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15<sup>th</sup> February 2021

your ref:55568

Dear Dr Isaac

**Energy from Waste Incinerator**

**Planning Application WP/20/00692/DCC Portland Port, Castletown, Portland DT5 1PP UK**

the Climate and Ecological Emergency is being caused by emissions of greenhouse gases and pollutants on unprecedented scales. This is an existential reality with attendant health and mental health implications which affects us all generated by unnecessary profligate behaviour causing greenhouse gas emissions and consequential air and water pollution.

We represent over 6,739 residents who have signed our Petition and many of these have written heartfelt letters opposing the plant which will burn 208,000 tons of waste to generate electricity in a comparatively extremely intensive way<sup>1</sup>.

The public watched the power of the tobacco industry delay Government legislation to reduce harm. Many local General Practitioners, Health Care Professional and the Clinical Director of the Weymouth and Portland Primary Care Network have already submitted reasoned objections to this application as have the Minister of Justice who have the wellbeing of the Prison and staff living and working directed above the flue outlet. Nowhere in the world is there an EfW Incinerator located below close by habitation especially on an island that has a regular lee wave of standing static air<sup>2</sup>. "It is sad to report that too many of the Island's population experiences social and/or economic deprivation, particularly in the Underhill area, with high unemployment levels, low levels of educational attainment, high levels of teenage pregnancies and poor health."<sup>3</sup>. Data obtained by Unearthed, the investigative arm of Greenpeace, found that areas in the top 20% for deprivation host nearly one-third of the waste incinerators in the UK<sup>4</sup>.

On the 21st December 2020 your written response to Dorset Council Planning and Regulation Team repeated reassurance that this plant when operating would be safe relying on the Environment Impact Assessment and the protocols overseen by the Environment Agency via BAT. We present this letter to you so that you may look to other published evidence. We question the stance you have taken and ask you to reconsider.

This is the context: the developers are a merchant company who have publicly stated at the Weymouth Town Council planning meeting that they will not build or run the plant but sell on the planning approval achieved to an unidentified company for profit. A simultaneous application for an Environmental Permit has been submitted and awaits assessment. SPWI monitor the EA evaluation as we do not understand how the planning applicant without prior experience can fulfil the obligation to be a legal operator or have the technical competence demanded by the Permit<sup>5</sup>.

Local people can see the damage that the consequential plant life time of thirty years of burning waste will do to the environment. There is already an over capacity in the South West of EfW incineration<sup>6</sup>. George Eustice from Defra has called attention to the landmark Environment Bill requirement for a countrywide consistent 65% municipal waste recycling by 2035. A plant located in the Port of Portland would be in the market to import waste from any destination. This proposed plant has no justification to exist to treat residual waste in the South West and it is not envisaged in the 2019 Dorset Waste Plan<sup>7</sup>.

Mindful of the level of pollution caused by ERF incinerators, the EU has removed Energy Recovery Facilities Incineration from their Taxonomy list of sustainable activities. Discussing the impact of the EU's rejection of ERF incineration as a "green", sustainable industry Janek Vahk of Zero Waste Europe, commented: "The taxonomy regulation will help bring clarity to what constitutes an environmentally sustainable waste management activity."<sup>8</sup>.

Your representation refers to the requirement that British approved facilities are required to operate to best available technology BAT. The label provided of "modern and well run" does not mean that BAT is the Climate and Ecological safeguard standard we all need; especially now that we are time short for any chance of mitigation and thus, we have the reality, an Emergency. What is necessary for ecology is also necessary for human health. It is the planning application process that responds to public and academic knowledge and wider concerns. The Particulate Research Group says it found numerous shortcomings in the Government's regulation of emissions from municipal waste incinerators and gaps in the Government's research and assessments<sup>9</sup>.

But did you realise in operating the current legislation, which is all they can do, the Environment Agency make no checks on the constituents of RDF the fuel that residual waste is? Defra and the EA have not sought to introduce a treatment requirement, but have instead introduced a definition for RDF: "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. . . 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." There is no clear basis in UK legislation for the regulators to impose prescribed treatment requirements that waste must meet<sup>10</sup>. There is consistent use of the caveat: Records that have been deemed commercially confidential are not included. This industry does not welcome questions from the public.

