



# NORTH LINCOLNSHIRE GREEN ENERGY PARK

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## North Lincolnshire Green Energy Park

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for further information by the  
Secretary of State

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# North Lincolnshire Green Energy Park

Applicant's Response to Request for Further Information by the  
Secretary of State

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## Acronyms and Abbreviations

Name	Description
AGI	Above Ground Installations
CBMF	Concrete Block Manufacturing Facility
CCUS	Carbon Capture, Utilisation and Storage
CO <sub>2</sub>	Carbon Dioxide
CoCP	Code of Construction Practice
COMAH	Control of Major Accident Hazards
DAS	Design and Access Statement
dDCO	Draft Development Consent Order
DHPWN	District Heat and Private Wire Networks
EIA	Environmental Impact Assessment
ERF	Energy Recovery Facility
ES	Environmental Statement
EV	Electric Vehicle
ExA	Examining Authority
H <sub>2</sub>	Hydrogen
IEMA	Institute of Environmental Management and Assessment
LAQM	Local Air Quality Management
MW	Megawatt
NE	Natural England
NLC	North Lincolnshire Council
NLGEP	North Lincolnshire Green Energy Park
NSIP	Nationally Significant Infrastructure Project
OEMP	Outline Environmental Management Plan
PRF	Plastic Recycling Facility
RDF	Refuse Derived Fuel
RHTF	Residue Handling and Treatment Facility
SMP	Soil Management Plan
SoCG	Statement of Common Ground
SSSI	Site of Special Scientific Interest
SUDs	Sustainable Drainage System

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# 1. INTRODUCTION

## 1.1 Overview

- 1.1.1 This report responds to a Request for Information by the Secretary of State for Energy Security and Net Zero, issued on 8 December 2023.
- 1.1.2 The report responds to each of the requests for updates and information that are addressed to the Applicant.

## 1.2 The Proposed Development

- 1.2.1 The North Lincolnshire Green Energy Park (NLGEP), located at Flixborough, North Lincolnshire, comprises an ERF capable of converting up to 760,000 tonnes of residual non-recyclable waste into 95 MW of electricity and a CCUS facility which will treat a proportion of the excess gasses released from the ERF to remove and store CO<sub>2</sub> prior to emission into the atmosphere. The design of the ERF and CCUS will also enable future connection into the Zero Carbon Humber pipeline to be applied for, when this is consented and operational, to enable the possibility of full carbon capture in the future.
- 1.2.2 The NSIP incorporates a switchyard, to ensure that the power created can be exported to the National Grid or to local businesses, and a water treatment facility, to take water from the mains supply or recycled process water to remove impurities and make it suitable for use in the boilers, the CCUS facility, concrete block manufacture, hydrogen production and the maintenance of the water levels in the wetland area.
- 1.2.3 The Project will include the following Associated Development to support the operation of the NSIP:
  - A bottom ash and flue gas residue handling and treatment facility (RHTF);
  - A concrete block manufacturing facility (CBMF);
  - A plastic recycling facility (PRF);
  - A hydrogen production and storage facility;
  - An electric vehicle (EV) and hydrogen (H<sub>2</sub>) refuelling station;
  - Battery storage;
  - A hydrogen and natural gas above ground installations (AGI);
  - A new access road and parking;

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- A gatehouse and visitor centre with elevated walkway;
  - Railway reinstatement works including, sidings by Dragonby, reinstatement and safety improvements to the 6km private railway spur, and the construction of a new railhead with sidings south of Flixborough Wharf;
  - A northern and southern district heating and private wire network (DHPWN);
  - Habitat creation, landscaping and ecological mitigation, including green infrastructure and 65-acre wetland area;
  - New public rights of way and cycle ways including footbridges;
  - Sustainable Drainage Systems (SuDS) and flood defence; and,
  - Utility constructions and diversions.

1.2.4 Additional information regarding the proposed development can be found in Chapter 1 and Chapter 3 of the submitted Environmental Statement (APP-049 and REP6-018).

### **1.3 Structure of the Report**

1.3.1 The remainder of this report has been structured by topic with a response to each of the requests for updates and information made.

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**2 RESPONSES TO REQUEST FOR INFORMATION BY SECRETARY OF STATE**

	TO	REQUEST FOR UPDATE OR INFORMATION	APPLICANT'S RESPONSE
<b>Incineration capacity and the waste hierarchy</b>			
Para 3	Applicant	<p>The Secretary of State notes Draft EN-1 paragraphs 3.3.20 and 5.15.7, and draft EN-3 paragraphs 3.7.7 and 3.7.29 state how an overcapacity of energy from waste treatment should be avoided at national and local scales. Development Consent was granted for the Boston Alternative Energy Facility on 05 July 2023, located in the same waste catchment area as the Proposed Development. The Secretary of State also notes that the Applicant references the eighth annual 'UK Energy from Waste Statistics – 2021' report published by Tolvik in May 2022. The ninth annual report was published in May 2023.</p> <p><b>The Applicant</b> is requested to explain whether it considers an update to its assessment of waste availability and conformity with the waste hierarchy is required in light of the Boston Alternative Energy Facility and the most recent Tolvik report, and if so to provide updated assessments as required.</p>	<p>Granting of consent for the Boston Alternative Energy Facility does not immediately result in guaranteed capacity as that project has not yet achieved financial close and so it is not yet certain that it will be developed. The Applicant's analysis confirms that approximately 50% of consented projects are ultimately developed. Consented facilities will compete for residual waste fuel supply contracts and once project finance is secured those facilities presenting the best environmental solution for waste treatment will be the more likely to go forward.</p> <p>It is clear that there is not EfW overcapacity today, as significant volumes of waste are still being landfilled (or exported). It is the Applicants position that there is a low potential for over-capacity and only in the longer term, depending on how residual waste volumes change over time and on which new EfW facilities are built and how long existing ones continue to operate.</p> <p>Nevertheless, the Applicant presents a number of scenarios for waste availability in Annex 1. These take into account information on project status from the May 2023 Tolvik report. The Applicant's 'best view' or 'median' scenario (Scenario E) concludes that the Proposed Development does not result in over-capacity at the national or regional level. This scenario takes into account projects which are consented but have not yet achieved financial close (including Boston), attaching a probability of realisation to these to reflect the reality that not all of these projects will progress.</p>
Para 4	Applicant	<p>The Secretary of State notes that the Applicant's own forecasts [REP6-032] predict a base-case capacity gap of 16 kilotons per annum (ktpa) in the Yorkshire &amp; Humber waste catchment region and an overcapacity</p>	<p>The tables presented in REP6-032 are for a 'conservative' (ie high recycling) scenario which is not the Applicant's best view of the likely outcome.</p>



		<p>of 1,841 ktpa in England by 2030. The contribution of the Proposed Development could result in overcapacity by 2030 at both spatial scales.</p> <p>In light of these forecasts, the Applicant is requested to provide further justification and reasoning to support its assertion [REP8-020] that there “will not be an excess of energy from waste capacity as a result of the Proposed Development, at a local, national or regional level”.</p>	<p>Annex 1 of this document presents several scenarios reflecting the wide range of uncertainty affecting future residual waste volumes and EfW treatment capacity.</p> <p>Annex 1 presents the same table as per REP6-032 for the Applicant’s ‘best view’ or ‘median’ scenario (see Scenario E).</p> <p>In this median scenario, the Applicant has assumed a 55% household recycling rate is achieved by 2035, rising to 60% by 2042, together with a rate of 77.5% C&amp;I waste recycling by 2042. These rates are coupled with the assumption that EfW capacity includes only existing and under-construction capacity which is assessed as being of ‘high’ or ‘medium’ CCS potential, together with consented pipeline projects with high or medium CCS potential which are assessed as still under active development.</p> <p>In this most likely scenario, there is a capacity gap of c.2,400 ktpa in 2040. The proposed development can meet only a proportion of this need to divert waste from landfill. As a result, there will be no excess of EfW capacity.</p> <p>There is substantial headroom for recycling rates to increase further, or for additional EfW capacity with poor CCS potential to remain onstream before the capacity gap is eroded completely. In what the Applicant considers is the unlikely event that this occurs, its view is that market forces will determine the capacity that continues to operate to deal with residual waste following recycling, reflecting the objective that high quality infrastructure should boost economic growth and competitiveness, as set out in NPS-EN1 2.1.3 and 2.6.2. Further, paragraph 2.7.29 of EN-3 makes it clear that <i>“Applicants must ensure EfW plants are fit for the future.</i> (our emphasis)” This position is more firmly held with confirmation that EfW facilities will be subject to carbon pricing through inclusion in the ETS from 2028, which will make more efficient and CCS-ready EfW facilities more competitive.</p>
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<p>Para 5</p>	<p>Applicant</p>	<p>EN-3 paragraph 2.5.70 states that the Secretary of State should be satisfied that the Proposed Development is in accordance with the waste hierarchy and would be of an appropriate type and scale as to not prejudice the achievement of local or national waste management targets. Where there are concerns in terms of a possible conflict, the Applicant should provide evidence as to “why this is not the case or why a deviation from the relevant waste strategy or plan is nonetheless appropriate and in accordance with the waste hierarchy”. (emphasis added).</p> <p><b>The Applicant</b> is requested to provide further evidence and reasoning beyond that stated in [REP6-032] that: “some resilience is necessary in the system to ensure as least waste as possible goes to landfill.”.</p>	<p>REP6-032 went on to say: “<i>A system which is operating at under capacity for Energy from Waste (EfW) will result in additional waste in landfill. The optimum position is therefore to have a slight overcapacity in EfW facilities to ensure that there is no residual waste. Facilities such as that proposed are tightly controlled to only take RDF and therefore are a direct replacement for landfill, rather than reducing recycling rates.</i>”</p> <p>Currently, there is insufficient operating EfW capacity to divert all residual waste capable of recovery from landfill to a higher stage in the hierarchy. Although there is further capacity in planning and already permitted, this cannot all be relied upon to become operational. Planned and permitted capacity may not be delivered for various reasons, including altered developer priorities or an inability to find funding or to secure fuel. For example, Wheelabrator (now Enfinium) abandoned its proposed NSIP Harewood EfW facility in 2020, whilst Peel Environmental’s Ince Marshes RDF facility, originally planned for 600 ktpa throughput is now being built at a 500 ktpa scale by Protos.</p> <p>The Applicant has recently decided not to progress the 250 ktpa project at Melton due to the constraints of the site. The site has an extant consent which dates back to 2005. This demonstrates the issues in forecasting capacity and has been taken into account in updated figures in Annex 1.</p> <p>The inability to rely on planned and permitted capacity was explicitly recognised in the decision letter on the Ince Marshes RDF EfW facility (see APP/Z0645/A/07/2059609. Section 6, page 7 of 10), where the Secretary of State said, in relation to a competing proposal “... <i>While the INEOS Chlor energy from waste proposal at Runcorn, referred to at the [Ince Marshes] inquiry was granted consent by the Secretary of State on 16 September 2008, there can be no guarantee that the waste facility will be constructed or that other prospective energy from</i></p>
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			<p><i>waste facilities will be approved and constructed. At the same time the Secretary of State notes that neither waste nor energy policy places a rigid cap on the development of waste management capacity.”</i></p> <p>In addition, operators may choose to close existing capacity for commercial reasons, or a facility may operate below its forecast availability as a result of unforeseen outages. The Hull EfW facility, for example, is operating at low availability and not meeting its design throughput.</p> <p>As a result, planning for ‘just enough’ capacity to meet the need to divert residual waste from landfill is almost certain to result in insufficient capacity being available in practice. Therefore, capacity to provide some contingency or resilience in the system will be required if as least waste as possible is to be landfilled.</p> <p>Moreover, if there were to be capacity available beyond that required to meet need, the market would determine to which facilities residual waste is consigned, with less attractive facilities, in terms of gate fee and environmental credentials (eg R1 status and CCS potential), exiting the market.</p> <p>Some mainland European markets where EfW was adopted more rapidly than in the UK have experienced a degree of overcapacity whilst recycling rates rose. In Germany and the Netherlands, a shortfall in fuel has been met through imports of residual waste from other member states where there is a less mature infrastructure, whilst local recycling rates have continued to rise<sup>1 2 3</sup>.</p> <p>In Denmark, there will be a planned closure of EfW plants that are no longer needed, with the worst-performing facilities closed first. The Bornholm plant, for example, will not be replaced when it is fully depreciated in 2032<sup>4 5</sup>.</p>
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<sup>1</sup> NABU, 2009, pages 2 ff and 37 ff. [https://www.nabu.de/imperia/md/content/nabude/abfallpolitik/nabu-studie\\_muellverbrunnungskapazitaeten.pdf](https://www.nabu.de/imperia/md/content/nabude/abfallpolitik/nabu-studie_muellverbrunnungskapazitaeten.pdf), accessed 11/01/24

<sup>2</sup> Packaging Insights, 2023, unpaginated. <https://www.packaginginsights.com/news/italian-trash-to-dutch-treasure-amsterdam-to-turn-romes-imported-waste-into-energy.html>, accessed 11/01/24.

<sup>3</sup> Musulin, K., 2015, unpaginated. <https://www.wastedive.com/news/germany-faces-an-awkward-trash-problem-theres-not-enough-of-it-407730/>, accessed 11/01/24

<sup>4</sup> Zero Waste Europe, 2023, p50. [https://zerowasteurope.eu/wp-content/uploads/2023/09/zwe\\_sep23\\_report\\_enoughisenoughwtemoratorium.pdf](https://zerowasteurope.eu/wp-content/uploads/2023/09/zwe_sep23_report_enoughisenoughwtemoratorium.pdf) , accessed 11/01/24.

<sup>5</sup> <https://www.eea.europa.eu/publications/many-eu-member-states/denmark/view> BOFA, 2019, p6.

			<p>In Belgium, only EfW facilities compatible with a carbon neutral society will be authorised to operate beyond 2050<sup>6 7</sup>.</p> <p>In these markets, recycling rates have still risen as EfW capacity has grown and have continued to rise as the need to treat local residual waste has declined and their throughput met with residual waste imports. There is no evidence that recycling rates have been affected by the potential shortfall in throughput<sup>8</sup>.</p>
Para 6	Applicant, NLC	<p>The Secretary of State notes that the Applicant [REP3-040] considers the capacity gap will gradually close at the national and local level by 2035 if the government's recycling targets are met, but recent plateauing of recycling rates at around 42% means there is significant uncertainty as to whether these targets will be met. The Applicant [REP6-032, Annex A] considered that the government targets on waste reduction and recycling would be met.</p> <p><b>The Applicant</b> is requested to clarify its position with regards to whether it considers that the capacity gap will close at the national and local level by 2035. <b>North Lincolnshire Council (NLC)</b> is also invited to comment on the Applicant's future projection of recycling targets, including whether it considers there will be an overcapacity of Energy from Waste (EfW) based on the Applicant's assessments, and whether it considers the Applicant's assumption (in [REP6-032]) that recycling targets would be met when forecasting is appropriate.</p>	<p>In the Scenarios presented below in Annex 1, the Applicant's best view is the 'Median' case (ie Scenario E).</p> <p>The Applicant's modelling of capacity in REP3-040 was based on government targets for reduction and recycling of wastes for 2035 being met. Clearly, as the SoS observes, there must be significant doubt that the targets will be met at this particular point in time, or indeed over a longer timeframe. On the current trajectory, the Applicant considers that the recycling targets as currently stated will not be met by 2035.</p> <p>Should there be a shortfall against the recycling targets, the result would be a greater quantity of residual waste. Without additional diversion capacity, this waste would be landfilled, contrary to the waste hierarchy and with an associated GHG burden. An increased quantity of residual waste landfilled would create a demand for further EfW capacity beyond that modelled.</p> <p>Where the government's targets are met, but only over a longer timeframe, additional EfW capacity would help ensure compliance with the waste hierarchy. The Applicant considers that the market would determine which facilities would remain operational in the longer term as reduction and recycling targets are approached at a more distant point in time.</p> <p>The Applicant assumes the Government remains committed to decarbonising the EfW fleet as part of the transition to Net Zero and the ambition to decarbonise the electricity grid by 2035.</p>

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<sup>6</sup> Zero Waste Europe, 2023, p51. [https://zerowasteurope.eu/wp-content/uploads/2023/09/zwe\\_sep23\\_report\\_enoughisenoughwtemoratorium.pdf](https://zerowasteurope.eu/wp-content/uploads/2023/09/zwe_sep23_report_enoughisenoughwtemoratorium.pdf) , accessed 11/01/24.

<sup>7</sup> Belgian Integrated National Energy and Climate Plan 2021-2030: Section A: National Plan (Context, objectives, policies and measures), Approved by the Consultation Committee on 18 December 2019, p106. [https://energy.ec.europa.eu/system/files/2020-09/be\\_final\\_necp\\_para\\_en\\_0.pdf](https://energy.ec.europa.eu/system/files/2020-09/be_final_necp_para_en_0.pdf), accessed 11/01/24.

<sup>8</sup> Eurostat, 2023, Treatment of waste by waste category, hazardousness and waste management operations. Data selection: hazardous and non-hazardous – total waste for recovery – energy recovery (R1) and disposal – landfill (D1, D5, D12); [https://ec.europa.eu/eurostat/databrowser/view/env\\_wastrt\\_custom\\_9199195\\_default/table?lang=en](https://ec.europa.eu/eurostat/databrowser/view/env_wastrt_custom_9199195_default/table?lang=en), accessed 11/01/24.

