

Growth, Environment & Transport

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Mr. Grahame Kean Examining Authority National Infrastructure Temple Quay House 2 The Square Bristol, BS1 6PN

BY EMAIL ONLY

Dear Mr Kean

Re: Application by Wheelabrator Technologies Inc. for an Order Granting Development Consent for the Wheelabrator Kemsley Generating Station (K3) and Wheelabrator Kemsley North (WKN) Waste to Energy Facility Development Consent Order (DCO) – Further Written Questions and Requests for Information (ExQ4)

Kent County Council (KCC) provides the following response to the Further Written Questions and Requests for Information published by the Planning Inspectorate on 15 July 2020.

Q4.1. Principle and nature of the development, including waste recovery capacity and management of waste hierarchy

Q4.1.1 (KCC, Applicant) Please could you explain more about the nature of the waste category listed at the top of the table in Appendix 1 to KCC's response to ExAQ1a submitted at D6 [REP5-042], as HCl waste going to landfill comprising 884,229 tonnes? How is this predominantly low calorific value, and what standard of calorific value would make fuel sustainable to be used for energy from waste plants of the type proposed by the Applicant?

KCC Response

In answer to the first part of the question, the value for Household, Commercial and Industrial (HCI) waste going to landfill is generated using a predetermined list of waste codes when that option is selected within the Environment Agency Waste Data Interrogator¹. This includes waste coded under European Waste Catalogue (EWC) code '19 12 12'. This code

 $^{^1\} available\ to\ download\ at\ https://data.gov.uk/dataset/312ace0a-ff0a-4f6f-a7ea-f757164cc488/waste-data-interrogator-2018$

relates to "other wastes (including mixtures of materials) from mechanical treatment of waste." In practice, this is a 'catch all' code used to classify residues that arise from the processing of waste through intermediate waste management sites, such as skip waste recycling sites. The vast majority of waste produced within the Study Area arises from Construction, Demolition and Excavation activity, referred to as CDEW (data can be provided to verify this if required by ExA). Much of this is collected using demountable containers such as skips, which are taken to intermediate waste management sites and processed using trommel screeners and picking lines.

When the recyclable materials are extracted, this leaves a residue of fines referred to as trommel fines. It is precisely these fines that the *Landfill Tax (Qualifying Fines) (No.2) Order 2015* was introduced to avoid being subject to landfill tax at the higher rate as active waste. This requires that for fines to be eligible for the inactive waste rate of landfill tax, the result of the Loss on Ignition (LoI) test must indicate a combustible content of no more than 10%.² Given the cost prohibitive nature of the rate of landfill tax for active waste (currently £94.15/tonne compared to £3.00/tonne for inactive waste), it can be taken that most waste going to landfill under the 19 12 12 code will have met the LoI test, and by definition is not suitable for use as a feedstock in the proposed plants.³

It is notable that there is a specific waste code relating to combustible waste that would constitute materials suited to be used as feedstock i.e. refuse derived fuel, EWC code 19 12 10 "combustible waste (refuse derived fuel)".

In answer to the second part of the ExA question, KCC refers the ExA to the Applicant's Carbon Assessment (APP-032) which assumes a mean net calorific value i.e. value after moisture loss, of 10.5MJ/kg. This is consistent with the calorific values presented in the *EU Best Available Techniques (BAT) Reference Document for Waste Incineration*⁴ referenced in the *EU Guidelines on the R1 energy efficiency formula in Annex II of Directive 2008/98/EC* ⁵. The "*Classification Scheme to Define the Quality of Waste Derived Fuels*" produced by the Government established Waste and Resources Action Programme (WRAP)⁶ provides a detailed explanation of the different parameters that may be taken into account when determining feedstock suitability for Energy from Waste plants. It may also assist to refer to the Government adopted definition of refuse derived fuel⁷ which acknowledges that end users' technical specifications will vary but generally refer to calorific value, moisture content and form and quantity.

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² https://www.gov.uk/government/publications/excise-notice-lft1-a-general-guide-to-landfill-tax/excise-not

³ KCC has made enquiries of HMRC for data on quantities of these materials going to landfill but have been advised this data is not kept/reported on separately. The Government consultation document on Landfill tax Liability for waste 'fines' (June 2014) refers to approximately 4.5 million tonnes of fines being produced in the UK each year.

⁴ JRC118637 EUR 29971 EN PDF ISBN 978-92-76-12993-6 ISSN 1831-9424 doi:10.2760/761437 Published 2019

⁵ https://ec.europa.eu/environment/waste/framework/pdf/guidance.pdf#page=18

⁶ https://wrap.org.uk/sites/files/wrap/WDF_Classification_6P%20pdf.pdf

⁷ The adopted definition reads "Refuse derived fuel (RDF) consists of residual waste that complies with the specifications in a written contract between the producer of the RDF and a permitted end-user for the thermal treatment of the waste in an energy from waste facility or a facility undertaking co-incineration such as cement and lime kilns. The written contract must include the end-user's technical specifications relating as a minimum to the calorific value, the moisture content, the form and quantity of the RDF."