The fact is that unlike a coal power station with a steady fuel of the same stuff these EfW Plants run on whatever is thrown in a black bag or what is contaminated and cannot be recycled. Human nature makes short cuts, inconvenient objects like the domestic broken first aid mercury thermometer "just chuck it in" the black bag route and on it goes. The widespread use of brominated flame retardants in household products add to the toxic burden in municipal solid waste. Nothing is opened for scrutiny; it is all passed as an estimation with pre-agreed factors. BAT reporting requirements stipulate annual mass releases estimation techniques (RETs) of specified substances on calculated daily averages of continuously emissions measurements (CEMs) but for only a few chemicals. The rest is calculated releases based on periodic samples for the many and all based on mass balance or emission factors<sup>11</sup>.

The latest Pollution Inventory details ERF plants reporting 64 pollutants and the worst only 8 pollutants. There is no consistency in operation with the single and best operating with all levels below threshold reporting and yet the majority function with up to 76% of pollutants exceeding thresholds and are yet left running<sup>12</sup>.

The Government must also be concerned since it has instigated a national consultation about BAT

standards issued 25th January 2021 – response required by 18th April 2021<sup>13</sup>. There are no safe limits for PM2.5s, but the World Health Organization (WHO) recommends that concentrations should not exceed 10 micrograms per cubic metre<sup>14</sup>; the current BAT legislation cannot safeguard us. The Government<sup>15</sup> does not put a limit on the CO2 emitted by waste incinerators and it does not monitor CO2 produced at a local level.

Our Campaign stresses the fact that this plant would for every ton of the 208,000 tons a year waste, for the 30 years of life of the plant, fed into the plant emit 1 ton of CO2 plus other chemical to air and water together with the arising 1/3 ton of toxic waste ash. This proposal is contrary to the changes needed in response to Climate & Ecological Emergency to safe guard our environment or our health.

The EA refer to you - Public Health England - who refer back to research that has narrow fields of study namely in babies. However, Professor C V Howard, Consultant Toxicopathologist's report in relation to Environmental Health Effects in respect to the constituents of the residual waste is much more to the point. This finds that pollution is a major cause of respiratory and heart disease and possibly foetal abnormalities and concludes "Public concern over these inadequacies is, in my opinion, understandable and justified."<sup>16</sup>. The Environment, Food and Rural Affairs Committee Oral evidence: Air Quality 08.09.20 clearly stated that fine particulate emissions from power stations were transboundary. Ozone is another worrying pollutant arising from secondary reactions between various pollutants. Whilst COVID saw a 40% decrease in traffic in the first lock down ozone pollution has barely decreased compared with levels over the past five years; power plants being one of the dominant sources of pollution in many places<sup>17</sup>. The mapping of all the UK EfW Incinerators shows the very worrying reality of cumulative consequences<sup>18</sup>. added to this are the emission from Europe's large number of EfW Incinerators who import our waste to feed supplement their reducing feed stocks. Once built they need to be fed and thus keep on emitting.

On Portland there are rare lichens which are good at absorbing mercury and the calcareous grasses prevalent on Portland they will be similarly affected. We are all looking to reduce food miles and grow our own. Other papers such as the Congruence Evaluation of Mercury Pollution Patterns Around a Waste Incinerator over a 16-Year-Long Period Using Different Biomonitors<sup>19</sup> add to SPWI deep concern that the health of the environment, the contamination of land and sea will have on the rare flora and fauna that characterizes Portland and of course on us living here. Peter W Tait's report advised that "older incinerator technology and infrequent maintenance schedules have been strongly linked with adverse health effects. More recent incinerators have fewer reported ill effects, perhaps because of inadequate time for adverse effects to emerge. **A precautionary approach is required**. Waste minimisation is essential."<sup>20</sup>.

Greater London Council comments: 'Health risks associated with MSWIs may not be limited to direct exposure to air and soil pollution. For example, consumption of locally grown food may be a significant exposure route to PCDD/Fs and heavy metals such as mercury from MSWIs.'<sup>21</sup>.

