Permit Application Representation

COMMENTS ON DUNBAR INCINERATOR PERMIT VARIATION APPLICATION

Proposed activity:

Schedule 20, Part 4, Chapter 5, paragraph 24(a): Incineration of non-hazardous waste at more than 3 tonnes per hour

Facility Location:

Dunbar Energy Recovery Facility, Oxwellmains, Dunbar, East Lothian, EH42 1SW

Applicant:

Viridor Dunbar Waste Services Limited

Permit Number:

PPC/A/1032878 Variation Application VAR04

1ST OCTOBER 2026

United Kingdom Without Incineration Network

The United Kingdom Without Incineration Network (UKWIN) objects to the proposed substantial variation of the Dunbar Energy Recovery Facility permit.

Viridor is seeking to increase the permitted annual throughput from 390,000 tonnes to 483,552 tonnes, an increase of 93,552 tonnes a year, or around 24%. It also proposes to increase the maximum hourly throughput from 23.95 tonnes per hour per line to 27.6 tonnes per hour per line, increase the nominal thermal load from 105% to 115%, and add two further waste codes.

Our primary submission is that SEPA should not determine the proposed increase in incineration capacity until the Scottish Government's indicative residual waste treatment cap has been established and incorporated into environmental permitting arrangements. If SEPA nevertheless approves the application before then, the additional capacity should remain expressly subject to review against the cap and should not become an established baseline which prejudges that future assessment.

1. THE APPLICATION SHOULD NOT BE DETERMINED BEFORE THE INDICATIVE CAP IS IN PLACE

Environmental Standards Scotland (ESS) has already investigated the particular regulatory problem raised by increases in permitted incineration capacity at existing facilities. Dunbar was one of the examples considered by ESS.

ESS's December 2025 Informal Resolution Report recorded that Dunbar's permitted capacity had increased in 2023 from 325,000 to 390,000 tonnes per annum without structural changes requiring new planning permission and without a planning condition limiting capacity. ESS found that SEPA did not consider national incineration capacity when determining or varying individual authorisations.

ESS concluded that the absence of national capacity as a consideration when limiting capacity at individual facilities creates the potential for capacity to increase without assessing whether it aligns with Scotland's overall residual waste management needs. It also found that the safeguards relied upon by the Scottish Government did not comprehensively control capacity at existing and pipeline facilities.

The agreed response was to develop an indicative residual waste treatment cap and to reflect that cap in SEPA's permitting arrangements so that national capacity is considered when environmental authorisations are assessed.

ESS's first progress update, published on 30 September 2026, confirms that this work is not complete. The indicative cap is still being developed and its integration into environmental permitting remains outstanding. ESS records that the Scottish Government has reaffirmed that, once the methodology is established, SEPA will take national capacity into account when assessing environmental authorisations.

That is directly relevant to this application. If the present variation is granted, Dunbar will have moved from 325,000 tonnes per annum before the 2023 variation to 483,552 tonnes per annum, an increase of nearly 49%, through successive permit variations. The present application would add a further 93,552 tonnes per annum before the safeguard introduced in response to the ESS investigation is in place.

The history also shows why ESS's concern is not theoretical. The 2023 increase was justified by technical operating parameters, including lower waste calorific value, operation at 105% MCR and increased availability. Dunbar then operated close to its new annual limit: the 2025 Annual Performance Report records 386,528 tonnes received, more than 99% of the 390,000 tonne permitted capacity. Viridor is now seeking another 24% increase based on a still lower design calorific value and operation at 115% load.

Determining another major increase now would allow the regulatory position identified by ESS to continue while the agreed remedy remains under development. UKWIN therefore asks SEPA to hold the application in abeyance until the indicative residual waste treatment cap and the associated permitting arrangements are in place.

2. ANY INCREASE GRANTED NOW MUST REMAIN SUBJECT TO THE CAP

If SEPA is not prepared to defer determination, the additional capacity should not become an entrenched baseline before the national capacity assessment has been introduced.

The fact that the plant may technically be capable of burning 483,552 tonnes a year does not establish that Scotland needs that capacity. Granting the variation now should not result in the additional 93,552 tonnes later being treated simply as existing authorised capacity which falls outside meaningful consideration under the cap.

