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LONDON SW1A 0AA

The Planning Inspectorate
Temple Quay House
Temple Quay
Bristol
BS1 6PN

Thursday 16 May 2019

RE: Riverside Energy Park - Planning Inspectorate Reference: EN010093

To whom it may concern

As the Member of Parliament for Dagenham and Rainham I have consistently voiced my opposition to these plans. This submission will outline the key points that have informed my position, and considerations for the examination process and deliberation.

Air Quality and Emissions

In my original submission I drew attention to the Greater London Authority report which highlighted that "incineration of solid waste can lead to emissions of toxic heavy metals, dioxins, and other substances that are detrimental to human health and biodiversity." And that "these impacts would be widespread across Rainham."

See full report here:

https://www.london.gov.uk/sites/default/files/PAWS/media_id_418734/riverside_energy_park_belvedere_report.pdf

On Thursday 25 April I was invited to the current Energy from Waste (EfW) incineration facility by Cory Environmental Holdings Ltd. I had a very full and frank conversation with executives, but ultimately, I found their information to be at odds with the GLA report and the numbers could be construed as somewhat misleading.

European environmental directives outline that a single facility cannot exceed 200 mg/Nm³ Nitrous Oxide (NOx) emissions per day. The existing Cory facility in Belvedere currently emits 170 mg/Nm³ per day with the proposed new Riverside Energy Park set

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to produce 120 mg/Nm³ over a 24-hour period. Under the European directives this is considered acceptable because the existing facility and proposed new facility would be evaluated on their individual output. However, in reality the geographical site will be producing combined daily Nitrous Oxide emissions of 290 mg/Nm³ which is 90 mg/Nm³ above the approved maximum.

The new facility will be right next to the current one and to suggest that the emissions in the air will be under set levels is disingenuous. This is a deep cause for concern as upon my site visit last month Dagenham Dock, South Hornchurch and Rainham could clearly be seen from the plant and it was agreed by all that the prevailing wind direction was towards my constituency.

I feel it is important to also draw attention to a comparison Cory Environmental Holdings Ltd made between their plant and the Amager Bakke EfW incinerator in Copenhagen during my site visit. Cory used this comparison to make the case that EfW plants do not have as big an impact on air quality as is suggested in reports made by organisations such as the Greater London Authority.

The Amager Bakke facility in Copenhagen is based in the city, and Cory used this as a positive example explaining that the emission by-products have little to no impact on air quality. However, on a closer look reports highlight that the Copenhagen plant produces a tenth of the emissions that the proposed facility will produce at approx. 15 mg/Nm³ of NO_x per day – so the two are not comparable. I would ask the Planning Inspectorate to be mindful if the company use this as a case study in favour of their application.

A report can be found here:

[http://www.volund.dk/Waste to Energy/References/ARC Amager Bakke Copenhagen](http://www.volund.dk/Waste%20to%20Energy/References/ARC%20Amager%20Bakke%20Copenhagen)

According to research carried out in 2018 by anti-incineration campaign group UKWIN (UK Without Incineration Network), Cory's current EfW incinerator produced the second highest level of 'harmful particulate matter' and 'harmful nitrous oxide' emissions in the country throughout 2017. If the application is approved, it would mean the site of both facilities would produce the highest concentration of harmful emissions in the country.

See full report here:

[http://ukwin.org.uk/btb/Particulate Pollution July 2018.pdf](http://ukwin.org.uk/btb/Particulate%20Pollution%20July%202018.pdf)

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*Source: UKWIN

The pollution in areas near key incinerators

incinerator	Waste burned (tonnes)	Harmful Particulate Matter Emitted (tonnes)	Harmful Nitrous Oxide Emitted (tonnes)
Runcorn, Cheshire	890,932	19.6	980
Belvedere, London	746,326	16.4	821
Ferrybridge, West Yorkshire	631,515	13.9	694.7

Additionally, the report also looks more in-depth at the high proportion of particulate matter (PM10 & PM2.5) that is produced as a by-product of incineration. The Department for Environment, Food and Rural Affairs 'UK Air Information Resource' states that: "Exposure to airborne PM is associated with a range of adverse effects on human health including effects on the respiratory and cardiovascular systems, leading to hospital admissions and mortality."