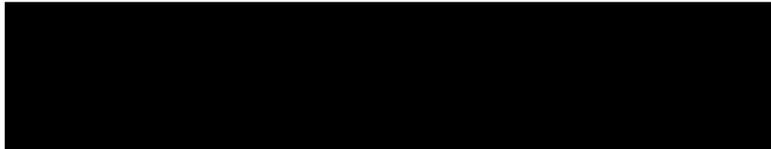
Birds have similarly been shown to be affected by fine particulate matter the reactive atmospheric gases and aerosols. Research shows that: unlike mammals, birds inhale oxygen, exchange it for carbon dioxide, and exhale the by-products all in one breath; they don't have to contract or expand their lungs repeatedly. The unique technique allows them to breathe and oxygenate at a rapid rate, which is optimal for flight. This constant air flow might bring in a variety of particles that lead to health issues. Indeed, respiratory illness was the most frequent problem Sanderfoot<sup>22</sup> found followed by increased stress levels, poor immune systems, reduced reproductive success, population decline. It is sad to think that the understanding of pollution affecting wildlife is better than that affecting humans.

The decision to approval the building of this plant is a local planning matter and we look to Public Health England to underline that emitting unnecessary CO2 and toxic pollutants even if they are current BAT compliant it is still compiling unnecessary strain on the need to stabilise the human habitat and wellbeing.

We as residents love our island and wish to preserve it as an echo-friendly destination. To blight Portland with the toxic industrialization that invariably flows from the construction of a chemically diverse fuelled incinerator with its attendant transport in and out, foul odours, light and sound pollution is an insult to us and the UNESCO world heritage status.

We ask you to reopen your deliberations and to think again, to support us in our campaign and safe guard our health.

Yours faithfully,

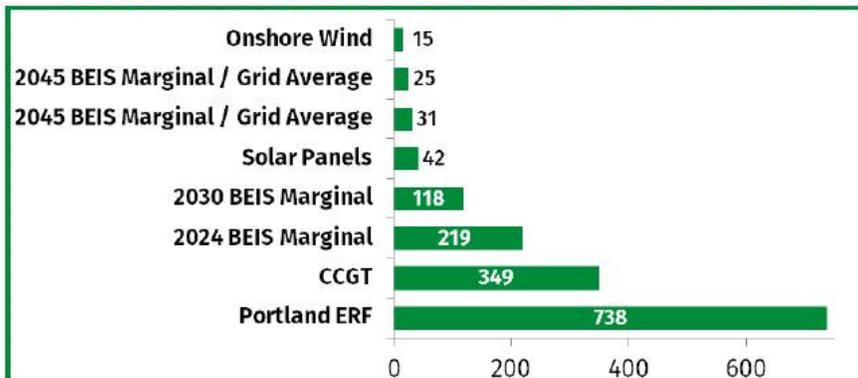


Paula Klaentschi BA Hons Dip Arch retired Architect  
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cc Public Health Dorset

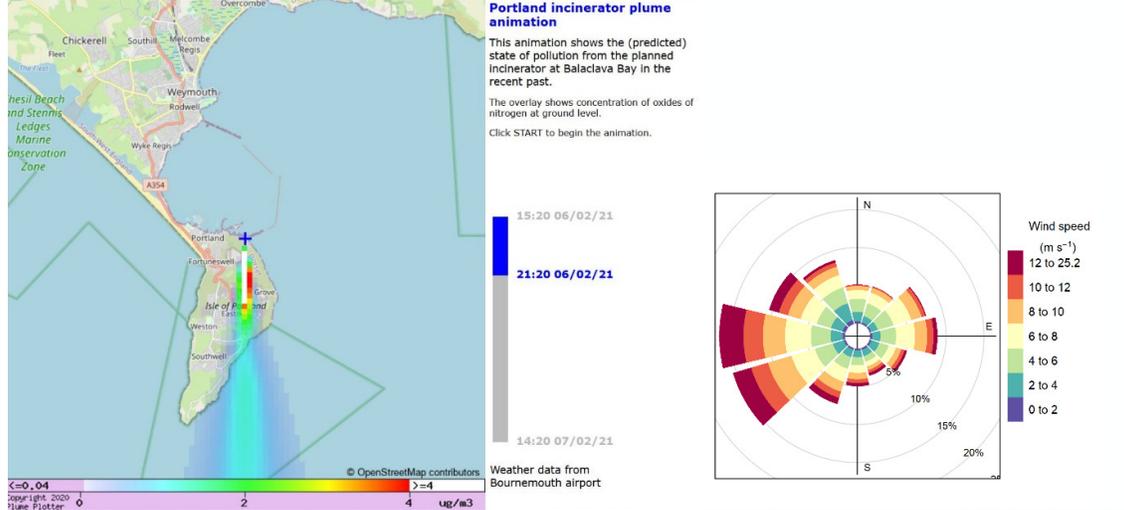
Reference Notes:

**COMPARISON OF FOSSIL CARBON INTENSITY OF ENERGY EXPORTED TO THE GRID  
FROM DIFFERENT ELECTRICITY GENERATION METHODS (gCO<sub>2</sub>e /kWh)**



1. UKWIN Feb 2021 Objection and comments on Climate Change Issues WP/20/00692/DCC

2. Static Lee Wave a regular feature of Portland. <https://plumeplotter.com/>



3. Pg 5 para 2.4 of <https://www.dorsetcouncil.gov.uk/planning-buildings-land/planning-policy/west-dorset-and-weymouth-portland/neighbourhood-planning/pdfs/neighbourhood-plan/portland/portland-np-referendum-version-master-05feb20-reduced.pdf>

4. <https://www.theguardian.com/environment/2020/jul/31/uk-waste-incinerators-three-times-more-likely-to-be-in-deprived-areas> Data obtained by Unearthed, the investigative arm of Greenpeace, found that areas in the top 20% for deprivation host nearly one-third of the waste incinerators in the UK.

5. <https://www.gov.uk/guidance/legal-operator-and-competence-requirements-environmental-permits>

6. The recently published Waste Management Plan for England January 2021

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/955897/waste-management-plan-for-england-2021.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/955897/waste-management-plan-for-england-2021.pdf)

Waste Incineration data from [Summary waste tables for England and the former planning regions](https://ea.sharefile.com/share/view/sd8fd3ec9e7245abb) found in <https://ea.sharefile.com/share/view/sd8fd3ec9e7245abb> gives area by area throughput and capacity updated 15.09.2020 showing that the South West has big available margin 14% in capacity in EfW Incineration.

7. <https://www.dorsetcouncil.gov.uk/planning-buildings-land/planning-policy/dorset-county-council/waste-planning-policy/2019-waste-plan.aspx>

8. 'The EU has reached a deal on its [Sustainable Finance Taxonomy](#), categorising activities contributing to the increase in incineration as harmful to the environment ' :Imogen Benson | 20 December 2019

9. <https://www.circularonline.co.uk/news/important-caveats-omitted-from-incinerator-health-dangers-group-claims/>

10. <https://www.rfindustrygroup.org.uk/code-of-practice/>

11. [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/923125/Pollution-inventory-reporting-incineration-activities-guidance-note.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/923125/Pollution-inventory-reporting-incineration-activities-guidance-note.pdf) Pg 19 BS EN14385 for extractive monitoring for As Cd Cu Cr Hg Mn Ni Sb V Zn

Pg 23 Each dioxin congener is assigned a toxic equivalency factor.

monitoring data representative of annual releases, you can get the resulting toxic equivalents TEQ of the mixture by Multiply the concentration (per m3) of each released congener by its Toxic equivalency factor. TEF and then by the total volume released in that year (in m3) to provide the TEQ

12. 2018 Pollution Inventory updated 11.09.2020

<https://environment.data.gov.uk/portals/g/home/item.html?id=972525652487430185a69836ec4a71ef>

compare Ecopark, Advent Way, London N18 3AG with 64 Pollutants 0 over reporting threshold with Hull Energy Works, Cleveland Street, East Yorkshire, HU8 8AD with 8 Pollutants or Slough Heat and Power 342 Edinburgh Avenue Berkshire, SL1 4TU with 37 Pollutants and 28 over reporting threshold.