Q4.1.2 (KCC) In your D5 submission BEIS Renewable Energy Statistics, Data Sources and Methodologies (July 2018) [REP5-044] please could you explain how the latent heat of the water vapour contained in exhaust gases, understood to be not normally recoverable (p33) would be calculated and verified in the eventual CHP process appertaining to the K3 Proposed Development, and how this affects if at all the NCV or, if this is explained in other document(s) submitted please provide a reference.

KCC Response

KCC submitted this document to evidence the most current data on the biogenic or renewable content of residual waste as displayed at p18.

It is KCC's understanding that the term net calorific value (NCV) by definition excludes the energy required to drive off the moisture content of the waste to a level that the calorific content of the feedstock may then be liberated through combustion. The resulting steam is normally⁸ released through the stack rather than being captured to harness its energy value. The County Council would anticipate that the Applicant can provide further details on this point.

Q4.1.4 (Applicant, KCC) Please provide updated information, if any, that is additional to what has already been provided to date, concerning your understanding of the position regarding the developments in Table 3.9 WHFAR [APP-086] which assesses comparable future capacity likely to be delivered.

KCC Response

KCC refers the ExA to its response to ExAQ1A.1.37 (REP2-044), which details its understanding of the respective status of the facilities identified and identifies additional Other Recovery capacity consented within the Applicant's chosen Study Area omitted from the Waste Hierarchy and Fuel Availability Report(WHFAR). In particular:

- Riverside Energy Park Bexley;
- the 3Rs (Recycling, Recovery and Renewable) facility in Warnham, West Sussex;
 and
- Grundon at Ford Circular Technology Park, West Sussex.

⁸ It is understood some plants in Scandinavia operating under very specific conditions do recover heat from exhaust gases using flue gas condensation scrubbers.

Q4.11. Traffic and Transport

Q4.11.1 (HE, KCC) If you seek to secure the completion of highway improvement works within your responsibility before commencement, commissioning or as the case may be, operation of any part of the authorised development, please provide justification and a precise form of wording, preferably agreed, to be inserted into the DCO.

KCC Response

The Grovehurst Road/A248 junction has been demonstrated to already be operating beyond its capacity and further development will place additional pressure on this junction. The County Council, as Local Highway Authority, would recommend the following additional wording to be inserted within the DCO:

"To ensure that the A249 Trunk Road and M2 Junction 5 continue to be an effective part of the national system of routes for through traffic in accordance with section 10 of the Highways Act 1980 and to satisfy the reasonable requirements of road safety, then no part of the development hereby permitted shall commence until the completion and opening to the public of a Roads Investment Strategy scheme at M2 Junction 5 and a Housing Infrastructure Fund scheme at the A249 Grovehurst junction (or schemes to the same effect that may be agreed in writing by the local planning authority who shall consult the Highway Authority and Highways England) are in place"

It should however be reiterated that the proposed development seeks to take advantage of capacity secured by a Housing and Infrastructure Fund (HIF) funded scheme provided by central government to secure housing, as opposed to this Proposed Development. At present, this application is not proposing any highway mitigation measures, an approach which is not supported by the County Council. The County Council would ideally like to see financial contributions made by the Applicant towards the HIF scheme and/or controls on the timings of HGV movements - significant controls on movements reduces the impact on the local highway network and therefore level of mitigation sought.

Q4.11.2 (KCC) Has the Council as local highway authority secured the required development contributions and grant funding to improve the Grovehurst junctions and please explain the current position? What is the latest estimation of when, in line with grant requirements, construction of the road improvements is expected to commence?

KCC Response

The County Council has secured central government (HIF) funding to improve the junction, to unlock Swale Borough Council's existing Local Plan housing supply. The construction of the road is currently expected to commence in May 2022.

Q4.11.3 (Applicant, HE, KCC) What degree of confidence is there in light of any relevant factors that may affect timescales in programmed highways improvement schemes of this nature, that i) completion of the A249 Grovehurst improvement works or ii) the M2/J5 improvement works would be completed in advance of a) commencement of construction and b) operation of the WKN Proposed Development, and please explain your reasoning?

KCC Response

In respect of the Grovehurst junction, the County Council would anticipate that these works would not be completed in advance of the commencement of construction, but they could possibly be completed prior to the operation of the WKN Proposed Development.

