

Final Single Case End-of-Waste decision Art28-0085
of 15th June 2026
establishing criteria determining when recovered wood chip produced by
Connaught Timber Products Ltd
of Derrybeg, Tynagh, Loughrea, Co. Galway
ceases to be waste under Regulation 28 of the European Union (Waste Directive) Regulations
2011 – 2020

Section 1

Subject matter

Art28-0085 establishes criteria determining when recovered wood chip resulting from a recovery operation ceases to be waste.

These criteria do not:

- affect the obligation of the producer to hold and comply with a waste collection permit, certificate of registration, waste facility permit, waste/ industrial emissions licence or any other National or European legislation which may apply when transporting, handling, storing or processing waste;
- affect permitting or any other legal requirements that do not depend on the status of the material as a waste; and
- negate the producers or users' statutory obligations or requirements under any other authorisations (including planning permission), enactments or regulations.

The Environmental Protection Agency (herein referred to as the Agency) accepts no responsibility for material produced in compliance with these criteria. It is the producer's responsibility to ultimately ensure the material is fit for the intended use. It is the user's responsibility to store and use the material as specified by the producer.

Any person who:

- deliberately or carelessly provides false or misleading information; or
- declares that waste has ceased to be waste, where the relevant end-of-waste criteria have not been demonstrated to have been fulfilled following recovery of waste;

commits an offence, under the Waste Management Act 1996 (End-of-waste) Regulations 2024.

Section 2

Definitions

For the purposes of this Decision, the definitions set out in the European Union (Waste Directive) Regulations 2011 – 2020 and Waste Management Act 1996, as amended shall apply.

In addition, the following definitions/ interpretations shall apply:

- (1) 'applicant' is Connaught Timber Products Ltd (CTP), Derrybeg, Tynagh, Loughrea, Co. Galway;
- (2) 'authorised waste facility' means a facility which has been granted a waste authorisation in the form of an Industrial Emissions licence, a waste licence, a waste facility permit or a certificate of registration;
- (3) 'load' is defined as an incoming delivery or collection quantity of waste wood which may originate from one or more sources.
- (4) 'batch' is defined as the output of recovered woodchip every 3 months produced from accepted waste wood under uniform processing conditions;
- (5) 'consignment' means a delivery quantity of recovered wood chip which leaves the production facility and may be contained in either one or several transport units;
- (6) 'competent authority' means any of the following: the Environmental Protection Agency (hereafter referred to as the Agency); a local authority, the National Waste Collection Permit Office, the Health and Safety Authority; the National Transfrontier Shipments of Waste Office, National Building Control and Market Surveillance Office; Transport Infrastructure Ireland, Geological Survey Ireland, Competition and Consumer Protection Commission, Food Safety Authority of Ireland or any other National or Irish governmental regulation body who may need to assess compliance with these criteria or any associated activity;

- (7) 'holder' means the natural or legal person who is in possession of recovered wood chip;
- (8) 'management system certification body' is a body which has an accreditation certificate issued by the Irish National Accreditation Board (INAB), or equivalent European accreditation body, to undertake quality management system certification to an approved standard;
- (9) 'POPs' means European Union regulation 2019/1021 concerning the regulation of Persistent Organic Pollutants;
- (10) 'producer' means the waste operator who produces the recovered wood chip under a waste authorisation;
- (11) 'qualified person' means suitably qualified, trained and experienced person who has the requisite knowledge and experience required for sampling, testing and waste characterisation;
- (12) 'qualified staff' means staff which are qualified by experience or training to monitor and assess the properties of recovered wood chip;
- (13) 'recovery operation' has the same meaning as 'waste recovery activity' assigned in the Waste Management Act 1996, as amended;
- (14) 'specified use' means the suitable specific circumstances, as declared in the statement of conformity, under which the recovered wood chip can be used;
- (15) 'statement of conformity' means a statement/declaration that the recovered wood chip conform to end-of-waste criteria, product standards and specifications, and includes details of restrictions on the use of the recovered wood chip;
- (16) 'user' means manufacturers, supply companies, contractors and all those organisations or individuals responsible for the end use of the product; and
- (17) 'visual inspection' means inspection using human senses or any non-specialised equipment.
- (18) 'waste' is as defined in the Waste Management Act 1996 as amended.