Source: <https://uk-air.defra.gov.uk/networks/network-info?view=particle>

Taking this into consideration if the applicant should be successful and the new facility is approved it would result in the Cory site at Belvedere emitting more harmful particulate matter than anywhere else in the country; this would have serious implications on human health in the area.

A report from the British Lung Foundation highlighted that the London Borough of Barking and Dagenham has the highest annual rate of lung disease related deaths in London at 7.7 per annum. Havering has the fourth highest rate at 6.7 lung disease related deaths per annum, this report shows that my constituency of Dagenham and Rainham is disproportionately affected by poor air quality.

At this point I think it is important to cover another alarming public health concern raised in conjunction with poor air quality and waste incineration. Since incineration was introduced as a method of waste management there have been several studies which suggest a link between incineration and infant mortality rates.

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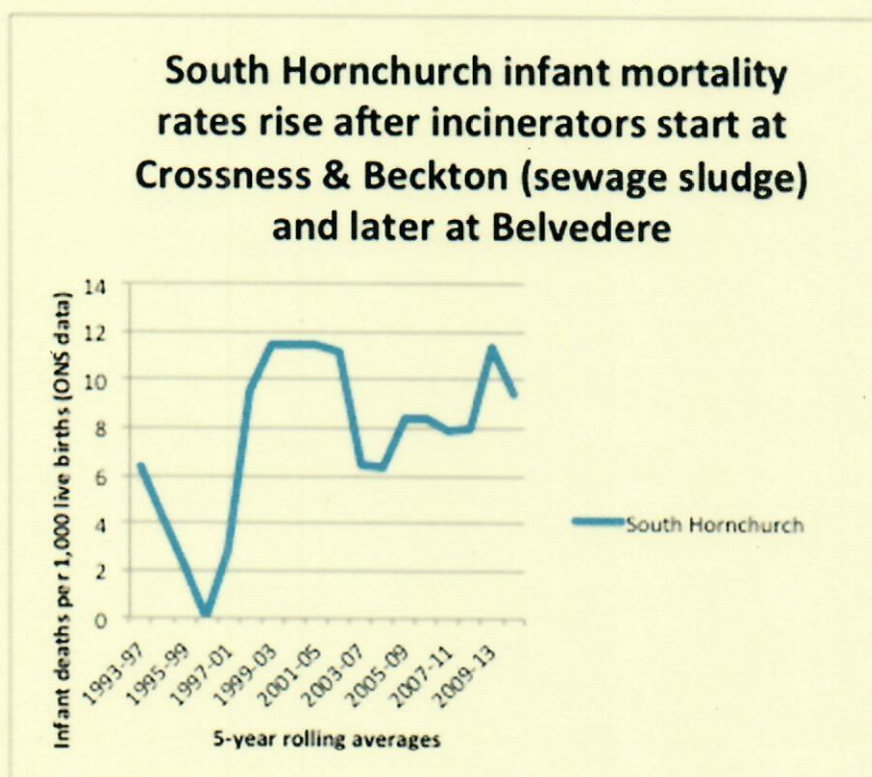


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Data from the Office of National Statistics reports a total of 17 infant deaths in the ward of South Hornchurch during the 22 years 1993-2014. South Hornchurch is in the south of my constituency alongside Rainham.

In the few years following 1995 sludge incinerators were built at the sewage works at Crossness and Beckton. The graph below highlights a sudden spike in South Hornchurch's infant mortality rate after the sludge incineration was established, plus a second spike after the current Belvedere Energy from Waste incinerator opened.



The graph based on South Hornchurch's infant mortality rate 1993-2014 is collated in 5-year rolling averages, which is the usual format for data at electoral ward level.

In conclusion there are numerous reports from leading health organisations, the government, charity groups and regional bodies that all highlight the same concerns regarding potential impacts on air quality, and what that means for human health.

Based on the projections in the Environmental Impact Assessment which I outlined in my initial submission, and the added information regarding the prevailing wind direction across the Thames into my constituency I cannot find any suitable reason to

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support this application. Comments from other interested parties such as the Greater London Authority, and outside organisations mentioned above deem the level of particulate matter and nitrous oxide emissions from an additional plant too high in conjunction with the existing facility. I am inclined to support this analysis.