13. [https://consult.defra.gov.uk/airquality/industrial\\_emissions\\_bat/supporting\\_documents/bestavailabletechniquesconsultationdocument.pdf](https://consult.defra.gov.uk/airquality/industrial_emissions_bat/supporting_documents/bestavailabletechniquesconsultationdocument.pdf)

14. <https://www.bbc.com/news/amp/science-environment-56013240>

15. Lord Goldsmith answered 21.10.20

<https://questions-statements.parliament.uk/written-questions/detail/2020-10-07/HL8855>

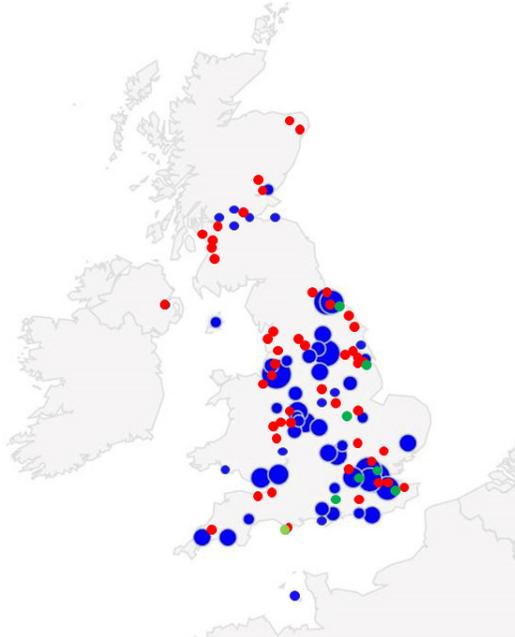
16. [http://www.gloucestershire-against-incinerators.org.uk/resources/V+HOWARD+Proof+of+Evidence+v2\\$281\\$29-2.pdf](http://www.gloucestershire-against-incinerators.org.uk/resources/V+HOWARD+Proof+of+Evidence+v2$281$29-2.pdf)

3.3.3: The level of organo-brominated wastes in the waste stream is increasing. This is because of the widespread use of brominated flame retardants over the past decades, for example in furniture, carpet sand electronics. These will lead increasingly to the formation of polybrominated and chloro-brominated dioxins, of which there are over 5,000 possible congeners. These are not routinely measured or modelled as part of the pollutant emissions from waste incinerators (Howard (2009) Ringaskiddy, Section 4.9). Therefore any estimates offered of dioxin emissions from the proposed plant are underestimates. This will also apply to any discussions about the current body burdens of dioxins in the local population.

17. <https://www.npr.org/sections/health-shots/2020/05/19/854760999/traffic-is-way-down-due-to-lockdowns-but-air-pollution-not-so-much>

18. there are many more EfW incinerators in France and beyond  
map compiled from <https://www.cewep.eu/interactive-map/>

- 59 = Operating EfW Incineration
- 34 = 18 Under Construction + 16 not progressed approvals
- 8 = Planning Applications for EfW Incineration



and <https://ukwin.org.uk/incinerators/>

19. <https://www.mdpi.com/2073-4433/10/4/183> work reports the results concerning five biomonitoring surveys (BSs) performed in the proximity of a waste incinerator (WI) over a 16-year period.

20. <https://onlinelibrary.wiley.com/doi/full/10.1111/1753-6405.12939>

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21. [https://www.london.gov.uk/sites/default/files/gla\\_efw\\_study\\_final\\_may2020.pdf](https://www.london.gov.uk/sites/default/files/gla_efw_study_final_may2020.pdf)

22. <https://iopscience.iop.org/article/10.1088/1748-9326/aa8051/meta>

Olivia V Sanderfoot and Tracey Holloway 2017 *Environ. Res. Lett.* 12 083002 Air pollution impacts on avian species via inhalation exposure and associated outcomes.