Q4.11.4 (HE, KCC) What precise restrictions if any are proposed to be placed on the WKN Proposed Development relating to traffic flows generated during the weekday peak hours or specified hours around peak hours, in advance of completion of (i) the M2/J5 and (ii) A249 Grovehurst improvement works? If there are any such, please provide a precise form of wording to be inserted into the DCO.

KCC Response

The County Council recommends the following wording:

"No vehicles shall enter or leave the site between the hours of 08:00 to 09:00 and 16:00 to 18:00 Monday to Friday inclusive until the M2 Junction 5 and A249 Grovehurst junction improvement schemes are open to all traffic."

Q4.11.5 (KCC) The Applicant states in its Transport Assessment Part 1 - ES Appendix 4.1 [APP-020] that KCC asked for evidence from other waste to energy sites (i.e. Aylesford) regarding vehicle arrival times to substantiate the estimations of vehicle profiles throughout the day, and replied with reasons that this is an inappropriate methodology and a flat profile has been assumed throughout the day to maximise the number of HGV movements during the highway network peak hours.

Are you satisfied with this response and if not why not?

KCC Response

Having reviewed the data submitted for the Allington site, it is clear that no overnight movements occur there. The flat profile approach provided by the Applicant is inconsistent with the data submitted for both the Ferrybridge and Allington sites that have been reviewed by KCC. Both sets of data also confirm that HGV movements are generally completed over a period between 07:00 and 18:00, not over 24 hours.

Whilst a flat profile approach has been submitted by the Applicant, for the movement of HGVs, the evidence provided by the other similar facilities suggests that the submitted TA is underestimating the impacts of the development in the AM peak and overestimating those of the PM peak. The County Council is therefore concerned with the lack of highway mitigation measures proposed.

Both the AM and PM peaks are currently over capacity at the Grovehurst A249 interchange, and it is therefore considered that the TA is not demonstrating the potential most severe impact.

Incorporating requirements within the DCO could help to avoid this impact, as the Applicant appears insistent that movements can be spread over 24 hours. The County Council considers that the DCO could include a requirement which controls movements between the night-time hours between 19:00 and 07:00 - this may be a solution to address the concerns of the Local Highway Authority with regards to the impact on the local highway network. The County Council concedes however that it is clear from the evidence reviewed that waste supply providers appear to operate during daylight hours.

Q4.11.6 (KCC) The Applicant's response to S42 Consultation [APP-017] concerning requests for information from the neighbouring Countrystyle Recycling plant at Ridham Docks stated all waste movements are assumed to be new to the network, rather than coming from Countrystyle.

Is this information still required and if so, please state why?

KCC Response

The question relates to the distribution of waste movements assigned for Refuse Collection Vehicles (RCV). At present, these are being shown as being assigned across all districts in Kent. The applicant should evidence the distribution patterns from Countrystyle to justify their assumptions or show a scenario with all traffic going through Grovehurst to provide a robust position.

Q4.11.9 (Applicant, KCC) A review period of the Rail and Water Transportation Strategy of five years was imposed in the 2011 consent. Should:

- i) the five-year period be reassessed in light of current national and other planning policies and if so what period would be appropriate and why?; and
- ii) the review period be stipulated in the DCO and if not why not?

KCC Response

The County Council is not aware of any changes that would require the review to be made more regularly. A review period should be stipulated within the DCO, with targets and penalties tackling inaction to ensure the effectiveness the Strategy in meeting its objectives.

Q4.11.11(KCC) Please describe:

- i) what action(s) KCC has taken itself or in conjunction with other government agencies or other authorities, if any, to pursue or facilitate the assembly of land, provision of funding or provision of necessary infrastructure with a view to realising (a) an improved rail terminal at Ridham Dock or (b) the use of land at Ridham Dock for transportation by barge, for industries including the applicant's, in proximity to the dock, to utilise a rail or a marine solution that would take heavy goods traffic off the highways network, specifying the particular action that KCC itself has taken; and
- ii) what specific plans or programmes KCC is pursuing if any to realise an improved rail terminal or transportation by barge at Ridham Dock as described in (i) above.

KCC Response

- ia) The County Council seeks to introduce sustainable transport opportunities throughout Kent, through Local Plan policy and planning decisions. The County Council has not sought to secure funding for an improved rail terminal, however, KCC understands that Swale Borough Council has had discussions with Network Rail on the potential for a rail terminal to improve the connectivity to benefit employment allocations in the Kemsley area.
- ib) Ridham Dock and Sheerness Port are both already capable of handling bulk transfers. Therefore, there has been no other direct action has been taken by KCC as Local Highway Authority.

Q4.11.16 (KCC) Please comment on the Applicant's post D6 Additional Submission [AS-019] relating to the Ferrybridge HGV movements.