The list of definitions and interpretations above is intended to assist understanding of these criteria and does not purport to be a legal interpretation of said terms.

Section 3

Criteria for recovered wood chip

1. Recovered wood chip shall cease to be waste where all of the following conditions are demonstrated as fulfilled:
 - (a) the recovered wood chip results from a recovery operation undertaken under an appropriate waste authorisation;
 - (b) the waste used as input for the recovery operation complies with the criteria set out in Part 1 of Annex I;
 - (c) the waste used as input for the recovery operation has been treated in accordance with the criteria set out in Part 2 of Annex I;
 - (d) the quality of the recovered wood chip complies with the criteria set out in Part 3 of Annex I;
 - (e) the producer has satisfied sampling and testing requirements set out in Part 4 of Annex I;
 - (f) the producer has satisfied storage requirements set out in Part 5 of Annex I;
 - (g) the producer has satisfied requirements set out in Sections 4 to 6;
 - (h) the producer has satisfied requirements within any guidance issued by the Agency in relation to these criteria.

Section 4

Specific uses & restrictions on use

1. Recovered wood chip fulfilling the criteria set out in Section 3 shall only be specified in the statement of conformity as suitable for use for purposes listed in Part 1 of Annex II.
2. The restrictions on use as listed in Part 2 of Annex II shall be specified in the statement of conformity.

Section 5

Statement of conformity

1. The producer shall issue a statement of conformity using the template set out in Annex III for each batch or consignment of recovered woodchip, whichever is of smaller quantity.
2. The statement of conformity shall be issued as documented evidence that the recovered woodchip meets these criteria and that the material ceases to be waste.
3. The statement of conformity shall state the suitable specific use(s) for the recovered woodchip and any associated restrictions as set out in Section 4.
4. The producer shall transmit the statement of conformity to the next holder of the recovered woodchip. The producer shall retain a copy of the statement of conformity for a minimum of 5 years after its date of issue and shall make it available to competent authorities upon request.
5. The statement of conformity may be in electronic form.
6. The producer shall give competent authorities access to the statements of conformity upon request.
7. A safety data sheet of the recovered woodchip shall be included in the statement of conformity.

Section 6

Management system

1. The producer shall implement a management system suitable to demonstrate compliance with the criteria referred to in Sections 3 to 5, and specific monitoring requirements set out in Annex I for each criterion.
2. The management system shall include a set of documented Quality Control (QC) Procedures concerning each of the following aspects:
 - (a) acceptance, control and quantification of waste used as input for the recovery operation as set out in Part 1 of Annex I, including quarantine, segregation, and control of non-conforming waste inputs;
 - (b) due diligence assessment (knowledge of inputs), including assessment of inputs for potential contamination for pollutants beyond those listed in Table 1 of Annex I; This shall include an assessment for the presence of hazardous substances as may be identified in association with the source of the waste inputs;
 - (c) monitoring of the treatment processes and techniques described in Part 2 of Annex I;
 - (d) monitoring of the quality of recovered wood chip resulting from the recovery operation as set out in Parts 3 & 4 of Annex I (including sampling and testing);
 - (e) storage of recovered wood chip as set out in Part 5 of Annex I;
 - (f) completion and sign-off of a statement of conformity as set out in Annex III;
 - (g) quarantine, segregation, control and quantification of non-conforming outputs from the recovery process;
 - (h) feedback from customers or product accreditation body concerning compliance with recovered woodchip quality, including assessment, investigation, corrective actioning and tracking of non-conformance reports;
 - (i) record keeping of the results of monitoring conducted under points (a) to (g). All records including controls, inspections and training shall be maintained for a minimum of 5 years, which may include electronic records;
 - (j) review and improvement of the management system;
 - (k) training of staff on all aspects of the criteria including the sampling, testing, treatment system, monitoring, control and record keeping.
3. The management system shall be certified by a Management System Certification Body accredited by the Irish National Accreditation Board, or equivalent European accreditation body. This certification shall verify that the management system complies with the requirements of this Section. The verification shall be carried out annually.
4. The producer shall maintain records of the quantities of:
 - (a) waste used as input for the recovery operation per list of waste code;
 - (b) recovered wood chip that have been recovered and can be demonstrated to meet these criteria;
 - (c) recovered wood chip which meet these criteria and have been dispatched;

- (d) non-conforming outputs from the recovery operation; and
 - (e) any non-conforming outputs reintroduced into the recovery operation.
5. The producer shall make available on request by the competent authorities the management system and records for inspection.