			<p>Expansion of the ETS scheme to EfW facilities from 2028 introduces a carbon price, altering the commercial model for the entire fleet, with the result that market forces would act preferentially to divert waste to those EfW facilities which can capture and store carbon most cost-effectively.</p> <p>Above, in its response to Para 5, the Applicant notes developments in the Danish and Belgian EfW markets, where better performing facilities, and those offering compatibility with a carbon neutral society, will persist in the future when less capacity is required than currently operating.</p>
Para 7	Applicant	<p><b>The Applicant</b> is requested to explain whether its projections that the Proposed Development does not result in over-capacity of EfW waste treatment at a national or local level [REP3-040] is based on a best, worst or median scenario.</p>	<p>The projections presented in REP3-040 represent only a 'conservative' scenario in that it assumes full achievement of waste reduction and recycling targets by 2035.</p> <p>Annex 1 below presents a range of scenarios that reflect the range of uncertainty affecting future residual waste volumes and EfW treatment capacity.</p> <p>Scenario E represents the Applicant's 'best view' or 'median' scenario.</p> <p>The Applicant can envisage other credible scenarios, as discussed in relation to the achievement of recycling targets above, where there is a much greater capacity gap, with the inevitable outcome that more residual waste would be required to be landfilled.</p>
Para 8	Applicant	<p><b>The Applicant</b> is requested to respond to the Environment Agency's comments [REP6-040] that whilst the European Waste Catalogue (EWC) codes on an environmental permit would limit the types of waste the ERF may receive, it does not provide certainty that the same waste would be unsuitable for treatment at an earlier stage in the waste hierarchy. The Environment</p>	<p>The Applicant set out its position with respect to the EWC codes for waste to be received by the development, which will be residual wastes remaining once higher stages in the waste hierarchy have been applied, and for the preservation of the waste hierarchy, in REP6-032.</p>

		<p>Agency also states [REP9-046] that it is the relevant planning authority that is responsible for driving waste generated in a given area up the waste hierarchy. <b>The Applicant</b> is requested to respond to the Environment Agency's comments and to confirm which EWC codes are relevant to the waste the Proposed Development would treat and what of the landfill waste is/would be comprised of waste with these EWC codes.</p>	<p>It also proposes that management of wastes in accordance with the waste hierarchy is promoted and controlled through Requirement 15.</p> <p>The Applicant agrees with the EA that EWC codes themselves do not provide absolute certainty that waste materials within these codes are all unsuitable for treatment at an earlier stage in the waste hierarchy. This is not the sole purpose of EWC codes, which is principally to confirm the specific characteristics of the waste.</p> <p>The EA notes, at REP6-040 Q12.17.0.1 and Q12.17.0.2, para 2, that it is <u>Regulation</u> that ensures that wastes are managed at as high a stage in the hierarchy as practicable, viz. <i>"Anyone who produces or handles waste has a duty under Regulations 12 to 14 and 35 to ensure the waste hierarchy is applied. Those producing and transferring waste are required to confirm they have fulfilled their duty under Regulation 12 through the signing of a declaration on their Waste Transfer Notes and Hazardous Waste Consignment Notes. Anyone handling waste also has a Duty of Care under Regulation 34 of the Environmental Protection Act Ref No. Question EA response 1990, and the statutory Code of Practice, pursuant to subparagraph (9)."</i></p> <p>The Applicant concurs with the EA that Regulation is the principal mechanism for ensuring conformity with the waste hierarchy.</p> <p>The Applicant understands the EA to be making the point that the role of planning authorities is in ensuring that sufficient opportunity exists for securing the infrastructure necessary for managing waste at higher stages in the waste hierarchy, as well as ensuring that the hierarchy is not compromised, through development plans and development control.</p> <p>The EWC codes that the development is permitted to accept will be set out in the development's Environmental Permit, issued in</p>
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			<p>due course by the Environment Agency once it has consent. A similar Permit, for the Ferrybridge 2 RDF facility, operated by Enfinium Limited, is attached as Annex 2 as an example and includes fairly standard EWC codes and permit conditions to limit the wastes that can be accepted at the facility.</p> <p>The wastes that Ferrybridge 2 is permitted to accept can be found in Schedule 2, Table 2.2, on pages 19-21 of this document, which lists the relevant EWC codes. It is important to recognise that the EWC code descriptions refer to <u>residual waste</u>, such that where the material description for the waste refers for example to “<i>plastic packaging</i>” and “<i>plastic</i>” (EWC 15 01 02 and 20 01 39) or to “<i>paper and cardboard</i>” (EWC 19 12 01 and 20 01 01), this is not to materials separated for recycling, but to unrecyclable wastes, composed of those materials, after processing has been carried out. Further, permit conditions 2.3.4-2.3.6 on pages 8 and 9 forbid the plant to accept separately collected waste materials unless they are unsuitable for recycling. These control mechanisms support the achievement of the waste hierarchy.</p>
Para 9	Applicant	<p><b>The Applicant</b> is requested to confirm and evidence what long-term agreements it has in place with waste suppliers to ensure long term RDF supply.</p>	<p>It is not industry practice to receive long-term contracts until consent has been granted for the facilities and these contracts are often finalised once a construction completion date is finalised.</p> <p>Paragraph 2.7.28 of EN-3 provides “<i>Like any combustion generating station, operators secure fuel through contracts. Local authorities issue municipal waste contracts which are often long term (up to 25 years). Contracts to manage private sector wastes are, generally, shorter. Applicants may decide to focus on either public or private sector waste treatment contracts, or a combination of the two.</i>”</p> <p>The Applicant has over 900,000 tonnes of RDF and plastics for recycling potentially interested in contracting with S21 for the</p>

			<p>Project by way of Memoranda of Understanding (MoU) and letters of support from partners in the waste aggregation sector. The Applicant is also looking at local authority contract options too. The Applicant is confident that the MoU's can be converted into long-term contracts. Due to commercial sensitivities the Applicant cannot share who they have MoU's in place with currently, however a letter from Solar 21 setting out the extent of these MoU's is included as Annex 3, and this includes redacted MoU's for information within Appendix 1 of that letter.</p>
Para 10	Applicant	<p>The Secretary of State notes the Applicant considers that if a lower recycling rate for household waste is assumed compared with its conservative base case forecast [REP6-032], with recycling rates increasing from the current level of around 42% to 55% in 2035 and only reaching 60% in 2042, compared with the government target of 65%, this would lead to 2,500 ktpa more RDF than the figure in Table 1 by 2040.</p> <p><b>The Applicant</b> is requested to clarify if this means that the increase of 2,500 ktpa RDF would be as a result of the waste that the Council (NLC and/or neighbouring local authorities) was unable to treat being incinerated by the Proposed Development (rather than going to the landfill) and if so, what proportion of the total waste being incinerated by the Proposed Development this would comprise.</p>	<p>The Applicant confirms that, in its original modelling presented in REP6-032, lower recycling rates than the base case would leave 2,500 ktpa RDF unable to be treated by any method other than landfill. This RDF would be available as fuel for the proposed development. With a throughput of 760 ktpa, the development would be able to manage 30% of the fuel available. There would not be infrastructure available to divert the remaining 1,850 ktpa from landfill.</p> <p>In response to the SoS's questions above, the Applicant now presents revised best, median and worst case scenarios for in Annex 1 below.</p> <p>In the median and worse case scenarios, there would be insufficient capacity to manage waste at higher stages in the waste hierarchy. As a result, this waste would continue to be landfilled. The Applicant estimates the quantity landfilled to be 2,500 ktpa and 8,000 ktpa tonnes respectively. Consequently, the proposed development would manage c.30% and c.10% of this waste respectively.</p> <p>In the best case scenario, where it is assumed that: (i) waste reduction targets are achieved, with 65% household waste recycling by 2035 and 70% by 2042, and 80% C&amp;I waste recycling by 2042; and (ii) all operating and under-construction EfW capacity remain in operation through their predicted life,</p>

			<p>regardless of their efficiency and suitability for CCS, there would be potential over-capacity, equivalent to around 3,000 ktpa.</p> <p>The Applicant considers that, were this unlikely case to occur in practice, market levers will inevitably act to bring forward to operation the best performing facilities in terms of efficiency, carbon capture and price, with others not proceeding to construction and operation. In addition, more poorly performing existing facilities will close, and their capacity replaced by better performing plant.</p>
Para 11	Applicant, Environment Agency	<p>The Secretary of State notes that 125 ktpa of bottom ash (a combustion residue) and 5 ktpa of hazardous flue gas residues will be used in the concrete block making facility (CBMF) in order to avoid it needing to be disposed of as waste [REP3-040].</p> <p><b>The Applicant</b> is requested to confirm that the hazardous flue gas residue will not contain fly ash and that it complies with paragraph 2.5.73 of the designated NPS EN-3 which states that ‘...the two residues from waste combustion generating stations cannot be mixed; they must be disposed of separately, under different regimes.’ The Applicant should note that the same substantive requirement is also included in draft NPS EN-3 in paragraph 3.7.49. <b>The Environment Agency and the Applicant</b> are requested to confirm that the use of hazardous flue gas residues and bottom ash in the CBMF is a process that requires an Environmental Permit. <b>The Environment Agency</b> is also invited to confirm if there is any reason why a permit would not be granted at this time.</p>	<p>The project includes a residue handling and treatment facility and concrete block manufacturing facility. The residue handling and treatment facility is designed to treat two separate wastes from the ERF in separate processes in line with NPS EN-3. Each facility will require an Environmental Permit to operate (as confirmed by the Environment Agency in their response to this question, dated 19 December 2023).</p> <p>Bottom ash treatment will be completed by allowing the ash to mature, completing chemical reactions in the material before separating any remaining metals and grading the material by particle size. The material receives end of waste certification during this process.</p> <p>Separately, the FGTr is reprocessed using a carbonation process. This reacts the material with cement, a fine material, water and carbon dioxide to form a lightweight aggregate. The material receives end of waste certification during this process.</p> <p>Both materials have then been reprocessed to form aggregates, which are used in the manufacture of concrete blocks.</p>
<b>Risby Warren Site of Special Scientific Interest (SSSIs)</b>			

Para 12	Natural England	<b>Natural England</b> is invited to advise on the suitability of the Risby Warren SSSI Mitigation and Enhancement Strategy, provided by the Applicant in Appendix 2 of its response2 to the Secretary of State’s first request for further information. Specifically, Natural England is invited to advise whether the Strategy is sufficient to mitigate and offset any adverse impacts that may result from the Proposed Development.	
Para 13	NLC, Natural England	<b>North Lincolnshire Council</b> and <b>Natural England</b> are invited to comment on the Applicant’s proposal to utilise a Section 106 agreement under the Town and Country Planning Act 1990 to secure the abovementioned strategy.	
Para 14	Applicant, Natural England, NLC	<p>The <b>Applicant</b> is requested to provide an update on the Section 106 agreement with the tenant farmer and relevant landowner to provide mitigation for adverse effects at Risby Warren and for the <b>Applicant, Natural England</b> and <b>North Lincolnshire Council</b> to provide their views on incorporating the agreement within the DCO in the following form:</p> <p><b>Risby Warren SSSI</b></p> <ol style="list-style-type: none"> <li>1. <i>The undertaker and [X] (“the parties”) must implement the measures set out in [the agreement], dated [date].</i></li> <li>2. <i>The [agreement] referred to in paragraph (1) may be varied by joint agreement of the parties only with the consent of the Secretary of State, following consultation by the Secretary of State with Natural England.</i></li> </ol>	<p>The Applicant maintains that the need for and the benefits delivered from the Project outweigh the limited adverse impact on the Risby Warren SSSI. As set out in the Closing Submissions document (AS-031), the effect on Risby Warren SSSI is largely as a result of the SSSI having been significantly affected already by atmospheric pollution in the vicinity of the project, and only slight exceedances are anticipated due to the Project itself. It is considered that the effect from the Project has been reduced as far as possible at this stage and should be balanced with the ongoing commitment of the Applicant to developing options to avoid such effects and/or provide mitigation/compensation for the residual effects currently reported at the Risby Warren SSSI. Considering the policy test set out in para 5.3.11 of NPS EN-1 it is considered that the benefits of the Project (set out in chapter 5 of Closing Submissions document (AS-031)) clearly and demonstrably outweigh the impacts reported.</p>

			<p>Further to the above, the revisions made to the draft NPS EN-1 in November 2023 deliberately include all low carbon technologies as Critical National Priority (CNP) infrastructure which is a step-change in support for low carbon technologies to reflect the role that they play in meeting Net Zero.</p> <p>NPS EN-1 specifies how decision-makers should treat CNP infrastructure on the basis of the requirement to deliver such technology at “speed and scale” (NPS EN-1 para. 4.2.2).</p> <p>If there is any doubt that Energy from Waste, or Energy Recovery, falls within the definition of CNP, this is made clear in the Government response to the consultation that was issued with the revised suite of energy NPSs in November 2023 which confirms that “the Government agrees with those who stated that it would be more consistent with overall energy and climate change aims for the description of “Critical National Priority” infrastructure to be applied consistently across low carbon technologies. We have updated the text through the NPSs to reflect this. CNP Infrastructure now encompasses for electricity generation, all onshore and offshore generation that does not involve fossil fuel combustion (that is renewable generation including anaerobic digestion and other plants that convert residual waste into energy, including combustion, providing that they meet existing definitions of low carbon).”</p> <p>The term ‘low carbon’ is used to define those energy sources which reduce Greenhouse Gas (GHG) emissions compared to conventional fossil fuels.</p> <p>In terms of how policy in NPS EN-1 says that CNP infrastructure must be considered, para 4.2.7 states that it does not create an additional need case. The need for the proposed development is already set out clearly in the Planning Statement (REP2-017), Closing Submissions document (AS-031) and the Written summaries of oral submissions put at ISH 1 (REP1-015).</p>
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			<p>However, paragraph 4.2.8 states that “during decision making, the CNP policy will influence how non-HRA and non-MCZ residual impacts are considered in the planning balance.”</p> <p>The effect of the CNP policy in relation to non-HRA residual impacts, is:</p> <ul style="list-style-type: none"> <li>• That the mitigation hierarchy must be applied to ensure that all residual impacts are those that cannot be avoided, reduced or mitigated.</li> <li>• Following this, applicants should set out how residual impacts will be compensated for as far as possible.</li> <li>• If residual impacts remain, following the application of the above, they are unlikely to outweigh the urgent need for this type of infrastructure.</li> </ul> <p>Paragraph 4.2.17 of NPS EN-1 gives examples of where this would apply, including development within or outside a SSSI where there are residual impacts on features of the site.</p> <p><u>Weight to be given to November 2023 NPS EN-1</u></p> <p>The Government has stated that the November 2023 versions of the suite of energy NPSs (including NPS EN1) are the versions that it intends to lay before Parliament and that they will be designated in early 2024. This was later clarified verbally by Michael Gove MP (Secretary of State for DHLUC) as being before the end of the financial year 2024. As such, the November 2023 energy NPS revisions should be given substantial weight in any decision.</p> <p><u>Implications to case for the NLGEP</u></p> <p>The CNP policy applies to the North Lincolnshire Green Energy Park application as follows:</p> <ul style="list-style-type: none"> <li>• The residual adverse impacts are summarised in paragraph 6.11 to 6.14 of the Applicant’s Closing</li> </ul>
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			<p>Submissions. With regard to each of these impacts, the Applicant has demonstrated how they have been avoided, reduced and mitigated as far as possible.</p> <ul style="list-style-type: none"> <li>• For noise, there is operational residual daytime noise effects at a small number of noise sensitive receptors of no greater than moderate significance, with compliance with a Noise Management Plan to be agreed.</li> <li>• In relation to heritage assets, the effects are considered to constitute less than substantial harm.</li> <li>• In relation to ecology, a significant adverse residual effect is identified for Risby Warren SSSI. As set out in the Applicant's case to date (outlined in Appendix A of Chapter 10 on the Effects of Air Quality on Nationally and Locally Designated Sites (AS-026), Chapter 18 of the Environment Statement: Cumulative and Indirect Effects (REP9-017) and the Statement of Common Ground (SoCG) (REP10-010)) the Applicant has sought to minimise these effects as far as possible at this stage of the project and the mitigation hierarchy has been applied. We refer below to the latest progress on a Section 106 agreement with the tenant of land adjacent to the SSSI to mitigate the significant residual effects, as well as other options that are being pursued as part of the environmental permit application process to potentially avoid the emissions leading to the adverse effect at Risby Warren.</li> </ul> <p>It is clear that the Applicant has applied the mitigation hierarchy and sought to limit effects as far as possible, in this case the policy on CNP is clear – that the small remaining residual effects should be outweighed by the urgent need for CNP, which includes the proposed development. In terms of the potential to avoid the adverse effects on Risby Warren SSSI, as part of the</p>
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			<p>permit application process the Applicant is investigating further options to reduce the impacts of the operation of the North Lincolnshire Green Energy Park to below the 1% threshold of a 'potentially significance effect' at Risby Warren. These options include the use of 'second generation' solid state carbon capture technology that can also be used in place of traditional flue gas abatement technology for NO<sub>x</sub> and SO<sub>2</sub> removal. The benefit of this technology is that it will eliminate the need for ammonia dosing to control NO<sub>x</sub> emissions, and therefore eliminate ammonia slippage. The Applicant is confident that the specification for this system can meet current emission limits for NO<sub>x</sub> and SO<sub>2</sub> for Energy from Waste facilities as set out in the Waste Incineration BREF document, and achieve also sufficiently low emissions to avoid 'potentially significant effects' at Risby Warren SSSI. It is acknowledged that use of this technology would need to be agreed with the Environment Agency and detailed in the Environmental Permit. However, the Environment Agency and Natural England are very much open to 'second generation' carbon capture technologies that can minimise or eliminate the potential environmental impacts associated with the 'first generation' technologies and are open to discussing the potential application of emerging technology. UK BAT guidance for carbon capture is also very much still in development allowing more scope for the Environment Agency to consider emerging technologies.</p> <p>In the event that the Applicant can secure an environmental permit incorporating such technology to avoid the adverse effects on Risby Warren, there would not then be a need for any further mitigation. As such, the proposed Section 106 Agreement obligation will stipulate that it is conditional and the requirement to mitigate effects will only be triggered if the permit does not secure the avoidance of such effects.</p>
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			<p>The Applicant is continuing to negotiate the Section 106 agreement and commercial terms with the tenant and the landowner and will keep the Secretary of State informed of progress prior to the deadline for the Secretary of State's decision. The Applicant does not consider that the wording suggested in the Secretary of State's question is required in the DCO as the Section 106 obligation will oblige the tenant to cease pig farming prior to the operation of the EfW and in the event of a breach of this obligation, NLC would be able to take the necessary enforcement action against the tenant / landowner to secure compliance.</p> <p>In the event that the Applicant is unable to secure the mitigation via an agreed Section 106 prior to the Secretary of State's decision, it is the Applicant's case that the residual effects on Risby Warren are limited and should be weighed in the overall planning balance and such effects do not outweigh the need for and benefits of the proposed development. If the Secretary of State takes a different view on the planning balance such that the adverse effects at Risby Warren do tip the balance and would lead the Secretary of State to be minded to refuse the DCO, a requirement could be imposed on the DCO in the following terms to secure the necessary avoidance or mitigation of adverse effects:</p> <p><i>No part of the energy park works may come into operation unless and until either:</i></p> <p><i>(a) The undertaker has submitted to the relevant planning authority a report which demonstrates that the emissions from the authorised development will not exceed 1% of the critical load of acid deposition for the authorised development alone on the Risby Warren SSSI and the relevant planning authority in consultation with Natural England has approved the report; or</i></p>
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			<p><i>(b) The undertaker has secured alternative adequate mitigation and / or compensation of the identified residual effects at the Risby Warren SSSI arising from the authorised development alone and this mitigation and/or compensation has been approved by the relevant planning authority in consultation with Natural England.</i></p> <p>Paragraph (b) of the proposed requirement above would include the option of securing the Section 106 obligation for ceasing pig farming by the tenant farmer as appropriate mitigation but leaves open alternative options for adequate mitigation and / or compensation to be pursued as well.</p>
<b>Air Quality modelling and Environmental Permits</b>			
Para 15	Environment Agency	<p>The Applicant provided air quality modelling using a Reasonable Operating Case (ROC) in Appendix A of ES Chapter 10 [AS-026]. In response to the Secretary of State's first request for information, the Applicant<sup>2</sup> stated that: <i>"part of the rationale for undertaking an assessment of the ROC was to provide Natural England with some assurance that the Environmental Permitting process would lead to an operational plant that will have effects on protected sites that are reduced to levels below those secured by the DCO with the reasonable worst-case assessment, and which are acceptable."</i></p> <p><b>The Environment Agency</b> is invited to comment on this statement and the Applicant's response<sup>2</sup> (Pages 12 to 17). <b>The Environment Agency</b> is invited to confirm whether it considers the use of the ROC is an acceptable basis for the assessment of operational emissions to air and of the consequent impacts on SSSIs. The Secretary of State notes that the Applicant</p>	

		has not yet applied for necessary Environmental Permits in accordance with the good practice recommended in Planning Inspectorate Advice Note 11 Annex D3. Noting this, and to provide the Secretary of State with the necessary comfort (see draft NPS EN-1 paragraphs 4.11.15 and 4.11.16), <b>the Environment Agency</b> is invited to advise whether it is satisfied that potential operational emissions and effects on SSSIs resulting from the Proposed Development can be adequately regulated and mitigated via the Environmental Permitting regime.	
<b>Protected Species (PS) licences</b>			
Para 16	Applicant, Natural England	<p>ES Chapter 10 [AS-026] concludes that there is likely to be significant residual adverse effects at a site level on badger and construction work is expected close to badger setts.</p> <p><b>The Applicant</b> is requested to provide an update on securing a PS licence for badger. Planning Inspectorate Advice Note 11 Annex C4 provides advice to Applicants on engaging with Natural England and securing relevant PS licences as relevant to Nationally Significant Infrastructure Projects.</p> <p><b>Natural England</b> is invited to comment on the requirements for a PS licence for badger and, if possible at this time, whether it sees any reason why a licence would not be able to be granted.</p>	Based on the current survey information, a licence may be required to cover the temporary closure of one outlier badger sett located in the Energy Park Land and potentially the disturbance of a main sett adjacent to the Railway Reinstatement Land. As outlined in ES Chapter 10: Ecology and Nature Conservation (AS-026) and the Outline Species Protection Plan, further pre-construction badger surveys and monitoring will be undertaken to identify any new setts and assess whether known setts remain active. Based on current information, a licence (if needed) will cover low impact works and will not involve the permanent closure of any setts or the need for bespoke compensation in the form of new artificial setts. As no non-standard mitigation measures are required, it is not anticipated that there is any impediment to granting a licence.
Para 17	Applicant, Natural England	ES Chapter 10 assumes that great crested newt (GCN) are assumed to be present on site and states that construction works will be carried out under a GCN PS licence.	The Application will seek a District Level Licence (DLL) for potential impacts on GCN arising from the development. In line with Planning Inspectorate Advice Note 11, no Letter of No Impediment is required from Natural England in respect of

		<p><b>The Applicant</b> is requested to provide an update on securing a PS licence for GCN.</p> <p><b>Natural England</b> is invited to comment on the requirements for a PS licence for GCN and, if possible at this time, whether it sees any reason why a licence would not be able to be granted.</p>	<p>strategic licensing. The Applicant is in the process of submitting a DLL enquiry to Natural England and will provide a counter-signed Impact Assessment and Conservation Payment Certificate (IACPC) as justification for why significant effects on GCN populations will be avoided. This would then mean no further GCN surveys are required. We can share a copy of this with the Secretary of State once finalised.</p>
<b>Habitats of Principal Importance (HPI)</b>			
Para 18	NLC	<p>ES Chapter 10 concludes there are likely to be significant residual adverse effects at site level on lowland dry acid grasslands and lowland calcareous grasslands HPIs. The Secretary of State notes that the final Statement of Common Ground with North Lincolnshire Council states all ecology matters as agreed, but that it does not specifically reference HPIs. In light of North Lincolnshire Council's comments in [REP1-019] and [REP6-037] regarding HPIs, <b>North Lincolnshire Council</b> is invited to confirm whether it considers the Applicant's response [REP6-032 page 12] and mitigation strategies in the outline Landscape and Biodiversity Management and Monitoring Plan (LBBMP) [REP2-018] are sufficient to resolve its queries.</p>	



Planning Act 2008

# North Lincolnshire Green Energy Park

Annex 1 - Scenarios for Future Capacity Need

PINS reference: EN010116

January 2024



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## ANNEX 1 – SCENARIOS FOR FUTURE CAPACITY NEED

### Introduction

This Annex presents different scenarios for future residual waste arising and treatment capacity, and relates to our responses under Paras 3, 4, 6, and 7 above.

