

Qair response to community questions. 27/03/2023.

 $Sent by email to the Community \ Liaison \ Group \ following \ questions \ being \ collated \ and \ issued \ by \ a \ member \ of \ the \ group.$

Ougetion number	Question	Answer
Question number 1	Question What is the date, time and venue for the public information event?	Answer Saturday 22 nd April 10.30 am to 3.30pm at Tanbridge House School, Farthings Hill, Guildford Road RH12 1SR
2	How do you propose to build good relations with the local community and communicate effectively during development and throughout the operation and decommissioning of the installation?	We aim to be a good neighbour, establishing positive relationships with the community and local businesses. One of the key ways we do this is by working with our Local Community Group. As well as creating local jobs and investment, we intend to play an active role in local life and support both community and environmental initiatives.
3	What should be expected in terms of noise, dust and traffic during construction?	At the outset, we put forward a construction plan that has to be approved by the Council before we begin. As a result, we will make all reasonable efforts to keep noise, dust and traffic to a minimum while CHER is being built, and we will use the most efficient and up to date practices available to us. Noise will be monitored to ensure it does not breach our limit, and traffic will also be controlled through our plan. The hours of work are also restricted as a condition of the planning consent.
		The normal working hours during construction will be:
		0700 – 1900 Monday to Friday inclusive 0800 – 1600 on Saturdays More information about our plan is here: (https://westsussex.planning-register.co.uk/Planning/Display/WSCC/015/18/NH).
4	How will hazardous fly and bottom ash, filters and other residual toxic waste be disposed of and where, and how will the workers and	CHER has to, and will, follow all the requirements laid out in its environmental permit. The permit contains stringent conditions to make sure that our processes meet the highest UK and European standards and do not harm the environment. The facility cannot operate without a permit.
	environment be protected	Residues from the combustion process (known as Incinerator Bottom Ash) will be recycled to produce aggregates that can be used in the production of concrete products or construction materials.
		Fly ash is classified as hazardous because of its high lime content (making it highly alkaline, as a result of neutralising acidic gases). Qair is working with a company that has technology to turn the fly ash into aggregates and an End of Waste product.
		Filters and other equipment will be disposed of according to the Environment Agency regulations in accordance with the permit.
		Qair and its contractors will always comply with relevant UK health and safety regulations and guidance to protect our staff, the community and the environment.
5	Can you explain the controls and monitoring systems in place to measure and report against emission targets and who will monitor these?	The CHER facility will be subject to strict conditions and is regulated by the Environment Agency(EA). Combustion gases will be treated before they are released into the atmosphere to remove elements such as nitrogen oxide, dioxins and furans. The hot gases will be filtered through a flue gas treatment system where they will be treated through a sophisticated chemical scrubber and a bag filter system to remove fine particles. Once cleaned, the gases will pass through the stack. A Continuous Emissions Monitoring System(CEMS) will ensure emissions are legally compliant and meet strict air quality standards set out in the facility's environmental permit. All CEMS readings will be monitored and reported to the Environment Agency. The CEMS system will be calibrated by an accredited third party and checked by the EA. The EA publishes the emissions readings so that they can be seen by anyone interested in the data.
6	Do you consider the emission targets set by Environment Agency to be achievable and would you consider setting even tighter emission targets to demonstrate best practice?	The environmental permit sets very strict limits on emissions, and we are confident we will stay well below them using the latest technology. Emissions will be continually monitored to ensure CHER is fully compliant. If the limits are exceeded, this must be reported to the Environment Agency, who have the power to order a shut down until the problem has been identified and fixed.
7	Would you support 'open' measurement and reporting to be discussed at the CLG?	We will be sharing emissions data with the Environment Agency, who will make the details public. We will be happy to discuss this data at CLG meetings.
8	How will the company guarantee that only non-recyclable feedstock will be incinerated?	QAIR has made a large investment in recycling facilities near the CHER site and is committed to supporting the circular economy. The CHER facility will only use waste once all economically viable and practical recycling has taken place.



