

Redacted: WG official 1

Environment Quality and Regulation Our ref: PAN-008534/A51 (LP3131SW)

Branch Your ref: -

Welsh Government
Cathays Park

Cardiff Date: 17 August 2021 CF10 3NQ

Dear Redacted: WG official 1

CC Redactd: WG Officials 2,3

Statutory Communication to Welsh Ministers of intended use by Natural Resources Wales of alternative combustion conditions for waste coincineration permitting using Article 51 provisions of the Industrial Emissions Directive (IED).

Permit Application reference: PAN-008534 (EPR/LP3131SW/V003)

Operator: Simec Uskmouth Power Limited

Facility: Uskmouth Power Station, West Nash Road, Nash, Newport, NP18 2BZ

In exercising its statutory functions under the Environmental Permitting (England and Wales) Regulations 2016 (EPR), Natural Resources Wales NRW has been determining the above permit substantial variation application and will shortly publish our draft decision for public consultation, which is to permit the proposed change.

The draft variation decision will permit the conversion of the facility from a coal-fired power station to a waste-fired (with up to 1% biomass in addition) co-incinerator, subject to Chapter IV IED ("Special provisions for waste incineration plants and waste co-incineration plants") under EPR. Article 50 sets required Operating Conditions for these plant. Article 51, allows the Competent Authority to set different conditions in certain circumstances. As a result of our detailed technical determination, we have decided that the appropriate draft decision in this case is to permit the proposed activity using Article 51 alternative conditions.

Under the relevant provisions of IED and EPR (including EPR Schedule 1(A) "Modification of the Directives" [EU Exit] Paragraph 24, the Competent Authority must communicate use of Article 51 Alternative Conditions to the Appropriate Authority (i.e. NRW to Welsh Ministers in this case). This letter is to communicate to you our intention to do so. We will communicate our final decision when the determination is complete, following statutory public consultation on our draft decision.

Article 50 sets various requirements for Operating Conditions. The only one for which an alternative is proposed under Article 51 provision, is the combustion residence time and temperature (known as "time temperature history").

Article 50 (2) (paragraph ii – for co-incineration) normally requires that "Waste co-incineration plants shall be designed, equipped, built and operated in such a way that the gas resulting from the co-incineration of waste is raised in a controlled and homogeneous fashion and even under the most unfavourable conditions, to a temperature of at least 850°C for at least two seconds". We propose to use an equivalent alternative combustion requirement under Article 51 that "the gas resulting from the co-incineration of waste is raised in a controlled and homogeneous fashion and even under the most unfavourable conditions, to a temperature of at least 1000°C for at least one second". All other, and related requirements are unchanged.

The purpose of the time-temperature requirement is to ensure near-complete combustion, in which organic products of incomplete combustion (such as dioxins) are effectively destroyed in order to minimise pollution. In effect, lower time is offset by higher temperature in this case, in a technically sound manner. This approach and the proposed alternative conditions have been subject to extensive technical verification during the permit determination. We are also satisfied that the proposed process meets Best Available Technique (BAT) requirements, and is capable of meeting the BAT-Associated Emission Limit values for "New Plant" in the applicable Waste Incineration BRef.

We will make available to the public, and to Welsh Ministers, our Draft Decision Document, which explains in detail the technical considerations in deciding upon this approach. Appendix 1 to this letter provides a detailed analysis of conformance of our proposed decision with the requirements for Article 50/51 as relevant to this determination. I will endeavor to answer any further questions you may raise regarding this communication.

Yours sincerely



Regulation Policy and Approach Manager

Copy to Redactd: WG Officials 2,3 Resource Efficiency and Circular Economy Division (Welsh Government)

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Gwasanaeth Trwyddedu, Cyfoeth Naturiol Cymru, Tŷ Cambria, 29 Heol Casnewydd, Caerdydd. CF24 0TP Permitting Service, Natural Resources Wales, Cambria House, 29 Newport Road, Cardiff. CF24 0TP



Appendix 1: Detailed Breakdown of Article 51 requirements and assessment of conformance with relevant provisions in this proposed decision:

Regulrements of Article 51 (1):

Article 51 (1) states that "Conditions different from those laid down in Article 50(1), (2) and (3) and, as regards the temperature, paragraph 4 of that Article and specified in the permit for certain categories of waste or for certain thermal processes, may be authorised by the competent authority provided the other requirements of this Chapter are met."

Authorisation of alternative conditions under this provision is legitimate, noting the following:

- Natural Resources Wales is the competent authority and may make this decision.
- As explained in our decision document, the permit variation application is specific both to certain categories of waste and a particular thermal process.
- All other requirements of Chapter IV of IED are met, as detailed in our decision document.
- Conformance with the stated requirements of Article 50 is as laid out below:

Article 50(1) slag and bottom ash requirement applies to waste incineration plants only, and not to the co-incineration plant in question. Carbon content of residues is nevertheless a matter of BAT and has been considered in our decision.

Article 50(2) paragraph (ii) is discussed above and alternative conditions for residence time and temperature will be used as explained. Detailed reasoning as to the justification is provided in our Decision Document.

Article 50(2) paragraph (I) concerns incineration plants and paragraph (III) concerns hazardous waste, neither of which are applicable.

Article 50(2) Paragraph (Iv) concerns combustion chamber temperature measurement in waste incineration plants, and so is not strictly applicable to this co-incinerator. *Temperature verification will nevertheless be managed for this facility as for others in England and Wales according to relevent regulatory guidance P4-100/TR Part 2 and standard regulatory approaches.*

Requirements of Article 51 (2):

Requirement of Article 51 (2) concerns waste incineration plants and so is not strictly applicable to this co-incinerator. Nevertheless as noted above, Residue quality has been considered as a matter of BAT.

Requirements of Article 51 (3):

Requirement of Article 51 (3) paragraph (i) for total organic carbon and carbon monoxide emission limit values (ELVs) for waste co-incineration plant is met – proposed ELVs are in accordance with Annex VI requirements

Requirement of Article 51(3) paragraph (II) is not relevant to this case as it concerns only certain type of plant in a specific sector, neither of which apply.

Requirements of Article 51 (4):

Requirement of Article 51 (4) for communication is met for authorisation of alternative conditions by provision of this letter and intended subsequent communication when our final decision is made.

Requirements for Article 72 Information and results of verification requirements will be met through standard reporting requirements, unless any specific requests are made from Welsh Government or other Appropriate Authority