

# Medworth incinerator proposals

## High level review of consultation material

### 1. Background

This paper summarises the findings of a high-level review of the consultation material produced by MVV Environment in respect of the Medworth Incinerator proposals.

### 2. Executive summary

A review of the Medworth consultation material has concluded that:

- The consultation is premature and not of an appropriate quality

MVV is not following good consultation practice for a Nationally Significant Infrastructure Project (NSIP). The single stage of formal consultation is premature and does not meet the legislative requirements, particularly in respect of the Preliminary Environmental Information Report (PEIR), which is incomplete.

A further round of formal consultation will be required to ensure that all stakeholders are fully informed, and that information previously requested by them can be fully considered and responded to.

- The project does not comply with key elements of policy, including the National Policy Statements for Energy, the National Planning Policy Framework for waste and the UK's adopted Sixth Carbon Budget recommendations.
- The limited benefits of the project, coupled with its non-compliance with planning and climate change policies, are such that the project is unlikely to obtain consent.

This view is supported by the Secretary of State's recent decision to refuse consent for the Kemsley North Waste-to-Energy Development Consent Order (DCO), in concurrence with the Planning Inspectorate's recommendation. The examining authority for the DCO application comprehensively considered the policy framework, the need for that incinerator project and alternatives to the proposal and found an absence of robust arguments to support the new plant, together with an absence of need for its location.

### 3. Introduction

MVV Environment (“MVV” or “the developer”) is proposing to develop a new Energy from Waste (EFW) Combined Heat and Power (CHP) facility generating electricity and steam on land at Algores Way, Wisbech (“the Project”).

By virtue of its notional electrical capacity the developer believes that the project constitutes a nationally significant infrastructure project (NSIP) for which a Development Consent Order (DCO) is required under the Planning Act 2008.

Part of the requirement of the DCO process is comprehensive front-loaded consultation. Lucent Energy has carried out a review of the consultation material produced by MVV in respect of its single statutory consultation exercise, carried out between 28th June and 13th August 2021.

### 4. Scope of review

Lucent’s high-level review has included the 19 chapters of the Preliminary Environmental Information Report (PEIR) provided by MVV as part of the consultation process together with associated consultation documents, including the Draft Waste Fuel Availability Assessment. These documents have been reviewed in the context of the relevant national planning and waste policies, with a focus on the key areas of waste management, carbon emissions, good design, traffic and transport and air quality.

### 5. Findings of high-level review

The findings of the high-level review fall under three main categories, namely:

- That the current formal consultation process is both inadequate and premature, failing to meet key requirements of the Development Consent Order process
- That the project proposals are contrary to the National Policy Statements and the national policy framework for waste
- The limited benefits of the project do not outweigh its adverse effects and therefore, given non-compliance with policy, the project is unlikely to be consentable in its current form at the proposed location.

These three categories are discussed in more detail in sections 6-8 below.

### 6. Premature and inadequate consultation

The current consultation is both inadequate and premature. Many important elements of the project remain unclear or undecided. The consultation does not meet good practice or the requirements of the

relevant legislation and the PINS guidance. The developer has not met the undertakings made in its Statement of Community Consultation (SOCC).

The guidance<sup>1</sup> on the DCO pre-application process states that consultation should be:

- *based on accurate information that gives consultees a clear view of what is proposed including any options;*
- *shared at an early enough stage so that the proposal can still be influenced, while being sufficiently developed to provide some detail on what is being proposed; and*
- *engaging and accessible in style, encouraging consultees to react and offer their views.*

None of these good practice criteria have been met by the developer's consultation documentation. As described below the documentation contains inaccurate information, is missing key details of what is being proposed and stylistically, is complex, dense and inaccessible.

Additionally, the developer has not complied with its own consultation requirements set out in the Statement of Community Consultation (SOCC), as agreed with the local authorities. The stated objectives of the SOCC, including to provide "*clear and concise technical and non-technical information*", have not been met.

