CBWIN Formal Response to Planning application S/3372/17/CW for Energy to Waste Facility, Waterbeach
5th February 2018

Cambridge Without Incineration (CBWIN) is a local campaign group of 1230 (and rising) people who are concerned about the waste incinerator planning application submitted by Amey Cespa for the Cambridge area. Following in-depth reviews of data surrounding waste incineration and of the applicant's data CBWIN recommend refusal for the incinerator (Energy from Waste) plan. The benefits offered by the proposal do not outweigh the significant and ongoing harm its presence in the local landscape and operational impacts would cause to the immediate and wider locality. The applicant should be held to account for abusing the planning system by undermining the community's rights to proper public consultation, they should be made to provide the public with information in a proper timely manner to allow them to be informed and engaged and able to have a fair voice on the proposal. Local people deserve better than this, they deserve an appropriate amount of time and proper display of information to understand the proposal and ask detailed questions, especially given the complex and major nature of the proposal and their comments deserve reasonable and appropriate time frames to be taken into consideration by councils (parish and district) before they decide their response to the proposal. The lack of a proper public consultation process and a district council entering their decision within 24hrs of that period closing is suggestive of the fiddling of the community's interests for a pre-determined outcome.

Community involvement

The level of engagement that has been carried out by Amey Cespa given such major and complex proposal has been appalling for such a significant and contentious application.
'Consultation' by Stealth is not acceptable. Most people in surrounding areas still no nothing about it. Parishes and their respected councils within the emissions fall out zone have not been consulted on (namely Horningsea, Histon and Impington, Milton, Bottisham, Lode, Wicken, and Stretham and Wilburton are stated as consultees but have not been contacted by the applicant). Our communities are being denied the opportunity to effectively participate in a meaningful consultation. The public engagement carried out is wholly inadequate, unreasonable, is inappropriately timed and fails to address the requirements of the Localism Act 2011 and the provisions of the NPPF particularly Para 188.

The applicant claims to have carried out 2 public information meetings in September 2017 on the plant site, but the evidence they have submitted with their application does not show that communication of these meetings was poorly timed (7 days' notice) and poorly advertised (through in commentary in a journal article in Cambridge News and mail drops to a select handful of roads in Waterbeach only and relying on Waterbeach PC website which receives low traffic to post a note).

Most people need longer notice to organise their commitments and an approach that included mailshotting every household in all surrounding villages within the predicted emission fall-out zone should have been the minimum start point to satisfy reasonable public consultation. Deciding to start the application process during the Christmas Holiday period looks like a deliberate ploy for circumventing proper public scrutiny. It took 3 weeks before Cambridgeshire County Council extended the consultation period by 2 weeks. Amey have not provided the local communities with just and fair public engagement. Their community liaison officers have not engaged with the wider public as their role suggests they should have done. A survey of 27 people in September 2017, does not reflect the broad views of a village of 7000 plus other villages who were not aware of the proposal until the beginning of 2018.

A hastily arranged public meeting on 29th Jan was called for by concerned residents of Waterbeach and organised by district councillors accordingly with presence from the applicant, PH England and County Council to answer questions. The public meeting was too little and too late to be a genuine consultation but was essentially and explanation. Feedback from the meeting showed that many residents found the presentations and answers from the public meeting unhelpful and confusing.

The applicant rejected requests on the night to provide a proper exhibition and to pause their application to conduct a fair and reasonable public consultation that has not been delivered. Subsequent to the public meeting, the applicant offered a public site visit with 3 days' notice and 2 days before consultation ends, with (due to health and safety reasons) a maximum of 60 visitors to tour the existing site (not a waste from energy site).

Given these proposals are literally thousands of pages long, are of a technical nature and of the utmost importance to the future of Waterbeach and surrounding areas, we regard it as completely unacceptable and, frankly, undemocratic for local residents who are not experts in this field to have so short a time to review and comment upon this information. The inadequacy of this period (if not extended) to constitute in itself a valid reason for approval to be withheld. We might almost suspect that the developer is deliberately trying to obfuscate the facts and stifle the debate by swamping the public with so much technical data. Surely, proposals of this size and importance should be required to provide a document suitable for a member of the public to review.

Local people deserve better than this, they deserve an appropriate amount of time and proper display of information to understand the proposal and ask detailed questions, especially given the complex and major nature of the proposal. They deserve public exhibition opportunities.

There has been no time provided by SCDC to take account of public comments before taking their decision on the proposal. SCDC are meeting to decide 24hrs after public consultation closes. This is again not in keeping with Localism Act 2011 and the provisions of the NPPF particularly Para 188. In order for the communities to have a reasonable and fair role in the public consultation, the comments that they have taken the time and effort to submit should be given sufficient time to be considered as part of the overall district council decision. A 24hr window for this is suggestive of fiddling community's interests for a pre-determined outcome.

<u>Questions we submit and request written response on please</u>. Please provide actual factual answers not just signposting to complex documents within the applicant's application. This is so that group members can easily understand the answers to the questions and forma base for informed decisions.

1. Why was information about public information meetings and parish council meetings not provided to every household in villages surrounding the site?
2. Will County Council reconsider the public consultation deadline as we understand they are empowered to do, to give the citizens of Waterbeach and Cambridge at least a fair opportunity to have their say.
3. Is this amount of planning material usual, necessary or justified? We realise that this is a large and technical development but is it really appropriate for these documents to be the only source material that a member of the public has to go on, other than a completely inadequate initial summary and lack of exhibition? Will county council ask the developer to provide documents and exhibition space suitable for members of the public to view and understand.

Pollution and Robustness of Emissions Data and Monitoring

The global, EU, EC, National and local government objective is to 'reduce pollution and improve air quality', not increase pollution and reduce air quality, as is defined by EC Air Quality Directive Framework 2008. SCDC and Cambridge County Council are responsible for improving air quality. This proposal directly interferes with that objective. Local changes in air quality have far reaching effects for the rest of the world, let alone county and country. Some leading authority statements which we would encourage you to be mindful of:

DEFRA

"Department for Environment, Food and Rural Affairs (Defra) Eastern region is among 38 of the UK's 43 air quality zones, which are currently breaching EU limits. Cambridge is experiencing a commercial and housing boom which is adding further to air quality issues due to rapidly increasing construction, vehicle, household and commercial emissions".