Section 7

Entry into effect

Single case End-of-Waste Criteria No. Art28-0085 shall be available for use immediately following publication on the Agency's website.

Section 8

Compliance

The producer or holder of recovered wood chip shall comply with any request made by a competent authority in relation to the provision of evidence of compliance with these criteria or any associated waste, product, or health and safety requirements.

Any person who;

- deliberately or carelessly provides false or misleading information,

or,

- declares that waste has ceased to be waste, where the relevant end-of-waste criteria have not been demonstrated to have been fulfilled following recovery of waste,

commits an offence, under the Waste Management Act 1996 (End-of-waste) Regulations 2024.

ANNEX I

Criteria for recovered wood chip

Criteria	Monitoring requirements
Part 1. Waste used as input for the recovery operation	
1.1 Inputs shall be restricted to the list of waste codes: 15 01 03 – Wooden packaging Waste inputs shall be restricted to wood that has not been chemically treated. Chemical treatment is defined as “<i>any treatment with chemicals other than air, water or heat</i>”¹ with the example of glue, paint or laminate. This includes composite blocks accepted under LoW code 15 01 03 as an element of wooden pallets. Painted wood will also not be permitted as an input material. Chemically treated and/or painted wood shall be segregated by trained staff prior to shredding and shall be appropriately disposed of according to the site’s waste facility permit. Prior to acceptance of waste wood, suppliers shall be clearly informed in writing of the acceptable waste input materials.	Acceptance control of all waste received (by visual inspection) and of the accompanying documentation shall be carried out by qualified staff which are trained on how to recognise waste that does not fulfil the criteria set out in this section. Visual inspections shall be carried out by qualified staff both when waste wood is collected off-site or delivered directly to the site by suppliers. Where visual inspection or due diligence assessment raises any suspicion of possible hazardous properties or contamination, further appropriate monitoring measures shall be taken, such as sampling and testing where appropriate. The staff shall be trained on potential hazardous properties or contamination that may be associated with waste wood and on material components or features that indicate these properties.
1.2 Inputs shall meet the incoming waste acceptance criteria of the waste authorisation under which the recovered wood chip are produced.	
1.3 Each load of waste input shall be assigned a unique identifier.	
1.4 Non-conforming waste shall be quarantined and managed in accordance with CTP’s QMS and internal procedures, namely rejection or diversion of non-conforming loads in accordance with the facility’s non-conformance procedures.	Non-conforming waste shall be managed in accordance with quarantine requirements specified in the waste authorisation.
1.5 Prior to waste acceptance, suppliers of waste are required to provide a declaration for each load of material collected by CTP and delivered to CTP. This document shall require suppliers to confirm the pallets have not come into contact with any substances which may cause negative environmental or human health impacts. This includes materials which are labelled as corrosive, toxic, harmful and irritation as well as hazardous. A characterisation of the waste inputs shall also be conducted prior to waste acceptance from the source sites, identified on a risk-based manner, and on an annual basis thereafter. This characterisation shall include screening for specific parameters arising from due diligence carried out in accordance with Section 6, 2(b). CTP will advise the EPA of any changes that affect the end-of-waste decision.	The producer shall regularly review and revise QC procedures to ensure they reflect current standards and operational requirements.

¹ The definition of chemically untreated wood is derived from ISO 17225-4: *Solid Biofuels – Fuel Specifications and Classes – Part 4: Graded Wood Chips*. Although this quality standard does not apply to playground surfacing it provides the most relevant definition of chemically treated wood that can be applied to this specific use.