SEPA should therefore use a condition, or another legally effective mechanism, to ensure that any increase above 390,000 tonnes per annum is reviewed once the indicative residual waste treatment cap and associated permitting arrangements are in place, and can be reduced where necessary to give effect to that assessment.

Suggested wording:

> *The Operator shall, following publication of the Scottish Government's indicative residual waste treatment cap and its incorporation into environmental permitting arrangements, provide such information as SEPA requires to enable the permitted annual throughput of the installation to be reviewed against Scotland's residual waste treatment requirements.*

The Operator shall thereafter comply with any revised annual throughput limit imposed by SEPA following that review.

If SEPA considers that this precise form of condition is not imposable, UKWIN asks SEPA to identify and use an equivalent mechanism.

At the very least, the decision document should state expressly that granting the variation does not amount to a finding that Scotland requires the additional 93,552 tonnes per annum and does not prejudice a subsequent reduction in permitted throughput when the cap is applied.

3. NO NEED FOR THE PROPOSED ADDITIONAL CAPACITY HAS BEEN DEMONSTRATED

The stated justification for the increase is principally technical. Viridor says that the proposed capacity reflects a long-term reduction in the net calorific value of waste and changes to the combustion control system. It proposes to increase the nominal load point to 115% of boiler thermal capacity and to use a revised firing diagram.

This explains how Dunbar could burn more waste. It does not establish why Scotland needs another 93,552 tonnes of incineration capacity.

Indeed, if the same logic is applied across the whole of the Scottish EfW fleet then this could result in significant levels of incineration overcapacity, which makes it all the more important to establish a precedent that this should not be allowed to happen.

SEPA's own variation form requires the applicant, where wastes received or generated will change, to demonstrate how the installation will manage waste sustainably and in line with the waste hierarchy. The Supporting Information does not provide a substantive assessment showing that the additional capacity is required for genuinely residual waste which cannot reasonably be prevented, reused or recycled, or how it fits with Scotland's declining residual waste requirements.

This is the question which the ESS cap is intended to address. It should not be answered indirectly by permitting whatever additional throughput an individual facility is technically capable of achieving.

The capacity work is intended to establish whether this additional incineration capacity is required at all. Before granting the variation, SEPA should therefore require evidence of the anticipated source and composition of the additional waste, the extent to which it is genuinely residual, and how the proposed increase is consistent with Scotland's waste reduction and recycling objectives. If that assessment is to be undertaken through the forthcoming national cap, the application should await it.

The environmental consequence is also material. Viridor's Greenhouse Gas Assessment estimates that the variation would increase greenhouse gas emissions by around 27,880 tonnes of CO_2e per year compared with the currently permitted operation. The suggestion that this is conservative because avoided landfill emissions have not been credited assumes the relevant alternative is landfill, and indeed ignores the carbon sequestration benefits of landfill which can result in landfill having a lower GHG impact than incineration per tonne of waste treated.

4. OPERATION AT 115% REQUIRES PROPER PERFORMANCE VALIDATION

The present proposal is a larger change to the operating envelope than the capacity variation approved in 2023. That earlier variation increased operation to 105% MCR and raised annual capacity from 325,000 to 390,000 tonnes.

During the 2023 determination SEPA required detailed technical evidence about operation at the increased rate, including the capacity of the abatement systems, increased flue gas volumes, residence time, IBA quality, raw material and residue storage and continuing compliance with BAT and the permit. SEPA described that evidence as critical to demonstrating that the permitted activities would continue to meet BAT and permit requirements.

Plant trials at 105% MCR had already been undertaken, but SEPA still required further assessment because those trials had used waste with a calorific value of around 11 MJ/kg. SEPA required modelling at lower calorific values relevant to the proposed operating envelope, recognising that these resulted in greater flue gas flow and emission rates.

The present application goes further. It proposes operation at 115% thermal load, an 8 MJ/kg lower design NCV, increased flue gas flow and temperature, changes to combustion controls and modifications to feedwater, baghouse and powdered activated carbon dosing equipment, with other modifications potentially required.

Despite this, section 3.12 of the application form states that a commissioning plan is 'Not applicable', even though the Supporting Information itself refers to changes being made 'during re-commissioning'. The form also states 'No change' in relation to emissions and environmental monitoring.