9	The construction of an incinerator will have major impact on local residents' enjoyment of their homes. Can you outline your mitigation plans?	Mitigation plans are in place to ensure local residents can continue to enjoy their homes. These plans cover noise, odours, emissions, traffic movements and efforts to reduce the visual impact of the building. Further issues can be discussed at Community Liaison Group meetings and we will also respond to any concerns raised.
10	Local residents will be further isolated by increased HGV traffic along Langhurstwood Road. Would Qair consider funding a footpath as part of a community project?	Qair are prepared to look into this in partnership with the relevant authorities, however, during operation there will be no more HGV vehicle movements than is currently permitted.
11	Some local residents are already having difficulty selling their house due to the EfW development, will there be any compensation from Qair for this?	The impact of energy from waste facilities on house prices has been studied by independent experts. An independent 2014 study from Cranfield University showed prices were unaffected by nearby energy from waste plants. Although the UK's housing market has been volatile since the COVID-19 pandemic, there is no evidence CHER will have any long term or significant effect on prices or the ability of home owners to sell their properties. The Planning Inspector who chaired the Public Inquiry before consent was given for CHER said in his decision document there was "no evidence before me to demonstrate that other energy from waste developments within or adjacent to a developing urban area have adversely affected either house prices or the demand for housing in an area".
12	Could the photomontages from the additional viewpoints highlighted at the Public Inquiry by RPS acting for Britaniacrest, be made available to the public by Qair?	All documents and photographs which were referred to as part of the public inquiry will have been published by the Planning Inspectorate. Qair will be happy to assist CLG members in accessing any of that material.
13	Research about the effects upon hens' eggs from nearby EfW plants in France is very worrying. Is Qair aware of this and do you have any comments?	To give you a detailed answer we would need to know some more details about this particular piece of research. Qair will be happy to comment on any document you should provide. CHER will be regulated by independent experts from the UK's Environment Agency, who will insist on the safest possible operating standards. The facility will meet all the conditions laid out in its environmental permit.
14	How often should we expect to see visible plumes from the stack? The planning application states this will be about 17 days per year, will Qair uphold this	Plumes are due to hot air meeting cooler air, becoming visible as water vapour. The visible nature of any plume is very variable due to a number of factors including, time of year, cloud cover, temperature, wind speed and direction, and the degree of saturation of the surrounding air. This makes it difficult to be specific about the visual effect of the plume due to the number of variables. Similarly, plumes are more likely to occur at night and have a low frequency of occurrence during hours of daylight. As such, the likelihood that visual receptors would witness the visible plume is significantly reduced by the requirement for them to have views towards the proposed site during the time period that the conditions are right for the plume to occur. Furthermore, a number of climatic conditions such as mist or fog where visibility is low would obscure the plume from view. Since the proposed development has committed to a lighting plan that minimizes illumination, these plumes would not be visible at night unless illuminated by off-site sources. The Planning Inspector examined the visual impact of the facility in detail and concluded the scheme "can be regarded as high quality" and would "integrate with its surrounding to a satisfactory degree".
15	Will Qair sponsor additional air quality monitoring stations around the local area?	Air quality monitoring is the responsibility of Horsham District Council. See https://www.horsham.gov.uk/environmental-health for more information.
16	Will Qair undertake further air quality benchmarking before commencing development?	Air quality was studied and analysed as part of the planning application and environmental impact, so no additional measurement is needed. However, we will measure dust during construction to ensure it is kept to minimal levels.
17	As there are no safe levels for particulate matter PM10, PM2.5, and NO2 is associated with adverse health effects at concentrations at and below the	The likely effect on air quality was assessed by the Environment Agency before an environment permit was issued to CHER.



	legal limits, what reassurance can you give local residents about the health impacts of this installation and how will Qair monitor these health impacts?	The subject of the impacts of incineration on health has been studied extensively. The UK Government's position is that: "Public Health England's risk assessment remains that modern, well run and regulated municipal waste incinerators are not a significant risk to public health." The report points out that the emissions are stringently regulated and at the limits of detection, especially when compared to background levels: This view is based on detailed assessments of the effects of air pollutants on health and on the fact that these incinerators make only a very small contribution to local concentrations of air pollutants." The issue is under regular review through Public Health England, and any recommendations will be enacted as required.