Furthermore, the requirements of PINS Advice Note 7 and particularly Section 8 "*The Role of Preliminary Environmental Information*" have not been met. Preliminary Environmental Information (PEI) must include information which is "*reasonably required by consultation bodies to develop an informed view of the likely significant environmental effects of the development (and of any associated development)*", but this requirement has not been met.

These omissions and errors are described further below, as follows:

## **6.1 Incomplete project description**

The project description is incomplete, providing only cursory detail in respect of the works at the proposed substation locations; no dimensions of substation work has been provided, there is no description of the apparatus, the substation construction / installation details are absent and, in the case of "TCC4", the location of a construction compound is yet to be decided. These are significant elements of the project and cannot be omitted from the Preliminary Environmental Information (PEI) and deferred until the publication of the environmental statement (the approach proposed at page 11 of the project description). This is particularly the case because the Environmental Impact Assessment (EIA) Regulations specifically require the PEI to include consideration of associated development and the need for all the above information was highlighted at paragraph 2.2.6 of the Scoping Opinion. It is unclear why it has been omitted from the PEI.

The developer's treatment of the grid connection is confusing, particularly given its commitment (Planning Inspectorate note of 6th July 2020) to include the electrical connection in the Development Consent Order application. The absence of a final decision on the grid connection reinforces the

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<sup>1</sup> <https://www.gov.uk/government/publications/guidance-on-the-pre-application-process-for-major-infrastructure-projects>

prematurity of the consultation – the developer is simply not yet able to consult fully on the project. The decision on the grid connection has been awaited since at least October 2019 (see Planning Inspectorate’s note of meeting) and it is unclear why the developer is unable or unwilling to secure a connection.

Other associated development is similarly inadequately detailed. The requirement for highway improvements is acknowledged, however the PEI notes that these impacts, and required mitigations, have not yet been identified (paragraph 3.6.88), confirming that the developer has not met the PEI requirements.

## 6.2 Inadequate treatment of alternatives

The Preliminary Environmental Information’s treatment of alternatives is not aligned with the Scoping Opinion or the requirements of the Environmental Impact Assessment (EIA) legislation, under which the developer is required to set out the main alternatives considered, including those in respect of site selection. The position stated at 2.3.3 (that “*the consideration of specific alternatives was not considered to be necessary*”) is incorrect, Schedule 4 of the EIA Regulations require:

“A description of the reasonable alternatives (for example in terms of development design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects.”  
(underlining is added for emphasis)

It is not credible that the developer considered only one location for the project, particularly given that site search criteria set out at paragraph 2.3.2 would give rise to many sites in the United Kingdom, many of them likely to be more suitable. This is another example of the poor quality of the consultation documentation.

The absence of information on consideration of alternatives would also prejudice the award of any compulsory acquisition powers sought by the applicant, further decreasing the likelihood of the project progressing. The developer cannot evidence an over-riding public interest in compulsorily acquiring property if it cannot appropriately explain its site selection.

Alternatives in respect of design and operation have similarly not been considered. Despite the advice of PINS (note of 15th January 2021 meeting) no attempt has been made to draw upon other Energy from Waste facilities when considering architecture and design. The National Policy Statement (NPS) requirements in respect of Good Design have been disregarded by the developer, a topic discussed further at Section 7 below.

## 6.3 Residential Amenity Assessment

In January 2021 the developer undertook to publish a Residential Amenity Assessment (PINS meeting note). The findings of this assessment have not been provided at the consultation stage, denying residents of Wisbech, and further afield, the opportunity to comment on the potential impacts on their homes and community.

## 6.4 Status of ash waste

The uncertainties around the status of Incinerator Bottom Ash (26.5% of the input waste, over 165,000t) and the potential for parts of that waste to enter landfill as hazardous waste rather than reclamation are not discussed in the Preliminary Environmental Information. The project description fails to inform consultees that the Air Pollution Control (APC) residues (a further 5% of input waste) are classified as hazardous waste. The developer has failed to provide information highlighting that the project is less sustainable than presented, creating hazardous waste where none existed in the feedstock and consigning significant proportion of waste to landfill. The transport of these wastes is not discussed in the PEI, either under traffic and transport (Chapter 6) or accidents and disasters (Chapter 17). The absence of a waste chapter to the PEI is particularly notable for a project which creates hazardous wastes. Advice Note 7 highlights the importance of providing clear information to consultees.

