

Final Single Case End-of-Waste decision ART28-0094
of
2nd December 2025
establishing criteria determining when recovered plastic fence post, railings, triangle and
rectangle boards produced by
IFF Plastic Ltd.
of Cloonwhite North, Cree, Co.Clare V15 N276
ceases to be waste under Regulation 28 of the European Union (Waste Directive) Regulations
2011 – 2020

Section 1

Subject matter

ART28-0094 establishes criteria determining when recovered plastic fence posts, railings, triangle and rectangle boards 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 IFF Plastics Limited, Cloonwhite North, Cree, Co. Clare V15 N276 ;
- (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) 'batch' is defined as two tonnes of material produced under conditions that are presumed uniform, that can be regarded as a single unit, and has a unique refence;
- (4) 'consignment' means a delivery quantity of recovered plastic fence posts, railings, triangle and rectangle boards which leaves the production facility and may be contained in either one or several transport units;
- (5) '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;

- (6) 'holder' means the natural or legal person who is in possession of recovered fence posts, railings, triangle and rectangle boards;
- (7) 'load' is defined as an incoming delivery or collection quantity of waste plastic which may originate from one or more sources.
- (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 fence posts, railings, triangle and rectangle boards 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 fence posts, railings, triangle and rectangle boards;
- (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 plastic fence posts, railings, triangle and rectangle boards can be used;
- (15) 'statement of conformity' means a statement/declaration that the recovered fence posts, railings, triangle and rectangle boards conform to end-of-waste criteria, product standards and specifications, and includes details of restrictions on the use of the recovered plastic fence posts, railings, triangle and rectangle boards;
- (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 plastic fence posts, railings, triangle and rectangle boards

1. Recovered plastic fence posts, railings, triangle and rectangle boards shall cease to be waste where all of the following conditions are demonstrated as fulfilled:
 - (a) the recovered plastic fence posts, railings, triangle and rectangle boards 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 plastic fence posts, railings, triangle and rectangle boards 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 and restrictions on use

1. Recovered plastic fence posts, railings, triangle and rectangle boards 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 plastic fence posts, railings, triangle and rectangle boards, whichever is of smaller quantity.
2. The statement of conformity shall be issued as documented evidence that the recovered plastic fence posts, railings, triangle and rectangle boards 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 plastic fence posts, railings, triangle and rectangle boards 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 plastic fence posts, railings, triangle and rectangle boards. 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 for the recovered plastic fence posts, railings, triangle and rectangle boards 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; 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 plastic fence posts, railings, triangle and rectangle boards resulting from the recovery operation as set out in Parts 3 & 4 of Annex I (including sampling and testing);
 - (e) storage of recovered plastic fence posts, railings, triangle and rectangle boards 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 plastic fence posts, railings, triangle and rectangle boards 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 (i). 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 plastic fence posts, railings, triangle and rectangle boards that have been recovered and can be demonstrated to meet these criteria;
 - (c) recovered plastic fence posts, railings, triangle and rectangle boards 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 give competent authorities access to the management system and records upon request.
6. The producer shall make the management system and records available for inspection.

Section 7

Entry into effect

Single case End-of-Waste Criteria No. Art28-0094 shall be available for use immediately following publication on the Agency's website.

Section 8

Compliance

The producer or holder of recovered plastic fence posts, railings, triangle and rectangle boards 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 Plastic Fence Posts, Railings,
Triangle and Rectangle Boards**
Part 1. Waste used as input for the recovery operation

Criteria		Monitoring requirements
1.1	Inputs shall be restricted to the list of waste (LoW) codes: <ul style="list-style-type: none"> • 02 01 04 – Waste plastic (except packaging) • 15 01 02 - Plastic packaging • 17 02 03 - Plastic 	Acceptance control of all waste received (by visual inspection) and of the accompanying documentation shall be carried out by qualified staff who are trained on how to recognise waste that does not fulfil the criteria set out in this section. 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 plastic and on material components or features that indicate these properties. Non-conforming waste shall be managed in accordance with quarantine requirements specified in the waste authorisation. The producer shall regularly review and revise quality control procedures to ensure they reflect current standards and operational requirements.
1.2	No hazardous waste shall be used as inputs, including waste originated from electrical and electronic waste (WEEE), construction and demolition, and all end of-life vehicles (ELV). Bio-waste, healthcare waste, and used products of personal hygiene shall not be used as input.	
1.3	All incoming waste shall meet the incoming waste acceptance criteria of the waste authorisation under which the recovered plastic fence posts, railings, triangle and rectangle boards are produced.	
1.4	Each load of waste input shall be assigned a unique identifier.	
1.5	Non-conforming waste shall be quarantined and managed in accordance with IFF Plastics Limited's QMS and internal procedures, namely rejection or diversion of non-conforming loads in accordance with the facility's non-conformance procedures.	
1.6	Prior to waste acceptance, suppliers of waste are required to provide a declaration for each load of material collected by IFF Plastics Ltd.	