DEFRA Energy from waste A guide to the debate February 2014 (revised edition)
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/284612/pb14130-energy-waste-201402.pdf

Friends of the Earth

"Friends of the Earth opposes incineration because it:

- Causes climate change, while generating energy inefficiently.
- Destroys valuable materials that could be recycled into new products. Recycling saves far more energy than is created by burning waste as it avoids having to make products from virgin materials.
- Doesn't provide an incentive for reducing waste, as incinerators need a minimum amount of rubbish to operate efficiently. Contracts for incinerators are long, requiring waste for 20 years.

To deal with our waste sustainably, we need to focus on prevention, reuse, recycling and the generation of 100% renewable energy via anaerobic digestion…….Eventually we want to achieve zero waste. For details of our zero waste vision. ……Zero waste will maximise our resource efficiency and minimise our climate impacts.

Councils can help to achieve this by:

- collecting recycling separately at the curbside
- collecting food waste separately, for composting or anaerobic digestion
- providing many recycling-focused household waste recycling centres
- reusing furniture and appliances from bulky collection schemes.
- collect and manage e-waste separately

The residual waste left over can then be processed using Material Recycling Facility (MRF) technology to:

- remove the bulk of the biological activity (in case the output is landfilled)
- release further recyclables, including plastics
- create a low-grade compost".

Friends of The Earth Incineration And Health Report 2002
https://www.foe.co.uk/sites/default/files/downloads/incineration_health_issues.pdf
https://www.foe.co.uk/community/campaigns/healthy_planet/incineration_index

Cambridgeshire Fenland Council Statement On Air Pollution

"In Cambridgeshire, the major sources of air pollution are vehicle emissions and industrial processes. In Fenland, the Environment Agency regulates emissions from the most potentially polluting processes. The Council's role is to prevent pollution from other sources, including homes. They currently monitor the levels of Nitrogen Dioxide, Smoke and Sulphur Dioxide in Fenland. European

legislation says the following pollutants must also be monitored: Fine Particulate matter (PM10 Particulates [6kb]), Sulphur Dioxide (SO2), Oxides of Nitrogen (NOx), Carbon Monoxide (CO), Benzene, 1,3-Butadiene and Lead".
Fenland District Council
http://www.fenland.gov.uk/airpollution

EC Statements On Air Pollution
The UK still breaches legal air pollution limits. According to EC reports on tightening levels state that reducing air pollution produces reductions in ecosystem damage due to acidification and that the impacts of air and water emissions on the coast and sea would be reduced.
"Poor air quality adversely affects human health, the environment, and the climate. Both short-term and long-term exposure to air pollution harms health. This harm occurs either via direct exposure to air pollutants, or indirectly via pollutants transported through the air, deposited, and then accumulated in the food chain. Air pollution also harms ecosystems by contributing to eutrophication and acidification of water and soil, leading to loss of flora and fauna. Air pollution can also harm agricultural crops and forests causing yield losses. Furthermore, certain air pollutants affect the climate system by triggering positive or negative changes in global radiative forcing".
European Environment Agency Air Pollution
https://www.eea.europa.eu/soer-2015/europe/air

https://nam04.safelinks.protection.outlook.com/?url=http%3A%2F%2Fec.europa.eu%2Fenvironment%2Farchives%2Fair%2Fstationary%2Fwid%2Flegislation.htm&data=02%7C01%7C%7C1ef71572992c40dca4d408d562b27e83%7C84df9e7fe9f640afb435aaaaaaaaaaaa%7C1%7C0%7C636523441160810 48&sdata=TFsmucB0aK1xpFs96PI0FsqNg2XDlZ%2Bbay3w3lrYkUQ%3D&reserved=0

GREEN PEACE
"No country should contemplate a commercial hazardous waste incinerator without a national programme of cleaner production. Policy measures to achieve this have been well documented by UN agencies and cleaner production initiatives have achieved significant results.

Municipal are the largest dioxin sources in industrial countries. PVC plastic is probably the most significant source of dioxin generating chlorine in these incinerators. Incinerators that burn hazardous waste from industry are also point sources of dioxin.

Over the past few years, many countries have updated their old incinerators or built new ones. In doing so, they have taken advantage of improved technologies for air pollution control. This has resulted in a substantial reduction in toxic emissions. Although this is an improvement, toxic waste production is still a serious global issue. In fact, the problem has now shifted, and more dioxins and other toxic substances are appearing in the ashes, therefore creating new disposal and pollution problems.

The myth that burning makes waste disappear has led to incineration emerging as a widely used method for disposing many kinds of waste, including hazardous wastes. Rather than making waste disappear, incinerators create more toxic waste that pose a significant threat to public health and the environment.

Incineration is often touted as an alternative to land filling. However, what many people do not realise is that incinerator ashes are contaminated with heavy metals, unburned chemicals and new chemicals formed during the burning process. These ashes are then buried in landfill or dumped in the environment.

Incineration is a method where industry can break down its bulk waste and disperse it into the environment through air, water and ash emissions. It is a convenient way for industry to mask today's waste problems and pass them onto future generations. Once emitted into the environment, dioxins can travel vast distances via air and ocean currents, which makes them a global contaminant. Dioxins are distributed into the environment as part of incinerator stack gases, bottom ash, fly ash and in the effluent of pollution control devices.

The main route of exposure to dioxins in humans is through food intake. Once in the body they are only excreted very slowly and build up in fatty tissues. Studies suggest that people in the US and some European countries now carry dioxins and furans at or near those levels suspected of causing health effects in humans. Dioxins released from an incinerator can be readily consumed by grazing animals and fish.

An average incinerator burning 32,000 tonnes of waste per year will receive over 1500 trucks of waste. This amounts to over 28 trucks per week. Amey Cespa site (250,000 tonnes/yr.) will receive therefore 11,700 trucks per year amounting to 225 trucks per week on top of trucks supplying the composting and recycling units.