18	What is Qair's Construction Environmental Plan to protect biodiversity during the 3 years of construction	As part of our planning application, we developed an environmental impact assessment, which sets out detailed plans for managing and protecting existing ecology, biodiversity and the environment. Qair have also submitted a Construction Environment Management Plan to West Sussex County Council. More details are available here. (https://westsussex.planning-register.co.uk/Planning/Display/WSCC/015/18/NH
19	What is Qair's Ecological Management Plan for the site and the development of wildlife areas for invertebrates and the local rare butterflies?	As part of our planning application, we developed an environmental impact assessment, which sets out detailed plans for managing and protecting existing ecology, biodiversity and the environment. More details are available here. (https://westsussex.planning-register.co.uk/Planning/Display/WSCC/015/18/NH
20	Will a light plan ensure that no lights are shone at boundary features, including the vegetation along the railway line?	The lighting scheme has yet to be agreed with West Sussex County Council. The project team will work hard to make sure light pollution is kept to a minimum.
21	What surface water control is planned to ensure that no untreated surface water is discharged into culverts/ditches and then ends up in Boldings Brook, which flows into Warnham Mill Pond and Warnham Local Nature Reserve, including during periods of heavy rain fall and containment of any fire suppressant material used in an emergency such as water/foam	Surface water on site from rain etc will be controlled through a variety of measures to ensure that all water is treated and complies with relevant standards. Our plans are outlined here: (https://westsussex.planning-register.co.uk/Planning/Display/WSCC/015/18/NH.
22	Does Qair plan to use additional mitigation measures such as installing solar panels, planting green/living walls and rooves?	Qair are looking into options available to us however any further development on the site would require further planning permission.
23	Is it intended to include Carbon Capture and Storage technology from the beginning to offset the CO2 volumes created and if not why not?	There are currently six carbon capture and utilisation (CCUS) schemes proposed for the UK – the North-East, the Humber, North Waste, Scotland and Wales, to be operational by 2030. More information can be found here: https://www.gov.uk/guidance/uk-carbon-capture-and-storage-government-funding-and-support Unfortunately, there are no schemes proposed for the south of England, mainly because the geological structure of the region is not suitable. Qair have investigated opportunities in this sector and will continue to do so throughout the development of the project. Qair have specified that the facility will be designed to be "CCUS Ready" to enable the facility to be fitted with CCUS at a later date when it becomes feasible.
24	Odours from the adjacent Biffa MBT are frequently reported to the EA especially during regular weather inversion events. Local residents know that, despite the use of many odour and emission controls by Biffa, certain weather conditions such as weather inversions, cause excessive odours and possibly other particulate matter, to drift to nearby homes and businesses. As odours are a great concern for the local community, will carbon filters be included in the design from the beginning and if not why not?	We do not comment on questions relating to other company operations. We are confident the measures we are taking to control odour are state of the art and will be effective. The CHER facility will be kept under negative air pressure, which means air cannot escape outside as it is being constantly drawn into the plant. Any odours are drawn into the furnace and burnt off by the high temperatures there. When the plant is shut down, all doors and louvres are closed. The air inside the plant is drawn into the stack by fans and dispersed into the upper atmosphere. In most Energy from Waste facilities in the UK, no further odour control is necessary. If that proves not to be the case at CHER, additional odour controls will be included for use during shut downs, and these may include carbon filters.
25	What measures for protection from dust and odours will be put in place for the storage of sorted materials in	Waste is not stored outside but tipped instead into the bunker hall. At each point, every step is taken to minimise the likelihood of odour and dust problems. We do not expect any odours to be detectable beyond the site boundary. We will have measures in place for controlling dust and will damp down any potentially dusty material as necessary. In addition:



	external bays outside of the	
	buildings?	 The waste will be transported to site by covered lorries. They will back into the tipping hall which has fast acting roller shutter doors to enclose the lorry before it tips its waste. All waste will be stored within enclosed buildings to prevent odour release. The waste reception or tipping hall and waste bunker will be kept under negative pressure. Air is drawn through the building by a large fan, and is directed into the combustion process where any odours are combusted. We will work with our neighbours to address any odour or other complaints though the CLG and other routes. If there is prolonged shut down for maintenance reasons, waste can be diverted to other facilities to avoid longer term storage.