### Drivers of uncertainty

Any RDF Supply Assessment must necessarily make long term projections of residual waste arising and energy-from-waste treatment capacity. Clearly there is uncertainty around both of these variables, and this uncertainty increases over time.

#### Residual waste arising

On the residual waste arising side of the equation, the main uncertainties are the total amount of waste arising and the rate of recycling. Total waste arising depends on factors such as economic activity and population growth, while recycling rates are very dependent on the success of government policies designed to increase recycling and local authority development planning. Government targets are to increase household recycling rates to 65% by 2035, and to halve total residual waste arising per capita by 2042 (from 2019 level). The latter target implies recycling rates even higher than 65% in 2042, for both household and commercial and industrial (C&I) waste.

The Applicant's view is that it will be extremely challenging to achieve these recycling targets. Recycling rates for local authority collected waste have plateau-ed in the range 41-43% over the last five years<sup>9</sup>. The government is developing a number of policies to seek to improve recycling rates, but many of these depend on behavioural change or producers, and so the effectiveness of these policies remains unknown at this point. Moreover it remains unclear how the investment needed in recycling infrastructure will be funded, particularly given that many local authorities are currently financially constrained.

If recycling targets are not met, then the additional residual waste arising as a result will need to be treated. The main options available are energy recovery in an EfW facility, or disposal to landfill. Clearly energy recovery is the preferable option in accordance with the waste hierarchy.

#### Energy-from-waste treatment capacity

On the EfW capacity side of the equation, there are a number of uncertainties affecting future capacity:

1. The remaining life and availability of existing capacity.
2. The impact of carbon policy on the EfW fleet. In 2023 the government announced that EfW facilities will be included in the UK Emissions Trading Scheme from 2027. A number of facilities have announced plans to fit carbon capture and storage (CCS), although at present this requires government support to be economic. The Applicant has previously discussed<sup>10</sup> its view that not all existing facilities will be able

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<sup>9</sup> Local authority collected waste management – annual results 2021/22, Defra, see Table 3.

<sup>10</sup> REP3-040 Section 3.8

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to fit CCS, and that some will be better placed than others to capture CO<sub>2</sub> more cost effectively (with less Government support). The Applicant's view is that smaller facilities or those in less favourable locations may close, with the waste diverted to large facilities near CCS clusters where the CO<sub>2</sub> can be captured and stored more cost effectively.

3. There are a number of EfW projects which have achieved planning consent but have not yet achieved financial close. Some of these appear to be dormant, and no longer under active development. Where projects are being actively developed, they will be competing with other projects for supply of residual waste or RDF, and they are unlikely to be able to secure finance until they have secured adequate supply. Hence natural selection by the market will ensure only better projects move forward. The Applicant notes also that decarbonisation readiness requirements will apply to new EfW facilities entering operation from July 2024<sup>11</sup>, and that some consented projects may not meet these requirements.

## Case definitions

Reflecting the uncertainties outlined above, this Annex defines a total of nine different combinations of assumptions for residual waste arising and available EfW treatment capacity. In more detail:

- The "High Recycling" case assumes waste reduction targets are achieved, with 65% household waste recycling by 2035 and 70% by 2042, and 80% C&I waste recycling by 2042.
- The "Median Recycling" case assumes 55% household recycling by 2035 and 60% by 2042, and 77.5% C&I waste recycling by 2042.
- The "Low Recycling" case assumes 45% household recycling by 2035 and 50% by 2042, and 75% C&I waste recycling by 2042.

For EfW waste treatment capacity available:

- The "High Capacity" case assumes all existing and under-construction EfW facilities remain in operation until the end of their expected operating life, including non-R1 facilities lower down the waste hierarchy than the Proposed Development. It also includes capacity which is assumed unlikely to fit CCS and hence this case is unlikely to be consistent with the government's Net Zero policy.
- The "Low Capacity" case includes only existing and under-construction capacity which is assessed as being of 'high' or 'medium' CCS potential<sup>12</sup>.
- The "Median Capacity" case is as per the Low Capacity case, with the addition of consented pipeline projects with high or medium CCS potential which are assessed as still under active development<sup>13</sup>.

Clearly some judgement has to be applied in defining these cases, given high levels of uncertainty about the success of waste reduction and decarbonisation policies. The Applicant's view is that the cases outlined above span a range of plausible outcomes,

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<sup>11</sup> "Decarbonisation Readiness: Consultation on updates to the 2009 Carbon Capture Readiness requirement", DESNZ, April 2023

<sup>12</sup> For full details of the modelling methodology and assumptions see REP3-040 and REP3-022.

<sup>13</sup> These projects are assumed to have a 50% probability of realisation.

with the High and Low cases representing more extreme, less probable outcomes, and the Medium cases representing a more likely position.

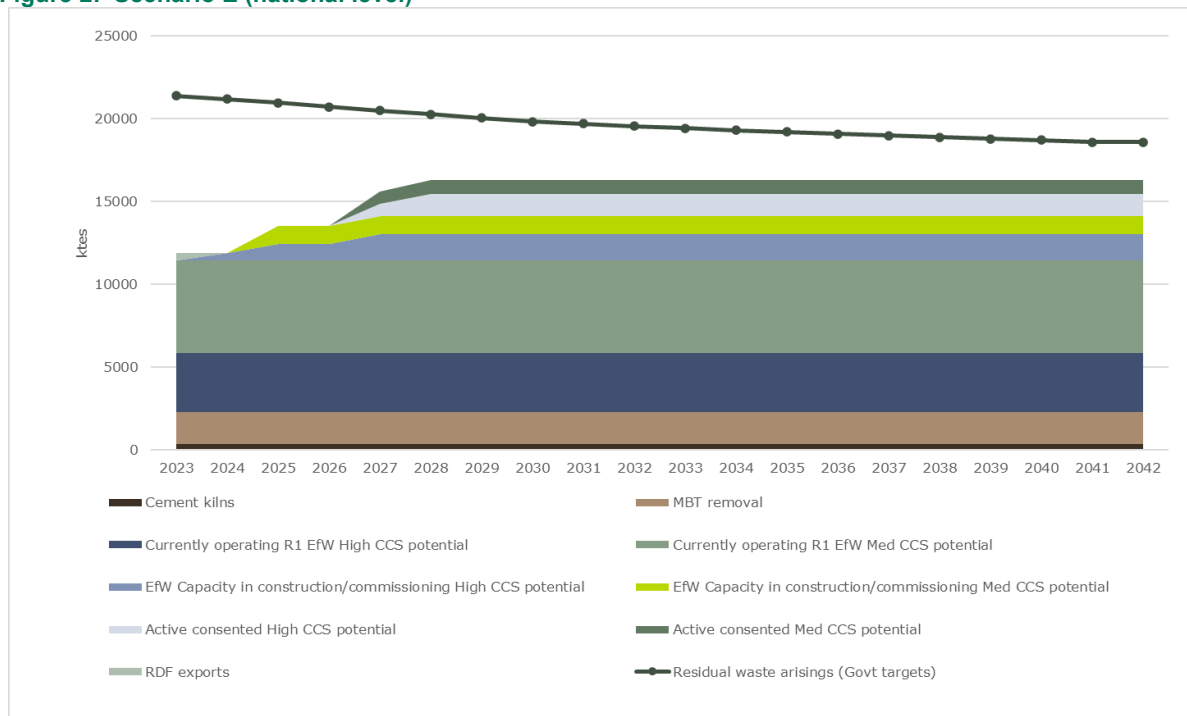
## Projections

The cases outlined above can be combined to define nine different scenarios. Figure 1 overpage shows projections of waste arising and available EfW treatment capacity for these nine scenarios at the national (England) level. The assumptions and methodology used to derive these projections is as previously described in REP3-040, REP3-022, and REP6-032 (Annex A). Note that the analysis has been updated to take into account new information from the 2023 Tolvik report<sup>14</sup> and to take account of the Boston project receiving planning consent.

The nine scenarios generated by the combinations are labelled A to J in Figure 1. The Applicant’s view is that Scenario E represents the most likely or “Median” combination. Scenario A is the ‘most conservative’ scenario, i.e. the one demonstrating the lowest need for new capacity, whilst Scenario J is the ‘least conservative’ (demonstrating the highest need).

The chart for Scenario E is reproduced in Figure 2 below, to allow for easier reading of the legend. The long term capacity gap is around 1400ktpa.

**Figure 2: Scenario E (national level)**

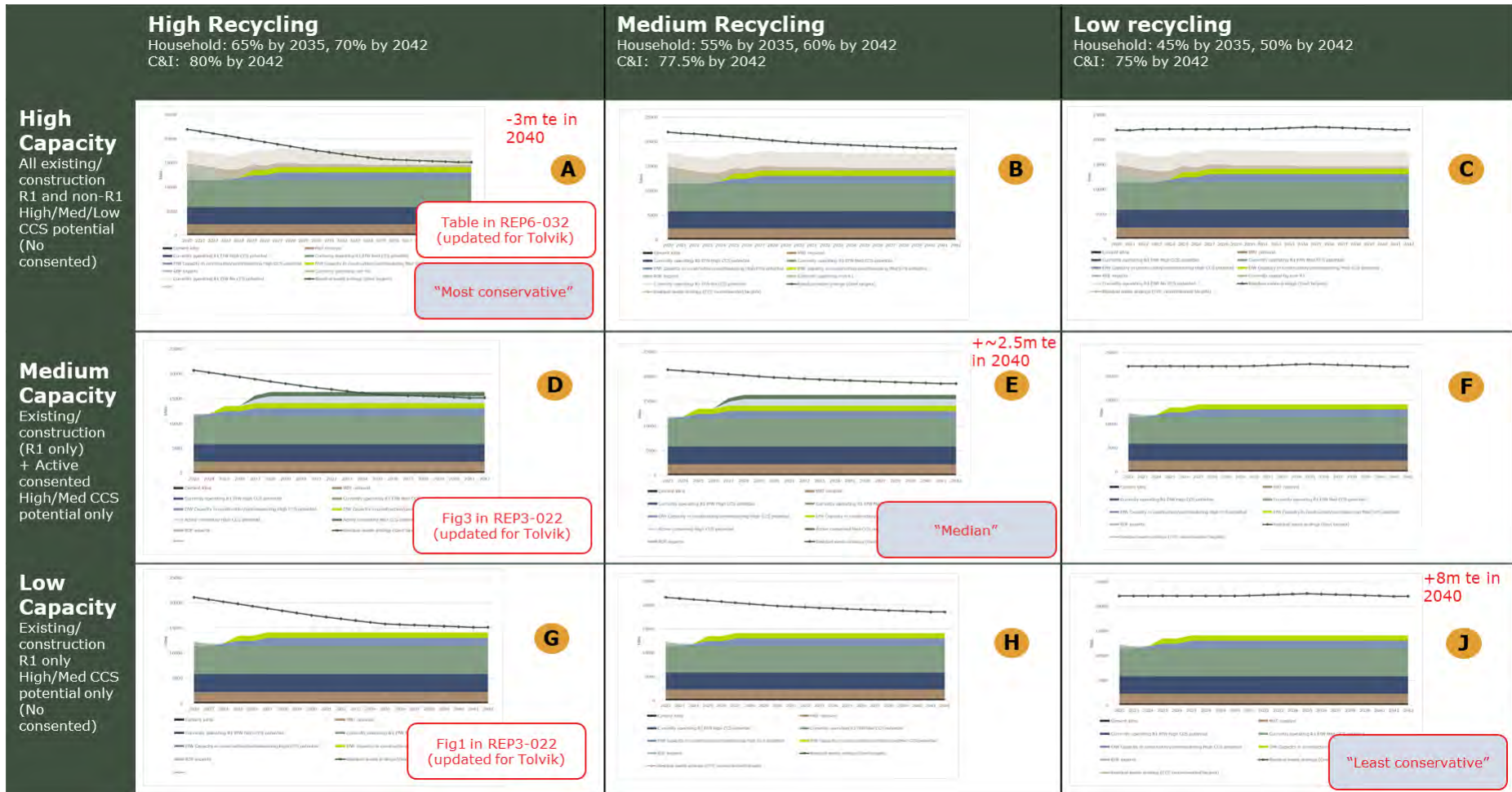


Tables 1-4 reproduce the tables given in REP6-032 (Annex A), for the ‘median’ scenario (Scenario E). As explained in REP3-040, the Applicant has defined the Yorkshire & Humber and East Midlands region as an appropriate catchment area for a regional analysis of RDF availability.

<sup>14</sup> “UK Energy from Waste Statistics 2022”, Tolvik, May 2023



Figure 1: Scenario projections reflecting the range of future uncertainty



**Table 1**

England		Medium recycling case Medium capacity case										Units	Note
	2020	2021	2022	2023	2024	2025	2026	2030	2035	2040			
1 Waste as fuel available	21967	21720	21623	21401	21183	20969	20732	19834	19206	18705	ktpa	1-4	
2 Energy from waste capacity available	9181	9181	9181	9181	9631	11233	11233	14042	14042	14042	ktpa	5	
3 'Other uses' for residual waste	2277	2277	2277	2277	2277	2277	2277	2277	2277	2277	ktpa	6,7	
Differences	<b>10510</b>	<b>10263</b>	<b>10165</b>	<b>9943</b>	<b>9275</b>	<b>7459</b>	<b>7222</b>	<b>3514</b>	<b>2887</b>	<b>2386</b>	ktpa	L1-L2_L3	

**Table 2**

Yorkshire&Humber and East Midlands		Medium recycling case Medium capacity case										Units	Note
	2020	2021	2022	2023	2024	2025	2026	2030	2035	2040			
1 Waste as fuel available	4325	4134	4994	4929	4865	4800	4735	4475	4214	4121	ktpa	1-4	
2 Energy from waste capacity available	1638	1638	1638	1638	1638	1638	1638	2877	2877	2877	ktpa	5	
3 'Other uses' for residual waste	427	427	427	427	427	427	427	427	427	427	ktpa	6,7	
Differences	<b>2260</b>	<b>2069</b>	<b>2929</b>	<b>2864</b>	<b>2800</b>	<b>2735</b>	<b>2670</b>	<b>1171</b>	<b>911</b>	<b>817</b>	ktpa	L1-L2_L3	

**Table 3**

Yorkshire&Humber		Medium recycling case Medium capacity case										Units	Note
	2020	2021	2022	2023	2024	2025	2026	2030	2035	2040			
1 Waste as fuel available	2171	1943	2527	2498	2469	2440	2412	2297	2210	2156	ktpa	1-4	
2 Energy from waste capacity available	1638	1638	1638	1638	1638	1638	1638	2202	2202	2202	ktpa	5	
3 'Other uses' for residual waste	258	258	258	258	258	258	258	258	258	258	ktpa	6,7	
Differences	<b>275</b>	<b>48</b>	<b>631</b>	<b>603</b>	<b>574</b>	<b>545</b>	<b>516</b>	<b>-162</b>	<b>-249</b>	<b>-304</b>	ktpa	L1-L2_L3	

**Table 4**

North Lincolnshire		Medium recycling case Medium capacity case										Units	Note
	2020	2021	2022	2023	2024	2025	2026	2030	2035	2040			
1 Waste as fuel available	207	162	332	330	327	325	323	316	311	323	ktpa	1-4	
2 Energy from waste capacity available	0	0	0	0	0	0	0	0	0	0	ktpa	5	
3 'Other uses' for residual waste	0	0	0	0	0	0	0	0	0	0	ktpa	6,7	
Differences	<b>207</b>	<b>162</b>	<b>332</b>	<b>330</b>	<b>327</b>	<b>325</b>	<b>323</b>	<b>316</b>	<b>311</b>	<b>323</b>	ktpa	L1-L2_L3	



Planning Act 2008

# North Lincolnshire Green Energy Park

Annex 2 - Ferrybridge 2 RDF facility waste permit

PINS reference: EN010116

January 2024





# Notice of variation and consolidation with introductory note

**The Environmental Permitting (England & Wales) Regulations 2016**

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Enfinium Ferrybridge 2 Limited

Ferrybridge 2  
Stranglands Lane  
Knottingley  
West Yorkshire  
WF11 8SQ

**Variation application number**

EPR/XP3833DK/V005

**Permit number**

EPR/XP3833DK

# Ferrybridge 2

## Permit number EPR/XP3833DK

### Introductory note

#### **This introductory note does not form a part of the notice**

Under the Environmental Permitting (England & Wales) Regulations 2016 (schedule 5, part 1, paragraph 19) a variation may comprise a consolidated permit reflecting the variations and a notice specifying the variations included in that consolidated permit.

This variation has been issued to update the permit following a statutory review of the permits in the industry sector for incineration. The opportunity has also been taken to consolidate the original permit and subsequent variations. The Industrial Emissions Directive (IED) came into force on 7th January 2014 with the requirement to implement all relevant Best Available Techniques (BAT) conclusions as described in the Commission Implementing Decision. The BAT conclusions for incineration were published on 03 December 2019 in the Official Journal of the European Union (L323) following a European Union wide review of BAT, implementing decision 2017/2117/EU of 21 November 2017.

The schedules specify the changes made to the permit. Schedule 1 of the notice specifies the conditions that have been varied and schedule 2 comprises a consolidated permit which reflects the variations being made. All the conditions of the permit have been varied and are subject to the right of appeal.

#### **Brief description of the process**

This permit controls the operation of a waste incineration plant. The relevant listed activity is S5.1 A1(b). The permit implements the requirements of the EU Directives on Industrial Emissions and Waste.

The main features of the permit are as follows:

Furnace technology	Moving Grate
Number of lines	2
Principal waste type	RDF & Municipal/commercial waste
Stack height	119 m
Permitted plant capacity	725,000 tonnes per year
Electrical generation capacity	90 MWe gross

The Installation processes Refuse Derived Fuel (RDF) and recovers energy, which is used to generate electricity for export to the National Grid and also to supply power to the site itself. The facility consists of two combustion lines having a combined maximum capacity to process 725,000 tonnes / year of RDF, generating approximately 90 MWe gross of electricity.

The RDF is delivered to the installation by road, to a reception hall. This material is then fed using a mobile crane grab into feed chutes to the two combustion lines. Hot gases from the combustion process are passed through a boiler to raise steam. The steam is then passed to a steam turbine to generate electricity for use within the installation and for export to the National Grid.

Emissions to air from the process are via a 119m high exhaust stack. This exhaust stack is fitted with continuous emission monitors (CEMs) to monitor emissions of particulates, nitrogen oxides, sulphur dioxide, volatile organic compounds, ammonia, carbon monoxide, hydrogen chloride, total organic carbon and oxygen. Secondary NOx control is provided by the employment of selective non-catalytic reduction (SNCR).