## 6.5 Air quality

Air quality is a key issue of concern for residents and yet full-time monitoring only commenced in June 2021. The lack of location specific weather data further adds to the uncertainty around the modelling (paragraph 8.6.27), relying instead on modelled data. These inadequacies again suggest the prematurity of the consultation exercise and poor quality of the PEI. Modelling of abnormal operations has not taken place at all, despite schools and a hospital being in close downwind proximity to the proposed site.

There has been no attempt to present the modelling in an easily accessible and understandable form, instead the developer has presented over 270 pages of tables (Appendix 8C). Modelling could have been easily presented in graphical form (for example by showing plumes overlaid on OS Maps) – it could be assumed that this is because the developer does not wish to show potential effects on the developed areas of Wisbech, which are largely downwind from the proposed location. The Plumeplotter website shows this to be the case for the developer's operational project in Plymouth. The poor location of the proposed project (exacerbated by the developer's failure to adequately consider alternatives, as discussed above) should not be used as a reason for not presenting PEI in a simple manner, consistent with the requirements of Advice Note 7.

## 6.6 Inaccurate and misleading information on greenhouse gas emissions

One of the main claims of the Energy from Waste (EfW) technology proponents, that these projects deliver greenhouse gas (GHG) emissions reductions as a renewable energy, is not evidenced in the PEI. The GHG emissions reductions set out in Chapter 14 show a net increase in greenhouse gas emissions from the "without proposed development" scenario of 32.9 ktCO<sub>2</sub>e/yr during operation<sup>2</sup>. There is a high likelihood that the increase in GHG emissions would, in fact, be greater than assessed. The PEI uses conservative assumptions as to the future efficacy of capture and re-use of landfill gas (for example, discounting export of biogas rather than generation by gas engines) and does not consider the requirement under the UK's 6th Carbon Budget for many of the more GHG intensive landfill wastes to be processed further up the waste hierarchy.

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<sup>2</sup> 252.4 ktCO<sub>2</sub>e for LFG (table 14.23) plus 3.4 ktCO<sub>2</sub>e for HGVs (table 14.24) vs 280.6 ktCO<sub>2</sub>e (table 14.25) plus 8.1 ktCO<sub>2</sub>e for vehicles (table 14.27)

Conversely, the emissions reductions predicted to arise by reason of power generated by the EfW plant (157.3 ktCO<sub>2</sub>e/yr, from table 14.28) displacing other forms of generation are likely to be significantly lower than that presented in the PEI.

Firstly, the 91% availability of the EfW generation (8000 hours, table 14.28) is not realistic in the context of industry figures where power export reliability is poor, often as the result of turbine and generator failures. Parasitic load (of around 15%) also has not been considered. Industry analysis<sup>3</sup> suggests an average power export of around 540 kWh/t input, with around 80% availability of turbines.

Second, the carbon intensity of the UK grid is rapidly decreasing, the assumptions based on displacement of gas fired generation only over the 40-year life span of the project (paragraph 14.9.34) are not credible, particularly as all new gas fired generation is likely to be required to incorporate carbon capture and storage.

Applying more realistic calculations based on these two points would reduce available power from the plant by a significant level, to the point where full lifecycle emissions benefits become negligible. Consultation should take place on these revised figures, not the misleading and inaccurate contents of Chapter 14.

The assessment's conclusion (paragraphs 14.9.40 – 14.9.48) that the project will contribute towards the aims of the 6th Climate Budget are misleading, given that the Budget assumes that Energy from Waste emissions should stay flat, with Carbon Capture and Storage (CCS) being adopted on all EfW projects and waste streams being diverted further up the waste hierarchy<sup>4</sup>. The reality is that, as currently, configured, the project would increase greenhouse gas emissions at a time when all industries must be rapidly decarbonising.

The Examining Authority for the North Kemsley Development Consent Order decision concluded that given the uncertainties surrounding carbon benefits in that case that emissions reductions should carry little weight in the planning balance and we believe that this is also likely to be the case for the Medworth proposals.