26	What is the maximum burn capacity of the plant?	The facility is permitted to receive 230,000 tonnes of waste per year and this will not be exceeded.
27	The Planning Appeal Inspector stated "180,000 tonnes per annum of residual waste being combusted in the proposed energy from waste plant." Can you confirm that throughput will be capped at 180,000 tonnes per annum?	The planning appeal inspector states: "it is estimated that around 50,000 tpa would be recycled with the remaining 180,000 tpa of residual waste being combusted in the proposed energy from waste plant" The planning conditions state that the facility will not receive any more than 230,000 tonnes. Although the estimate of 50kt/a for recycling was the intended original purpose of the overall scheme, Project CHER will receive up to 230,000 tonnes of non-recyclable waste to be processed. Recycling material will be diverted if required to the Britaniacrest Recycling facility in Hookwood where Qair are investing in new recycling sorting system.
28	Are any technical or specification changes proposed from the documentation submitted by Britaniacrest to Planning and the Environment Agency?	Not at present. The planning permission and Environmental Permit state any limitations and restrictions required in the construction and operation of the plant. If Qair requires any changes to these documents, they will be available on the public register and adjustments to the permit etc would be in the public domain.
29	Would the proposed plant be considered Best Available Technology (BAT) and why?	This was assessed by the Environment Agency before it issued CHER a permit. The agency found that across a range of processes, including emissions prevention and minimisation, the cooling system and ways to control greenhouse gases, CHER will be using best available technology. The environmental permit decision document contains much more detail about the technology used, and how it has been assessed as BAT. This is a publicly available document and you can access it here.
30	As Selective Catalytic Reduction (SCR) can reduce NOX to below 50mg/m3, can Qair invest in SCR in this facility and if not why not?	It is true that SCR can achieve lower NOx concentrations than non-selective catalytic reduction. The assessment upheld by the Environment Agency is that the ground-level concentrations of NOx generated by the energy from waste plant using the abatement proposed are sufficiently low that the adoption of SCR (that uses rare metals in the catalyst) would be an inefficient use of resources.
31	Will Qair/HZI share the construction drawings during the construction phase?	HZI will be unable to share the construction drawings as these are commercially sensitive and contain the intellectual property of HZI and their sub-contractors.
32	Will the plant have combined heat and power capability, if so, where will the heat be sold/used? If not why not and when will this next be reviewed?	The plant will be able to deliver combined heat and power. There is the potential for excess steam to be used by nearby homes or businesses in a district heating system. However, this would depend on a suitable off-taker being identified. There are a number of practical questions to be satisfied. We will be keen to enter a heat offtake contracts, but this requires the heat taker to agree to it, and the pipework network required to transport the heat to be practically achievable and cost effective. We will keep this possibility under review.



33	Do you really expect to receive 230,000 tonnes when Portsmouth and Newhaven incinerators are nearby and London which already suffers from severe incineration overcapacity	The planning inspector who chaired the public inquiry said the facility: "would make a significant contribution towards meeting the identified need for waste recovery facilities" in West Sussex. He also confirmed the facility's location at Brookhurst Wood is a site which was allocated for waste recovery in the West Sussex Waste Local Plan (WLP).
34	What is the process for extracting recyclable material from supplied mixed waste?	The waste supplied to CHER will have already been sorted at source and by the waste supplier and will be non-recyclable.
35	What biometric and environmental baselines will be established prior to any building and operation?	Biometrics is a term usually applied to distinguishing characteristics such as fingerprints, to identify individuals. We can confirm that security will be in place to ensure only those eligible can access the facility. Environmental baselines were considered and reported in the Environmental Statement under the Environmental Impact Assessment (EIA) carried out and included with the planning application, which is available on the WSCC planning portal https://westsussex.planning-register.co.uk/Planning/Display/WSCC/015/18/NH).