Recent monitoring reinforces the need to verify the revised operating envelope. During the April 2025 AST the Line 2 duty CEMS volume-flow measurement failed its calibration test and the existing calibration function was deemed invalid, requiring further QAL2 testing.

As the present variation proposes increased flue gas flow, SEPA should confirm that volume-flow measurement and the wider CEMS are valid across the proposed operating range.

UKWIN therefore asks SEPA not to authorise unrestricted operation at 115% load until an appropriate commissioning and performance validation programme has demonstrated satisfactory operation under conditions representative of the revised firing envelope, including the lower design NCV. This should cover combustion performance, residence time, flue gas cleaning, emissions monitoring and residue quality.

5. THE PROPOSED NEW WASTE TYPES REQUIRE PROPER ASSESSMENT

Viridor proposes to add EWC 19 08 01, screenings from wastewater treatment plants, and EWC 19 08 05, sludges from the treatment of urban wastewater. However, in its discussion of fugitive emissions the Supporting Information states that 'The proposed variation does not introduce new waste types' and relies on this, amongst other matters, in concluding that no fugitive emissions management plan is required. It also states that no changes are anticipated to the types and amounts of odour generated.

Those statements should be reconciled before the new waste codes are authorised. SEPA should require a proportionate assessment of the likely quantities and characteristics of these wastes, their handling and storage, odour and fugitive emission potential, and their compatibility with the proposed firing envelope.

CONCLUSION

The central issue is that SEPA is being asked to authorise a further substantial increase in incineration capacity at the very facility used by ESS to illustrate the regulatory gap, before the safeguard agreed in response to that investigation is in place.

ESS identified Dunbar itself as an example of how incineration capacity could increase without proper consideration of national residual waste treatment need. The Scottish Government agreed that this weakness should be addressed through an indicative residual waste treatment cap and by incorporating national capacity into environmental permitting. ESS confirmed on 30 September 2026 that this work remains incomplete.

Viridor is seeking another 93,552 tonnes per annum of permitted capacity before that safeguard is in place. If granted, Dunbar's permitted capacity will have increased by nearly 49% from the 325,000 tonnes per annum which applied before the 2023 variation.

UKWIN therefore asks SEPA to:

1. Defer determination of the proposed capacity increase until the indicative residual waste treatment cap has been established and incorporated into environmental permitting arrangements;

2. If SEPA nevertheless grants additional capacity before then, ensure through a condition or other legally effective mechanism that the additional capacity remains subject to subsequent review and reduction in line with the cap, and is not treated as an established baseline which prejudges that assessment; and

3. In any event, not authorise unrestricted operation at 115% load until the revised operating envelope has been properly validated and the material inconsistencies concerning the proposed new waste types have been resolved.

If SEPA considers that any of these safeguards cannot lawfully be secured through permit conditions, UKWIN asks SEPA to explain this in their decision document and identify what alternative mechanism will be used to prevent the present variation from undermining the remedial action agreed following the ESS investigation.

REFERENCES

Environmental Standards Scotland, Incineration Capacity Investigation - Informal Resolution Report, Case IESS.24.046, December 2025.

Environmental Standards Scotland, Incineration Capacity - Case Update, Case IESS.24.046, 30 September 2026.

SEPA consultation, APP2026-00001990, Viridor Dunbar Waste Services Ltd.

Viridor Dunbar Waste Services Limited, Supporting Information, Fichtner Consulting Engineers, 4 August 2026, document UF00505-0320-0001STS.

Viridor Dunbar Waste Services Limited, Industrial Activities Permit Variation Form P-IND-IA2V.

SEPA, Dunbar Energy Recovery Facility, 2023 variation application and determination documents for PPC/A/1032878/CP01/VAR01, including the Draft Decision Document and supporting correspondence.

SEPA, Variation Notice PPC/A/1032878/CP01/VAR01, effective 28 July 2023.

Viridor Dunbar Waste Services Limited, 2025 Annual Performance Report.

Cura Terrae OH and Emissions Testing Ltd, Dunbar ERF Line 2 Duty CEMS AST/QAL2 monitoring report, April 2025, and Viridor notification to SEPA dated 31 July 2025.

The Environmental Authorisations (Scotland) Regulations 2018, as amended.