Incinerators that burn hazardous waste will never solve toxic waste problems. A clean production approach, which substitutes safe materials and processes to stop the generation of hazardous waste in the first place, is needed.
Strategies to prevent generating incinerable waste streams currently exist by:
· Toxic use reduction planning within industries;
· Waste reduction and alternative forms of sterilisation in hospitals; and
· Efficient reduction, recycling and compost actions at community level for household waste".
Green Peace: Alternatives To Incineration
www.greenpeace.org/international/en/campaigns/detox/incineration/alternatives-to-incineration/

CBWIN has significant concerns in relation to the credibility and robustness of the data underpinning the application submission, and the plans for monitoring emissions and data when the plant is in operation. This is evidenced by the fact that CCC commissioned an independent noise assessment review that concluded the application "includes the use of so many assumptions and lack of firm commitments to specific mitigation measures (those assessed are portrayed as options with the use of alternatives mooted) inevitably undermines confidence in the predicted outcomes". The applicant does not think there is causing to take seriously the accumulative effect of contaminants coming from the proposed waste facility over the lifetime of the plant, some 25 years of operation. Data submitted by the applicant does not calculate cumulative effects over the lifetime of the plant on environment, biota and people living close to it and within emission fall-out zones. The cumulative effects will be felt by them more greatly than any other affected stakeholder.

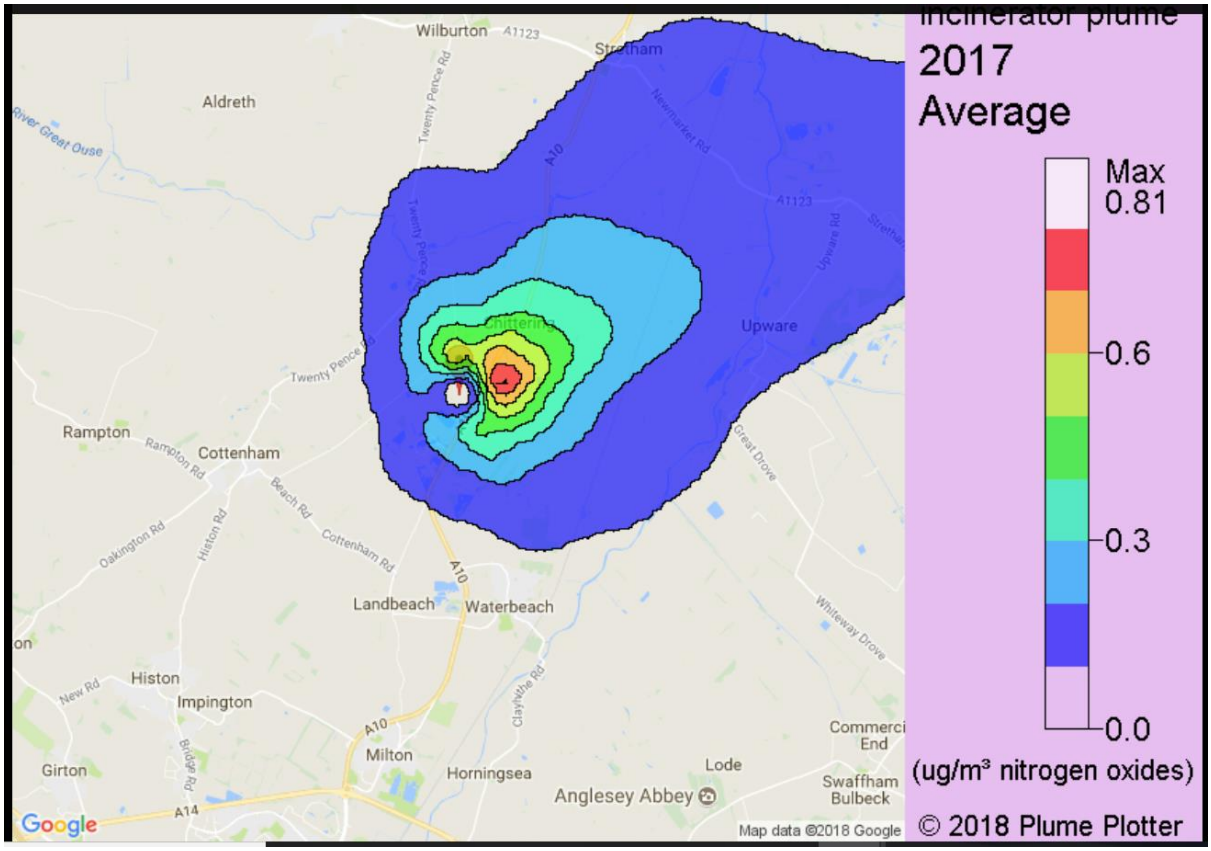
Many studies looking at environmental and health effects of waste incineration over the last 20 years have concluded that monitoring of incinerators has been unsatisfactory in the lack of rigor, the infrequency of monitoring, the small number of compounds measured, the levels deemed acceptable, and the absence of biological monitoring. Approval of new installations has depended on modelling data, supposed to be scientific measures of safety, even though the method used has no more than a 30% accuracy of predicting pollutants levels correctly and ignores the important problems of secondary particulates and chemical interactions.