There is a lot of development planned in the coming years across the south of my constituency, including nearly 3,000 new homes, two new schools, leisure facilities and open spaces. I don't want the quality of life in Rainham, South Hornchurch and south Dagenham to be marred by poor air as a result of a waste incineration plant, which Cory are yet to demonstrate the need for, billowing toxic fumes across the Thames.

The Economic Cost-to-Society

Another key factor to consider is the long-term economic impact of waste incineration on society as a knock-on effect of negative public health outcomes. The Treasury has published guidelines on how this can be calculated.

The online tool can be found here:

<https://www.gov.uk/guidance/air-quality-economic-analysis>

Based on 2018 costing (updated calculations are available) The Treasury assumes that particulate matter from EfW costs the country £24,994 per tonne, whilst nitrous oxides cost £9,049 per tonne. If we are to take this into account, the current facility at Belvedere cost the country £7,839,130.6 in 2017 alone – the proposed second EfW plant will produce only fractionally fewer emissions, so will be similar in cost. The question I would pose to the Planning Inspectorate and subsequently the Secretary of State who are considering this application is this;

Based on the financial implications owing to the adverse impact of an increase in particulate matter and nitrous oxide emissions, is upwards of £7,000,000 per annum in public health costs worth paying for an additional Energy from Waste plant that the applicant has thus far failed to demonstrate there is any need for?

To conclude on the cost-to-society I would like to draw attention to the already overstretched local health services and infrastructure in the east of London, where looking at the evidence we are disproportionately more likely to suffer poor health as a direct result of waste incineration and its impacts on air quality.

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Environment, Biodiversity and Climate Change

At the beginning of May 2019 HM Government declared an 'environment and climate emergency'. The government also laid out a route map to a net-zero carbon economy by 2030. Unnecessary developments like the one outlined by the applicant in their planning submission are detrimental to reducing emissions and have the potential to hamper natural carbon absorption by damaging surrounding habitats.

Incineration is proven to be the least environmentally friendly form of waste disposal after landfill. I do not accept this as a case for approval, with the applicant championing the point that incineration is 'better than landfill'. If we are to significantly reduce greenhouse gases and grind climate change to a halt, we should be moving away from any energy production methods that we know to be harmful to our environment.

I have raised questions about how this development fits in with the reorientation of waste management and energy production in London and feel that if this application was approved it would be at odds with the Draft London Plan, and several Local Development Plans in the surrounding area regarding air quality, habitat protection, and biodiversity.

There is evidence to suggest that waste incinerators such as the one proposed in the application emit far more fossil fuel derived CO₂ than gas powered stations producing the same amount of energy. Whilst this evidence was provided in 2006 prior to the approval of the current Belvedere EfW plant, I feel that given the trajectory of environmental concern at present this report submitted by Friends of the Earth should be revisited by the Planning Inspectorate in relation to the current application.

Full report can be found here:

https://friendsoftheearth.uk/sites/default/files/downloads/dirty_truths.pdf

The earlier referenced report by the Greater London Authority also highlights the potential impact that emissions and water deposits could have on surrounding nature reserves and biodiversity. In particular the nearby Crossness Nature Reserve, and sites in my constituency such as Hornchurch Country Park, Beam Parklands, RSPB Rainham Marshes, The Chase Nature Reserve, and the Wildlife Trusts Ingrebourne Valley.

The open spaces and nature reserves mentioned above are home to a number of protected and endangered species and are visited by large numbers of migratory birds.

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The Environmental Impact Assessment suggests that dust during the site clearance and construction will have a negative impact on the air quality. There is a concern that this could have a detrimental effect on migratory wildlife, native wildlife, and biodiversity in general across my constituency.

It has been suggested in numerous reports that during site clearance and/or construction there would also be changes in water quality, underwater noise impacts, and non-native species transfer which could be damaging to existing wildlife in the surrounding area. My worry is that the contamination of surface water and increased pollutants during construction and operation could have a detrimental impact on local water ways such as the Ingrebourne River, Beam River, and across the Rom Valley.

