

**END-OF-WASTE CRITERIA  
FOR PULVERISED FUEL ASH  
& FURNACE BOTTOM ASH**



**SINGLE CASE DECISION FOR ELECTRICITY SUPPLY BOARD  
(ESB)**

**Technical Amendment A**

In relation to

Decision establishing End-of-Waste Criteria  
under  
Regulation 28 of the European Union (Waste Directive) Regulations  
2011-2020  
for  
Pulverised Fuel Ash and Furnace Bottom Ash  
produced by  
Electricity Supply Board (ESB), Generation and Trading,  
Moneypoint Generation,  
Carrowdotia,  
Killimer, Kilrush,  
Co. Clare

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## ***Reasons for the Decision***

The EPA has decided, in accordance with Regulation 28(3) of the European Union (Waste Directive) Regulations 2011-2020, that the pulverised fuel ash (PFA), sometimes referred to as coal fly ash, and furnace bottom ash (FBA), the subject of the application made by Electricity Supply Board on the 17th April 2015 and produced at an EPA authorised facility operated by Electricity Supply Board (ESB) Moneypoint, will cease to be waste if it complies with the end-of-waste criteria set out in this document.

The EPA is satisfied, based on:

- the information provided by the applicant, including additional information;
- Standards for the production of aggregate, as referenced in Appendix A;
- Joint Research Centre, 2009 Final Report on “End-of-waste criteria”;
- WRAP Quality Protocol for Pulverised Fuel Ash (PFA); and
- WRAP Pulverised fuel ash and furnace bottom ash, “A technical report on the manufacture of products from pulverised fuel ash (PFA) and furnace bottom ash (FBA)”

that, subject to compliance with the end-of-waste criteria, , as well as any amendments noted herein, the pulverised fuel ash and furnace bottom ash conforms with the requirements of Regulation 28(1)(a) & (b) of the Regulation and its use in bound applications will not lead to overall adverse environmental and human health impacts

## ***Technical Amendment***

Regulation 28 of European Union (Waste Directive) Regulations 2011-2020, does not prescribe the decision-making process for setting end-of-waste criteria. Therefore, as there is no formal mechanism for amending the decision that has issued, it is within the power of the EPA to make such amendments, where deemed appropriate. As such, the Agency amends the End-of-Waste decision granted in respect of the application submitted by ESB Moneypoint Generation, Carrowdotia, Kilrush, Co. Clare.

Henceforth, the decision shall be read in conjunction with the amendments set out below.

# Amendment

*Amend Appendix A: Approved standards and specifications for determining the quality of PFA and FBA in Bound applications, of the existing End-of-Waste Decision as follows:*

- With regard to determining the quality of FBA in aggregates for concrete, reference standard, IE EN 12620 has been included as an applicable standard.

Appendix A:

Material	Product Standard
Pulverised Fuel Ash and Furnace Bottom Ash	IS EN 13242: Aggregates for unbound and hydraulically bound materials for use in civil engineering work and road construction.
Pulverised Fuel Ash and Furnace Bottom Ash	IS EN 13055-1: Lightweight aggregates. Lightweight aggregates for concrete, mortar and grout.
Pulverised Fuel Ash and Furnace Bottom Ash	IS EN 13055-2: Lightweight aggregates. Lightweight aggregates for bituminous mixtures and surface treatments and for unbound and bound applications.
Pulverised Fuel Ash	IS EN 13043: Aggregates for bituminous mixtures and surface treatments for roads, airfields and other trafficked areas.
Pulverised Fuel Ash	IS EN 450-1: Fly ash for concrete. Definition, specifications and conformity criteria.
<b>Pulverised Fuel Ash and Furnace Bottom Ash</b>	IS EN 12620: Aggregates for concrete.
Pulverised Fuel Ash	BS EN 197-1: Cement. Composition, specifications and conformity criteria for common cements.

This Technical Amendment shall be cited as Amendment A to the End-of-Waste Decision.