In the context of the rapid de-carbonisation of the UK electricity grid, and the relative inefficiency of Energy from Waste, this technology limited green credentials are decreasing annually. The potential carbon savings of the project are an important element of the environmental impact assessment process, but clarity and accuracy on this topic have been omitted from the Preliminary Environmental Information Report. Further statutory consultation is required to provide clarity on this issue and ensure that the information contained in the Development Consent Order application, if it occurs, is robust.

Further discussion on the carbon emissions from the Medworth development in the context of the UK's 6th Carbon Budget is set out below in respect of the project's non-compliance with planning and other policy. Unless carbon capture and storage (CCS) is adopted as an integral part of the project (rather than just a piece of land being allocated for future CCS) then the proposals would be incompatible with UK emissions targets. The PEI has not described the necessary CCS elements of the project or how they could operate in practice. This reinforces the need for a further round of consultation.

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<sup>3</sup> E.g Tolvik UK Energy from Waste Statistics

<sup>4</sup> <https://www.theccc.org.uk/wp-content/uploads/2020/12/Sector-summary-Waste.pdf>

## **6.7 Flawed assumptions relating to waste fuel availability**

The draft waste fuel availability assessment is incomplete, and significantly flawed. As discussed below in respect of waste, planning and climate change policies, the assessment fails to address the waste hierarchy and the extent to which wastes can be managed higher up in the waste hierarchy. The findings of the Planning Inspectorate in respect of the North Kemsley Incinerator and the likely adverse effect of those proposals on recycling rates is highly relevant here.

The assumptions in respect of source local authorities does not accord with the proximity principle. It is difficult to understand how sourcing waste from 12 authorities can satisfy the requirement to treat wastes as locally as possible. Furthermore, the use of the 2-hour travel time metric (even if appropriate under the proximity principle) has not been consistency applied – many of the towns listed in table 14.26 as sources of waste fuel are at distances which would be impossible to travel from by HGV in 2 hours, including Coventry, Basildon, Watford, Scunthorpe, Warwick and Mansfield.

The breakdown of waste composition used to assess the carbon intensity of the proposed project (table 14.22) appears to include a significant element of waste could be managed further up the waste hierarchy, including food waste (27%), garden and other organic waste (5%), paper (14.8%), card (6.3%) and textiles (5.5%) – this analysis undermines the assumptions of the fuel availability assessment. Under the 6th Carbon Budget nearly all this material must either be treated higher up the waste hierarchy or through EfW equipped with CCS. Card, paper and textiles can all be recycled, food, garden and other organic waste can be more benignly managed through anaerobic digestion.

Further consultation should take place when these key issues have been addressed in the next iteration of the assessment.

## **6.8 Traffic and transport**

As previously advised by statutory consultees (see responses to Environmental Impact Assessment scoping on the PINS website) a rigorous assessment of traffic impacts is required, but this has not been delivered. Nor is the preliminary information clear or understandable to consultees. Most of the information presented presents assessment methodologies rather than a clear indication of likely effects or the mitigation (including the delivery of associated development) which will be required. The prematurity of the information provided is clearly indicated by the “further steps” which include traffic surveys, further assessment, technical consultation and design arrangements for A1101 Elm High Road and A47 Broadend crossings. Further statutory consultation should take place when this information is available.

Given the flawed nature of the draft waste fuel availability assessment (discussed above) and the uncertainties surrounding the location of waste sources and ash disposal facilities, it is questionable whether the HGV traffic distribution data set out in the PEI is accurate or reliable. Further information in respect of traffic movements in this respect is required.

## **6.9 Limited detail of proposed mitigation**

The mitigation presented throughout the PEI is generally generic in nature, emphasising the premature nature of the consultation. Key elements of the project required to mitigate impacts, including highways improvements, Combined Heat and Power connections and Carbon Capture and Storage facilities have not been described. An informed view of the likely significant effects of the project

cannot be ascertained if the scale and efficacy of the mitigation is not clearly presented. Further consultation should take place when schemes of mitigation are more clearly understood.

