

Compliance Assessment Report CAR_NRW0042239

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: Site Inspection,

Reason: Routine.

On: 27/06/2023 between 10:00 and 16:00.

Parts of permit assessed: Improvement Condition IC38 Dust Management Plan..

NRW Lead Officer: Ian Oakes, accompanied by Jamie Blythin.

Report sent to: Chris Emery, Director, on 16/08/2023.

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

Part of permitted activity assessed (compliance criteria)	Assessment result	Permit condition
IR2E - Operations - Improvement programme	C3 Minor	Condition 2.4.1 The operator shall complete the improvements specified in schedule 1 table S1.3 by the date specified in that table unless otherwise agreed in writing by Natural Resources Wales.

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

Total non-compliances recorded	Total non-compliance score
1	4

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
IR2E	Refer to details section.	30/11/2023

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

IC38 Dust Management Plan (DMP) submission

1. Improvement condition IC38

IC38 "The Operator shall update and submit the written Dust Management Plan describing the operating techniques employed. The dust management plan shall be structured in line with Environment Agency Emissions Management Plan for Dust online guidance and 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."

2. Subject to BW9999IG permit conditions (but not exclusively)

"2.3 Operating techniques

2.3.1 (a) The activities shall, subject to the conditions of this permit, be operated using the techniques and in the manner described in the documentation specified in schedule 1, table S1.2, unless otherwise agreed in writing by Natural Resources Wales.

(b) If notified by Natural Resources Wales that the activities are giving rise to pollution, the operator shall submit to Natural Resources Wales for approval within the period specified, a revision of any plan or other documentation ("plan") specified in schedule 1, table S1.2 or otherwise required under this permit which identifies and minimises the risks of pollution relevant to that plan, and shall implement the approved revised plan in place of the original from the date of approval, unless otherwise agreed in writing by Natural Resources Wales.

2.3.2 Wood particles, including woodchip and sawdust, that may become wind-entrained, shall be stored in such a manner (for example, enclosed storage areas, screened, covered, by conditioning and height management of stockpiles etc) to prevent as far as is reasonably practicable, the emission of wind-blown particulates.

2.3.3 External stockpiles shall be suitably conditioned and managed to prevent, as far as is

reasonably practicable, the emission of wind-blown particulates.

2.3.4 External stockpiles shall not contain MDF Fibre or Sander Dust. The only exception to this is where non-dry MDF Fibre, mixed with other wood residues, is stored within the K7 boiler fuel compound.

3.2 Emissions of substances not controlled by emission limits

3.2.1 Emissions of substances not controlled by emission limits (excluding odour) shall not cause pollution. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in any approved emissions management plan, have been taken to prevent or where that is not practicable, to minimise, those emissions.

3.2.2 The operator shall:

(a) if notified by Natural Resources Wales that the activities are giving rise to pollution, submit to Natural Resources Wales for approval within the period specified, an emissions management plan which identifies and minimises the risks of pollution from emissions of substances not controlled by emission limits;

(b) implement the approved emissions management plan, from the date of approval, unless otherwise agreed in writing by Natural Resources Wales."

3. Best Available Techniques conclusions (BATc) Directive 2010/75/EU for Production of Wood – based Panels (for DMP but not exclusively).

"BAT 1 *In order to improve the overall environmental performance, BAT is to implement and adhere to an environmental management system (EMS) that incorporates all of the following features (listed as I – XIV, with XIV being the DMP).*

BAT 2 *In order to minimise the environmental impact of the production process, BAT is to apply good housekeeping principles using all of the techniques given below.*

(a). Careful selection of control of chemicals and additives.

(b). Application of a programme for the quality control of recovered wood used as a raw material and/or as fuel (EN 14961 -1:2010 can be used for the classification of solid biofuels), in particular to control pollutants such as As, Pb, Cd, Cr, Cu, Hg, Zn, chlorine, fluorine and PAH.

(c). Careful handling and storage of raw materials and waste.

(d). Regular maintenance and cleaning of equipment, transport routes and raw material storage areas.

(e). Review options for the reuse of process water and use of secondary water sources.