Part 2. Treatment process and techniques

Criteria		Monitoring requirements
2.1	All treatment processes needed to prepare the waste plastic polyethylene and polypropylene 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 plastic fence posts, railings, triangle and rectangle boards are produced.
2.2	The treatment process shall include shredding, washing, physical removal of contaminants, drying, heating, extrusion, moulding and final product cooling.	The producer shall regularly review and revise QC procedures to ensure they reflect current standards and operational requirements.
2.3	<p>Each batch of the recovered plastic fence posts, railings, triangle and rectangle boards produced shall be assigned a unique identifier for traceability and each batch number will have an associated batch record. The batch record shall include;</p> <ul style="list-style-type: none"> • The batch number applicable to the batch of product; • The waste input load numbers used as raw materials to make that batch of product; • 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 plastic fence posts, railings, triangle and rectangle boards resulting from the recovery operation.

Criteria		Monitoring requirements
3.1	Each batch of recovered plastic fence posts, railings, triangle and rectangle boards shall be verified in accordance with IFF Plastics Ltd.'s internal quality control procedures.	<p>Qualified staff shall visually inspect each batch of recovered plastic fence posts, railings, triangle and rectangle boards.</p> <p>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.</p> <p>The producer shall regularly review and revise QC procedures to ensure they reflect current standards and operational requirements.</p>
3.2	<p>The recovered plastic fence posts, railings, triangle and rectangle boards shall, as required:</p> <ol style="list-style-type: none"> i. comply with relevant provisions of the Classification, Labelling and Packaging (CLP) ¹ Regulation; ii. comply with relevant provisions of the REACH ² Regulation; and iii. comply with relevant provisions of the POPs ³ Regulation. 	As regulations are subject to amendment and replacement, it is the producer's responsibility to ensure that current regulations are referred to.

3.3	The recovered plastic fence posts, railings, triangle and rectangle boards must meet the specification requirements of <i>Minimum Specifications for Farm Fencing S148</i> in addition to the relevant specifications within <i>IS 436:2020 Farm Fencing-Timber post and wire- Requirements</i> .	As technical standards and specifications are subject to regular review, it is the producer responsibility to ensure that the latest version is referred to.
3.4	The recovered plastic fence posts, railings, triangle and rectangle boards shall comply with the specifications in Table 1 and the sampling and testing requirements set out in Part 4.	<p>A qualified person shall undertake sampling and testing.</p> <p>A qualified person shall review the test results and determine material as compliant or non-compliant with this criterion.</p> <p>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.</p>

Table 1: Fence posts, railings, triangle and rectangle boards technical specification to be tested

Determinant	Method / Relevant Standard	Units	Limit Values	Frequency ⁴
Quality of Material outputs	Visual inspection	-		Once per operating shift
Finish	Site Standard	-	Even finish, no sharp edges	Weekly
Straightness	Site Standard	%	≤0.5 of total length	Weekly
Dimensions-Length in mm (% of total)	Site Standard	%	+/-1% of product specification	Weekly
Dimensions- Breadth in mm (% of total)	Site Standard	%	+/-1% of product specification	Weekly
Strength Testing	ISO 180 527 Determination of tensile properties ⁵ & ISO 180 Izod impact strength ⁶ (ASTM D256)	% Joule Kj/m ²		Bi-annually (minimum 5 specimens per sample)

¹ Classification, Labelling and Packaging - Regulation (EC) No 1272/2008 (CLP)

² Registration, Evaluation, Authorisation and Restriction of Chemicals - Regulation 1907/2006/EC (REACH)