36	As all of the concerns raised in 'Comments on Risk of Environmental Impact, Fire and Explosion' (copy attached) and other concerns sent to the EA remain unanswered, when will a comprehensive Fire Prevention Plan be available for the public to see?	A Fire Prevention Plan was submitted to the Environmental Agency along with the application for variation of the Environmental Permit (Appendix H). The CHER facility fire protection installation will need to meet the approval of the insurers before the plant will be permitted to operate.
37	Will adequate firewater be available in the event of a fire?	Yes. The regulations require sufficient firewater to be available. This is achieved by water storage and will need to be approved by the Fire Officer and the insurers before the plant can operate.
38	Will the ERF bunker capacity be adequate?	The volume of the bunker has been sized based on previous experience to store sufficient waste to maintain continuous operation of the plant over weekends and public holidays.
39	Regarding the release of toxic pollutants, the EA stated that there is some 'headroom' to ensure emission limits to air are not exceeded, and that the limit for Sulphur Dioxide is 30mg/m3, however can you explain why this is higher than the limit in the Keighley incinerator permit which is only 18mg/m3? The limit for Ammonia is 10mg/m3, however can you explain why this is higher than the Keighley permit which was limited to 8.5mg/m3?	We are not aware of the specific conditions that applied to the Keighley facility and cannot comment on its permit. However, the plant is smaller than the CHER plant and so amounts of waste processed will differ. The environmental limit values stated in the CHER Environmental Permit are normal for a plant of its nature at the location at Wealden Works and were specified by the Environment Agency based on the latest version of the Best Available Techniques reference document that defines the requirements for incineration plants.
40	As Public Health England's recommendation to the planning authority, for the Applicant to undertake more detailed air quality modelling, at a greater subset of receptors at the environmental permitting stage, was not carried out, and the impact assessment did not include gaseous and vaporous organic substances and ammonia, will Qair conduct further air quality modelling?	The air quality modelling carried at for both the planning and Environmental Permit applications were accepted by the authorities concerned as being adequate. We are not aware of any requirement to carry out further air quality modelling.
41	What arrangements will be in place for continuous and periodic monitoring of emissions to air, including the size and distribution of particulate matter, details of monitoring locations, access and working platforms and informing the public of the results?	A Continuous Emissions Monitoring System will be installed in the chimney stack. There will also be periodic monitoring of some specific pollutants. All of our emissions data will be shared with the Environment Agency, which will make the details public. We will be happy to discuss the data at Community Liaison Group meetings.



42	With the progressive decarbonisation of the energy supply, it is increasingly likely that an incinerator would displace renewable and/or nuclear rather than fossil fuels. What is your estimate of the carbon intensity of electricity displaced over the lifetime of the installation?	CHER will support the UK's low carbon ambitions and will provide cleaner electricity than the UK's coal fired power stations, many of which have been decommissioned. Although the government intends to increase nuclear and other forms of renewable energy, the timetable is very difficult to predict. It will, however, be a matter of decades, not years, before we see the impact of this expansion. In the meantime, energy from waste plays an important part in providing the UK with a secure source of energy, derived from material which would otherwise be exported or go to landfill, both of which would involve the production of additional greenhouse gases.
43	Given it is generally accepted that EFW incineration is not 'true green' energy, how does this fit with Qair's stated credentials in the sustainable and green energy market?	Energy from waste is a sustainable and clean form of energy which helps reduce carbon and methane emissions by ensuring less waste is sent to landfill or transported abroad. Our energy from waste operation works hand in hand with our investment in recycling, ensuring that Qair supports the circular economy.
44	What is Qair's view of the current moratorium on EfW incinerators in Scotland and Wales and how this may affect your business in England?	We are aware of the decisions taken by the Welsh and Scottish governments. However, because the CHER project is outside those jurisdictions and different considerations apply in relation to capacity and recycling, we do not feel those decisions are directly relevant to our work in West Sussex. Central government policy was outlined in <i>Our Waste, our resources: a strategy for England</i> which was published in December 2018. The document says: "Incineration currently plays a significant role in waste management in the UK, and the government expects this to continue."