Acid gases (HCl & HF produced from the combustion of the waste) along with particulate will be removed from the flue gas using adsorption additives at the dry filter unit. SO<sub>2</sub> produced from the combustion of the waste is removed from the flue gas similarly at the flue gas filter located prior to the exhaust stack. There are no water emissions as process waters such as boiler blowdown are used for quenching ash. Treated water from the waste water treatment plant will be either reused in the process or discharged to a trade effluent sewer.

The status log of a permit sets out the permitting history, including any changes to the permit reference number.

<b>Status log of the permit</b>		
<b>Description</b>	<b>Date</b>	<b>Comments</b>
Application EPR/YP3332WV/A001	Duly made 14/01/15	Application for 90MW electrical output WDF Power Station.
Additional information received	15/05/15	Further detailed assessment in support of submitted Human Health Risk Assessment. Additional information and clarification of submitted Noise Impact Assessment.
Additional information received	31/07/15	Further assessment of potential impact upon sensitive habitat receptors.
Permit determined EPR/YP3332WV	25/11/15	Permit issued to Multifuel Energy Limited.
Application EPR/XP3833DK/S002 (full transfer of permit EPR/YP3332WV)	Duly made 15/03/16	Application to transfer the permit in full to Ferrybridge MFE 2 Limited.
Transfer determined EPR/XP3833DK	25/04/16	Full transfer of permit complete.
Part surrender application (including admin variation) EPR/XP3833DK/S002	Duly made 01/08/18	Application to surrender an area of land within the permitted area & consequential admin variations.
Part surrender (including admin variation) determined EPR/XP3833DK	31/08/18	Part surrender, admin variation and consolidation complete.
Application EPR/XP3833DK/V003 (variation and consolidation)	Duly made 30/03/20	Application to vary the permit to amend carbon monoxide ELV, reference diesel generator as MCPD and increase waste throughput.
Additional information	12/10/20	Revised air modelling.
Variation determined EPR/XP3833DK	17/11/20	Varied permit issued.
Notified of change of Company Name and site name	Duly Made 08/06/21	Company Name and site name changed to Enfinium Ferrybridge 2 Limited, Ferrybridge 2.
Variation issued EPR/XP3833DK/V004	05/07/21	Varied permit issued to Enfinium Ferrybridge 2 Limited.
Permit review EPR/BR4551IC/V012 Environment Agency initiated variation	01/04/22	Statutory review of permit. BAT Conclusions published 03 December 2019.

End of introductory note

# Notice of variation and consolidation

## The Environmental Permitting (England and Wales) Regulations 2016

The Environment Agency in exercise of its powers under regulation 20 of the Environmental Permitting (England and Wales) Regulations 2016 varies

### Permit number

**EPR/XP3833DK**

### Issued to

**Enfinium Ferrybridge 2 Limited** (“the operator”)

whose registered office is

**123 Victoria Street**

**London**

**England**

**SW1E 6DE**

company registration number **09685158**

to operate a regulated facility at

**Ferrybridge 2**

**Stranglands Lane**

**Knottingley**

**West Yorkshire**

**WF11 8SQ**

to the extent set out in the schedules.

The notice shall take effect from 01/04/2022

<b>Name</b>	<b>Date</b>
<b>Philip Lamb</b>	<b>01/04/2022</b>

Authorised on behalf of the Environment Agency

## **Schedule 1**

All conditions have been varied by the consolidated permit as a result of an Environment Agency initiated variation.

## **Schedule 2 – consolidated permit**

Consolidated permit issued as a separate document.



# Permit

## The Environmental Permitting (England and Wales) Regulations 2016

### Permit number

**EPR/XP3833DK**

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/XP3833DK/V005 authorising,

**Enfinium Ferrybridge 2 Limited** (“the operator”),

whose registered office is

**123 Victoria Street  
London  
England  
SW1E 6DE**

company registration number 09685158

to operate an installation at

**Ferrybridge 2  
Stranglands Lane  
Knottingley  
West Yorkshire  
WF11 8SQ**

to the extent authorised by and subject to the conditions of this permit.

<b>Name</b>	<b>Date</b>
<b>Philip Lamb</b>	<b>01/04/2022</b>

Authorised on behalf of the Environment Agency

# Conditions

## 1 Management

### 1.1 General management

- 1.1.1 The operator shall manage and operate the activities:
- (a) in accordance with a written management system that identifies and minimises risks of pollution, including those arising from operations, maintenance, accidents, incidents, non-conformances, closure and those drawn to the attention of the operator as a result of complaints; and
  - (b) using sufficient competent persons and resources.
  - (c) referenced in schedule 1, table S1.1 (AR1), from 03/12/2023, in accordance with a written other than normal operating conditions (OTNOC) management plan.
- 1.1.2 Records demonstrating compliance with condition 1.1.1 shall be maintained.
- 1.1.3 The operator shall review the written management system at least every 3 years or otherwise as requested by the Environment Agency.
- 1.1.4 Any person having duties that are or may be affected by the matters set out in this permit shall have convenient access to a copy of it kept at or near the place where those duties are carried out.

### 1.2 Energy efficiency

- 1.2.1 The operator shall:
- (a) take appropriate measures to ensure that energy is recovered with a high level of energy efficiency and energy is used efficiently in the activities.
  - (b) review and record at least every four years whether there are suitable opportunities to improve the energy efficiency of the activities; and
  - (c) take any further appropriate measures identified by a review.
- 1.2.2 The operator shall review the viability of Combined Heat and Power (CHP) implementation at least every 4 years, or in response to any of the following factors, whichever comes sooner:
- (a) new plans for significant developments within 15 km of the installation;
  - (b) changes to the Local Plan;
  - (c) changes to the UK CHP Development Map or similar; and
  - (d) new financial or fiscal incentives for CHP.

The results shall be reported to the Agency within 2 months of each review, including where there has been no change to the original assessment in respect of the above factors.

### 1.3 Efficient use of raw materials

- 1.3.1 The operator shall:
- (a) take appropriate measures to ensure that raw materials and water are used efficiently in the activities;
  - (b) maintain records of raw materials and water used in the activities;
  - (c) review and record at least every four years whether there are suitable alternative materials that could reduce environmental impact or opportunities to improve the efficiency of raw material and water use; and

- (d) take any further appropriate measures identified by a review.

## **1.4 Avoidance, recovery and disposal of wastes produced by the activities**

- 1.4.1 The operator shall take appropriate measures to ensure that:
  - (a) the waste hierarchy referred to in Article 4 of the Waste Framework Directive is applied to the generation of waste by the activities; and
  - (b) any waste generated by the activities is treated in accordance with the waste hierarchy referred to in Article 4 of the Waste Framework Directive; and
  - (c) where disposal is necessary, this is undertaken in a manner which minimises its impact on the environment.
- 1.4.2 The operator shall review and record at least every four years whether changes to those measures should be made and take any further appropriate measures identified by a review.

## **2 Operations**

### **2.1 Permitted activities**

- 2.1.1 The operator is only authorised to carry out the activities specified in schedule 1 table S1.1 (the “activities”).
- 2.1.2 Waste authorised by this permit shall be clearly distinguished from any other waste on the site.

### **2.2 The site**

- 2.2.1 The activities shall not extend beyond the site, being the land shown edged in green on the site plan at schedule 7 to this permit.

### **2.3 Operating techniques**

- 2.3.1 The activities shall, subject to the conditions of this permit, be operated using the techniques and in the manner described in the documentation specified in schedule 1, table S1.2, unless otherwise agreed in writing by the Environment Agency.
- 2.3.2 If notified by the Environment Agency that the activities are giving rise to pollution, the operator shall submit to the Environment Agency for approval within the period specified, a revision of any plan specified in schedule 1, table S1.2 or otherwise required under this permit which identifies and minimises the risks of pollution relevant to that plan, and shall implement the approved revised plan in place of the original from the date of approval, unless otherwise agreed in writing by the Environment Agency.
- 2.3.3 Any raw materials or fuels listed in schedule 2 table S2.1 shall conform to the specifications set out in that table.
- 2.3.4 Waste shall only be accepted if:
  - (a) it is of a type and quantity listed in schedule 2 table S2.2; and
  - (b) it conforms to the description in the documentation supplied by the producer or holder.
- 2.3.5 Waste paper, metal, plastic or glass that has been separately collected for the purpose of preparing for re-use or recycling shall not be accepted. Waste from the treatment of these separately collected

wastes shall only be accepted if incineration delivers the best environmental outcome in accordance with regulation 12 of the Waste (England and Wales) Regulations 2011.

- 2.3.6 Separately collected fractions other than those listed in condition 2.3.5 shall not be accepted unless they are unsuitable for recovery by recycling.
- 2.3.7 The operator shall ensure that where waste produced by the activities is sent to a relevant waste operation, that operation is provided with the following information, prior to the receipt of the waste:
- (a) the nature of the process producing the waste;
  - (b) the composition of the waste;
  - (c) the handling requirements of the waste;
  - (d) the hazardous property associated with the waste, if applicable; and
  - (e) the waste code of the waste.
- 2.3.8 The operator shall ensure that where waste produced by the activities is sent to a landfill site, it meets the waste acceptance criteria for that landfill.
- 2.3.9 Waste shall not be charged if:
- (a) the combustion chamber temperature is below 850 °C,
  - (b) any continuous emission limit value in schedule 3 table S3.1(a) is exceeded; or
  - (c) any continuous emission limit value in schedule 3 table S3.1 is exceeded, other than during abnormal operation; or
  - (d) continuous emission monitors to demonstrate compliance with any continuous emission limit value in schedule 3 table S3.1 are unavailable other than during abnormal operation; or
  - (e) there is a stoppage, disturbance or failure of the activated carbon abatement system, other than during abnormal operation.
  - (f) continuous emission monitors to demonstrate compliance with the emission limit values for particulates, TOC or CO in schedule 3 are unavailable unless alternative techniques, as agreed in writing with the Environment Agency, are used to demonstrate compliance with those emission limit values.
- 2.3.10 The operator shall record the beginning and end of each period of “abnormal operation”.
- 2.3.11 During a period of “abnormal operation”, the operator shall restore normal operation of the failed equipment or replace the failed equipment as soon as possible.
- 2.3.12 The operator shall interpret the start of the period of “abnormal operation” as the earliest of the following:
- (a) a technically unavoidable stoppage, disturbance, or failure of continuous emission monitors.
  - (b) a technically unavoidable stoppage, disturbance, or failure of the activated carbon abatement system
  - (c) Any other technically unavoidable stoppage, disturbance, or failure of the plant which is causing or could lead to an exceedance of an emission limit value in table S3.1.
- 2.3.13 The operator shall interpret the end of the period of “abnormal operation” as the earliest of the following:
- (a) when the failed equipment is repaired and brought back into normal operation;
  - (b) when the operator initiates a shut down of the waste combustion activity, as described in the application or as agreed in writing with the Environment Agency;

- (c) The failed equipment has not been repaired and brought back into normal operation and a single period of abnormal operation reaches a duration of 4 hours after the start of abnormal operation on an incineration line
- (d) Abnormal operation occurs on an incineration line and the cumulative duration of abnormal operation periods over 1 calendar year has reached 60 hours on that incineration line;

2.3.14 The operator shall have at least one auxiliary burner in each line which shall be operated at start up, shut down and as required during operation to ensure that the operating temperature specified in condition 2.3.9 is maintained as long as incompletely burned waste is present in the combustion chamber. Unless the temperature specified in condition 2.3.9 is maintained in the combustion chamber, such burner(s) shall be fed only with fuels which result in emissions no higher than those arising from the use of gas oil, liquefied gas or natural gas.

2.3.15 Bottom ash and APC residues shall not be mixed.

## **2.4 Improvement programme**

2.4.1 The operator shall complete the improvements specified in schedule 1 table S1.3 by the date specified in that table unless otherwise agreed in writing by the Environment Agency.

2.4.2 Except in the case of an improvement which consists only of a submission to the Environment Agency, the operator shall notify the Environment Agency within 14 days of completion of each improvement.

## **3 Emissions and monitoring**

### **3.1 Emissions to water, air or land**

3.1.1 There shall be no point source emissions to water, air or land except from the sources and emission points listed in schedule 3 tables S3.1, S3.2 and S3.3.

3.1.2 The limits given in schedule 3, subject to condition 3.2.1, shall not be exceeded.

3.1.3 Wastes produced at the site shall, as a minimum, be sampled and analysed in accordance with schedule 3 table S3.4. Additional samples shall be taken and tested and appropriate action taken, whenever:

- (a) disposal or recovery routes change; or
- (b) it is suspected that the nature or composition of the waste has changed such that the route currently selected may no longer be appropriate.

### **3.2 Emissions limits and monitoring for emission to air for incineration plant**

3.2.1 The limits for emissions to air apply as follows:

- (a) The limits in table S3.1 shall not be exceeded except during periods of abnormal operation.
- (b) The limits in table S3.1 (a) shall not be exceeded.

3.2.2 Where Continuous Emission Monitors are installed to comply with the monitoring requirements in schedule 3 table S3.1 and S3.1(a); the Continuous Emission Monitors shall be used such that;

(a) the values of the 95% confidence intervals of a single measured result at the daily emission limit value shall not exceed the following percentages of the emission limit values:

- Carbon monoxide 10%
- Sulphur dioxide 20%

- Oxides of nitrogen (NO & NO<sub>2</sub> expressed as NO<sub>2</sub>) 20%
  - Particulate matter 30%
  - Total organic carbon (TOC) 30%
  - Hydrogen chloride 40%
  - Ammonia 40%
- (b) valid half-hourly average values or 10-minute averages shall be determined within the effective operating time (excluding the start-up and shut-down periods) from the measured values after having subtracted the value of the confidence intervals in condition 3.2.2 (a).
- (c) where it is necessary to calibrate or maintain the monitor and this means that data are not available for a complete half-hour or 10 minute period, the half-hourly average or 10-minute average shall in any case be considered valid if measurements are available for a minimum of 20 minutes or 7 minutes during the half-hour or 10-minute period respectively. The number of half-hourly or 10-minute averages so validated shall not exceed 5 or 15 respectively per day;
- (d) daily average values shall be calculated as follows:
- (i) the average of valid half hourly averages or 10 minute averages over a calendar day excluding half hourly averages or 10 minute averages during periods of abnormal operation. The daily average value shall be considered valid if no more than five half-hourly average or fifteen 10-minute average values in any day have been determined not to be valid;
- (e) no more than ten daily average values per year shall be determined not to be valid.

### **3.3 Emissions of substances not controlled by emission limits**

- 3.3.1 Emissions of substances not controlled by emission limits (excluding odour) shall not cause pollution. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in any approved emissions management plan, have been taken to prevent or where that is not practicable, to minimise, those emissions.
- 3.3.2 The operator shall:
- (a) if notified by the Environment Agency that the activities are giving rise to pollution, submit to the Environment Agency for approval within the period specified, an emissions management plan which identifies and minimises the risks of pollution from emissions of substances not controlled by emission limits;
  - (b) implement the approved emissions management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.
- 3.3.3 All liquids in containers, whose emission to water or land could cause pollution, shall be provided with secondary containment, unless the operator has used other appropriate measures to prevent or where that is not practicable, to minimise, leakage and spillage from the primary container.
- 3.3.4 Periodic monitoring shall be carried out at least once every 5 years for groundwater and 10 years for soil, unless such monitoring is based on a systematic appraisal of the risk of contamination.

### **3.4 Odour**

- 3.4.1 Emissions from the activities shall be free from odour at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved odour management plan, to prevent or where that is not practicable to minimise the odour.

3.4.2 The operator shall:

- (a) if notified by the Environment Agency that the activities are giving rise to pollution outside the site due to odour, submit to the Environment Agency for approval within the period specified, an odour management plan which identifies and minimises the risks of pollution from odour;
- (b) implement the approved odour management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

### **3.5 Noise and vibration**

3.5.1 Emissions from the activities shall be free from noise and vibration at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved noise and vibration management plan to prevent or where that is not practicable to minimise the noise and vibration.

3.5.2 The operator shall:

- (a) if notified by the Environment Agency that the activities are giving rise to pollution outside the site due to noise and vibration, submit to the Environment Agency for approval within the period specified, a noise and vibration management plan which identifies and minimises the risks of pollution from noise and vibration;
- (b) implement the approved noise and vibration management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

### **3.6 Monitoring**

3.6.1 The operator shall, unless otherwise agreed in writing by the Environment Agency, undertake the monitoring specified in the following tables in schedule 3 to this permit:

- (a) point source emissions specified in tables S3.1, S3.1(a) and S3.2;
- (b) process monitoring specified in table S3.3; and
- (c) residue quality in table S3.4.

3.6.2 The operator shall maintain records of all monitoring required by this permit including records of the taking and analysis of samples, instrument measurements (periodic and continual), calibrations, examinations, tests and surveys and any assessment or evaluation made on the basis of such data.

3.6.3 Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme and the environmental or other monitoring specified in condition 3.6.1 shall have either MCERTS certification or MCERTS accreditation (as appropriate) unless otherwise agreed in writing by the Environment Agency. Newly installed CEMs, or CEMs replacing existing CEMs, shall have MCERTS certification and unless otherwise agreed in writing by the Environment Agency have an MCERTS certified range which is not greater than 1.5 times the daily emission limit value (ELV) specified in schedule 3 table S3.1. The CEM shall also be able to measure instantaneous values over the ranges which are to be expected during all operating conditions. If it is necessary to use more than one range setting of the CEM to achieve this requirement, the CEM shall be verified for monitoring supplementary, higher ranges. Newly installed Data handling and acquisition systems (DAHS), or DAHS replacing existing DAHS, shall have MCERTS certification.

3.6.4 Permanent means of access shall be provided to enable sampling/monitoring to be carried out in relation to the emission points specified in schedule 3 tables S3.1, S3.1(a) and S3.2 unless otherwise agreed in writing by the Environment Agency.

## **3.7 Pests**

- 3.7.1 The activities shall not give rise to the presence of pests which are likely to cause pollution, hazard or annoyance outside the boundary of the site. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in any approved pests management plan, have been taken to prevent or where that is not practicable, to minimise the presence of pests on the site.
- 3.7.2 The operator shall:
- (a) if notified by the Environment Agency, submit to the Environment Agency for approval within the period specified, a pests management plan which identifies and minimises risks of pollution from pests;
  - (b) implement the pests management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

## **3.8 Fire prevention**

- 3.8.1 The operator shall take all appropriate measures to prevent fires on site and minimise the risk of pollution from them including, but not limited to, those specified in any approved fire prevention plan.
- 3.8.2 The operator shall:
- (a) if notified by the Environment Agency that the activities are giving rise to a risk of fire, submit to the Environment Agency for approval within the period specified, a fire prevention plan which prevents fires and minimises the risk of pollution from fires;
  - (b) implement the fire prevention plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

# **4 Information**

## **4.1 Records**

- 4.1.1 All records required to be made by this permit shall:
- (a) be legible;
  - (b) be made as soon as reasonably practicable;
  - (c) if amended, be amended in such a way that the original and any subsequent amendments remain legible, or are capable of retrieval; and
  - (d) be retained, unless otherwise agreed in writing by the Environment Agency, for at least 6 years from the date when the records were made, or in the case of the following records until permit surrender:
    - (i) off-site environmental effects; and
    - (ii) matters which affect the condition of the land and groundwater.
- 4.1.2 The operator shall keep on site all records, plans and the management system required to be maintained by this permit, unless otherwise agreed in writing by the Environment Agency.

## **4.2 Reporting**

- 4.2.1 The operator shall send all reports and notifications required by the permit to the Environment Agency using the contact details supplied in writing by the Environment Agency.



