

Background information

In July 2019 Norbord Europe Limited (now West Fraser Europe Limited) submitted an application for variation of their PPC (Pollution Prevention & Control) Permit (PPC/E/20054/CP02) partly to allow for the burning of WESP crumb at their site in Cowie as a fuel in the Heat Energy Plant (HEP), instead of sending it to Southampton as Special Waste for incineration.

SEPA refused this part of the application for variation, as we considered the WESP crumb to be waste, not a by-product, under the conditions in Article 5(1) of the Waste Directive (Directive 2008/98/EC).

Article 5(1) requires all the following conditions to be met:

- (a) further use of the substance or object is certain;
- (b) the substance or object can be used directly without any further processing other than normal industrial practice;
- (c) the substance or object is produced as an integral part of a production process;
- (d) further use is lawful, i.e. the substance or object fulfils all relevant product, environmental and health protection requirements for the specific use and will not lead to overall adverse environmental or human health impacts.

What is WESP Crumb?

WESP crumb is the solid filter residue extracted from the Wet Electro-static Precipitator (WESP). The WESP is a gas emissions abatement system that cleans the emissions from the wood drying and board pressing processes. It uses an electro-static charge to attract particles to collecting plates within the WESP to remove these particles from the gas emissions, capturing dust, organic compounds and volatile organic compounds (VOCs). The resultant WESP crumb comprises woody material, VOCs and heavy metals.

Due to the high levels of heavy metals, in particular lead, it is not possible to use WESP crumb as a fuel on its own.

It is SEPA's opinion that those high levels of lead also prevented it from being used as a fuel, when blended with biomass. As such it remained a waste, and any burning of WESP crumb would require to be permitted as a waste incineration or co-incineration plant under Chapter IV of the Industrial Emissions Directive (Directive 2010/75/EU), which requires additional abatement.

DPEA (Division of Planning and Environmental Appeals) appeal

The operator appealed to Scottish Ministers in October 2020, and SEPA's decision to refuse this part of the variation application was affirmed in October 2021 [Scottish Government - DPEA - Case Details \(scotland.gov.uk\)](https://www.scotland.gov.uk/topics/consultations-and-appeals/dpea/cases/wesp-crumb).

The Reporter considered that the blending of particleboard (PB) WESP crumb with other fuel sources may be said to be necessary, in part, to address the contamination characteristics of the WESP crumb, and therefore went beyond normal industrial practice, preventing its classification as non-waste under condition (b).

Summary appeal

The operator then lodged a summary appeal in Edinburgh Sheriff Court in November 2021.

Following the judgement of Sheriff John K Mundy on the scope of the appeal (see decision [2022scedin34.pdf \(scotcourts.gov.uk\)](https://www.scotcourts.gov.uk/cases/2022scedin34.pdf)), the case proceeded as an open appeal involving a re-hearing of evidence rather than by way of review of the Scottish Ministers decision.

On 29 January 2024 the Sheriff ruled that in respect of PB WESP Crumb, the conditions set out in Article 5(1) of the Waste Framework Directive are all met and PB WESP Crumb generated at the Cowie plant is a by-product and not a waste. The decision is specific to PB WESP Crumb as proposed to be used at the operator's plant in Cowie only.

The Sheriff's written decision has not yet been published.

Following the judgment of the Sheriff, SEPA was directed to issue a variation notice, varying the conditions of the PPC Permit to allow the use of PB WESP crumb in the Heat Energy Plant.

Variation of the Permit

SEPA issued a notice of variation for West Fraser's PPC Permit at Cowie on 12 April 2024 containing the amendment as directed. [PERMIT_XYZ \(windows.net\)](#)

It is still SEPA's position that when determining if the PB WESP crumb is suitable for use instead of normal biomass fuel we must look at whether burning PB WESP crumb results in emissions that have an overall adverse impact on the environment and human health. This approach is used by all UK Environment Agencies.

Using figures supplied by the company, the concentrations of heavy metals in PB WESP crumb is 109 times that of normal biomass fuel. This results in a 47% increase in emissions of lead compared to current emissions, leading SEPA to conclude that there is an overall adverse environmental or human health impact compared to the use of the currently permitted fuels.

Due to this increase in concentrations, SEPA have also inserted further conditions into the PPC permit to protect the environment and human health, including:

- requirements for the installation of equipment to ensure the correct blend of biomass and PB WESP Crumb,
- weekly sampling of the PB WESP Crumb with monthly reporting to SEPA,
- An emission limit value and monitoring requirements for lead – including monitoring in the community.

We expect West Fraser to meet all the conditions laid out in the varied PPC Permit and will assess compliance against them.

Statement

A spokesperson for the Scottish Environment Protection Agency (SEPA) said: "SEPA have a critical role in securing high environmental performance from those we regulate, reducing pollution and protecting communities. We also play a significant role in working with operators to support innovation that creates less waste and improves resource efficiency – helping to create a more prosperous economy.

"Our expert staff made the decision to refuse the requested variation after careful consideration of environmental legislation and the comparator approach, as adopted by all UK environmental agencies. This was done to protect the environment and local community from the significant increase in lead emissions.

"While we continue to believe our approach is correct, we have accepted the judgement and completed the variation to allow the burning of WESP crumb as directed. We have included further requirements in the permit to set an emission limit value for lead and monitoring and will enforce compliance against them.

"SEPA will continue to take decisions on end-of-waste and by-products on a case-by-case basis, applying the comparator approach to assess any overall adverse environmental or human health impact."