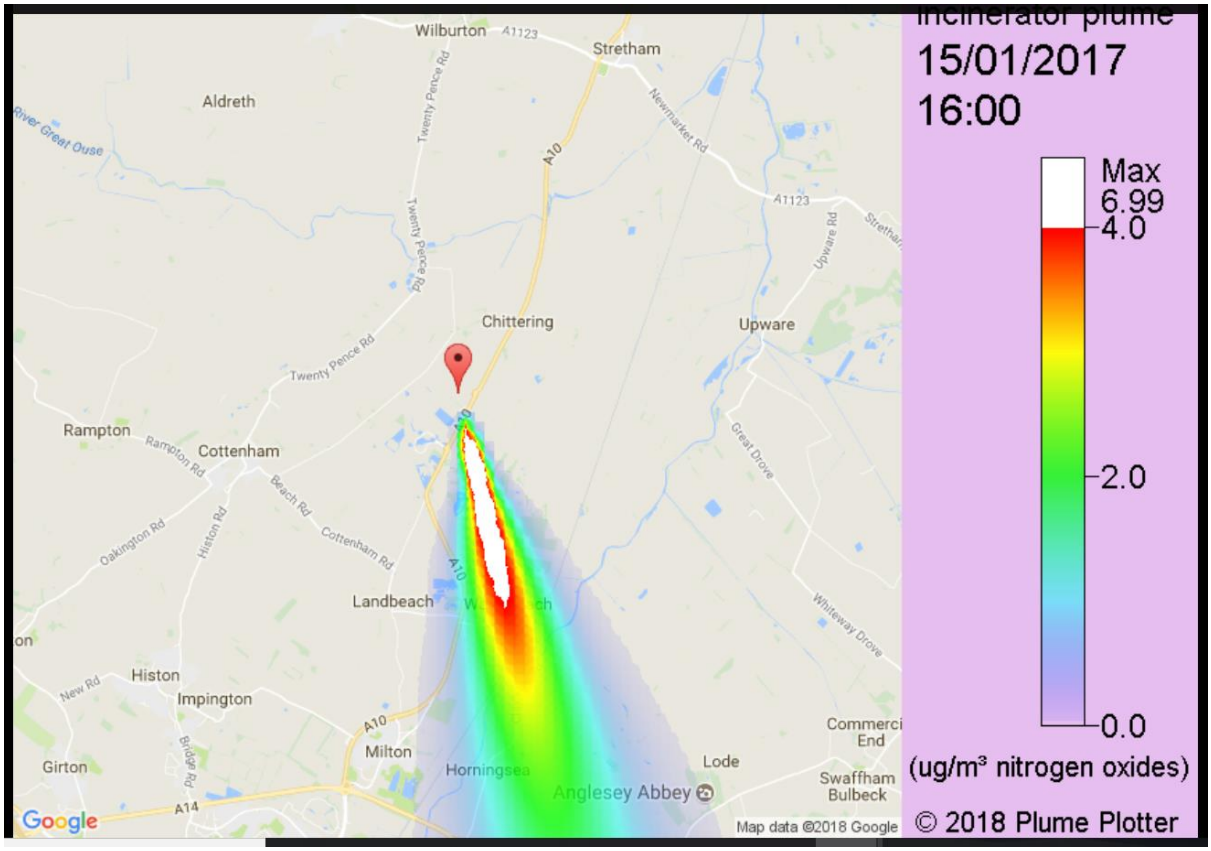
Fugitive emissions: Some waste is accidentally released when:
· Chemicals are removed from storage containers at the incinerator site;
· It is moved to transportation vehicles; and

· It is shipped to and moved about within the incineration facility.
The proposed site is expected to receive 11,700 trucks/yr. amounting to 218 trucks per week with associated fugitive emissions and congestion effects, on top of trucks already supplying the existing recycling, and composting site.
Green Peace: Alternatives To Incineration
www.greenpeace.org/international/en/campaigns/detox/incineration/alternatives-to-incineration/

The plant is only required to filter out and monitor PM10s (particles that are 10 microns in size). This is all that they are alluding to when they state they will filter out all these toxins. Unfortunately they do not filter out or monitor particles that are smaller, the PM2.5s. These are the most toxic! They are so small that they can be absorbed straight through cell membranes, and include mercury, arsenic, cadmium and dioxins. There is only a requirement for such things to be measured for 8 hours twice a year, and this is done by the company themselves – there is no independent testing.

The plume from the 80 meter high chimney has 6dispersal of a 16 mile radius in the Cambridge without Incineration website (www.cbwin.co.uk), there is a plume generated animation showing the average fallout zone over the period of a year given typical wind direction. Wicken Fen unfortunately falls in the most concentrated area given the dominant south westerly winds. This is concerning not just for the wildlife and environment, but also your workforce.





Shows projected reach of emissions fall-out (nitrogen oxides) at ground level. NO is harmful to human health and the environment.
Calculated emission fall-out from proposed Cambridge waste incinerator based on last year's weather data for a specific nominal day
Wind directions and speeds change on a regular basis and seasonally.
Emissions model: AERMOD (Gaussian plume) assuming usual continuous (8760 hours per year) operation at max long-term limits.
Weather data source: Cambridge airport, RAF Mildenhall, and upper air data from Nottingham.
All incinerator and building details from the applicant's air quality assessment submitted with planning application.
Terrain data from OS.

Animation showing expected fall out over 1 typical year:
https://nam03.safelinks.protection.outlook.com/?url=https%3A%2F%2Fyoutu.be%2FS2z0yn5Jb-o&data=02%7C01%7C%7Cced0625dc98c473f15e008d56590651a%7C84df9e7fe9f640afb435aaaaaaaaaaaa%7C1%7C0%7C636526593197379833&sdata=m%2B8Ub2knwxp1rNyoIy5cD2RmctQbHa6p4xgBO0GZW1Q%3D&reserved=0

Finally there is a duty of care to preserve the unique soils of the area and ensure they are not degraded. The area surrounding the proposed plant is the boundary between the clay uplands and the fen. Wicken Fen, Angelsey Abbey and the Cam Washes are in close proximity to the site. Both areas support many rare species and migrating birds. The Cam Washes and National Trust at Wicken Fen and Angelesey Abbey work in tandem to support the flora and fauna on the connected riverways and surrounding fenland. Increases in pollution and impact on air quality will harm wildlife species either directly or indirectly (e.g. through water contamination or soil erosion etc). The proposal does not in any way promote the preservation, restoration and re-creation of local priority habitats, ecological networks, and the protection and recovery of priority species populations such as those protected and promoted locally by Natural England, National Trust and the Wildlife Trust on riverways and fenland. It therefore directly contravenes NPPF.

The Soil Association (who also accredit local Cambridgeshire organic farms who have not been consulted on the application by the applicant) have commented to CBWIN "On waste incinerators, we are clear that the priority is investment in renewable energy sources and burning municipal waste, particularly that which can be re-used or re-cycled, is not a sustainable option. The Soil

Association supports the European Waste Hierarchy of the EU Waste Framework Directive which states that the order of priority should be to first prevent and reduce and then to reuse, recycle and recover – before burning waste. We believe that incinerators are a disincentive for these higher priorities. You can read more about how this informs UK legislation in the Environmental Permitting Regulations here.