BAT 23 *In order to reduce diffuse dust emissions to air from the transport handling and storage of wood materials, BAT is to be set up and implement a dust management plan, as part of an environmental management system (see BAT 1) and to apply one or a*

combination of techniques given below:

- (a). Regularly clean transport routes, storage areas and vehicles.*
- (b). Unload sawdust using covered drive - through unloading areas.*
- (c). Store sawdust, dust - prone material in silos, containers, roofed piles, etc. or enclose bulk storage areas.*
- (d). Suppress dust emissions by water sprinkling."*

4. Dust Management Plan submission

The response to IC38 comprises a new Dust Management Plan (DMP) Revision 3 dated 04/04/2023 produced by Fichtner Consulting Engineers Limited (on behalf of Kronospan Ltd).

The DMP is cited as being in accordance with Environment Agency (EA) Emissions Management Plan for Dust online guidance [Control and monitor emissions for your environmental permit - GOV.UK \(www.gov.uk\)](https://www.gov.uk/guidance/control-and-monitor-emissions-for-your-environmental-permit) and as addressing the delivery of all relevant Production Wood – based Panels BAT Conclusions.

The report structure is cited as being broadly in line with the template DMP guidance provided by the EA [taken to be a modified Dust & Emission Management Plan D(E)MP proforma].

The submission provides a review of (in brief):

- Introduction (s1) "dust" refers to coarse fraction and particulate to "fine" fraction (<PM10),
- Sources (s3.1 / 2, Table 1) identifying 12 departments and 59 potential sources,
- Pathway (s3.3) as releases to air influenced by meteorological conditions (s3.3.1) with wind roses (Figure 2, Appendix A), with the wind predominantly from SW,
- Two WCBC ambient air quality monitoring sites Chirk Green and Chirk Hospital <https://www.airqweb.co.uk>
- Receptors (s3.4, Table 2) identified as a representative set of 12 (residential, hospital, farm, school care home etc.) and 3 environmental (SSSI etc., within 1km),
- Responsibility (s4.1) of senior management, environment, health and safety (EHS) and departmental managers. Competence assessment and training on the EMS,
- Permit requirements (s4.2.1) - Only condition 3.2 and "Pollution" definition provided,
- Control of the impact of dust involves breaking the source - pathway – receptor (SPR) for all of the 59 sources identified (s4.2.2, Tables 3 Log yard to Table 12 Kronoplus and s4.2.3 Table 13 General measures),
- Should measures fail operations are to cease and NRW notified. Periodic reviews of DMP,
- General measures (s4.2.3, Table 13) are used on site and include:

Preventative measures: Various fire procedures, Enclosure within a building where possible, Implementation of a speed limit for vehicles, Minimising drop heights, Use of enclosed conveyors, Good housekeeping, Sheeting / covering of vehicles, Designated sweep off area for vehicles, Surfacing the site with easy to clean, Impermeable concrete

surfaces, Minimisation of timber storage heights and volumes on site, Installation of walls / bank surrounding site, Use of high integrity equipment, Regular visual inspections, Minimising the amount of movement of ash once outside, Regular preventative maintenance, and

Remedial measures: On-site sweeping, Water suppression, Spill kits/cleaning equipment, Cleaning roofs.

- Water use (s4.2.3) Adequate water supply and two mobile water cannons on site,
- Monitoring (s5) Due to the low baseline concentrations of particulates, additional monitoring equipment is not proposed (refer s5.6), ISO accredited EMS (s5.1),
- Visual dust monitoring (s5.2) Departmental managers undertake visual inspections on a daily basis though not formally recorded. Audits and checklists are implemented weekly (or more frequently if required). This includes (not limited to) road networks on-site & off-site and use of road sweepers and water bowzers.
- Existing monitoring data (s5.6) WCBC is responsible for Local Air Quality Management and operates two continuous monitoring stations with 'Chirk, an urban industrial site, set up 22 July 2020' and 'Chirk community Hospital, an urban background site, set up 29 November 2021'. Both measure PM10, PM2.5 and PM 1, wind speed and direction, temperature and humidity.
- Table 14: Mapped background data – (DEFRA 2018 Dataset, including site contributions) are well below the relevant Air Quality Assessment Levels AQALs (PM10 and PM2.5).
- Table 15: Local monitoring data – Shows concentrations are well below the AQALs
- Reporting and complaints (s6) has been updated for NRW Incident Communications Centre reporting and Kronospan response.
- Engagement with the community (s6.1) Quarterly Liaison Group with WCBC, NRW, Chirk Town Councillors and Unite the Union followed by a 'drop in' session.