- 4.2.2 A report or reports on the performance of the activities over the previous year shall be submitted to the Environment Agency by 31 January (or other date agreed in writing by the Environment Agency) each year using the annual report form specified in schedule 4, table S4.4 or otherwise in a format agreed with the Environment Agency. The report(s) shall include as a minimum:
- (a) a review of the results of the monitoring and assessment carried out in accordance with the permit including an interpretive review of that data;
  - (b) the annual production /treatment data set out in schedule 4 table S4.2;
  - (c) the performance parameters set out in schedule 4 table S4.3
  - (d) the functioning and monitoring of the incineration plant in a format agreed with the Environment Agency. The report shall, as a minimum requirement (as required by Chapter IV of the Industrial Emissions Directive) give an account of the running of the process and the emissions into air and water compared with the emission standards in the IED.
- 4.2.3 Within 28 days of the end of the reporting period the operator shall, unless otherwise agreed in writing by the Environment Agency, submit reports of the monitoring and assessment carried out in accordance with the conditions of this permit, as follows:
- (a) in respect of the parameters and emission points specified in schedule 4 table S4.1;
  - (b) for the reporting periods specified in schedule 4 table S4.1 and using the forms specified in schedule 4 table S4.4 ; and
  - (c) giving the information from such results and assessments as may be required by the forms specified in those tables.
- 4.2.4 The operator shall, unless notice under this condition has been served within the preceding four years, submit to the Environment Agency, within six months of receipt of a written notice, a report assessing whether there are other appropriate measures that could be taken to prevent, or where that is not practicable, to minimise pollution.
- 4.2.5 Within 1 month of the end of each quarter, the operator shall submit to the Environment Agency using the form made available for the purpose, the information specified on the form relating to the site and the waste accepted and removed from it during the previous quarter.

### **4.3 Notifications**

- 4.3.1 In the event:
- (a) that the operation of the activities gives rise to an incident or accident which significantly affects or may significantly affect the environment, the operator must immediately:
    - (i) inform the Environment Agency,
    - (ii) take the measures necessary to limit the environmental consequences of such an incident or accident, and
    - (iii) take the measures necessary to prevent further possible incidents or accidents;
  - (b) of a breach of any permit condition the operator must immediately:
    - (i) inform the Environment Agency, and
    - (ii) take the measures necessary to ensure that compliance is restored within the shortest possible time;
  - (c) of a breach of permit condition which poses an immediate danger to human health or threatens to cause an immediate significant adverse effect on the environment, the operator must immediately suspend the operation of the activities or the relevant part of it until compliance with the permit conditions has been restored.

- 4.3.2 Any information provided under condition 4.3.1, shall be confirmed by sending the information listed in schedule 5 to this permit within the time period specified in that schedule.
- 4.3.3 Where the Environment Agency has requested in writing that it shall be notified when the operator is to undertake monitoring and/or spot sampling, the operator shall inform the Environment Agency when the relevant monitoring and/or spot sampling is to take place. The operator shall provide this information to the Environment Agency at least 14 days before the date the monitoring is to be undertaken.
- 4.3.4 The Environment Agency shall be notified within 14 days of the occurrence of the following matters, except where such disclosure is prohibited by Stock Exchange rules:
- Where the operator is a registered company:
- (a) any change in the operator's trading name, registered name or registered office address; and
  - (b) any steps taken with a view to the operator going into administration, entering into a company voluntary arrangement or being wound up.
- Where the operator is a corporate body other than a registered company:
- (a) any change in the operator's name or address; and
  - (b) any steps taken with a view to the dissolution of the operator.
- In any other case:
- (a) the death of any of the named operators (where the operator consists of more than one named individual);
  - (b) any change in the operator's name(s) or address(es); and
  - (c) any steps taken with a view to the operator, or any one of them, going into bankruptcy, entering into a composition or arrangement with creditors, or, in the case of them being in a partnership, dissolving the partnership.
- 4.3.5 Where the operator proposes to make a change in the nature or functioning, or an extension of the activities, which may have consequences for the environment and the change is not otherwise the subject of an application for approval under the Regulations or this permit:
- (a) the Environment Agency shall be notified at least 14 days before making the change; and
  - (b) the notification shall contain a description of the proposed change in operation.
- 4.3.6 The Environment Agency shall be given at least 14 days notice before implementation of any part of the site closure plan.

## **4.4 Interpretation**

- 4.4.1 In this permit the expressions listed in schedule 6 shall have the meaning given in that schedule.
- 4.4.2 In this permit references to reports and notifications mean written reports and notifications, except where reference is made to notification being made "immediately", in which case it may be provided by telephone.

# Schedule 1 – Operations

<b>Table S1.1 activities</b>			
Activity reference	Activity listed in Schedule 1 of the EP Regulations	Description of specified activity	Limits of specified activity
AR1	S5.1 A1(b)	The incineration of non-hazardous waste in a waste incineration plant with a capacity of 3 tonnes per hour or more.	From receipt of waste to emission of exhaust gas and removal from site of waste arising.  Waste types and quantities as specified in Table S2.2 of this permit.
<b>Directly Associated Activities</b>			
AR2	Electricity Generation	Generation of 90MWe electrical power using a steam turbine from energy recovered from the flue gases.	
AR3	Back up electrical generator	A medium combustion plant comprising a diesel generator with a net rated thermal input of 2.2MW for use when power supply is interrupted.	Emergency use to a maximum of 500 hours operation per year.  Maximum of 50 hours testing per year.

<b>Table S1.2 Operating techniques</b>		
Description	Parts	Date Received
Application	Section 5 – Operating Techniques Section 6 – Emissions to Air, Water & Land. Section 7 – Monitoring of Emissions	14/01/2015
Application	Application EPR/XP3833DK/V003 Supporting Statement	30/03/2020
Response to improvement condition IC1	Operating techniques as set out in improvement condition response as approved by the Environment Agency	Date IC1 response was received

<b>Table S1.3 Improvement programme requirements</b>		
Reference	Requirement	Date
IC1	The operator shall submit a report to the Environment Agency for approval (using the form provided by the Environment Agency) that addresses compliance with each BAT conclusion. The report shall include: <ul style="list-style-type: none"> <li>i. If any BAT conclusion is not relevant explain why</li> <li>ii. Whether and how the installation complies with the standards in set out in each BAT conclusion</li> </ul>	3 months from issue of variation notice

<b>Table S1.3 Improvement programme requirements</b>		
<b>Reference</b>	<b>Requirement</b>	<b>Date</b>
	<p>iii. If the installation does not currently comply with a standard set in a BAT conclusion describe how and when the installation will comply with that standard.</p> <p>iv. If the installation will continue operating in a manner which would not comply with a BAT Conclusion, after 03/12/2023 the operator shall submit to the Environment Agency:</p> <ul style="list-style-type: none"> <li>• a justification for being allowed to do so</li> <li>• a description of alternative measures to be adopted that will provide equivalent environmental protection</li> </ul>	
IC2	The operator shall submit a report to the Environment Agency on whether waste feed to the plant can be proven to have a low and stable mercury content. The report shall have regard to BAT 4 of the BAT conclusions, be based on historic mercury emissions monitoring data and have regard to the Environment Agency Mercury Monitoring Protocol.	30/09/23
IC3	The operator shall submit a report to the Environment Agency on whether dioxin emissions to air are stable. The report shall have regard to BAT 4 of the BAT conclusions, be based on historic dioxin emissions monitoring data and have regard to the Environment Agency Dioxins Monitoring Protocol.	30/09/23
IC4	<p>The operator shall perform a study to determine the extent to which the operation of the current systems in place at the plant to minimise NOx emissions can be further optimised such that emissions are reduced as far as possible below 180 mg/Nm<sup>3</sup> as a daily average, without significantly increasing emissions of other pollutants or having a significant negative effect on plant operation, reliability or bottom ash quality. The study shall be based on the results of trials carried out at the installation and shall have regard to the recommendations for test conditions set out in Section 5.4.3 of report titled 'Establishing factors that influence NOx reduction at waste incineration plant to levels below the upper end of the BAT-AELs' (dated 14/01/2022), or other methodology agreed in writing with the Environment Agency. A written report of the study shall be submitted to the Environment Agency which shall include but not necessarily be limited to the following:</p> <ul style="list-style-type: none"> <li>• A brief description of the currently installed measures at the installation to minimise NOx emissions, including details of how the reagent dosing system responds to emissions monitoring data and historic data which illustrates the current achievable level of daily NOx emissions.</li> <li>• The results of trials conducted to further reduce daily average NOx emissions using currently installed measures, including: <ul style="list-style-type: none"> <li>○ a description of the parameters that were varied during the trial e.g. ammonia or urea feed rates, physical form of urea injected, air flows, and the range over which they were varied</li> <li>○ the levels of NOx achieved and associated levels of ammonia and nitrous oxide emissions and reagent consumption</li> <li>○ observed effects and predicted long-term impacts on plant operation, reliability and maintenance regime</li> </ul> </li> </ul>	30/09/23

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
	<ul style="list-style-type: none"> <li>○ any changes to the composition of the bottom ash and boiler ash and the implications of those changes for the ability to process and use the ash, as well as for the pollution potential of the ash both during processing and its subsequent use as a secondary aggregate</li> <li>○ any other relevant cross-media effects</li> </ul> <p>The report shall also include a description of the extent to which current systems in place at the plant to minimise NOx emissions can be optimised on a permanent basis, including justification and an implementation plan where relevant.</p>	
IC5	<p>Where the response to IC1 shows that the energy efficiency will be below the bottom of the BAT-AEEL range specified in BAT 20 after 02/12/2023 the operator shall carry out an assessment of the opportunities to increase the energy efficiency of the installation.</p> <p>The assessment shall include but not necessarily be limited to:</p> <ul style="list-style-type: none"> <li>• Improvements that could be made to the furnace (including control systems) in order to increase the amount of thermal energy produced per unit of thermal energy in the waste.</li> <li>• Improvements that could be made to the steam system and related components to allow a greater quantity of electricity to be generated per unit of thermal energy in the steam.</li> <li>• Improvements in the heat and electrical efficiency of the plant's ancillary systems that could be made in order to reduce the parasitic heat and electrical loads of the plant.</li> <li>• Where relevant, an implementation plan for the improvements identified, including the anticipated increase in the gross and/or net electrical efficiency of the plant which would be achieved.</li> </ul> <p>A written copy of the assessment shall be submitted to the Environment Agency.</p>	12 months from issue of variation notice

## Schedule 2 – Waste types, raw materials and fuels

Table S2.1 Raw materials and fuels	
Raw materials and fuel description	Specification
Fuel Oil	< 0.1% sulphur content

Table S2.2 Permitted waste types and quantities for incineration plant	
Maximum quantity	725,000 tonnes / year
Waste code	Description
<b>02</b>	<b>WASTES FROM AGRICULTURE, HORTICULTURE, AQUACULTURE, FORESTRY, HUNTING AND FISHING, FOOD PREPARATION AND PROCESSING</b>
<b>02 01</b>	<b>wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing</b>
02 01 03	plant-tissue waste
02 01 04	waste plastics (except packaging)
02 01 07	wastes from forestry
<b>02 02</b>	<b>wastes from the preparation and processing of meat, fish and other foods of animal origin</b>
02 02 03	materials unsuitable for consumption or processing
<b>02 05</b>	<b>wastes from the dairy products industry</b>
02 05 01	materials unsuitable for consumption or processing
<b>02 06</b>	<b>wastes from the baking and confectionery industry</b>
02 06 01	materials unsuitable for consumption or processing
<b>02 07</b>	<b>wastes from the production of alcoholic and non-alcoholic beverages (except coffee, tea and cocoa)</b>
02 07 01	wastes from washing, cleaning and mechanical reduction of raw materials
<b>03</b>	<b>WASTES FROM WOOD PROCESSING AND THE PRODUCTION OF PANELS AND FURNITURE, PULP, PAPER AND CARDBOARD</b>
<b>03 01</b>	<b>wastes from wood processing and the production of panels and furniture</b>
03 01 01	waste bark and cork
03 01 05	sawdust, shavings, cuttings, wood, particle board and veneer other than those mentioned in 03 01 04
<b>04</b>	<b>WASTES FROM THE LEATHER, FUR AND TEXTILE INDUSTRIES</b>
<b>04 02</b>	<b>wastes from the textile industry</b>
04 02 15	wastes from finishing other than those mentioned in 04 02 14
04 02 21	wastes from unprocessed textile fibres
04 02 22	wastes from processed textile fibres
<b>15</b>	<b>WASTE PACKAGING, ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED</b>
<b>15 01</b>	<b>packaging (including separately collected municipal packaging waste)</b>
15 01 01	paper and cardboard packaging

<b>Table S2.2 Permitted waste types and quantities for incineration plant</b>	
<b>Maximum quantity</b>	<b>725,000 tonnes / year</b>
<b>Waste code</b>	<b>Description</b>
15 01 02	plastic packaging
15 01 05	composite packaging
15 01 06	mixed packaging
15 01 09	textile packaging
<b>15 02</b>	<b>absorbents, filter materials, wiping cloths and protective clothing</b>
15 02 03	absorbents, filter materials, wiping cloths and protective clothing other than those mentioned in 15 02 02
<b>16</b>	<b>WASTES NOT OTHERWISE SPECIFIED IN THE LIST</b>
<b>16 01</b>	<b>end-of-life vehicles from different means of transport (including off-road machinery) and wastes from dismantling of end-of-life vehicles and vehicle maintenance (except 13, 14, 16 06 and 16 08)</b>
16 01 03	end-of-life tyres
16 01 19	plastic
<b>17</b>	<b>CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)</b>
<b>17 02</b>	<b>wood, glass and plastic</b>
17 02 01	wood
17 02 03	plastic
<b>17 09</b>	<b>other construction and demolition wastes</b>
17 09 04	mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03
<b>19</b>	<b>WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE WATER TREATMENT PLANTS AND THE PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION AND WATER FOR INDUSTRIAL USE</b>
<b>19 02</b>	<b>wastes from physico/chemical treatments of waste (including dechromatation, decyanidation, neutralisation)</b>
19 02 03	premixed wastes composed only of non-hazardous wastes
19 02 10	combustible wastes other than those mentioned in 19 02 08 and 19 02 09
<b>19 05</b>	<b>wastes from aerobic treatment of solid wastes</b>
19 05 01	non-composted fraction of municipal and similar wastes
19 05 02	non-composted fraction of animal and vegetable waste
<b>19 12</b>	<b>wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified</b>
19 12 01	paper and cardboard
19 12 04	plastic and rubber
19 12 07	wood other than that mentioned in 19 12 06
19 12 08	textiles
19 12 10	combustible waste (refuse derived fuel)
19 12 12	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11

<b>Table S2.2 Permitted waste types and quantities for incineration plant</b>	
<b>Maximum quantity</b>	<b>725,000 tonnes / year</b>
<b>Waste code</b>	<b>Description</b>
<b>20</b>	<b>MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS</b>
<b>20 01</b>	<b>separately collected fractions (except 15 01)</b>
20 01 01	paper and cardboard
20 01 08	biodegradable kitchen and canteen waste
20 01 10	clothes
20 01 11	textiles
20 01 25	edible oil and fat
20 01 38	wood other than that mentioned in 20 01 37
20 01 39	plastics



## Schedule 3 – Emissions and monitoring

Emission point ref. & location	Parameter	Source	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard(s) or method(s)
A1 & A2 as shown on the site plan in Schedule 7	Particulate matter	Main stack	30 mg/m <sup>3</sup>	½-hr average	Continuous	EN 14181
	Particulate matter		10 mg/m <sup>3</sup> Until 02/12/2023	daily average	Continuous	EN 14181
			5 mg/m <sup>3</sup> from 03/12/2023			
	Total Organic Carbon (TOC)		20 mg/m <sup>3</sup>	½-hr average	Continuous	EN 14181
	Total Organic Carbon (TOC)		10 mg/m <sup>3</sup>	daily average	Continuous	EN 14181
	Hydrogen chloride		60 mg/m <sup>3</sup>	½-hr average	Continuous	EN 14181
	Hydrogen chloride		10 mg/m <sup>3</sup> Until 02/12/2023	daily average	Continuous	EN 14181
			8 mg/m <sup>3</sup> from 03/12/2023			
	Hydrogen fluoride		2 mg/m <sup>3</sup> until 02/12/2023	Average of three consecutive measurements of at least 30 minutes each	Bi-annually	CEN TS 17340 [BS ISO 15713 can be used until 01/03/22]
			1 mg/m <sup>3</sup> from 03/12/2023			
Carbon monoxide	150 mg/m <sup>3</sup>	95% of all 10-minute averages in any 24-hour period	Continuous	EN 14181		

Table S3.1 Point source emissions to air – emission limits and monitoring requirements.						
Emission point ref. & location	Parameter	Source	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard(s) or method(s)
	Carbon monoxide		50 mg/m <sup>3</sup>	daily average	Continuous	EN 14181
	Sulphur dioxide		200 mg/m <sup>3</sup>	½-hr average	Continuous	EN 14181
	Sulphur dioxide		50 mg/m <sup>3</sup> Until 02/12/2023	daily average	Continuous	EN 14181
			40 mg/m <sup>3</sup> from 03/12/2023			
	Oxides of nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> )		400 mg/m <sup>3</sup>	½-hr average	Continuous	EN 14181
	Oxides of nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> )		180 mg/m <sup>3</sup>	daily average	Continuous	EN 14181
	Cadmium & thallium and their compounds (total)		0.05 mg/m <sup>3</sup> until 02/12/2023	Average of three consecutive measurements of at least 30 minutes each	Bi-annually	BS EN 14385
			0.02 mg/m <sup>3</sup> from 03/12/2023			
	Mercury and its compounds		0.05 mg/m <sup>3</sup> until 02/12/2023	Average of three consecutive measurements of at least 30 minutes each	Bi-annually until 02/12/2023	BS EN 13211
	Mercury and its compounds		0.02 mg/m <sup>3</sup> from 03/12/2023	Average of three consecutive measurements of at least 30 minutes each	Bi-annually from 03/12/2023	BS EN 13211

Table S3.1 Point source emissions to air – emission limits and monitoring requirements.						
Emission point ref. & location	Parameter	Source	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard(s) or method(s)
			Limit does not apply if continuous monitoring has been specified in writing by the Environment Agency		Not required if continuous monitoring has been specified in writing by the Environment Agency	
	Mercury and its compounds		0.02 mg/m <sup>3</sup> from 03/12/2023	Daily average	Continuous from 03/12/2023 Not required unless continuous monitoring has been specified by in writing by the Environment Agency in line with sampling protocol	EN 14181
	Sb, As, Pb, Cr, Co, Cu, Mn, Ni and V and their compounds (total)		0.5 mg/m <sup>3</sup> Until 02/12/2023	Average of three consecutive measurements of at least 30 minutes each	Bi-annually	BS EN 14385
			0.3 mg/m <sup>3</sup> from 03/12/2023			
	Exhaust gas temperature		No limit set	-	Continuous	Traceable to national standards
	Exhaust gas pressure		No limit set	-	Continuous	Traceable to national standards
	Exhaust gas flow		No limit set	-	Continuous from 01/01/2023	BS EN 16911-2
	Exhaust gas oxygen content		No limit set	-	Continuous	EN 14181
	Exhaust gas water vapour content		No limit set	-	Continuous	EN 14181

**Table S3.1 Point source emissions to air – emission limits and monitoring requirements.**

<b>Emission point ref. &amp; location</b>	<b>Parameter</b>	<b>Source</b>	<b>Limit (including unit)</b>	<b>Reference period</b>	<b>Monitoring frequency</b>	<b>Monitoring standard(s) or method(s)</b>
	Ammonia (NH <sub>3</sub> )		30 mg/m <sup>3</sup> Until 02/12/2023	½-hr average	Continuous Until 02/12/2023	BS EN 14181 and BS EN 15267-3
			15 mg/m <sup>3</sup> from 03/12/2023	daily average	Continuous from 03/12/2023	EN 14181
	Nitrous oxide (N <sub>2</sub> O)		No limit set	½-hr average and daily average from 01/01/2023	Continuous from 01/01/2023	EN 14181
	Carbon dioxide		No limit set	Continuous	Continuous from 01/01/2023	EN 14181
	Dioxins / furans (I-TEQ)		0.1 ng/m <sup>3</sup> Until 02/12/2023	periodic over minimum 6 hours, maximum 8 hour period	Bi-annually until 02/12/2023	BS EN 1948 Parts 1, 2 and 3
	Dioxins / furans (I-TEQ)		0.06 ng/m <sup>3</sup>  or  0.08 ng/m <sup>3</sup>	periodic over minimum 6 hours, maximum 8 hour period  or  or	bi-annually from 03/12/2023  or  or	EN 1948 Parts 1, 2 and 3  or  or