Furthermore, burning wastes at high temperatures results in the release of heavy metals, acid gases, toxic particulates and pollutants through atmospheric emissions and ash production. Although improvements in cleaning technologies have meant reductions in pollution rates, the Soil Association is concerned about remaining levels of pollution, particularly of reports that regulated levels may be breached due to temperature fluctuations and at start-up and shut-down. This could result in the contamination of soils, water and food".
Packer, 2018, Soil Association

Please find enclosed some support documents. Firstly Water birds as bioindicators of wetland heavy metal pollution. Key for nearby Wicken Fen particularly as birds are susceptible to mercury poisoning.
https://www.researchgate.net/publication/271617352_Waterbirds_as_bioindicators_of_wetland_heavy_metal_pollution

Heavy Metal Deposition Mapping: Concentrations and Deposition of Heavy Metals in Rural Areas of the UK
https://uk-air.defra.gov.uk/assets/documents/reports/cat13/1511251439_AQ0716_Heavy_Metals_Final_Report2012-15NOV12.pdf

Pg 65 under mercury:
"The main sources of mercury in the UK are emissions from generation of electricity and heat production, waste incineration, the manufacture of chlorine in mercury cells and the combustion of coal and other fuels" . Then other toxins in the table, some are cited to be caused by, "industrial combustion processes including energy production"

Amey Cespa also has a history of breaching EA monitoring/emissions regulations and its permit and has been fined and made to pay compensation for causing adverse effects on human health.

The importance of 'the right information' to accompany an application is stressed in the NPPF Para 192 particularly in respect to EIA development.

Public Health England confirmed that their statement concludes that there is risk but that the risk is unlikely to be significant. The PHE officer confirmed afterwards that the Small Area Health Assessment Unit (function of PHE) is actually conducting ongoing research into health effects of incinerators on infants and new born babies, which will not publish until the end of the year. Increasing the volume of PM2.5 in the atmosphere is directly linked to negative health outcomes as well reported in the landmark global air quality study 6-Cities. EU Directives require councils to reduce air pollution and improve air quality not increase pollution and reduce air quality. The UK is currently breaching EU Directives on air quality. This local decision has a national and global effect.
Dockery *et al,* 1993 Association between Air Pollution and Mortality in Six U.S. Cities
www.nejm.org/doi/full/10.1056/NEJM199312093292401
SAHSU Incinerator Study http://www.sahsu.org/content/incinerators-study

Amey Cespa were unable to provide clear or confident answers backed with evidence about the expected emissions of the incinerator. Cumulative pollution effects over the lifetime of the plant are unknown. Oxides of Nitrogen are measured continually but other pollutants including (Arsenic, Cadmium, Mercury, Chromium, Dioxin) are only checked for up to 8 hours twice per year. The company's own contractor doing the emission checking, then submitting their test results to the Environment Agency is not a reliable way to regulate the safety of emissions. The Environment Agency accepts 'Modern Incinerators' can produce Dioxins many time over the permitted limit for months at a time, while operating as "Normal". It became obvious during the meeting that the environment agency didn't have much knowledge of the application details and provided no confidence that emissions would be externally monitored with any reliability. Amey seemed to pass the buck on committing to key information about emissions and it is negligent of them to hide from such information or indeed hide it in application documents that are technically challenging for the general public to understand.

Pollution – effects on health

The NPPF establishes that "health" impacts are a material consideration in planning decisions. Para 120: "To prevent unacceptable risks from pollution and land instability, planning policies and decisions should ensure that new development is appropriate for its location. The effects (including cumulative effects) of pollution on health, the natural environment or general amenity, and the effects from pollution, should be considered. Where a site is affected by contamination or land stability issues, responsibility for securing a safe development rests with the developer and/or landowner".

On this basis, the Environmental Statement does not include any assessment of the impact of the development on health. The buck is passed to the applicant whose HIA is lacking detail and optimistic in its assumptions and does not quantify the true risks to health of the acute and cumulative (for lifetime of the plant) dangerous particle (<PM2.5) emissions. They rely upon the current Public Health England statement that waste incinerators pose an insignificant risk to health, but they fail to include PHE commentary in the same statement that 'it is not possible to rule out adverse health effects', and that there is ongoing international and national research into the health effects. The potential health impacts of incinerators are widespread. At the public meeting the buck was passed back to the EA and onto the council and back to applicant and round again several times on the matter of whose responsibility it is to determine health effects of waste incineration pollution for this proposal.

We believe it paramount that health effects are calculated in a robust independently produced HIA. SCDC and Cambridge County Council and the applicant must provide assurances that if this proposal is approved there are no risks to human health. To approve an application where risks are not fully evaluated or dismissed as insignificant when it is known that major leading authorities call for and are conducting ongoing research, is negligence.

The World Health Organisation (WHO) (Waste and Human Health, 2015):

"The available scientific evidence on the waste-related health effects is not conclusive, but suggests the possible occurrence of serious adverse effects, including mortality, cancer, respiratory complications, reproductive health, and milder effects affecting well-being. This evidence, combined with the growing importance of sustainability considerations, should allow Member States of the WHO Regional Office for Europe to formulate health-friendly policy orientations…….The health effects of waste management and disposal activities are only partly understood, and updated evidence would be needed for better informing the policy debate, especially in consideration of the fast-evolving technology. Multisite cohort studies, for example, would refine current risk estimates

and would allow the consideration of health outcomes of increasing interest, such as neurological disorders".
Waste and Human Health, The WHO, 2015.
http://www.euro.who.int/__data/assets/pdf_file/0003/317226/Waste-human-health-Evidence-needs-mtg-report.pdf?ua=1

Public Health England
"While it is not possible to rule out adverse health effects from modern, well-regulated municipal waste incinerators with complete certainty....[1]" That is the certainty of their evidence and confidence. The evidence is under review[1, 2]- see SAHSU below.
1,Public Health England (PHE) position statement on the impact on health of emissions to air from municipal waste incinerators.
https://www.gov.uk/government/publications/municipal-waste-incinerator-emissions-to-air-impact-on-health
2.Waste incineration—how big is the health risk? A quantitative method to allow comparison with other health risks. Journal of public health, 2006
https://academic.oup.com/jpubhealth/article/28/3/261/1515980/Waste-incinerationhow-big-is-the-health-risk-A

Small Area Health Statistic Unit
Commissioned by PHE to conduct research into health risks of UK waste incinerators: the results of which have NOT yet been published. Study focus is on birth rates and infant abnormalities in relation to fine particle pollution (study has been heavily criticised because it only looks at fine particles sized >PM10, whereas PM2.5 pollution is particularly harmful since it can penetrate human bronchi and lungs owing to the small size. Hence, long-term exposure to air pollution <PM2.5 is known to increase morbidity and mortality[3,4]). The Environment Agency does not request that particles <PM10 are monitored or measured ever.