Beyond compromises in water quality, there are also likely to be impacts on sediment. These changes in sediment not only impact the water but can also lead to loss of wetlands, and nutrient balance changes.

Rainham Marshes and other parts of the London Riverside Area have in recent years run successful programs to reintroduce water voles to the local ecosystem, I would argue that this development is potentially harmful to that work.

The water vole used to populate nearly every waterway in the UK but it has faced numerous threats over the last 30 years. These threats, as outlined by the People's Trust for Endangered Species, include habitat loss and fragmentation from unsympathetic riverside management and not least, water pollution.

The Environmental Impact Assessment carried out as part of this application and examination process suggests that habitat loss, disturbance (including through shading) or fragmentation is inevitable during site clearance and/or construction. These predicted impacts increase the threat to the diverse species that currently inhabit the waterways surrounding Crossness Nature Reserve, Rainham Marshes, Beam Parklands and the Ingrebourne Valley.

To conclude on environment, biodiversity and climate change, it is my view that if approved this application would cause significant disturbance to habitats and biodiversity across my constituency and surrounding areas. On this basis and looking at recent revelations by the government to protect biodiversity I would suggest the application should be considered for refusal.

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Recycling Rates

The use of EfW plants will also have an impact on recycling rates in London with much recyclable waste being redirected and incinerated. Over the last five years recycling rates have stalled across the United Kingdom whilst government approved waste incineration has doubled.

Having read the in-depth report provided by the Greater London Authority it is my concern that this application fails to fit into the Mayor of London's plans regarding the reorientation of waste management. The Mayor has set an ambitious recycling target of 65 per cent of municipal waste being recycled in the capital by 2030.

There is also a borough level drive to hit recycling targets and whilst the London Borough of Bexley has the best recycling rate in the capital with 52.1 per cent of household waste sent for reuse, recycling or composting, it is also worth noting that much of the waste collected by Cory for incineration comes from the East London Waste Authority.

ELWA collects its waste from Barking and Dagenham, Havering, Redbridge and Newham. Three out of the four London boroughs currently contracted to ELWA have the lowest recycling rates in London. This highlights a correlation between low recycling rates and waste incineration.

This application if approved would arguably lead to an increase in waste processed and incinerated from Barking and Dagenham and Havering via ELWA. This increase in incineration would be counterproductive to recycling rates, and on the issue of recycling I would recommend the application for refusal.

Representation of Rainham Constituents

Since the start of this process, as the Member of Parliament for Dagenham and Rainham I have contacted every household in the ward of Rainham and Wennington on two occasions regarding this application.

Since September 2018 residents of Rainham and Wennington have expressed an overwhelming strength of feeling against the Riverside Energy Park proposal. This can be traced back to a number of factors, not least because Rainham has historically taken the brunt of environmental developments seen as undesirable for other areas.

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Rainham is disproportionately blighted by landfill and mineral extraction, which I have consistently fought against over the years. Due to Dagenham and Rainham's industrial past the air quality has taken hit after hit, and year after year it seems we are having to fend off unwanted government proposals along the A13 Thames corridor. There is a feeling among many residents that Rainham has become a dumping ground and this application, if approved will do little to dispel this public perception.

This application is the most recent in a long line of proposed projects that have threatened the environmental stability of the area, and it is my duty as an elected representative to make my constituents voices heard at every stage of this process.

The Planning Inspectorate may be aware that I launched a petition against these proposals. I have attached the petition to my submission for your consideration. You will see that over 1,000 residents have signed the petition from the Rainham area.

To conclude, as the Member of Parliament for Dagenham and Rainham, representing approximately 75,000 constituents interests I am firmly opposed to this application for the reasons outlined above.

The applicant is still unable to effectively demonstrate that there is any need for this development, and according to the Greater London Authority the approval of this will conflict with the Mayor's London Plan and local environmental targets.

I have not received sufficient assurances from the applicant regarding air quality, emission levels, recycling rates, the environment, biodiversity, or human health and for this reason I cannot in good conscience support the application.

Thank you for your consideration of my written submission regarding the Riverside Energy Park application - *Planning Inspectorate Reference: EN010093*

Yours sincerely


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