5. NRW assessment

Having reviewed the DMP submission, NRW has identified a number of issues and omissions that prevent IC38 being discharged. This constitutes a breach of permit condition 2.4.1 and attracts a non compliance score of C3. You have been issued with a warning.

The primary reasons for this breach have been set out below, but please note this is not an exhaustive list.

- The permit requirements need to be expanded (reference 2. above),
- The BATc requirements need to be added (reference 3. above),
- A thorough gap analysis needs to be undertaken as to where Kronospan currently stands with respect to the application of the BATc particularly BAT23 and the storage and processing of clean and waste wood feedstocks (refer below):

Detail is required on the external largely uncovered section of the site, which includes the log yard, inbound clean and waste wood storage and processing areas and associated areas, and include (but not limited to):

- Types and specifications of (none round wood) inbound clean and waste wood by grade including particle size distribution and fines content (size and percentage by weight) and moisture content,

- Details of hardstanding and non-hardstanding areas with location and use,
- Types of transport vehicles, offloading mechanisms and storage locations by grade and how the site is laid out in this respect (to include site infrastructure, location of buildings, loading and offloading areas, storage bays and fixed plant (sorting, sizing, screening equipment) and conveyors etc.,
- The extent to which conveyors are covered and any other measures e. g. de-dusting,
- Description of type of storage areas (except silos) by grade of material with dimensions e. g. height and make up of containment walls, height of contained stockpiles within the walls and an estimated tonnage of each grade stored in this way,
- The dimensions by grade of stockpiles (height, width and length) without containment walls,
- Proportion by grade of material that is completely covered (housed), partially covered (shielded), or completely uncovered (exposed),
- Location and type of suppression systems and nozzle head design including their arc of coverage and date of installation,
- Height and location of any additional wind brakes,
- Details of segregation and containment of biomass for combustion,
- Vehicles cleaning procedures prior to leaving site,
- Elaborate on the trigger points required for the cessation of activities,
- Details of procedures in place for the control of contractors in relation to dust management,
- Confirmation as to all environmentally critical equipment for the prevention and minimisation of wood dust and particulate emissions being identified. Such plant should be recorded in a register and subject to planned preventative maintenance.

As a general point, it should be noted that the DMP forms part of your Environmental Management System (EMS) and should therefore be designed and written in a way that robustly ensures permit compliance. For example, broad, high level descriptions of physical and managerial controls should be avoided to ensure site personnel are clear as to the DMP requirements and to avoid incorrect interpretation. References to other relevant operating procedures should be included in the DMP, or where appropriate incorporated into the document itself.

It should also be noted that the review of the DMP is at a time when NRW continues to receive regular wood dust / fibres / particulate incident reports from residents in the vicinity of the installation. These emissions of wood dust / fibres / particulate as perceived by authorised officers of NRW, are at levels likely to cause pollution outside the site.

6. Site visit on 27 June 2023

The areas visited mainly constituted the external largely uncovered section of the site, which includes the log yard, inbound clean and waste wood storage and processing areas and associated areas. The look round reinforced the view that the DMP was deficient in respect of the details outlined and that a comprehensive review is needed to address the application of BATc.

One example was the offloading of a delivery of waste wood and subsequent transfer and

discharge with the release of dust and particulate into the air. These were carried out in the open air with only two sprinklers in use, which had little obvious impact. We were advised that the installation of 6 new sprinkler systems was imminent.

It is acknowledged that improvements have been made with the general layout, storage and operations but more work is required for a coordinated approach to the containment of dust and particulate emissions.

7. Action

Kronospan is required to resubmit the Improvement Condition 38 DMP response, which must demonstrate the delivery of all relevant BAT conclusions with any proposed timescales for implementation (future strategy) included for consideration by 30 November 2023.

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.