"We are now finalising three health papers and plan to submit these to peer-reviewed journals early this year. The publication process can take several months and sometimes up to a year depending on journal and comments in the peer-review process"[5] (Dr) Anna Hansell, Assistant Director, Small Area Health Statistics Unit (SAHSU), Reader in Environmental Epidemiology, MRC-PHE Centre for Environment and Health, Hon Consultant, Public Health and Primary Care, Imperial College Healthcare NHS Trust
3. Harvard USA Six-Cities 20year Ongoing Air Pollution Landmark Study, 2014
https://www.hsph.harvard.edu/news/features/six-cities-air-pollution-study-turns-20/
4. Dockery *et al,* 1993 Association between Air Pollution and Mortality in Six U.S. Cities
www.nejm.org/doi/full/10.1056/NEJM199312093292401
5. SAHSU Incinerator Study http://www.sahsu.org/content/incinerators-study

"Traffic pollution puts unborn babies' health at risk", warn experts from Small Area Health Statistic Unit (a function of PHE)
http://www.sahsu.org/news/traffic-pollution-putting-unborn-babies'-health-risk-warn-experts

LANCET Commission on pollution and health
Pollution is costly. Pollution-related diseases cause productivity losses that reduce gross domestic product (GDP) in low-income to middle-income countries by up to 2% per year. Pollution-related disease also results in health-care costs that are responsible for 1·7% of annual health spending in high-income countries and for up to 7% of health spending in middle-income countries that are heavily polluted and rapidly developing. Welfare losses due to pollution are estimated to amount to

US$4·6 trillion per year: 6·2% of global economic output. The costs attributed to pollution-related disease will probably increase as additional associations between pollution and disease are identified.
This Commission encourages all efforts to bring the issue of pollution to public attention and supports all solutions to reduce the enormous health burden of this major, yet often hidden, global threat."
LANCET Commission on pollution and health 2017
http://www.thelancet.com/commissions/pollution-and-health

Green Peace
The lack of evidence of health effects from modern incinerators should not be assumed to indicate an actual lack of health effects; that secondary effects from food chain contamination or handling/disposal of ash (which contains dioxins and other toxic substances) are not considered .
Green Peace: Alternatives To Incineration
www.greenpeace.org/international/en/campaigns/detox/incineration/alternatives-to-incineration/

It is noted that SCDC is pursuing development of up to 18,000 homes north of Waterbeach through the emerging local plan and the closest dwellings could be only approx. 1km from the proposed site and as such will potentially be the most vulnerable to emissions. The relationship of a significant new housing development planned so close to a waste incineration site is a material consideration that need to be balanced in the wider health and amenity interests. It is not justifiable to overlook the many material considerations of this proposal to justify a solution to the waste produced by such a new development.
The applicant and EA acknowledge that Oxides of Nitrogen are measured continually but other pollutants including (Arsenic, Cadmium, Mercury, Chromium, Dioxin) are only checked for up to 8 hours twice per year. It would be the applicant's own contractor doing the emission checking, then submitting their test results to the Environment Agency. The applicant has a history of permit breaches. The Environment Agency accepts 'Modern Incinerators' can produce Dioxins many time over the permitted limit for months at a time, while operating as "Normal".
Monitoring conditions would have to be set at the highest possible level for all the different elements and not only the 10 in the industrial strategy.[see paras 206-7 of the Defra publication Energy from Waste – a Guide to the debate):
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/284612/pb14130energy-waste-201402.pdf
The same high limits should also apply to any additional elements that may be monitoring in the future.

Questions we submit and request written response on please. Please provide actual factual answers not just signposting to complex documents within the applicant's application. This is so that group members can easily understand the answers to the questions and forma base for informed decisions.

1. Will the county council order an independently produced Health Impact Statement relating to the proposed increase height the stack, variation of conditions and predicted emissions and fall-out and cumulative effects over the lifetime of the plant?
2. Will the county council and SCDC provide written reassurance that the proposal if approved poses no risk of harm to human health and risk of harm to biota and the food chain (via pollution to water and soil)?

3. Does the applicant or County Council intend to include within contracts if the proposal is approved, insurance policies covering them against emissions harming human health and food chain?
4. Can the applicant and EA describe exactly how emissions will be monitored? What emissions will be monitored? Whether Arsenic, Cadmium, Mercury, Chromium, Dioxins will be monitored? Whether PM2.5 particles will be monitored? Whether emissions from lorry supplying the plant and moving residual waste are included in monitoring? How often will emissions be monitored and by who?
5. How does this incinerator help Cambridge County Council contribute to reducing air pollution? (Conditions of DEFRA National Air Quality Objectives)?
6. Where is the developer planning to send or bury the toxic residual waste and bottom ash?
7. Why does the chimney stack need to be 80mt tall, is it because of high emission levels?
8. Please could you advise how many times a year will monitoring of the ditches in the vicinity of the site take place and who will monitor?
9. What is the furthest receptor from the proposed incinerator that the applicant will monitor?
10. How many times a year will the furthest most receptor be monitored?
11. What protocols will the applicant undertake to control any breaches at the furthest most point to mitigate pollution into The Old West river, River Cam and River Ouse.
12. Who will be responsible for monitoring the receptors to ensure that no breaches from the plant have occurred?
13. What protocols have been identified by the applicant to prevent any breaches leading to pollution of the watercourses?
14. Have different protocols been adopted by the applicant if a breach occurs depending upon high/low water levels in the ditches? http://planning.cambridgeshire.gov.uk/swift/MediaTemp/43806-1950968580.pdf
15. The production of Energy From Waste by incineration requires a constant supply of water. How many litres of water per annum will be required?
16. How many litres of grey water per annum will be available to ensure the EFW is not compromised?
17. If the supply of grey water becomes unavailable where will additional water be sourced from to ensure the EFW is not compromised?
18. If water is sourced from the natural water content of the area how will the applicant manage the effects that may have on water levels in the ditches that drain into the Old West river, River Cam and River Ouse.
19. How will the existing balance of the land be maintained should water be sourced in this way?
20. How will the applicant guarantee the constant requirement for water for EFW?
21. We are concerned that there are no independent devices for measuring air pollution within the area of the proposed Waste Incinerator and Waterbeach New Town area. Can planners comment on this?
22. Under Section 11 of the National Planning Policy Framework (NPPF), it states soils should be preserved and are a material consideration. The area surrounding the proposed waste incinerator site is an important area which is the boundary between the clay uplands and the fen at Waterbeach, and as such, we understand the Planning Department should be trying to preserve and look after these soils when making decisions. Can the Planning Department comment if there enough research to adequately know what harm could be done to this soil? Does the Planning

Department know how much of the following will accumulate in the soil over the lifetime of the plant: mercury, arsenic, cadmium, dioxins, in PM2.5s not just PM10s?