KCC Response

The data relating to the Ferrybridge site was received by the County Council on 2nd July and has been reviewed. Despite the difference in type of facility, the movements at Ferrybridge are between 07:00 and 19:00 with a downward profile of arrival movements similar to that of the facility at Allington; with greater movements in the morning tailing off to reduced numbers later in the day. As was found at Allington, there were limited arrivals after 18:00.

The Applicant's response on this issue appears focussed on assumptions around contracts; however, KCC is not aware of evidence to suggest that those contracts, or the profile of waste received, would not alter over time and reflect the patterns seen in the evidence provided for other similar facilities.

Q4.11.17 (Applicant, KCC) If, as is asserted at para 2.4.7 of the Applicant's post D6 Additional Submissions [AS-017] all HGV movements at Allington are during daytime periods, is the distance travelled by the vehicles relevant and if so how?

KCC Response

As far as KCC is aware, the supply of materials would be coming from the South East region and therefore it is suggested that the distance travelled is irrelevant. In many cases,

municipal waste collection vehicles will have travelled for some time and distance before the collection run is completed and could take a longer or shorter time than the proposed commercial waste arriving from outside the county.

Q4.13. Draft Development Consent Order

Q4.13.8 (KCC) In KCC D5 Submission - Highways Response to dDCO Requirement 10 – Heavy Goods Vehicles, [REP5-037] you dispute the figure of 416 movements per day. What exact amendments if any do you propose to Requirement 10 [REP6-003] as currently drafted and why?

KCC Response

The County Council would like to draw attention to the wording of Condition 3 of the section 73 application (SW/18/503317 (KCC/SW/0103/2018), which increased the permitted number of HGV movements per day, to 348. This figure was accepted as appropriate at time of approval. The condition of the local highway network as assessed at the baseline suggests that the highway network has no capacity for additional movements during the extended AM and PM peaks. KCC proposes therefore that any K3 movements should be conditioned to be split equally between the day and night, with further restrictions on the peak hour and shoulders. A suggestion could be to restrict to 400 per day with a minimum of 200 movements to be at night between 19:00 and 07:00 and no arrivals between 07:00 and 09:00 and 16:00 and 18:00.

Q4.13.9 (KCC) Also in [REP5-037] you consider Requirement 10 does not adequately encourage use of Ridham Docks and therefore the number of movements should be reduced accordingly. What exact amendments if any do you propose to Requirement 10 [REP6-003] as currently drafted and why?

KCC Response

The County Council would propose reducing the number of HGV movements in a requirement, so as to encourage the Applicant to use more sustainable delivery options.

Q4.14. Other Matters

Q4.14.3 (Applicant, KCC) Please provide an updated "K3 Planning Permission – Planning Conditions Tracker" appended to the Planning Statement [APP-082] as an appendix to the latest SoCG with KCC which is due at D7.

KCC Response

Condition 22 states that - Other than waste arising from within Kent all waste used as a fuel in the Sustainable Energy Plant hereby permitted shall be pre-treated. Unless otherwise agreed in writing by the Waste Planning Authority no less than 20% of the annual waste throughput shall be pre-treated waste sourced from within the area defined as Hinterland

shown on the plan attached to the letter from RPS dated 17 March 2011 entitled KENT & HINTERLAND and which includes Kent, Tandridge, Thurrock and Medway.

The County Council as Waste Planning Authority considers that the objective of condition 22 is still required in order for the development to be sustainable and for the waste proximity principle to be met. It is noted that the ground for imposing the condition was to ensure that the sourcing of the waste processed at the plant is consistent with the waste proximity principles and to secure waste management capacity sufficiently to achieve net regional and sub-regional self-sufficiency.

Q4.14.4 (Applicant, KCC, SBC, HE) The submission at D6 of Allyson Spicer [AS-015] refers to a contract between Norfolk County Council and Veolia which appears to be a six-year contract for waste to be delivered initially to incineration facilities operated by the Applicant at Kemsley until 2021. Please add or comment on any information contained

KCC Response

KCC would make the following observations already illustrated in Appendix 3 of KCC submission to Deadline 4 (REP4-018):

- Norfolk is not identified as a potential source in the Applicant's chosen Study Area.
- The movement of waste from Norfolk would be contrary to the proximity principle given that Kemsley is over two and half hours distant from the principal population centre of Norfolk. Similarly, the EfW plant at Great Blakenham in Suffolk is around an hour away, and the Fengate EfW plant in Peterborough is within a two hour drivetime isochrone. Therefore, neither facility on the application site represents one of the "nearest appropriate installations", as required for the management of mixed municipal waste to be compliant with the principle.

The County Council will continue to work with the Applicant and Examining Authority and welcomes the opportunity to comment on matters of detail throughout the Examination.

Should you require any additional information or clarification, please do not hesitate to contact me.

Yours sincerely



Corporate Director – Growth, Environment and Transport