## **7. Failure to comply with National Policy Statements, the National Planning Policy Framework for Waste and UK Climate Change policy**

The developer's proposals significantly conflict with government policies in respect of waste management, planning, and climate change.

### **7.1 Waste policy**

As discussed above the proposals are not consistent with the self-sufficiency or proximity principles. Figure 2 of the draft waste fuel availability assessment describes an area measuring some 160 miles from north to south and 150 miles from east to west, encompassing 12 waste authorities (9 county councils and 3 unitary authorities). The only reference to the proximity principle in the consultation is made in respect of exports of waste outside of the UK.

Similarly, the proposals do not accord with the waste hierarchy, with the over 50% of the waste fuels proposed being capable of being managed by recycling or less harmful recovery technologies such as anaerobic digestion which do not create toxic emissions or solid waste.

### **7.2 National Policy Statements**

The project does not meet the requirements of the National Policy Statements EN-1 and EN-3, particularly in respect of principles of Good Design.

Section 2.4 of NPS EN-3, referencing Section 4.5 of NPS EN-1, reminds applicants of the requirement for energy infrastructure to demonstrate good design, both in respect of landscape and visual amenity and more widely. There is no indication in the consultation document that this requirement has been taken seriously, despite recent DCO decisions and recommendations that design issues constitute important factors when considering whether to grant consent.

The project promoter should take account of good practice advice in respect of design (most notably that produced by the National Infrastructure Commission) and show how the project design has evolved. It should be noted that design extends beyond visual appearance to include issues such as site selection and alternatives, issues which, as discussed above, are not fully addressed in the consultation documentation, despite requests from consultees for more information in this respect, and the requirements of the Scoping Opinion. Paragraph 4.5.2 of NPS EN-1 emphasises this point, highlighting the importance of siting in mitigating adverse impacts, siting is also emphasised elsewhere in the NPS including at paragraph 5.9.17 in respect of visual harm.

Paragraph 2.5.2 of EN-3 acknowledges an important role for projects in meeting the UK's energy needs where in accordance with the waste hierarchy (emphasis added). As discussed above the project proposals are not currently in accordance with that hierarchy.

The project does not appear to be in conformity with the provisions of NPS EN-1 in respect of Combined Heat and Power (CHP). As currently presented the proposals for utilising excess heat amount to a pipeline across land not currently within the control of the applicant and, given the statutory



undertaker status of Network Rail, this position is unlikely to change within the foreseeable future. Furthermore, the project promoter has failed to evidence either demand for excess heat or the likelihood of entering commercial contracts for that heat. It is not sufficient the plant to be heat enabled, for benefits to be delivered it must deliver heat. The potential for CHP is one of the limited benefits of the proposals but on the current evidence cannot to be delivered. The proposals therefore do not currently satisfy paragraphs 4.6.6 – 4.6.8 of the NPS. As discussed below this is possibly because the project proposals are not currently sufficiently advanced to be suitable for public consultation.

### **7.3 Climate change policy**

The UK needs to decarbonise its electricity network to meet 2050 Net Zero targets. In that context the greenhouse gas emissions which the proposed development would produce (a minimum additional level of 32.9 ktCO<sub>2</sub>e/yr) would be unacceptable.

The 6th Carbon Budget (which was adopted by government in full in April 2021) makes significant and wide-ranging recommendations in respect of waste. The project proposals are incompatible with the assumptions set out the adopted budget in respect of Energy from Waste (EfW) and the future management of waste currently destined for landfill. To be compatible, the project's business case would need to acknowledge a far lower proportion of available waste fuel and that, without the adoption of carbon capture and storage (CCS) technology, more efficient and carbon friendly recovery technologies would be available as alternatives to EfW.

## **8. The project is not consentable as currently formulated**

The existence of preferred technical solutions to manage the waste, including increased plastic recycling, and the presence of alternative sites and project configurations suggests that the project as proposed is unlikely to obtain consent.

The PEI, despite its flaws, acknowledges that the project will give rise to significant adverse effects on the environmental and local community without delivering local or national benefits.