Part 2. Treatment process & techniques

2.1	All treatment processes needed to prepare the waste wood for direct input into final use shall have been completed.	Treatment processes shall be undertaken in accordance with the waste authorisation under which the recovered wood chip is produced.
2.2	The treatment process shall include mechanical and manual sorting, shredding, metal removal, and screening to produce clean, specification-compliant wood chip.	The producer shall regularly review and revise QC procedures to ensure they reflect current standards and operational requirements.
2.3	Each batch of the recovered wood chip produced shall be assigned a unique identifier for traceability and each batch number will have an associated batch record. The batch record shall include; • The batch number applicable to the batch of product; • The waste input load numbers used as raw materials to make that batch of product; • The number of samples taken from the batch for analysis inclusive of the date and time the sample was taken; • The results of sample analysis; • Quality control checks completed throughout the lifecycle of the process; • The results of any quality checks completed on the waste inputs and finished product; and • The approval or rejection of the finished product by a qualified person.	

Part 3. Quality of recovered wood chip resulting from the recovery operation.

3.1	The recovered wood chip shall comply with EN 1177:2018 in relation to impact attenuation.	Qualified staff shall grade/classify each batch of recovered wood chip. As technical standards and specifications are subject to regular review, it is the producer and user's responsibility to ensure that the latest version is referred to.
3.3	The recovered wood chip shall, as required, comply with the relevant provisions of the: - i Classification, Labelling and Packaging (CLP) Regulation²; - ii Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) Regulation³; - iii Persistent Organic Pollutants (POPs) Regulation⁴; - iv Or any other relevant legislation requirements as applicable or as identified by the Agency.	As regulations are subject to amendment and replacement, it is the producer's responsibility to ensure that current regulations are referred to.
3.4	The recovered wood chip shall comply with	A qualified person shall undertake sampling and testing.

² Classification, Labelling and Packaging - Regulation (EC) No 1272/2008 (CLP)

³ Registration, Evaluation, Authorisation and Restriction of Chemicals - Regulation 1907/2006/EC (REACH)

⁴ Persistent Organic Pollutants - Regulation 850/2004/EC (POPs)

	- the pollutant limit values referenced in BS PAS 111:2012; and; - the specifications in Table 1 and sampling and testing requirements set out in Part 4.	A qualified person shall review the test results and determine material as compliant or non-compliant with this criterion. A register of non-conforming product for these criteria shall be maintained by the producer. The register shall contain information as to the reasons for the non-conformance and the manner in which the non-conformance was rectified. The register shall also include information on the outlet for the non-conforming product, for example whether it is re-introduced to the start of the process, disposed of, or recovered as waste.
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Table 1: Recovered wood chip (Output) – Pollution Limit Values (PLVs)

Parameter	Upper Limit	Unit	Method
Cadmium (Cd)	1.5	(mg/kg dry matter)	BS EN 13650
Chromium (Cr)	100	(mg/kg dry matter)	BS EN 13650
Copper (Cu)	200	(mg/kg dry matter)	BS EN 13650
Lead (Pb)	200	(mg/kg dry matter)	BS EN 13650
Mercury (Hg)	1.0	(mg/kg dry matter)	BS ISO 16772
Nickel (Ni)	50	(mg/kg dry matter)	BS EN 13650
Zinc (Zn)	400	(mg/kg dry matter)	BS EN 13650
Heavy metal compounds (e.g. chromated copper arsenate) & halogenated organic compounds	Trace	(mg/kg dry matter)	BS EN 13650
Creosote (Benzoapyrene)	Trace	(mg/kg dry matter)	BS EN 13650
Odour assessment	N/A	N/A	Sensory evaluation (industry practice)
Particle Size	30	mm	
Foreign Matter ⁵	Absent	N/A	Gravimetric
Escherichia coli	1,000	CFU/g fresh mass	BS ISO 16649-2
Salmonella spp	Absent	25 g fresh mass	Schedule 2, Part II of BS EN ISO 6579

Part 4. Sampling and Testing

Criteria	Monitoring requirements
4.1	Incoming waste wood shall be verified on-site using CTP's internal quality control procedures. Samples shall be collected by a qualified person and be in accordance with the sampling and monitoring

⁵ The absence of foreign matter in the recovered woodchip is to include, but not limited to, inorganic material, non-wood organic materials, ferrous and non-ferrous metals and material treated with chromated copper arsenate (CCA) or creosote-like substances as per Section 6.3.2 of PAS 111:2012.