Table S3.1 Point source emissions to air – emission limits and monitoring requirements.						
Emission point ref. & location	Parameter	Source	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard(s) or method(s)
			if long term limit is specified by the Environment Agency in line with sampling protocol from 03/12/2023	value over sampling period of 2 to 4 weeks for long term sampling	long term sampling if specified by the Environment Agency in line with sampling protocol from 03/12/2023	CEN TS 1948-5 if specified by the Environment Agency in line with sampling protocol
	Dioxin-like PCBs (WHO-TEQ Humans / Mammals, Fish, Birds)		No limit set	periodic over minimum 6 hours, maximum 8 hour period  or  value over sampling period of 2 to 4 weeks for long term sampling from 03/12/2023	Bi-annually;  or  long term sampling if specified by the Environment Agency in line with sampling protocol from 03/12/2023  No monitoring is required if emissions have been shown to be below 0.01 ng/m <sup>3</sup> as agreed with the Environment Agency.	EN 1948 Parts 1, 2 and 4  or  CEN TS 1948-5 if specified by the Environment Agency in line with sampling protocol
	Dioxins / furans (WHO-TEQ Humans / Mammals, Fish, Birds)		No limit set	periodic over minimum 6 hours, maximum 8 hour period	Bi-annually	BS EN 1948 Parts 1, 2 and 3
	Polybrominated dibenzodioxins and furans		No limit set	periodic over minimum 6 hours, maximum 8 hour period	Bi-annually from 01/01/2023	Method based on procedural requirements of EN 1948

<b>Table S3.1 Point source emissions to air – emission limits and monitoring requirements.</b>						
<b>Emission point ref. &amp; location</b>	<b>Parameter</b>	<b>Source</b>	<b>Limit (including unit)</b>	<b>Reference period</b>	<b>Monitoring frequency</b>	<b>Monitoring standard(s) or method(s)</b>
	Specific individual polycyclic aromatic hydrocarbons (PAHs), as specified in Schedule 6.		No limit set	periodic over minimum 6 hours, maximum 8 hour period	Annually	BS ISO 11338 Parts 1 and 2.
A3 as shown on the site plan in Schedule 7	Carbon monoxide	Back-up electrical generator	No limit set	In line with web guide 'Monitoring stack emissions: low risk MCPs and specified generators' Published 16 February 2021 (formerly known as TGN M5)	Every 1500 hours of operation or once every five years (whichever comes first)	In line with web guide 'Monitoring stack emissions: low risk MCPs and specified generators' Published 16 February 2021 (formerly known as TGN M5)

<b>Table S3.1(a) Point source emissions to air during abnormal operation of incineration plant – emission limits and monitoring requirements</b>						
<b>Emission point ref. &amp; location</b>	<b>Parameter</b>	<b>Source</b>	<b>Limit (including unit)</b>	<b>Reference period</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>
A1 & A2 as shown on the site plan in Schedule 7	Particulate matter	Main stack	150 mg/m <sup>3</sup>	½-hr average	Continuous	EN 14181 or alternative surrogate as agreed in writing with the environment agency during failure of the continuous emission monitor
	Total Organic Carbon (TOC)		20 mg/m <sup>3</sup>	½-hr average	Continuous	EN 14181 or alternative surrogate as agreed in writing with the environment agency during failure of the continuous emission monitor
	Carbon monoxide		150 mg/m <sup>3</sup>	95% of all 10-minute averages in any 24-hour period	Continuous	EN 14181 or alternative surrogate as agreed in writing with the environment agency during failure of the continuous emission monitor

<b>Table S3.2 Point Source emissions to water (other than sewer) and land – emission limits and monitoring requirements</b>						
<b>Emission point ref. &amp; location</b>	<b>Source</b>	<b>Parameter</b>	<b>Limit (incl. unit)</b>	<b>Reference Period</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>
W1 as shown on the site plan in Schedule 7	Surface water	No parameters set	No limit set	--	--	--

<b>Table S3.3 Process monitoring requirements</b>				
<b>Emission point reference or source or description of point of measurement</b>	<b>Parameter</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>	<b>Other specifications</b>
As identified in the Application	Wind Speed and Direction	Continuous	Anemometer	
Location close to the Combustion Chamber inner wall or as identified and justified in Application.	Temperature (° C)	Continuous	Traceable to national standards	As agreed in writing with the Agency.
Incineration plant	Gross electrical efficiency	within 6 months of any modification that significantly affects energy efficiency	Performance test at full load or other method as agreed in writing with the Environment Agency	



<b>Table S3.4 Residue quality</b>					
<b>Emission point reference or source or description of point of measurement</b>	<b>Parameter</b>	<b>Limit</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method *</b>	<b>Other specifications</b>
Bottom Ash	TOC	3%	Quarterly	EN 14899 and either EN 13137 or EN 15936	Environment Agency Guidance, 'TGN M4 – Guidelines for Ash Sampling and Analysis'
Bottom Ash	Metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) and their compounds, dioxins/furans and dioxin-like PCBs.		Quarterly	Environment Agency Guidance, 'TGN M4 – Guidelines for Ash Sampling and Analysis'	
Bottom Ash	Total soluble fraction and metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) soluble fractions		Before use of a new disposal or recycling route	Environment Agency Guidance, 'TGN M4 – Guidelines for Ash Sampling and Analysis'	
APC Residues	Metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) and their compounds, dioxins/furans and dioxin-like PCBs.		Quarterly	Environment Agency Guidance, 'TGN M4 – Guidelines for Ash Sampling and Analysis'	
APC Residues	Total soluble fraction and metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) soluble fractions		Before use of a new disposal or recycling route	Environment Agency Guidance, 'TGN M4 – Guidelines for Ash Sampling and Analysis'	

\* Or other equivalent standard as agreed in writing with the Environment Agency.

## Schedule 4 – Reporting

Parameters, for which reports shall be made, in accordance with conditions of this permit, are listed below.

<b>Table S4.1 Reporting of monitoring data</b>			
<b>Parameter</b>	<b>Emission or monitoring point/reference</b>	<b>Reporting period</b>	<b>Period begins</b>
Emissions to air Parameters as required by condition 3.6.1	A1 & A2	Quarterly	1 Jan, 1 Apr, 1 Jul and 1 Oct
TOC Parameters as required by condition 3.6.1	Bottom Ash	Quarterly	1 Jan, 1 Apr, 1 Jul and 1 Oct
Metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) and their compounds, dioxins/furans and dioxin-like PCBs Parameters as required by condition 3.6.1	Bottom Ash	Quarterly	1 Jan, 1 Apr, 1 Jul and 1 Oct
Total soluble fraction and metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) soluble fractions Parameters as required by condition 3.6.1	Bottom Ash	Before use of a new disposal or recycling route	
Metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) and their compounds, dioxins/furans and dioxin-like PCBs Parameters as required by condition 3.6.1	APC Residues	Quarterly	1 Jan, 1 Apr, 1 Jul and 1 Oct
Total soluble fraction and metals (Antimony, Cadmium, Thallium, Mercury, Lead, Chromium, Copper, Manganese, Nickel, Arsenic, Cobalt, Vanadium, Zinc) soluble fractions Parameters as required by condition 3.6.1	APC Residues	Before use of a new disposal or recycling route	

<b>Table S4.2: Annual production/treatment</b>	
<b>Parameter</b>	<b>Units</b>
Total Municipal Waste and RDF Incinerated	tonnes
Total Commercial Waste Incinerated	tonnes
Electrical energy produced	kWh

<b>Table S4.2: Annual production/treatment</b>	
<b>Parameter</b>	<b>Units</b>
Thermal energy produced e.g. steam for export	kWh
Electrical energy exported	kWh
Electrical energy used on installation	kWh
Waste heat utilised by the installation	kWh

<b>Table S4.3 Performance parameters</b>		
<b>Parameter</b>	<b>Frequency of assessment</b>	<b>Units</b>
Annual Report as required by condition 4.2.2	Annually	-
Electrical energy exported, imported and used at the installation	Annually	kWh / tonne of waste incinerated
Fuel oil consumption	Annually	kg / tonne of waste incinerated
Bottom Ash residue	Annually	Route, tonnes and tonnes / tonne of waste incinerated
APC residue	Annually	Route, tonnes and tonnes / tonne of waste incinerated
Ammonia consumption	Annually	kg / tonne of waste incinerated
Activated Carbon consumption	Annually	kg / tonne of waste incinerated
Lime consumption	Annually	kg / tonne of waste incinerated
Water consumption	Annually	kg / tonne of waste incinerated
Periods of abnormal operation	Annually	No of occasions and cumulative hours for current calendar year for each line.

<b>Table S4.4 Reporting forms</b>		
<b>Media/parameter</b>	<b>Reporting format</b>	<b>Date of form</b>
Annual report required by condition 4.2.2	Annual performance report template	01/04/2022
Emissions to air until 02/12/2023	Form air 1 or other form as agreed in writing by the Environment Agency	25/11/15
Emissions to air from 03/12/2023	Forms air 1-9 or other forms as agreed in writing by the Environment Agency	01/04/2022
Residue quality	Form residue 1 and 2 or other form as agreed in writing by the Environment Agency	01/04/2022
Other performance indicators	Form performance 1 or other form as agreed in writing by the Environment Agency	01/04/2022

## Schedule 5 – Notification

These pages outline the information that the operator must provide.

Units of measurement used in information supplied under Part A and B requirements shall be appropriate to the circumstances of the emission. Where appropriate, a comparison should be made of actual emissions and authorised emission limits.

If any information is considered commercially confidential, it should be separated from non-confidential information, supplied on a separate sheet and accompanied by an application for commercial confidentiality under the provisions of the EP Regulations.

### Part A

Permit Number	
Name of operator	
Location of Facility	
Time and date of the detection	

<b>(a) Notification requirements for any malfunction, breakdown or failure of equipment or techniques, accident, or emission of a substance not controlled by an emission limit which has caused, is causing or may cause significant pollution</b>	
<b>To be notified within 24 hours of detection</b>	
Date and time of the event	
Reference or description of the location of the event	
Description of where any release into the environment took place	
Substances(s) potentially released	
Best estimate of the quantity or rate of release of substances	
Measures taken, or intended to be taken, to stop any emission	
Description of the failure or accident.	

<b>(b) Notification requirements for the breach of a limit</b>	
<b>To be notified within 24 hours of detection unless otherwise specified below</b>	
Emission point reference/ source	
Parameter(s)	
Limit	
Measured value and uncertainty	
Date and time of monitoring	

<b>(b) Notification requirements for the breach of a limit</b>	
<b>To be notified within 24 hours of detection unless otherwise specified below</b>	
Measures taken, or intended to be taken, to stop the emission	

<b>Time periods for notification following detection of a breach of a limit</b>	
<b>Parameter</b>	<b>Notification period</b>

<b>(c) Notification requirements for the breach of permit conditions not related to limits</b>	
<b>To be notified within 24 hours of detection</b>	
Condition breached	
Date, time and duration of breach	
Details of the permit breach i.e. what happened including impacts observed.	
Measures taken, or intended to be taken, to restore permit compliance.	

<b>(d) Notification requirements for the detection of any significant adverse environmental effect</b>	
<b>To be notified within 24 hours of detection</b>	
Description of where the effect on the environment was detected	
Substances(s) detected	
Concentrations of substances detected	
Date of monitoring/sampling	

## **Part B – to be submitted as soon as practicable**

Any more accurate information on the matters for notification under Part A.	
Measures taken, or intended to be taken, to prevent a recurrence of the incident	

Measures taken, or intended to be taken, to rectify, limit or prevent any pollution of the environment which has been or may be caused by the emission	
The dates of any unauthorised emissions from the facility in the preceding 24 months.	

Name*	
Post	
Signature	
Date	

\* authorised to sign on behalf of the operator

## Schedule 6 – Interpretation

“abatement equipment” means that equipment dedicated to the removal of polluting substances from releases from the installation to air or water media.

“abnormal operation” means: any technically unavoidable stoppages, disturbances, or failures of the plant or the measurement devices. Abnormal operation starts as defined in condition 2.3.12 and ends as defined in condition 2.3.13. Abnormal operation is limited to 4 hours for a single occurrence and a total of 60 hours per year per line.

“accident” means an accident that may result in pollution.

“APC residues” means air pollution control residues

“application” means the application for this permit, together with any additional information supplied by the operator as part of the application and any response to a notice served under Schedule 5 to the EP Regulations.

“authorised officer” means any person authorised by the Environment Agency under section 108(1) of The Environment Act 1995 to exercise, in accordance with the terms of any such authorisation, any power specified in section 108(4) of that Act.

“BAT conclusions” means Commission Implementing Decision (EU) 2019/2010 of 12 November 2019 establishing the best available techniques (BAT) conclusions, under Directive 2010/75/EU of the European Parliament and of the Council, for Waste Incineration

“bottom ash” means ash falling through the grate or transported by the grate.

“CEM” Continuous emission monitor

“CEN” means Comité Européen de Normalisation

“bi-annual” means twice per year with at least five months between tests;

“Commissioning” means testing of the new incineration plant that involves any operation of the furnace or as agreed with the Environment Agency.

Daily average emissions value means ‘the average of at least 43 valid half hourly averages or for CO the average of at least 43 valid half hourly averages or 129 valid 10 min averages’

“dioxin and furans” means polychlorinated dibenzo-p-dioxins and polychlorinated dibenzofurans.

“disposal”. Means any of the operations provided for in Annex I to Directive 2008/98/EC of the European Parliament and of the Council on waste.

“emissions to land” includes emissions to groundwater.

“EP Regulations” means The Environmental Permitting (England and Wales) Regulations SI 2016 No.1154 and words and expressions used in this permit which are also used in the Regulations have the same meanings as in those Regulations.

“emissions of substances not controlled by emission limits” means emissions of substances to air, water or land from the activities, either from the emission points specified in schedule 3 or from other localised or diffuse sources, which are not controlled by an emission limit.

“groundwater” means all water, which is below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil.

‘Hazardous property’ has the meaning in Annex III of the Waste Framework Directive

“incineration line” means all of the incineration equipment related to a common discharge to air location.

“Industrial Emissions Directive” means DIRECTIVE 2010/75/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 24 November 2010 on industrial emissions

“ISO” means International Standards Organisation.

'List of Wastes' means the list of wastes established by Commission Decision 2000/532/EC replacing Decision 94/3/EC establishing a list of wastes pursuant to Article 1(a) of Council Directive 75/442/EEC on waste and Council Decision 94/904/EC establishing a list of hazardous waste pursuant to Article 1(4) of Council Directive 91/689/EEC on hazardous waste, as amended from time to time

"LOI" means loss on ignition a technique used to determine the combustible material by heating the ash residue to a high temperature

"MCERTS" means the Environment Agency's Monitoring Certification Scheme.

"PAH" means Poly-cyclic aromatic hydrocarbon, and comprises Anthanthrene, Benzo[a]anthracene, Benzo[b]fluoranthene, Benzo[k]fluoranthene, Benzo[b]naph(2,1-d)thiophene, Benzo[c]phenanthrene, Benzo[ghi]perylene, Benzo[a]pyrene, Cholanthrene, Chrysene, Cyclopenta[c,d]pyrene, Dibenz[ah]anthracene, Dibenz[a,i]pyrene Fluoranthene, Indo[1,2,3-cd]pyrene, Naphthalene

"PCB" means Polychlorinated Biphenyl. Dioxin-like PCBs are the non-ortho and mono-ortho PCBs listed in the table below.

"Pests" means Birds, Vermin and Insects.

"quarter" means a calendar year quarter commencing on 1 January, 1 April, 1 July or 1 October.

"recovery" means any of the operations provided for in Annex II to Directive 2008/98/EC of the European Parliament and of the Council on waste.

"start up" is any period, where the plant has been non-operational, until waste has been fed to the plant in a sufficient quantity to initiate steady-state conditions as described in the application or agreed in writing with the Environment Agency.

"shut down" is any period where the plant is being returned to a non-operational state as described in the application or agreed in writing with the Environment Agency.

"TOC" means Total Organic Carbon. In respect of releases to air, this means the gaseous and vaporous organic substances, expressed as TOC. In respect of Bottom Ash, this means the total carbon content of all organic species present in the ash (excluding carbon in elemental form).

'Waste code' means the six digit code referable to a type of waste in accordance with the List of Wastes and in relation to hazardous waste, includes the asterisk

"Waste Framework Directive" or "WFD" means Waste Framework Directive 2008/98/EC of the European Parliament and of the Council on waste

Where a minimum limit is set for any emission parameter, for example pH, reference to exceeding the limit shall mean that the parameter shall not be less than that limit.

Unless otherwise stated, any references in this permit to concentrations of substances in emissions into air means:

- (a) in relation to emissions from combustion processes, the concentration in dry air at a temperature of 273K, at a pressure of 101.3 kPa and with an oxygen content of 3% dry for liquid and gaseous fuels, 6% dry for solid fuels; and/or
- (b) in relation to gases from incineration plants other than those burning waste oil, the concentration in dry air at a temperature of 273K, at a pressure of 101.3 kPa and with an oxygen content of 11% dry.

For dioxins/furans and dioxin-like PCBs the determination of the toxic equivalence concentration (I-TEQ, & WHO-TEQ for dioxins/furans, WHO-TEQ for dioxin-like PCBs) stated as a release limit and/ or reporting requirement, the mass concentrations of the following congeners have to be multiplied with their respective toxic equivalence factors before summing. When reporting on measurements of dioxins/furans and dioxin-like PCBs, the toxic equivalence concentrations should be reported as a range based on: all congeners less than the detection limit assumed to be zero as a minimum, and all congeners less than the detection limit assumed to be at the detection limit as a maximum. However the minimum value should be used when assessing compliance with the emission limit value in table S3.1.



TEF schemes for dioxins and furans				
Congener	I-TEF	WHO-TEF		
	1990	2005	1997/8	
		Humans / Mammals	Fish	Birds
<b>Dioxins</b>				
2,3,7,8-TCDD	1	1	1	1
1,2,3,7,8-PeCDD	0.5	1	1	1
1,2,3,4,7,8-HxCDD	0.1	0.1	0.5	0.05
1,2,3,6,7,8-HxCDD	0.1	0.1	0.01	0.01
1,2,3,7,8,9-HxCDD	0.1	0.1	0.01	0.1
1,2,3,4,6,7,8-HpCDD	0.01	0.01	0.001	<0.001
OCDD	0.001	0.0003	-	-
<b>Furans</b>				
2,3,7,8-TCDF	0.1	0.1	0.05	1
1,2,3,7,8-PeCDF	0.05	0.03	0.05	0.1
2,3,4,7,8-PeCDF	0.5	0.3	0.5	1
1,2,3,4,7,8-HxCDF	0.1	0.1	0.1	0.1
1,2,3,7,8,9-HxCDF	0.1	0.1	0.1	0.1
1,2,3,6,7,8-HxCDF	0.1	0.1	0.1	0.1
2,3,4,6,7,8-HxCDF	0.1	0.1	0.1	0.1
1,2,3,4,6,7,8_HpCDF	0.01	0.01	0.01	0.01
1,2,3,4,7,8,9-HpCDF	0.01	0.01	0.01	0.01
OCDF	0.001	0.0003	0.0001	0.0001

TEF schemes for dioxin-like PCBs			
Congener	WHO-TEF		
	2005	1997/8	
	Humans / mammals	Fish	Birds
<b>Non-ortho PCBs</b>			
3,4,4',5-TCB (81)	0.0001	0.0005	0.1
3,3',4,4'-TCB (77)	0.0003	0.0001	0.05
3,3',4,4',5 - PeCB (126)	0.1	0.005	0.1
3,3',4,4',5,5'-HxCB(169)	0.03	0.00005	0.001
<b>Mono-ortho PCBs</b>			
2,3,3',4,4'-PeCB (105)	0.00003	<0.000005	0.0001
2,3,4,4',5-PeCB (114)	0.00003	<0.000005	0.0001

TEF schemes for dioxin-like PCBs			
Congener	WHO-TEF		
	2005	1997/8	
	Humans / mammals	Fish	Birds
2,3',4,4',5-PeCB (118)	0.00003	<0.000005	0.00001
2',3,4,4',5-PeCB (123)	0.00003	<0.000005	0.00001
2,3,3',4,4',5-HxCB (156)	0.00003	<0.000005	0.0001
2,3,3',4,4',5'-HxCB (157)	0.00003	<0.000005	0.0001
2,3',4,4',5,5'-HxCB (167)	0.00003	<0.000005	0.00001
2,3,3',4,4',5,5'-HpCB (189)	0.00003	<0.000005	0.00001

“year” means calendar year ending 31 December.