There is simply no need for the project, something evidenced by the Secretary of State's decision in respect of the North Kemsley DCO proposals. The Medworth project is being promoted as a nationally significant infrastructure project at a time when the Secretary of State has determined that there is no longer a national need for large new incinerators.

For the project to progress to DCO application with a prospect of success, the following issues would need to be addressed:

- Delivery of a further round of consultation, with full Preliminary Environmental Information being provided to stakeholders. Additional information is required in respect of the project description, grid connection proposals, highways improvements, impacts on residential amenity, ash waste, air quality, traffic and greenhouse gas emissions
- Development of a business case which accords with the proximity principle and provides the Development Consent Order Examining Authority and Secretary of State with evidence that the

project is aligned with the waste hierarchy and does not divert waste from recycling or other more beneficial recovery methods

- Presentation of alternatives to the project, including the project location, in accordance with the Environmental Impact Assessment Regulations
- Further details on how Carbon Capture and Storage (CCS) and Combined Heat and Power (CHP) will be secured to ensure that the maximum level of energy efficiency and carbon savings can be secured, in accordance with the adopted 6<sup>th</sup> Carbon Budget.
- Design of the plant, including site selection, to be explained in the context of the Good Design requirements of the National Policy Statements.

Additionally, we believe that the questions set out in the appendix to this report should be addressed by the developer during the current consultation.

## **Questions for developer, to be addressed at a further stage of consultation**

To what extent have the requirements for good design set out in the National Policy Statements been taken into account in selecting the site for the project and in evolving its appearance, layout and operation?

Has the developer taken independent professional advice or carried out design review, as recommended by paragraph 4.5.5 of NPS EN-1?

Will the developer take into account the National Infrastructure Commission's Design Guidance? How do the proposals take account of the principles of "Climate, People, Places and Value" described in that guidance?

What is the status of potential contracts for the sale of excess heat from the project?

When is it envisaged that agreement will be reached with Network Rail for the installation of the CHP infrastructure?

The PEIR suggests that no alternative sites were considered in respect of the project? Is this the case? If not then, in accordance with the EIA Regulations and the Scoping Opinion, could the developer provide details of other sites considered for the project?

If no alternatives were considered could the developer confirm how the site was selected? How did that site selection accord with the principles of Good Design mandated by the National Policy Statement?

Noting the legislative requirement to provide information on alternatives which have been considered, and recent decisions and judicial reviews in respect of alternatives, including for the Wheelabrator Kelmsley North Waste-to-Energy and A303 Stonehenge DCO projects, how does the developer intend to consult on this information?

How will the developer show a need for project, given that the draft Waste Fuel assessment has not evidenced compliance with either the waste hierarchy or the proximity principle? If no need for the project has been shown, and no alternatives have been considered, how does the developer intend to sustain a compulsory purchase case?

What are the implications of the adoption of the 6<sup>th</sup> Carbon Budget for the project? How are the greenhouse gas assumptions set out in Chapter 14 of the PEI aligned with the Budget?

When will the developer consult on accurate and realistic greenhouse case emission estimates for the proposed plant? Carbon assessment forms a key element in the environmental impact assessment process and therefore accurate information should have been included in the PEI.

The project proposals do not contain details of future carbon capture and storage (CCS) capabilities. However, government policy (as set out in the adopted Sixth Carbon Budget) envisages that all EfW plants will have to incorporate CCS to meet UK emissions targets. How does the developer intend to consult on the CCS elements of the project?

Will the developer provide graphical depictions of plume modelling? When will the results of modelling incorporating the ongoing air quality monitoring be made available for consultation? What are the weaknesses of using modelled meteorological data and why has the developer not deployed its own meteorological equipment to ensure that the modelling is underpinned by robust data (as has been the case for other waste projects)?

Noting that the Residential Amenity Assessment has not been provided as part of PEI, when does the developer intend to consult with residents on local impacts on homes and communities?

When will details of all associated development, including substation design and construction, and highways improvements, be made available for public consultation?

How does the developer intend to comply with the legal duty to respond to consultation and ensure alignment with all relevant DCO guidance?