Traffic

The applicant has underestimated the effects on traffic and associated noise and pollution in its proposal. The increased traffic along the A10 from large lorries servicing the plant would adversely impact on the flow of traffic along the A10 (which is severely congested throughout long periods of the day at this point). In view of this, and the recent Ely to Cambridge Transport Study 2018 which concludes that the A10 has major problems, CBWIN request an independent review of the data on creation of traffic to be assured that the figures are valid. At the public meeting on 29th Jan, Amey Cespa were tackled on their ambiguous figures about the increase in HGV lorries required to feed the plant with waste coming from as far as the Isle of Wight once up and running. There will also be a need to take the toxic ash away, with more lorry journeys. This, coupled with the expected traffic increase from the proposed Waterbeach New Town, will significantly increase air pollution, noise and congestion in the area. As such, there are plans to dual the A10 from the A14 to Ely. Again impacting on the rural area surrounding the fen.

An average incinerator burning 32,000 tonnes of waste per year will receive over 1500 trucks of waste. This amounts to over 28 trucks per week. Amey Cespa site (250,000 tonnes/yr.) will receive therefore 11,700 trucks per year amounting to 225 trucks per week on top of trucks supplying the composting and recycling units. There is no mention within the application that waste from Cambridge will be taken first. The applicant already receives waste from 5 counties and the Isle od Wight. A contract would need to stipulate the processing of county waste ahead of third party councils and commercial contracts.
Green Peace: Alternatives To Incineration
www.greenpeace.org/international/en/campaigns/detox/incineration/alternatives-to-incineration/

"Traffic pollution puts unborn babies' health at risk", warn experts from Small Area Health Statistic Unit (a function of PHE)
http://www.sahsu.org/news/traffic-pollution-putting-unborn-babies'-health-risk-warn-experts

Questions we submit and request written response on please. Please provide actual factual answers not just signposting to complex documents within the applicant's application. This is so that group members can easily understand the answers to the questions and forma base for informed decisions.

1. Will County Council provide an independent review of the data on creation of traffic to be assured that the figures are valid?
2. How many extra HGV lorries will be going to and from the site - taking rubbish to the site and returning to their origin, taking different forms of ash away from the site and returning to origin, etc? Have all these journeys been accounted for when assessing the air pollution of the area?
3. Please provide details of the overall increase in air pollution to the area accounting for the waste incinerator emissions and emissions from all the extra HGV journeys.
4. As there was ambiguity at the public meeting on 29 January, with regards the exact number of HGVs coming and going, please can Planning confirm we receive accurate numbers from Amey Cespa?
5. Once accurate numbers of all HGV movements have been stated, and have been added to projections of the traffic generated by the proposed Waterbeach New Town plan, can the

Planning Department state whether they would class the traffic generation as severe and likely to be a material consideration? Can the Planning Department state what the local criteria is for defining the increase in transport as severe?

Visual Impact

Landbeach, Waterbeach, Horningsea parish council's and Historic England for the ancient Denny Abbey have voted that the current design was unacceptable in visual impact terms. The scale and overall bulk of the proposed building is at odd with the surrounding landscape and built development. The proposal would be significantly and materially harmful to the surrounding flat Fen landscape due to its scale, design and height as is a requirement of Policy CS2 of the County's Minerals and waste Core Strategy. The applicant acknowledges that there will be significant local impact on landscape character. The proposal requires better visual impact and landscape mitigation measures than those currently proposed.

The site proposed is very close proximity to the proposed development of 11,000 – 18,000 dwellings which would be directly beneath emissions fall out.

Location results in total loss of an area of valuable prime agricultural greenfield.
Disturbance from 24 operation effects on light, noise and traffic from construction and operation in an urban village area will be significant and cannot be mitigated by measures proposed by the applicant.

The planned chimney stack height is entirely out of keeping with surrounding local village architecture and the Fenland landscape which contravenes NPPF guidelines. Chimney stack height will be 46ft higher than tallest Fenland landmark Ely Cathedral. Waterbeach sits on the edge of the fens with typical long flat and open views. The site with its required chimney stack will be visible from up to 50km and overbearing to existing landscape and village architecture. Scope for mitigation measures is very limited.

The vast industrial building with 80-meter-high chimney will have a significant negative impact on the enjoyment and surroundings of the fen, celebrated for it's wide open skies and uninterrupted views of the rural landscape.

Visible presence of HGVs and chimney stack and plant will identify the area as an industrial area and an area of processing waste which does not contribute positively to character and quality of local area for living or enjoyment of.

The proposal delivers a severely high magnitude of change to village scape. This produces landscape and visual harm to character and appearance of conservation areas (National Trust Wicken Fen and Angelsey Abbey, and the Cam riverways and washes), heritage assets (Historic England Denny Abbey) and to the traditional architecture of surrounding villages.

The proposed incinerator is to be sited on the A10 opposite and in close proximity to English Heritage's ancient monument Denny Abbey. English Heritage have strongly opposed the application because of the significant harm it poses to historic Denny Abbey.

<u>Questions we submit and request written response on please.</u> Please provide actual factual answers not just signposting to complex documents within the applicant's application. This is so that group members can easily understand the answers to the questions and forma base for informed decisions.