When the following terms appear in the waste code list in Schedule 2, table 2.2 for that table, they have the meaning given below:

‘hazardous substance’ means a substance classified as hazardous as a consequence of fulfilling the criteria laid down in parts 2 to 5 of Annex I to Regulation (EC) No 1272/2008

‘heavy metal’ means any compound of antimony, arsenic, cadmium, chromium (VI), copper, lead, mercury, nickel, selenium, tellurium, thallium and tin, as well as these materials in metallic form, as far as these are classified as hazardous substances

‘PCBs’ means

- polychlorinated biphenyls
- polychlorinated terphenyls
- monomethyl-tetrachlorodiphenyl methane, Monomethyl-dichloro-diphenyl methane, Monomethyldibromo-diphenyl methane
- any mixture containing any of the above mentioned substances in a total of more than 0,005 %by weight

‘transition metals’ means any of the following metals: any compound of scandium, vanadium, manganese, cobalt, copper, yttrium, niobium, hafnium, tungsten, titanium, chromium, iron, nickel, zinc, zirconium, molybdenum and tantalum, as well as these materials in metallic form, as far as these are classified as hazardous substances

‘stabilisation’ means processes which change the hazardousness of the constituents in the waste and transform hazardous waste into non-hazardous waste

‘solidification’ means processes which only change the physical state of the waste by using additives without changing the chemical properties of the waste

‘partly stabilised wastes’ means wastes containing, after the stabilisation process, hazardous constituents which have not been changed completely into non-hazardous constituents and could be released into the environment in the short, middle or long term.

# Schedule 7 – Site plan



**AECOM**

**Legend**

- Permit Installation Boundary
- ⊙ W Water
- ⊙ A Air

Revision Details			
Drawn	Checked	Approved	Date
GB	AW	RL	22/03/18

Figure Number: **Figure 1**

Figure Title: **Point Source Emission**

Document Reference: 60509259 PSE 001

**Ferrybridge Multifuel 2**

Scale: 1:2500	Original size: A3
Document Number: 60509259 PSE 001	Revision: 01

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END OF PERMIT



Planning Act 2008

## North Lincolnshire Green Energy Park

Annex 3 - Solar 21 Letter and Letters of support and Memoranda of Understanding

PINS reference: EN010116

January 2024



John Wheadon

Head of Energy Infrastructure Planning Delivery

Energy Infrastructure Planning

Reference EN010116

12<sup>th</sup> January 2024

Subject: Planning Act 2008 and The Infrastructure Planning (Examination Procedure) Rules 2010. Application by The North Lincolnshire Green Energy Park Limited ("**the Applicant**") for an Order granting Development Consent for the proposed **The North Lincolnshire Green Energy Park ("the Proposed Development")**

We write in response to your letter dated 8<sup>th</sup> December 2023 regarding your request for information and specifically with reference to the request in Section 9 which requests the following:

*"The Applicant is requested to confirm and evidence what long-term agreements it has in place with waste suppliers to ensure long term RDF supply."*

Due to the commercial sensitivity surrounding waste contracts, particularly pre-consent, we decided it would be prudent to submit this letter with a summary of the waste supply commitments that have been secured, along with some redacted Memoranda of Understanding (MoU) to protect the commercial sensitivity.

The Solar21 Group of companies already have waste contracts secured for other projects and has developed a network of partners within the waste management sector that have submitted letters of support, with a view of reaching long-term waste supply agreements, once the North Lincolnshire Green Energy Park (NLGEP) has secured the DCO consent. As the SoS will be aware it is not possible for any project to secure binding commercial waste supply agreements until they are in possession of a consent.

To date, Solar 21 has incurred over £15 million in costs in making the NLGEP DCO application. This expenditure would not have been incurred if it was not very confident that it can secure the waste it requires to operate the plant. If there were to be energy recovery capacity available beyond that required to meet need, the market would determine to which facilities residual waste is consigned, with less attractive facilities, in terms of gate fee and environmental credentials e.g. R1 status and carbon capture capability, exiting the market the market.

There is a competitive market for the management of waste where successful operators offer waste producers the most attractive combination of *inter alia* price, availability and environmental and other sustainability credentials. Solar 21 believes that the development will make a compelling offer to waste producers as a result in particular of its economies of scale and preparedness for carbon capture and use. This position is supported by the attached memoranda of understanding and letters of support with non-recyclable waste providers. Our belief is that market drivers will lead to the closure of smaller, older and less efficient EfW facilities, particularly where these are not able to capture carbon, and as the carbon price becomes a significant competitive discriminator with the extension of the energy trading scheme to EfW in 2028. Solar 21 notes that NPS-EN1 recognises the important role of high-quality infrastructure in boosting economic growth and competitiveness, precisely the contribution the development will make to the waste market.

In Appendix 1 of this letter, there are four partners in the waste aggregation, waste processing and waste brokering sectors in the region, that have availability of 425,000 tonnes of refuse derived fuel per annum and an initial commitment of 132,500 tonnes. Attached are six letters of support that could potentially deliver an additional contract tonnage in excess of 500,000 tonnes of RDF per annum. These represent a cross-section of our engagement with waste suppliers.

All of our partners in the waste sector are trying to identify plastic recyclers in the UK to process the volume of plastic for recycling that is currently exported (2.7m tonnes per annum). The plastic recycling facility proposed within the NLGEP is supported by our partners with a view to increasing the waste plastic that can be recycled.

The commitment by NLGEP to deploy carbon capture rather than just have the facility carbon capture enabled, is now seen as a preference for waste that cannot be recycled for energy recovery facilities. This will become a pre-requisite of the waste authority contracts that are falling due for re-tendering.

NLGEPL is actively submitting expressions of interest for all the regional waste authority contracts that will be re-tendered from 2026 onwards.

We are confident of the commitment of our waste supply partners to secure the long-term supply of waste, which cannot be recycled on a commercial basis.

We hope that this letter alongside the MoU's and letters of support, provides sufficient confidence to the Secretary of State, that the waste supply is not an issue for this facility.

Yours sincerely



Michael Bradley

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## **Appendix 1 - Memoranda of Understanding**



# MEMORANDUM OF UNDERSTANDING

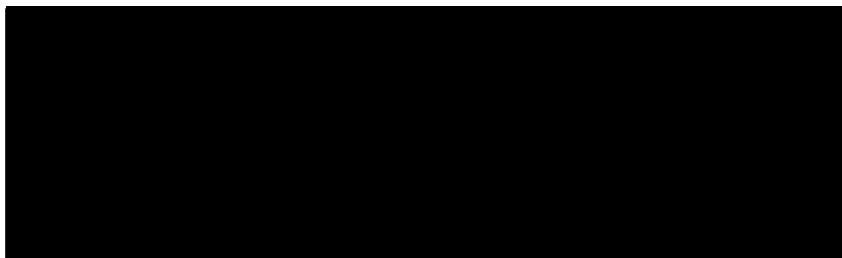
By and between

**North Lincolnshire Green Energy Park Limited**

CRN: 10949653

Office 71, The Colchester Centre, Hawkins Road, Colchester, CO2 8JX

And



(the "Supplier")

## 1. Background

The parties have initiated discussions regarding the Supply and Delivery of Refused Derived Fuel (RDF) and source segregated plastics for recycling to North Lincolnshire Green Energy Park Limited's Energy Recovery Facility (the "Plant"). This memorandum of understanding ("MOU") sets out the proposed terms of a potential agreement and timetable for implementation. It is not intended to be legally binding except as specifically set out below.

North Lincolnshire Green Energy Park Limited is developing a plant in Flixborough North Lincolnshire which, at full capacity, will consume 760,000 tonnes of RDF and plastic for recycling per year. The plant is scheduled to commence operations Q1 2027 with CCUS enabled at the plant. The aim is to reach a carbon negative status at the facility with the Zero Carbon Humber CO<sub>2</sub> pipeline passing within 4km of the facility. The facility will provide a low-carbon option for waste management.

The Supplier has exported more than 20,000 tonnes of RDF per annum and would like to reduce its reliance on export by establishing a UK-based off taker.

The option to maximise containerised RDF transport by rail and by boat with the development of one or more RDF compactor sites at railheads close to the waste sources will be the focus of future discussions between the Parties.

The Supplier can Supply and Deliver up to 50,000 tonnes per year either through its own capacity or network.

## 2. Supply – Feedstock Specification and Requirements

The Supplier will supply to North Lincolnshire Green Energy Park Limited up to 25,000 tonnes of RDF and recyclable plastics per annum and ensure delivery against the following outline Feedstock Specification and requirements:

Acceptable waste source:

- 2.1.1. Derived from municipal solid waste;
- 2.1.2. commercial waste having the same or similar composition to mixed residual municipal solid waste; and/or
- 2.1.3. industrial waste having the same or similar composition to mixed residual municipal solid waste;

### 3. Positive Descriptions

European Waste Catalogue Code	Description
The following 19-12 codes are for wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified	
19-12-01	Paper and cardboard
19-12-04	Plastic and rubber
19-12-07	Wood other than that mentioned in 19 12 06 (wood containing hazardous substances)
19-12-08	Textiles
19-12-10	Combustible waste (refuse derived fuel)
19-12-12	Other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11 (other wastes (including mixtures of materials) from mechanical treatment of waste containing hazardous substances
The following 20-01 codes are for separately collected fractions (except 15 01).	
20-01-01	Paper and cardboard
20-01-10	Clothes
20-01-11	Textiles
20-01-38	Wood other than that mentioned in 20 01 37 (wood containing hazardous substances)
20-01-39	Plastics
20-02-01	Biodegradable waste
20-03-01	Mixed municipal waste
20-03-02	Waste from markets

### 4. Measured Parameters

The following table sets out the measured parameters which must be complied with.

Ref	Parameter	Units	Limits
M01	Net caloric value	MJ/kg as received	11.0 to 18.0
M02	Moisture content	wt% as received	Max 40.0%
M03	Ash content	wt% dry, ash free	Max 25.0%
M04	Fines (defined as the material which goes through a screen with 1 mm circular holes)	wt% dry basis	Max 5.0%
M05	Chlorine	wt% dry, ash free	Max 1.00%
M06	Sulphur	wt% dry, ash free	Max 0.60%
M07	Zinc plus lead	mg/kg dry, ash free	Max 1,000
M08	Sodium	mg/kg dry, ash free	Max 5,000
M09	Potassium	mg/kg dry, ash free	Max 5,000
M10	Bulk density – not baled	kg/m <sup>3</sup>	150 to 500 kg/m <sup>3</sup>

- 4.1. Contaminants/abrasive inert (glass, stone, ceramics, metal, plastic) content: up to 10% (as received)

- 4.2. Particle size: <300 mm (as received)
- 4.3. Traceable for provenance back to original source
- 4.4. Consistency in volumes and quality

## 5. Delivery

- a. The goods shall be delivered as one-cut shred to North Lincolnshire Green Energy Park Limited ERF facility in Flixborough North Lincolnshire compacted in containers, loose in walking floor trailers or in bales
- b. North Lincolnshire Green Energy Park Limited and the Supplier shall agree a delivery schedule based on 125 tonnes per day consumption

## 6. Pricing

- a. The RDF will be supplied at a price to be agreed for the material
- b. North Lincolnshire Green Energy Park Limited shall pay the following:
  - i. A fixed price per tonne delivered to Flixborough by road
  - or
  - ii. A fixed price per tonne compacted and loaded into containers for road of ship transportation at source
  - iii. A CPI price index annual increase in price

## 7. Duration and timing

- a. North Lincolnshire Green Energy Park Limited and the Supplier shall enter into a long-term supply agreement with a duration of no less than ten years
- b. North Lincolnshire Green Energy Park Limited shall use its reasonable endeavour to ensure its readiness to accept Supply by the end of **2026**
- c. North Lincolnshire Green Energy Park Limited and the Supplier shall conclude negotiations for a firm supply agreement no later than 6 months before scheduled commencement operation of the Plant

## 8. Sustainability and Certifications

- a. The Supplier will use its reasonable endeavours to support North Lincolnshire Green Energy Park Limited in acquiring relevant certifications under UK schemes, including by not limited to, ISCC +, ISCC EU, RED I and RED II
- b. The Supplier will use its reasonable endeavour to ensure that the carbon footprint of the supply chain is kept to a minimum

## 9. Confidentiality

- a. This paragraph is legally binding. North Lincolnshire Green Energy Park Limited and the Supplier will keep all information confidential, including but not limited to information regarding North Lincolnshire Green Energy Park Limited technology, product requirements and this MOU. Unless otherwise agreed in writing.

10. Governing Law and Jurisdiction

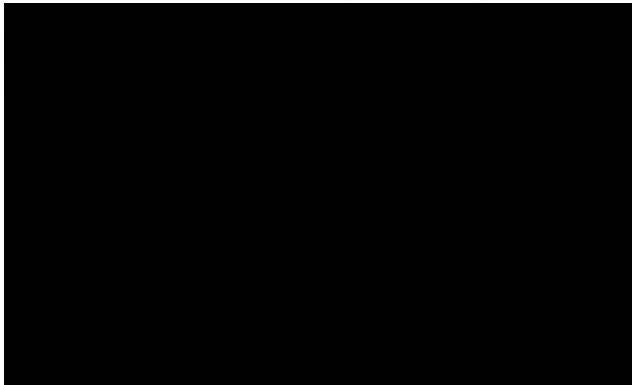
- a. This paragraph is legally binding. This MOU and all negotiations and any legal agreements prepared in connection with it, and any dispute or claim arising out of or in connection with them or their subject matter or formation, shall be governed by and construed in accordance with English law. Any dispute or claim arising out of or in connection with the MOU, its subject matter, existence, validity, formation or termination and including non-contractual disputes or claims shall be referred to and final resolved by arbitration, under the Rules of the London Court of International Arbitration, which are deemed to be incorporated by reference into the clause.

This Memorandum of Understanding has been entered into on: 19/11/2022

For North Lincolnshire  
Green Energy Park Limited



Mr David Jones  
Director



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## **Appendix 1 - Memoranda of Understanding**

# MEMORANDUM OF UNDERSTANDING

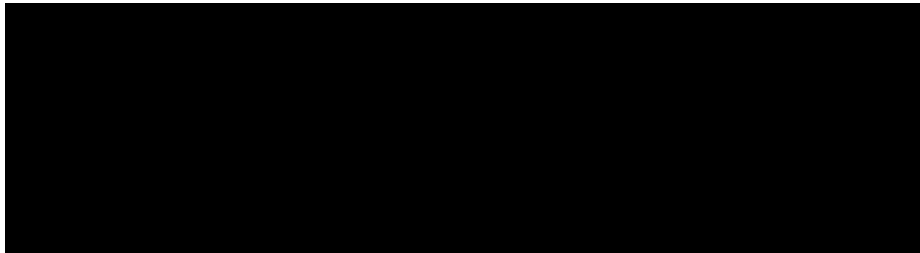
By and between

**North Lincolnshire Green Energy Park Limited**

CRN: 10949653

Office 71, The Colchester Centre, Hawkins Road, Colchester, C02 BJX

And



(the "Supplier")

## 1. Background

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North Lincolnshire Green Energy Park Limited is developing a plant in Flixborough North Lincolnshire which, at full capacity, will consume 760,000 tonnes of RDF and plastic for recycling per year. The plant is scheduled to commence operations Q1 2027 with CCUS enabled at the plant. The aim is to reach a carbon negative status at the facility with the Zero Carbon Humber CO2 pipeline passing within 4km of the facility. The facility will provide a low-carbon option for waste management.

The Supplier has exported more than 25,000 tonnes of RDF per annum and would like to reduce its reliance on export by establishing a UK-based off taker.

The option to maximise containerised RDF transport by rail and by boat with the development of one or more RDF compactor sites at railheads close to the waste sources **will** be the focus of future discussions between the Parties.

The Supplier can Supply and Deliver up to 150,000 tonnes per year either through its own capacity or network.

## 2. Supply-Feedstock Specification and Requirements

The Supplier will supply to North Lincolnshire Green Energy Park Limited up to 40,000 tonnes of RDF and recyclable plastics per annum and ensure delivery against the following outline Feedstock Specification and requirements:

Acceptable waste source:

**2.1.1. Derived from municipal solid waste;**

2.1.2. commercial waste having the same or similar composition to mixed residual **municipal solid waste; and/or**

2.1.3. industrial waste having the same or similar composition to mixed residual municipal solid waste;



### 3. Positive Descriptions

European Waste Catalogue Code	Description
The following 19-12 codes are for wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, palletising) not otherwise specified	
19-12-01	Paper and cardboard
19-12-04	Plastic and rubber
19-12-07	Wood other than that mentioned in 19 12 06 (wood containing hazardous substances)
19-12-08	Textiles
19-12-10	Combustible waste (refuse derived fuel)
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The following 20-01 codes are for separately collected fractions (except 15 01).	
20-01-01	Paper and cardboard
20-01-10	Clothes
20-01-11	Textiles
20-01-38	Wood other than that mentioned in 20 01 37 (wood containing hazardous substances)
20-01-39	Plastics
20-02-01	Biodegradable waste
20-03-01	Mixed municipal waste
20-03-02	Waste from markets

### 4. Measured Parameters

The following table sets out the measured parameters which must be complied with.

Ref	Parameter	Units	Limits
MD1	Net caloric value	MJ/kg as received	11.0 to 18.0
M02	Moisture content	wt% as received	Max 40.0%
M03	Ash content	wt% dry, ash free	Max 25.0%
M04	Fines (defined as the material which goes through a screen with 1 mm circular holes)	wt% dry basis	Max 5.0%
M05	Chlorine	wt% dry, ash free	Max 1.00%
M06	Sulphur	wt% dry, ash free	Max 0.60%
MO?	Zinc plus lead	mg/kg dry, ash free	Max 1,000
MOB	Sodium	mg/kg dry, ash free	Max 5,000
M09	Potassium	mg/kg dry, ash free	Max 5,000
M10	Bulk density - not baled	kg/m <sup>3</sup>	150 to 500 kg/m <sup>3</sup>

4.1. Contaminants/abrasive inert (glass, stone, ceramics, metal, plastic) content: up to 10% (as received)

- 4.2. Particle size: <300 mm (as received)
- 4.3. Traceable for provenance back to original source
- 4.4. Consistency in volumes and quality

## 5. Delivery

- a. The goods shall be delivered as one-cut shred to North Lincolnshire Green Energy Park Limited ERF facility in Flixborough North Lincolnshire compacted in containers, loose in walking floor trailers or in bales
- b. North Lincolnshire Green Energy Park Limited and the Supplier shall agree a delivery schedule based on 175 tonnes per day consumption

## 6. Pricing

- a. The RDF will be supplied at a price to be agreed for the material
- b. North Lincolnshire Green Energy Park Limited shall pay the following:
  - i. A fixed price per tonne delivered to Flixborough by road
  - or
  - ii. A fixed price per tonne compacted and loaded into containers for road or ship transportation at source
  - iii. A CPI price index annual increase in price

## 7. Duration and timing

- a. North Lincolnshire Green Energy Park Limited and the Supplier shall enter into a long-term supply agreement with a duration of no less than ten years
- b. North Lincolnshire Green Energy Park Limited shall use its reasonable endeavour to ensure its readiness to accept Supply by the end of **2026**
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This Memorandum of Understanding has been entered into on: 15/11/2022

For North Lincolnshire  
Green Energy Park Limited



Mr David Jones  
Director



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## **Appendix 1 - Memorandum of Understanding**

# **MEMORANDUM OF UNDERSTANDING**

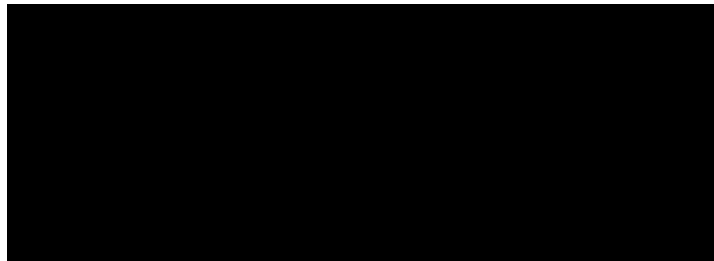
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The option to maximise containerised RDF transport by rail and by boat with the development of one or more RDF compactor sites at railheads close to the waste sources will be the focus of future discussions between the Parties.

