV, in Q4 both MDF1 & 2 had exceedances of the ELV and in Q1 2024 MDF1 exceeded the ELV.

Schedule 5 Notification: *'Since 30th June 2023, periodic formaldehyde monitoring has been undertaken to standard CEN/TS 17638:2021. Previous emissions monitoring had been carried out to the preceding standard (CEN/TS 13649:2014) simultaneously with the abovementioned standard which showed discrepancies between the two standards, with the current standard producing consistently higher results. Monitoring was carried out to both test methods at the same time during Q1, results are provided in the table below. Due to production difficulties in Q1, additional testing was abandoned. This is being rearranged with the emissions testing house for Q2 2024.'*

Sample Date / Time	CEN / TS 17638:2021		CEN / TS 13649:2014	
	Result (mg/Nm ³)	Uncertainty in result +/-	Result (mg/Nm ³)	Uncertainty in result +/-
05/03/2024 10:38-11:08	22.6	4.4	0.67	0.11
05/03/2024 11:21-11:51	33.0	6.5	0.93	0.15
05/03/2024 12:06-12:36	23.6	4.6	1.70	0.27

The above results indicate little correlation between the new standard for formaldehyde monitoring to air CEN/TS 17638:2021 and the old standard CEN/TS 13649:2014.

Since 30 June 2023 using CEN/TS 17638:2021, 10 monitoring results have been submitted for MDF1 & 2 (4 as single results, 2 cyclones for MDF1 and 4 cyclones for MDF2). In order of lowest to highest these are: 5.8, 6.7, 10.9, 13.7, 16.3, 17.2, 19.5, 21.0, 26.4, 30.5 versus

15 mg/m³ ELV.

Action 2: Action from CAR_NRW0043325 to undertake further CEN/TS 17638:2021 formaldehyde monitoring (scope to be agreed) of MDF1 & 2 to better quantify the emissions and submit the findings to NRW with options and timescales to comply with the ELV, is extended to 27 September 2024.

2. Revisions of IC41 Emissions Mgmt. Plan and IC49 Control of dust filter units B01 - B31.

2.1 NRW IC41: *"The Operator shall submit a written Emissions Management Plan. The emissions management plan shall address the emissions of substances not controlled by emission limits (excluding odour, noise and dust which are covered by separate management plans). The plan shall describe the operating techniques employed. It shall also address the delivery of all relevant Production of Wood-based Panels BAT Conclusions. The written report will be incorporated into Table S1.2 of this permit as existing operating techniques."*

This was a resubmitted document S2376-0270-0016RSF Kronospan Emissions Management Plan V2, dated 23/08/2023 and is an extensive revision required by CAR_NRW0043152. This has been reviewed and is considered complete.

2.2 NRW IC49: *"The Operator shall investigate potential technical solutions with regard to monitoring and control of dust filtration units B01-B31."*

This was a resubmitted document NRW IC49 Updated Response, Email dated 12/04/2024 and is an extensive revision required by CAR_NRW0043121. This has been reviewed and is considered complete (subject to action below).

Action 3: Kronospan to confirm to NRW that IC49 Action Timeline has been completed by 27 September 2024.

Action Timeline

#	Description	Timescale
1	Review and confirm optimum dP range for each filtration unit (B01-B32)	31/05/24
2	Carry out any required changed to set points within control systems as a result of action 1	30/06/24
3	Review the alarm systems against relevant human factors good practice and Kronospan's alarm management philosophy document	30/06/24
4	Carry out any required changes to alarm systems as a result of action 3	31/08/24

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.