		conditions of the site's waste facility permit.
4.2	Sampling of the finished wood chip product shall be conducted in accordance with the requirements of PAS 111:2012, specifically for sealed surface applications, and porous surface applications, using Grade A wood. A composite sample⁶ shall be prepared from multiple sub-samples taken from each production shift during the sampling period for detailed compositional analysis. Testing of the composite sample shall be conducted as follows: i. at a frequency of every batch produced for all parameters specified in Table 1; ii. at an annual frequency for compliance with EN 1177:2018. iii. at an accredited laboratory, using accredited test methods, where available, for all parameters specified in Table 1; The frequency of sampling and analyses, as set out in this end-of-waste decision, may be amended with the written agreement of the relevant enforcement authority, following evaluation of test results, where compliance has been demonstrated over a minimum period of 12 months.	The laboratory selected shall be able to achieve detection limits for each parameter specified in Table 1. Laboratory analysis shall be undertaken in accordance with I.S. EN ISO-IEC 17025: General requirements for the competence of testing and calibration laboratories. Samples shall be collected by a qualified person. A sample shall be a representative, composite sample prepared in accordance with the requirements of the accredited laboratory. A register of non-conforming products for these criteria shall be maintained by the producer. The register shall contain information as to the reasons for the non-conformance and the manner in which the non-conformance was rectified.

Part 5. Storage

Criteria		Monitoring requirements
5.1	Recovered woodchip, pending the results of testing, shall be identified and physically separated into individual batches per representative sample.	A storage and labelling plan shall be established and maintained. Qualified staff shall regularly monitor storage and labelling plans and records and undertake a review thereof bi-annually. Any recovered wood chip stored greater than 12 months shall be re-classified as waste and managed accordingly until classified otherwise.
5.2	Prior to dispatch or use, recovered woodchip that fulfils the criteria shall be kept in designated areas, separate from any other products or waste.	
5.3	The recovered wood chip shall not be stored for a period greater than 12 months. Products that exceed the time limit for storage of a period of 12 months shall be deemed a waste unless otherwise demonstrated by re-testing as per Part 3 and Part 4.	

ANNEX II

Specific use & restrictions on use

1. Specific uses

The recovered woodchip that is produced in compliance with these criteria shall only be suitable for use as a playground surfacing material.

2. Restrictions on use

- 2.1 The recovered woodchip is limited to sale and use in Ireland and in any other destination country where approval has been attained from the country's relevant competent authority that the recovered material is recognised by the competent authority in that jurisdiction as a non-waste prior to the material being placed on that market.

⁶ Samples must be representative of the batch and prepared in accordance with Annex C of PAS 111:2012.

ANNEX III

Statement of conformity with the end-of-waste criteria

1.	<u>Producer of the recovered wood chip</u> Producer Organization Name: Registered Company Address: Waste Authorisation Ref. No.: Address & Eircode of Production: Contact Tel: Contact E-mail: Date of production:
2.	Quantity of the consignment in kg:
3.	<u>Classification/ specification & suitability for use</u> (a) The material in this consignment is only suitable for the following specified use(s): <i>Specify applicable suitable uses</i> •
4.	The recovered wood chip in this consignment complies with the customer specification, industry specification or standard listed below: •
5.	<u>Restrictions on use</u> The material in this consignment is <u>not suitable</u> for use in: •
6.	The recovered wood chip in this consignment meets the criteria specified in Single Case End-of-Waste decision Art28-0085 for recovered wood chip.
7.	The producer of recovered wood chip in this consignment applies a management system certified by a Management System Certification Body accredited by the Irish National Accreditation Board, or equivalent European accreditation body.
8.	Declaration of the producer of recovered wood chip in this consignment: I certify that the above information is complete and correct to the best of my knowledge: Name: Date: Signature:
9.	<u>Chain of custody</u> Producer As per Item 1. Date of transfer to next holder: Any other holder (where applicable) Organization Name: Contact Tel: Contact E-mail: Date of transfer to next holder: User Organization Name (if applicable): Name: Contact Tel: Contact E-mail: Use Location: NOTE: it is the responsibility of the holder who transfers the recovered wood chip to the next holder to ensure the chain of custody has been completed to include details of the next holder.