The Supplier can Supply and Deliver up to 150,000 tonnes per year either through its own capacity or network.

## 2. Supply – Feedstock Specification and Requirements

The Supplier will supply to North Lincolnshire Green Energy Park Limited up to 37,500 tonnes of RDF and recyclable plastics per annum and ensure delivery against the following outline Feedstock Specification and requirements:

Acceptable waste source:

- 2.1.1. Derived from municipal solid waste;
- 2.1.2. commercial waste having the same or similar composition to mixed residual municipal solid waste; and/or
- 2.1.3. industrial waste having the same or similar composition to mixed residual municipal solid waste;

### 3. Positive Descriptions

European Waste Catalogue Code	Description
The following 19-12 codes are for wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified	
19-12-01	Paper and cardboard
19-12-04	Plastic and rubber
19-12-07	Wood other than that mentioned in 19 12 06 (wood containing hazardous substances)
19-12-08	Textiles
19-12-10	Combustible waste (refuse derived fuel)
19-12-12	Other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11 (other wastes (including mixtures of materials) from mechanical treatment of waste containing hazardous substances)
The following 20-01 codes are for separately collected fractions (except 15 01).	
20-01-01	Paper and cardboard
20-01-10	Clothes
20-01-11	Textiles
20-01-38	Wood other than that mentioned in 20 01 37 (wood containing hazardous substances)
20-01-39	Plastics
20-02-01	Biodegradable waste
20-03-01	Mixed municipal waste
20-03-02	Waste from markets

### 4. Measured Parameters

The following table sets out the measured parameters which must be complied with.

Ref	Parameter	Units	Limits
M01	Net caloric value	MJ/kg as received	11.0 to 18.0
M02	Moisture content	wt% as received	Max 40.0%
M03	Ash content	wt% dry, ash free	Max 25.0%
M04	Fines (defined as the material which goes through a screen with 1 mm circular holes)	wt% dry basis	Max 5.0%
M05	Chlorine	wt% dry, ash free	Max 1.00%
M06	Sulphur	wt% dry, ash free	Max 0.60%
M07	Zinc plus lead	mg/kg dry, ash free	Max 1,000
M08	Sodium	mg/kg dry, ash free	Max 5,000
M09	Potassium	mg/kg dry, ash free	Max 5,000
M10	Bulk density – not baled	kg/m <sup>3</sup>	150 to 500 kg/m <sup>3</sup>

- 4.1. Contaminants/abrasive inert (glass, stone, ceramics, metal, plastic) content: up to 10% (as received)

- 4.2. Particle size: <300 mm (as received)
- 4.3. Traceable for provenance back to original source
- 4.4. Consistency in volumes and quality

## 5. Delivery

- a. The goods shall be delivered as one-cut shred to North Lincolnshire Green Energy Park Limited ERF facility in Flixborough North Lincolnshire compacted in containers, loose in walking floor trailers or in bales
- b. North Lincolnshire Green Energy Park Limited and the Supplier shall agree a delivery schedule based on 175 tonnes per day consumption

## 6. Pricing

- a. The RDF will be supplied at a price to be agreed for the material
- b. North Lincolnshire Green Energy Park Limited shall pay the following:
  - i. A fixed price per tonne delivered to Flixborough by road
  - or
  - ii. A fixed price per tonne compacted and loaded into containers for road of ship transportation at source
  - iii. A CPI price index annual increase in price

## 7. Duration and timing

- a. North Lincolnshire Green Energy Park Limited and the Supplier shall enter into a long-term supply agreement with a duration of no less than ten years
- b. North Lincolnshire Green Energy Park Limited shall use its reasonable endeavour to ensure its readiness to accept Supply by the end of 2026
- c. North Lincolnshire Green Energy Park Limited and the Supplier shall conclude negotiations for a firm supply agreement no later than 6 months before scheduled commencement operation of the Plant

## 8. Sustainability and Certifications

- a. The Supplier will use its reasonable endeavours to support North Lincolnshire Green Energy Park Limited in acquiring relevant certifications under UK schemes, including by not limited to, ISCC +, ISCC EU, RED I and RED II
- b. The Supplier will use its reasonable endeavour to ensure that the carbon footprint of the supply chain is kept to a minimum

## 9. Confidentiality



- a. This paragraph is legally binding. North Lincolnshire Green Energy Park Limited and the Supplier will keep all information confidential, including but not limited to information regarding North Lincolnshire Green Energy Park Limited technology, product requirements and this MOU. Unless otherwise agreed in writing.

10. Governing Law and Jurisdiction

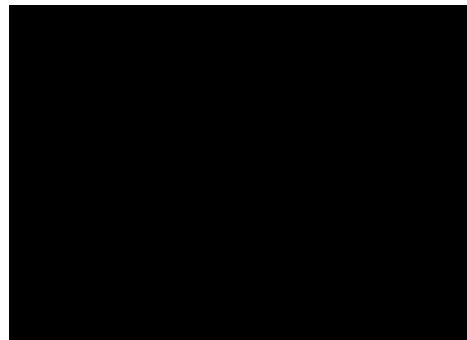
- a. This paragraph is legally binding. This MOU and all negotiations and any legal agreements prepared in connection with it, and any dispute or claim arising out of or in connection with them or their subject matter or formation, shall be governed by and construed in accordance with English law. Any dispute or claim arising out of or in connection with the MOU, its subject matter, existence, validity, formation or termination and including non-contractual disputes or claims shall be referred to and final resolved by arbitration, under the Rules of the London Court of International Arbitration, which are deemed to be incorporated by reference into the clause.

This Memorandum of Understanding has been entered into on: 15 / 11 / 2022

For North Lincolnshire  
Green Energy Park Limited



Mr David Jones  
Director



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## **Appendix 1 - Memorandum of Understanding**

# **MEMORANDUM OF UNDERSTANDING**

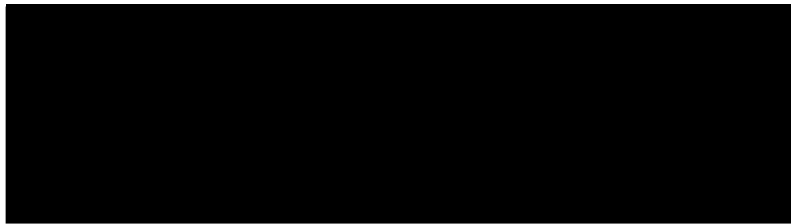
By and between

**North Lincolnshire Green Energy Park Limited**

CRN: 10949653

Office 71, The Colchester Centre, Hawkins Road, Colchester, CO2 8JX

And



(the "Supplier")

## 1. Background

The parties have initiated discussions regarding the Supply and Delivery of Refused Derived Fuel (RDF) and source segregated plastics for recycling to North Lincolnshire Green Energy Park Limited's Energy Recovery Facility (the "Plant"). This memorandum of understanding ("MOU") sets out the proposed terms of a potential agreement and timetable for implementation. It is not intended to be legally binding except as specifically set out below.

North Lincolnshire Green Energy Park Limited is developing a plant in Flixborough North Lincolnshire which, at full capacity, will consume 760,000 tonnes of RDF and plastic for recycling per year. The plant is scheduled to commence operations Q1 2027 with CCUS enabled at the plant. The aim is to reach a carbon negative status at the facility with the Zero Carbon Humber CO<sub>2</sub> pipeline passing within 4km of the facility. The facility will provide a low-carbon option for waste management.

The Supplier has exported more than 25,000 tonnes of RDF per annum and would like to reduce its reliance on export by establishing a UK-based off taker.

The option to maximise containerised RDF transport by rail and by boat with the development of one or more RDF compactor sites at railheads close to the waste sources will be the focus of future discussions between the Parties.

The Supplier can Supply and Deliver up to 75,000 tonnes per year either through its own capacity or network.

## 2. Supply – Feedstock Specification and Requirements

The Supplier will supply to North Lincolnshire Green Energy Park Limited up to 30,000 tonnes of RDF and recyclable plastics per annum and ensure delivery against the following outline Feedstock Specification and requirements:

Acceptable waste source:

- 2.1.1. Derived from municipal solid waste;
- 2.1.2. commercial waste having the same or similar composition to mixed residual municipal solid waste; and/or
- 2.1.3. industrial waste having the same or similar composition to mixed residual municipal solid waste;

### 3. Positive Descriptions

European Waste Catalogue Code	Description
The following 19-12 codes are for wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified	
19-12-01	Paper and cardboard
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The following 20-01 codes are for separately collected fractions (except 15 01).	
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20-01-11	Textiles
20-01-38	Wood other than that mentioned in 20 01 37 (wood containing hazardous substances)
20-01-39	Plastics
20-02-01	Biodegradable waste
20-03-01	Mixed municipal waste
20-03-02	Waste from markets

### 4. Measured Parameters

The following table sets out the measured parameters which must be complied with.

Ref	Parameter	Units	Limits
M01	Net caloric value	MJ/kg as received	11.0 to 18.0
M02	Moisture content	wt% as received	Max 40.0%
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M05	Chlorine	wt% dry, ash free	Max 1.00%
M06	Sulphur	wt% dry, ash free	Max 0.60%
M07	Zinc plus lead	mg/kg dry, ash free	Max 1,000
M08	Sodium	mg/kg dry, ash free	Max 5,000
M09	Potassium	mg/kg dry, ash free	Max 5,000
M10	Bulk density – not baled	kg/m <sup>3</sup>	150 to 500 kg/m <sup>3</sup>

4.1. Contaminants/abrasive inert (glass, stone, ceramics, metal, plastic) content: up to 10% (as received)

- 4.2. Particle size: <300 mm (as received)
- 4.3. Traceable for provenance back to original source
- 4.4. Consistency in volumes and quality

## 5. Delivery

- a. The goods shall be delivered as one-cut shred to North Lincolnshire Green Energy Park Limited ERF facility in Flixborough North Lincolnshire compacted in containers, loose in walking floor trailers or in bales
- b. North Lincolnshire Green Energy Park Limited and the Supplier shall agree a delivery schedule based on 200 tonnes per day consumption

## 6. Pricing

- a. The RDF will be supplied at a price to be agreed for the material
- b. North Lincolnshire Green Energy Park Limited shall pay the following:
  - i. A fixed price per tonne delivered to Flixborough by road  
or
  - ii. A fixed price per tonne compacted and loaded into containers for road of ship transportation at source
  - iii. A CPI price index annual increase in price

## 7. Duration and timing

- a. North Lincolnshire Green Energy Park Limited and the Supplier shall enter into a long-term supply agreement with a duration of no less than ten years
- b. North Lincolnshire Green Energy Park Limited shall use its reasonable endeavour to ensure its readiness to accept Supply by the end of 2026
- c. North Lincolnshire Green Energy Park Limited and the Supplier shall conclude negotiations for a firm supply agreement no later than 6 months before scheduled commencement operation of the Plant

## 8. Sustainability and Certifications

- a. The Supplier will use its reasonable endeavours to support North Lincolnshire Green Energy Park Limited in acquiring relevant certifications under UK schemes, including by not limited to, ISCC +, ISCC EU, RED I and RED II
- b. The Supplier will use its reasonable endeavour to ensure that the carbon footprint of the supply chain is kept to a minimum

## 9. Confidentiality

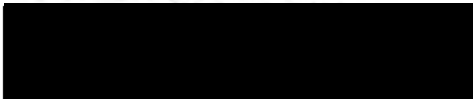
- a. This paragraph is legally binding. North Lincolnshire Green Energy Park Limited and the Supplier will keep all information confidential, including but not limited to information regarding North Lincolnshire Green Energy Park Limited technology, product requirements and this MOU. Unless otherwise agreed in writing.

10. Governing Law and Jurisdiction

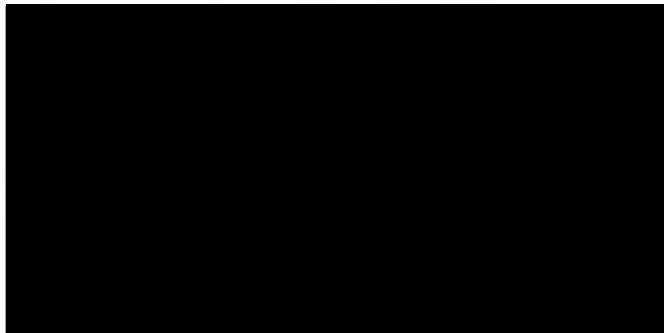
- a. This paragraph is legally binding. This MOU and all negotiations and any legal agreements prepared in connection with it, and any dispute or claim arising out of or in connection with them or their subject matter or formation, shall be governed by and construed in accordance with English law. Any dispute or claim arising out of or in connection with the MOU, its subject matter, existence, validity, formation or termination and including non-contractual disputes or claims shall be referred to and final resolved by arbitration, under the Rules of the London Court of International Arbitration, which are deemed to be incorporated by reference into the clause.

This Memorandum of Understanding has been entered into on: 19/11/2022

For North Lincolnshire  
Green Energy Park Limited



Mr David Jones  
Director



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## **Appendix 2 - Letters of Support**

### **Letter 1 - Blue Sky Recycling**





BLUE SKY  
RECYCLING

Blue Sky Recycling Ltd

109 Knowles Hill  
Rolleston-On-Dove  
Burton-On-Trent  
United Kingdom  
DE13 9DZ

Email: [accounts@blueskyrec.co.uk](mailto:accounts@blueskyrec.co.uk)

Mr Colin Hammond  
North Lincolnshire Green Energy Park Ltd  
Office 71 The Colchester Centre  
Hawkins Road  
Colchester  
CO2 8JX

5<sup>th</sup> May 2023

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Dear Sirs,

At Blue Sky Recycling we handle large tonnages of varying waste materials. We strive for 100% landfill diversion on an ongoing basis. We are keen to find long-term sustainable solutions that assist us in realising our 100% landfill diversion target. We have a range of clients, from blue chip to small independent family businesses.

Carbon is the buzz word of the industry, and we are committed to finding carbon friendlier solutions for our waste arisings. NLGEP offers us that solution and we are looking forward to committing to working together. Our customers, no matter the industry, are all engaging with us to ensure we are finding the most environmentally friendly solutions for their waste. This is as important as the commercial element of our deals with customers. NLGEP offers us the opportunity to showcase to our customers that we have a carbon friendly solution that will be there for the long term.

Too many of our outlets suffer from capacity issues and can be stop start. This causes operational disruption for us in addition to the commercial and environmental impact referred to above.

North Lincolnshire Green Energy Park will be a welcome addition to us. Our competitors are in the same boat as we often have the same discussions at forums around the lack of capacity in the UK for such sustainable offerings.

We look forward to working in collaboration with NLGEP in the not-too-distant future.

Yours Sincerely,

William Perry  
Director

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## **Appendix 2 - Letters of Support**

### **Letter 2 - Wastecom NRG**

To

Mr C D Hammond  
North Lincolnshire Green Energy Park Ltd  
Office 71 The Colchester Centre  
Hawkins Road  
Colchester  
CO2 8JX  
11th May 2023

Dear Sirs

**Subject; NLGEP support**


Wastecom-NRG is keen to support a move towards a low or negative carbon footprint for our waste management solutions. The UK will need to become self-sufficient in its capacity to facilitate its own waste management within country. The potential loss of waste plastic exports by 2027 and the proposed ending of RDF exports, will require greater capacity to recycle and recover waste with a low-carbon footprint in the UK.

Our clients are actively pursuing a low-carbon footprint for their waste management and a facility that is sited for accessibility with sustainable transport options, provides Wastecom-NRG with greater flexibility in our waste management. A facility delivering energy recovery status, carbon capture utilisation and storage (CCUS) and the option to achieve a carbon-negative status with the Humber Low Carbon Pipelines, will be what future commercial drivers and government policy will dictate as essential in the near future.

The UK ambitions to recycle plastics without the commissioning of additional commercially viable recycling facilities in the UK, will make the recycling targets impossible to achieve. The development of Sustainable Aviation Fuel (SAF) will just remove the best quality waste plastics from the recyclable total, of which 2.7m tonnes are already exported and classed as recycling. The ban on the export waste plastic for recycling, will increase the pressure on achieving the recycling targets, leaving the RDF to find additional energy recovery capacity to avoid landfill. Waste arisings to landfill increased over 2020 and 2021 showing the energy recovery capacity is significantly below requirements as landfill is the more expensive option.

Wastecom-NRG sees the North Lincolnshire Green Energy Park as an essential delivering a much-needed facility for UK waste management and an opportunity to reduce our own carbon footprint and look forward to supporting the Project

Yours faithfully



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## **Appendix 2 - Letters of Support**

### **Letter 3 - TransWaste**



Tel: 01482 333650  
e-mail: enquiries@transwasteltd.co.uk  
Website: www.transwasteltd.com

Mr C D Hammond  
North Lincolnshire Green Energy Park Ltd  
Office 71 The Colchester Centre  
Hawkins Road  
Colchester  
CO2 8JX

22<sup>nd</sup> December 2023

Dear Colin

**Subject; Letter of Support for the NLGEP**

Transwaste Recycling and Aggregates has been in business since 1999.

Transwaste currently hold the contract for the removal of waste arising from North Lincolnshire Council. We have held this contract since 2018, which was renewed for a period of 10 years in 2023.

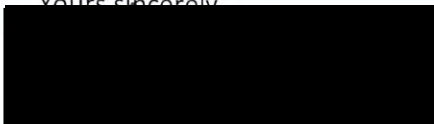
The Melton site has a permit to process 750,000 tonnes of waste, we currently process around 400,000 tonnes / Year which has generated the following volumes of recyclable materials and waste arisings over the past 3 years:

	Recycled	Exported	delivered to EfW	Total Yearly waste.
2021	280,574 t	49,040 t	59,092 t	388,706 t
2022	244,792 t	70,542 t	57,828 t	373,162 t
2023	252,908 t	64,668 t	58,625 t	376,201 t

Transwaste are very supportive of any initiative that would facilitate the local utilisation on non-recyclable waste locally to our site. A long-term relationship with a low carbon or carbon-negative facility delivering energy recovery is vital to Transwaste and the waste management sector.

Transwaste are interested in commercial agreements that could deliver some of the current exported and waste delivered to other EfW Facilities to the North Lincolnshire Green Energy Park once consent for the DCO has been secured.

Yours sincerely



Paul Hornshaw

Director



Old Heritage Building, Gibson Lane,  
Melton, East Yorkshire HU14 3HH  
Co Reg No: 3863280 • VAT No: 780 6842 04



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## **Appendix 2 - Letters of Support**

### **Letter 4 - Ashcourt Group**



Mr C D Hammond  
North Lincolnshire Green Energy Park Ltd  
Office 71 The Colchester Centre  
Hawkins Road  
Colchester  
CO2 8JX  
10<sup>th</sup> January 2024

Dear Colin

**Subject: Letter of Support for the NLGEP**

As you are aware, Stonegrave Aggregates Ltd is now part of the Ashcourt Group, which has been in operation since 1996 and now has over 1,000 employees.

We have the waste arisings contract with Darlington Borough Council and a licence to operate the Drinkfield civic amenity site. Stonegrave Aggregates Ltd has had this contract since 2009 and with the suspension of discussions on the Tees Valley ERF project, we hope for this contract to be extended beyond its current renewal date of December 2034.

Our Newton Aycliffe facility currently has a licence to process up to 160,000 tonnes of waste per annum and we will expand this operation in the future. We have already expressed our interest in partnering North Lincolnshire Green Energy Park for the regional waste contracts due for renewal.

The Ashcourt Group and our client-base are very supportive of any initiative that provides an option for the efficient, competitive and low carbon disposal of non-recyclable waste generated within the region and nationally.

We have already contracted 250,000 tonnes per annum of non-recyclable waste to the S21 Group and would be happy to continue to support other projects within the S21 Group.

We look forward to reaching a commercial agreement once you have secured the DCO consent.

Yours sincerely



Kurt Bousfield

Managing Director