

Dr Clive Ballard



Rt Hon Claire Coutinho MP
Secretary of State for Energy Security and Net Zero
Houses of Parliament
London

17th October 2023

Dear Ms Coutinho

Re: Wisbech Mega-Incinerator Application

I would like to express my extreme concern regarding the proposal for a waste to energy mega-incinerator in Wisbech. I am writing as a local resident, but I hope that my expertise as Professor of Age Related Diseases (Kings College London and University of Exeter) can provide some insights, in particular for health related issues.

My key concerns include:

1. Impact of the Mega-Incinerator on Health *(References for key points provided at the end of the letter)*

As part of the consultation, myself and local medical practitioners were all extremely concerned regarding the potential impact of the mega-incinerator on health, in particular:

a) Air pollution is a risk to health

A Lancet commission (a major paper including the majority of leading UK and international researchers in this field) focusing on pollution and health, using robust meta-analysis to combine the results of all of the major research studies, estimated that there were 4 million excess deaths worldwide every year as a result of air pollution. Air pollution was a major contributory factor in 25% of deaths due to cardiovascular disease and 50% of deaths due to lung disease, as well as significantly increasing the risk of diabetes, dementia, autism and attention deficit disorder.

b) Particulate matter is a risk to stroke and respiratory health

Two recent and very comprehensive reports in the British Medical Journal provide clear evidence of the impact of particulate matter in the air on health. Firstly, a meta-analysis of more than 2000 studies showed a clear and significant risk of stroke associated with particulate matter. This risk was seen with as little as 7 days exposure and also had a significant impact on related hospitalisations. Secondly, a report combining the findings of studies across more than 200 countries demonstrated a link between exposure to particulate matter and an increased risk of asthma and Chronic Obstructive Pulmonary Disease – explaining a substantial 20% of the risk.

In addition to the impact on the health of individuals, the added health burden and increased rate of hospitalisation also has significant implications for health resources and cost.

c) Heavy metals and polycyclic aromatic hydrocarbons accumulate in the environment and are a significant risk to health

It is well established and not disputed that heavy metals including lead, mercury, cadmium, silver nickel, vanadium, chromium and manganese, all released by the incinerator, are all harmful to human health, resulting in problems in most of the bodies organs including the lungs (asthma, breathlessness, respiratory function, lung cancer), heart (increased blood pressure), blood (anaemia), kidney (kidney failure) and nervous system (memory disturbances, sleep disorders, anger, fatigue, hand tremors, blurred vision, slurred speech). There are also particular risks during pregnancy (spontaneous abortion, reduced foetal growth, pre-term delivery, low birth weight, congenital malformations).

There are 2 major problems that intensify the impact of heavy metals on health:

- They are not broken down or excreted by the human body and therefore continue to accumulate over time; and
- Heavy metals in the air also get into the soil and water, impacting on wildlife but also getting into the food chain and further exacerbating accumulation in the body.

It is therefore extremely difficult to set safe levels for heavy metals as these materials continue to accumulate in the body over time and any failure in safety measures leading to increased heavy metal air pollution (even very temporary), would have a significant and permanent impact on human health.

Given what we know about air pollution, particulate matter and heavy metals, **it is almost certain that the facility would have a significant negative impact on human health.** This is particularly important in the context of the current proposed facility given the **size of the facility** and the very close proximity to local **schools**.

2 The Environmental Impact of the Proposed Mega-Incinerator

The applicant suggests that the proposed facility has less of an impact on CO₂ emissions than traditional landfill, based on a complex mathematical model making a number of assumptions and offsetting the environmental impact against energy production. Although it sounds highly technical, if all of the modelling is stripped away – the harsh reality is that per unit of energy, waste to energy facilities have the second largest impact for CO₂ production after coal. It is also important to note that **heavy metal emissions are significantly higher from incinerator facilities than from traditional landfill and that the ash from incinerators also contains a significant concentration of heavy metals.**

3 The Need for a Mega-Incinerator and the Impact upon Transport Infrastructure

There is already an incinerator in Peterborough, most of Cambridgeshire already has arrangements in place for disposing of waste and a recent incinerator has also been approved in Boston, Lincolnshire. The need is therefore clearly not a need for our own town or County but was proposing to take waste from a wide geographical area. Building upon this point, it became apparent during the consultation discussions that more than 50% of the proposed areas from which waste would be collected were more than 2 hours away from Wisbech, with implications for the environment, road infrastructure and financial viability.

There was much discussion in the consultation process regarding the limited road infrastructure to service the facility around Wisbech, with already poor and overcrowded roads – which is a serious

concern. It should however also be noted that because of the silt soil composition in the area, the local roads deteriorate quickly and there is a high burden on road maintenance. This would clearly be significantly exacerbated by a substantial increase in heavy vehicle transport.

4 Consultation

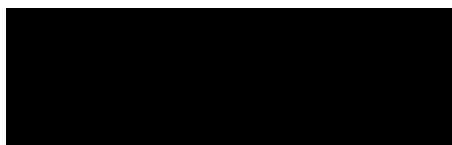
Although there were unanimous objections to the proposal from local residents, the process to make specific contributions to the consultation was extremely complex and severely limited the opportunities for local residents to express their views. As an example, during consultation meetings I personally attended there were frustrated local business owners who were not permitted to express views and an elderly local resident in tears because she was not allowed to make a statement during the meeting.

In Summary

If it goes ahead this facility would be the largest waste to energy facility in Europe and unlike other UK incinerators it would be located in close proximity to both the main town of Wisbech and local schools.

From a health, environment and local infrastructure perspective I am therefore writing to express extreme concerns about the proposal.

Yours sincerely



Dr Clive Ballard

Professor of Age Related Diseases (Kings College London and University of Exeter)

Copy to: Rt Hon Stephen Barclay MP – North East Cambridgeshire
Rt Hon Elizabeth Truss MP – South West Norfolk

References

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