³ Persistent Organic Pollutants Regulation (EU) No. 2019/1021 (POP)

⁴ Weekly testing of samples for each product type

⁵ International Standard ISO 527-1-2019- Plastics-Determination of tensile properties

⁶ International Standard ISO 180:2019-Plastics-Determination of Izod impact Strength

Part 4. Sampling and Testing

Criteria		Monitoring requirements
4.1	<p>Samples and testing of recovered plastic fence posts, railings, triangle and rectangle boards shall be conducted as per Table 1.</p> <p>The frequency of sampling and analysis 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.</p>	Samples shall be collected by a qualified person
4.2	<p>For each sample tested records of the following information shall be kept:</p> <ul style="list-style-type: none"> • Sampling date • Product description • Identity of the batch or batches from which the sample was taken • Name of person who carried out the sampling • Full test results 	

Part 5. Storage

Criteria		Monitoring requirements
5.1	Recovered plastic fence posts, railings, triangle and rectangle boards pending the results of testing, shall be identified and physically separated into individual batches.	<p>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.</p> <p>Any recovered plastic fence posts, railings, triangle and rectangle boards stored greater than 12 months shall be re-classified as waste and managed accordingly until classified otherwise.</p>
5.2	Prior to dispatch or use, recovered plastic fence posts, railings, triangle and rectangle boards that fulfil the criteria shall be kept in designated areas, separate from any other products or waste.	
5.3	The recovered plastic fence posts, railings, triangle and rectangle boards 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.	

ANNEX II

Specific use and restrictions on use

1. Specific uses

The recovered plastic fence posts, railings, triangle and rectangle boards that is produced in compliance with these criteria shall only be suitable for use as;

- Fencing posts and fence railings for the demarcation of field and property boundaries (agricultural, commercial and domestic)
- Components in cattle girds to act as a deterrent to animals at railway crossings.

2. Restrictions on use

1. The recovered fence posts, railings, triangle and rectangle boards are 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.
2. In the event of the material being exported, the National Transfrontier Shipments Office shall be contacted, and confirmation attained that they recognise this approval from another jurisdiction prior to the material being placed on an export market.
3. The recovered fence posts and railings shall not be used for the construction of fences in wetlands, bogs and peat areas that are designated Special Areas of Conservation (SAC), except where appropriately authorised as may be relevant for the SAC.

ANNEX III

Statement of conformity with the end-of-waste criteria

1.	<p><u>Producer of the plastic fence posts, railings, triangle and rectangle boards</u> Registered Company Address: Waste Authorisation Ref. No.: Address and Eircode of Production: Contact Tel: Contact E-mail: Date of Production:</p>
2.	Quantity of the consignment in kg:
3.	<p><u>Classification/ specification and 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></p> <ul style="list-style-type: none"> •
4.	<p>The recovered plastic fence posts, railings, triangle and rectangle boards in this consignment complies with the customer specification, industry specification or standard listed below:</p> <ul style="list-style-type: none"> •
5.	<p><u>Restrictions on use</u> The material in this consignment is <u>not suitable</u> for use in:</p> <ul style="list-style-type: none"> •
6.	The recovered plastic fence posts, railings, triangle and rectangle boards in this consignment meets the criteria specified in Single Case End-of-Waste decision Art28-0094 for recovered plastic fence posts, railings, triangle and rectangle boards.
7.	The producer of recovered plastic fence posts, railings, triangle and rectangle boards 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.	The material has been tested at an accredited laboratory, using accredited test methods, where available
9.	<p>Declaration of the producer of recovered plastic fence posts, railings, triangle and rectangle boards in this consignment: I certify that the above information is complete and correct to the best of my knowledge: Name: Date:</p>
10.	<p><u>Chain of custody</u> Producer As per Item 1. Date of transfer to next holder:</p> <hr/> <p>Any other holder (where applicable) Organisation Name: Contact Tel: Contact E-mail: Date of transfer to next holder:</p> <hr/> <p>User Organisation Name (if applicable): Name: Contact Tel: Contact E-mail: Use Location:</p> <hr/> <p>NOTE: it is the responsibility of the holder who transfers the recovered plastic fence posts, railings, triangle and rectangle boards to the next holder to ensure the chain of custody has been completed to include details of the next holder.</p>