1. Can the Planning Department please take into consideration the impact of dropping a vast industrial building with an 80-metre-high chimney in a flat rural area?
2. I am concerned that this giant industrial building will have a negative impact on the enjoyment and experience of the landscape and therefore feel this is a material consideration. The Fens are unique and have an intrinsic value. They are flat and open with uninterrupted views of the wide-open skies and striking landscape. If walking along the Cam / Ouse, do we want to see this massive chimney with a possible visible plume?
3. Will the Planning Department to consider the overall impact of the giant industrial building of the waste incinerator with an 80-meter-high chimney, along with the proposed Waterbeach New Town and possible duelling of the A10 carriageway between the A14 and Ely on this rural area. We are concerned that this will have a considerable negative impact on the experience and enjoyment of the area.
4. We are concerned about the impact of this giant industrial building with an 80-meter-high chimney on the historic setting of Denny Abbey. The proposed Waterbeach New Town which is approximately the size of Ely, will already have a considerable impact on the historic setting of Denny Abbey, but this 2-3 story development is being mitigated by planting. No such concealment can take place for an 80-meter-high chimney and we believe feel this will have a severely negative impact on the nearby historic site. At what point do you erode the historic asset and setting and surrounding landscape so that it becomes worthless?
5. Will visitor numbers to the area be affected? Has the Planning Department considered the effect on the local tourist industry, and if so what is it?

Noise/Light

The proposal will have an adverse environmental Impact by virtue noise and light emissions from the plant and note that this is contrary to the Minerals and Waste Core Strategy Policy CS2.
The County Council's noise assessment review gives further evidence that the proposal is not viable. "9.1.8. Given that the application is a full (i.e. detailed) application, the use of so many assumptions and the lack of firm commitment to specific mitigation measures. Those assessed are portrayed as options with the use of alternatives mooted which inevitably undermines confidence in the predicted outcomes. "

This is not a sound basis to approve the incinerator because of the unknown noise impact that such a proposal will cause and will cause when running as expected 24/7. No parties (CCC, PHE, Amey, EA) could confirm the noise impact or associated safety risks of the plant at the public meeting on 29th Jan.

<u>Questions we submit and request written response on please.</u> Please provide actual factual answers not just signposting to complex documents within the applicant's application. This is so that group members can easily understand the answers to the questions and forma base for informed decisions.

1. Will County Council provide an independent review of the data on creation of noise to be assured that the figures are all encompassing for a 24/7 operation and valid?

<u>Sustainability</u>

Even if all the PVC and chlorinated wastes were eliminated from the waste stream, incineration would still be a poor solution due to high costs, loss of jobs in the recycling industry, lost profits from secondary resale and on-going contamination from heavy metal, hydrocarbon and other air

emissions. Incineration relies upon the continued generation of waste (250,000 Tonnes/yr. in respect of this incinerator) to support the high operating costs. Pressure to pay back the high cost of building incinerators has had the effect of encouraging and perpetuating waste generation. Recycling rates are getting worse not better in Cambridgeshire. East Cambs managed 52.4% 2016/17, a drop of 4% since 2015/16. South Cambs managed 46.1% 2016/17, dropping a massive 11.4% since 2015/16. Compare this to Powys in Wales who achieved 65.2% 2016/17. Continued investment in incineration inhibits the development of more sustainable waste minimisation practices, as well as the exploration and development of products and processes that do not use toxic chemicals in the first place. Dispersing persistent, bio accumulative pollutants into the air from incinerator emissions creates more pollution problems. Once an incinerator is built, ongoing toxic waste generation is legitimised and there is little incentive to investigate process changes within industry even if cleaner production methods are more profitable.

Green Peace: Alternatives To Incineration
www.greenpeace.org/international/en/campaigns/detox/incineration/alternatives-to-incineration/
https://sciencing.com/landfills-vs-incinerators-5523826.html

Questions we submit and request written response on please. Please provide actual factual answers not just signposting to complex documents within the applicant's application. This is so that group members can easily understand the answers to the questions and forma base for informed decisions.

1. How is the incinerator being funded? Are any commercial or government banks involved?
2. How much will the contract cost Cambs County Council per tonne of waste and per year?
3. What is the cost difference per tonne to Cambs County Council for EfW and recycling and landfill?
4. Is the applicant using a government grant for the build?
5. Is a contract in place already?
6. Will County Council include in any potential contract stipulation that the processing of county waste will be prioritised ahead of third party councils and commercial contracts?

Concern About Pre-determination of Decision
The applicant has initiated and application to county council, but Cambridge County Council is a stakeholder to the applicant. The applicant has a waste contact with the councils deciding the outcome of the planning application. This is conflict of interest.

These concerns are supported by the witnessing at the public meeting of the business manager for Cambs County Council Minerals and Waste placing a hand in the air and commenting positively when a member of the audience asked if any of the panel would be comfortable living nearby a waste incinerator. Other county council members and the EA representatives also did the same (although without volunteering comment). At the end of the meeting, a district councillor called a vote for the room on for or against or undecided. Panel did not vote. The applicant has gathered momentum as is evidenced in the minutes published on their website a community liaison group that has been heavily comprised of the same people who were present on the panel at the public meeting on 29th Jan (including of the business manager for Cambs County Council Minerals and Waste, EA representatives, District and Parish councillors). These stakeholders have been engaged with the applicant interestingly sometime before (since Jul 2017) the waste incinerator application was entered and in the run up to.

There are reasonable grounds to question bias in the decision outcome at district and county level because key stakeholders have been engaged in interactions that could have influenced their approach to viewing the application in an impartial manner, threatening the democratic foundation of the planning process.

We return to the point that the residents of all parishes who are affected by this proposal by residing within the emissions fall-out zone have not been given reasonable opportunity to engage in a fair and proper public consultation, with easy access to information sources that are suitable for general public to understand and with which to make an informed opinion to put forward about he application.

We hope this information will enable you to consider the impact of this plan. Not just during its daily running, but accumulative over time, and in conjunction with all the other developments proposed for the area.

You may find the audio of the public meeting (29/1/2018) helpful in understanding some of the points and references we have made in our response.
https://drive.google.com/file/d/16-5Jof20zS4yWZk3Ttq6hTiXe7MZXtai/view?usp=sharing

https://www.dropbox.com/s/gv1mtggrnn4j13v/Amey%20Waste%20Incinerator%20-%20Waterbeach%20Public%20Meeting.mp3%2029%20Jan%202018.mp3?dl=0

Finally we draw your attention to independent reviews of the viability of waste incineration for energy:
https://sciencing.com/landfills-vs-incinerators-5523826.html

http://www.independent.co.uk/voices/sweden-recycling-rates-revolutionary-dark-truth-behind-uk-wales-incineration-a7471861.html

CBWIN
3rd Feb 2018