45	Given current targets to progressively reduce waste in the UK, what is your view on the ongoing availability of future feedstock, as this is clearly a critical issue?	We are confident there will be sufficient feedstock available to run CHER successfully and efficiently for the projected lifespan of the facility. This issue has been independently assessed by the Planning Inspectorate after studying evidence from West Sussex County Council. The planning inspector said the facility: "would make a significant contribution towards meeting the identified need for waste recovery facilities" in West Sussex. He also confirmed the facility's location at Brookhurst Wood is a site which was allocated for waste recovery in the West Sussex Waste Local Plan (WLP).
46	How do you size a plant? Is this based upon local waste need or just maximum throughput for maximum profit?	Qair is a commercial operator and only makes investments of this size once we have satisfied ourselves that the business plan is robust and the operation is sustainable over the long term. One of the issues we examine very closely is the need for local waste disposal and the availability of feedstock.
47	What is the £ investment in the EfW plant? Britaniacrest previously indicated this to be c £250 million, has this now changed?	Qair are still reviewing the total investment and if appropriate this will be shared at a later date.
48	How will the company ensure the Horsham plant construction is exemplary, in terms of following construction industry best practice eg fair pay and welfare facilities for workers?	Qair's contractors will comply with good industry practise, ensuring fair rates of pay and working conditions. We will outline our commitment to good employment practices in conjunction with our contractors.
49	Are you prepared to provide some transparency on the acquired assets from Britaniacrest, including fixed plant, real estate, joint ventures and WSCC contracts? Such would be helpful to our understanding.	The acquisition of Britaniacrest Recycling is a private acquisition and the terms of which is commercially sensitive and we are unable to share this information.
50	Denmark has now announced the decommissioning of nearly 50% of their EfW plants due to overcapacity. Is this a concern for Qair and if not, why not?	The UK's energy market is very different to Denmark's – not least because of the higher population here in Britain. We are confident CHER will be a success as a waste disposal facility, as an energy provider and as a commercial operation. Issues such as the availability of feedstock, the local need to divert waste from landfill and the market for our energy have been investigated in detail by both the company and by independent experts.
51	Qair offers no information about the intended feedstock composition and the origin of that material. As per Defra's 2020 Resources and Waste Strategy Monitoring Report: "Of total residual waste from household sources in England in 2017, an estimated 53% could be categorised as readily recyclable, 27% as	There are often concerns that energy recovery facilities reduce recycling rates, but it is simply not practical or possible to recycle all waste. Examples of materials that cannot be recycled are plastic films like the ones that cover ready meals, some types of textiles, many laminated materials (such as certain types of crisp packets), disposable nappies, paper and card contaminated with food. The CHER project will only accept waste that has been sorted for recyclable material, treating waste that would otherwise be exported or sent to landfill.



	potentially recyclable, 12% as potentially substitutable and 8% as difficult to either recycle or substitute". This means that it is impossible for all of UK's incinerators to actually restrict feedstock to only the "non-recyclable residual fraction of the waste". Where is Qair going to obtain feedstock from and what will it be made up of?	
52	The UK government are exploring expanding the UK Emissions Trading Scheme (ETS) to waste incineration and EfW, also the possibility of the introduction of an incineration gate tax. How will this effect the Qair business model for the continued operation of this EfW plant?	At present the situation is uncertain and therefore we are unable to comment further. The business model and continued operation however have tolerances for change, for example in legislation, as one would expect.
53	What precautions will Qair take financially and what is your site closure, deconstruction and site restoration plan, for actions to be taken at the end of the operational lifetime or decommissioning of the installation for any other reason, including financial failure and/or failed technology?	As part of our planning application the proposals for closure, decommissioning and site restoration have to be outlined. These are on the planning portal. QAIR is taking all necessary steps to ensure the project is a success.