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Mrs Sharon Hodgson MP
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Concord
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Tyne and Wear
NE37 2SQ

13 December 2017

Our Ref-

RKL003/ARN/PK

Dear Mrs Sharon Hodgson MP

Thank you for your letter of 23 November 2017 and your patience in awaiting our response. Our team of professional industry experts have now completed their review of the points you have raised and answered the various queries below.

As we have stated before it is our intention that any information we supply can be corroborated and verified with other independent experts, local authorities, government or the industry concerned. We understand that some of these answers may not be welcome but they are accurate, in contrast to some of the more irresponsible and extravagant claims made by those opposed to the proposal. As before, we would be happy to discuss or brief you on any aspect further. We have taken each of your points and answered in order.

COMMUNITY LIAISON GROUP

Community Liaison Groups are common across the entire construction and infrastructure industry. They are an important, useful way of sharing information, views, making decisions and addressing community issues at an early stage.

How will this Community Liaison Group work?

Community Liaison Groups meet regularly and:

- Give the community the chance to meet key members of the project team face-to-face
- Give an opportunity to ask questions or raise concerns
- Provide an accurate and timely flow of information
- Enable information to be shared to the wider community
- Allow for a greater understanding of activities
- Engage communities in finding practical solutions to issues

Who will sit on it?

Community Liaison Groups are formed from representatives from the local community – this can include residents, commuters and businesses. Key people from the project team are also part of the group – this can include people from contractors, partner organisations and local authorities. The group needs to be apolitical, open and inclusive.

How will issues be escalated and dealt with?

These groups make links between communities and project teams, the community and key members of the project team meet face-to-face at these meetings and members can ask questions, raise concerns as a project progresses.

DIRECTORS
PETER ROLTON
COLIN BANYARD
ANDREW NEEDHAM

Communities are ideally placed to advise on local needs and can help the project team to be proactive in responding to concerns at an early stage. In terms of escalation, appropriate actions will be agreed among the committee at the time based on the issue / concern.

How will agencies, such as the Environment Agency, be involved?

The Community Liaison Group is for the community and therefore organisations such as the Environment Agency will not be expected to sit permanently on the committee. However should circumstance require it, the Environment Agency could be invited to send a rep for particular meetings should the committee agree that it is necessary.

How will it be set up and ensure it is effective?

Should planning permission be granted, we would at an appropriate juncture, invite interested parties to register their interest. This will be carried out via press releases, notices on our website and social media as well as a newsletter to those signed up on our mailing list. We will invite respondents to the first inaugural meeting.

The Chair is elected following the first meeting and will set out the guidelines for selection and voting. The group is bound by a formal terms of reference and the initial meeting sets out the aims and principles of the group, discusses roles and agrees on ways of working. The terms of reference are then prepared based on these decisions.

Community Liaison Groups meet regularly; the exact timetable is usually agreed within the group itself. We have experienced facilitators in the team having run many of these (20+) over time.

WASTE MANAGEMENT AND ODOUR

In general, odour problems are not associated with modern Energy from Waste facilities including gasification. This is principally due to the facility being kept at a negative pressure which constantly draws any odour into the process where it is destroyed.

What is the minimum time that the doors will be open for individually and how long this would be in the total over one day?

The doors would be open individually for no more than 1 minute at a time to allow vehicles in and out. We would expect between 40-50 vehicles movements in and out of the reception hall each day (Monday – Saturday). It is important to remember hall is at slight negative pressure; therefore when the doors open odour remains within the building.

How can you ensure that vermin and flies will not become a problem when it comes to opening and closing of the doors and allowing vehicles into the incinerator?

The potential for vermin and flies has been considered and having control measures in place is normally a requirement of the Environment Agency. Waste is not stored outside at any point, the doors to the reception hall are only open if there is a delivery taking place, with waste being tipped directly into a self-contained bunker. Controls and feedstock handling measures will also be put in place by the operator to deal with any vermin or pest issues on site should they arise; this includes the use of standard vermin control measures and insecticides.

Vermin, flies and other pests are attracted by organic and other putrescible materials in the incoming refuse derived fuel (RDF) stream. However they are only able to multiply when there is a favourable environment for them to do so. It is important to recognise that the primary means of management of such pests is good management of the RDF fuel. RDF is processed waste, which, when obtained from commercial sources, typically contains much less putrescible material than municipal derived RDF. We expect to derive a significant proportion of our RDF from commercial sources and thus the risks presented by pests are greatly reduced.

Additionally, the management of waste within the plant is undertaken on a broadly first in, first out basis. This means that waste material is constantly circulated and therefore pests and vermin do not have favourable conditions to multiply.

Other measures as described earlier can be used in the rare circumstances where an issue occurs and in no case would there be any impact on the area surrounding the plant.

These measures are regular procedures across waste management sites, and Energy from Waste plants in particular, therefore there is no reason to expect that the proposed facility should be more susceptible. The nature of the operation of the facility ensures that there is a constant flow of feedstock through the plant, which decreases the risk of any issues arising.

We propose to manage pests and vermin in line with industry best practice throughout the UK and in particular the Energy from Waste facilities operational throughout the UK.

We understand that there have been issues with other waste management facilities in the area, however we are unable to comment on other operators' standards. We would be happy to offer you a tour of an Energy from Waste facility or provide photos of other facilities to detail how clean these sites are.

TRAFFIC

It is in our interests to have fuel delivered to the facility as quickly and efficiently as possible without being delayed in traffic jams or other congestion. This has clear economic and environmental benefits.

Interruptions to the delivery schedule

As with any area of the country, traffic can and is subject to delays and interruptions for any number of reasons eg. roadworks, accidents. Issues of this nature could affect the frequency of deliveries to the site but will not affect the estimated number of deliveries as these could be made up at other times during the day.

Bottlenecks near residential areas

The Transport Chapter of our Environmental Statement has considered the environmental effects of traffic and proximity to residential areas. It concludes that the effects are insignificant.

The Environmental Statement (see chapter 7 for traffic and transport) is available publically on www.sunderland.gov.uk and on our website www.roltonkilbride.co.uk/sunderland.

Are your findings based on Department for Transport's national traffic forecasts?

The submitted assessment has been undertaken using growth assumptions provided by the Department for Transport for this area as well allowances for the completion of the wider Hillthorn Farm development. However, National Planning Policy Guidance (NPPG) does not require consideration of a forecast year scenario to 2040.

Delivery timetable and congestion

There are commercial and operational reasons for us to ensure that HGVs can deliver fuel to the facility with minimum delay and ensuring an even spread of arrivals throughout the day.

The operational delivery window for feedstock is as you state in your last letter and is the window within which the plant would be able to accept deliveries. The operator and feedstock contractor would monitor the road network conditions and adjust the schedule to avoid the busier times on the network to avoid delays and disruption, which could be costly to the plant operations.

However, even without the adjustment to the delivery schedule, our data shows that the change in traffic would be less than the day-to-day variation that one would normally anticipate under normal circumstances. Thus, any impact would be indiscernible in the context of the existing performance of the road network.

It is also worth noting that this relates to the roads local to the site. Other roads more remote from the site, including the A19, A1231-Sunderland Highway and A195-Northumberland Road, would experience a significantly lower relative change.

You state that HGV vehicles will not park up on the roads, yet how can this be managed? Under DVLA regulation, drivers are required to take mandatory breaks. Will these be scheduled to take place outside of Washington?

As you point out the Driver and Vehicle Standards Agency regulations (GV262) require drivers to take a break in accordance with prescribed guidelines. This obligation will therefore be mandatory for any operator of the facility and will of course be set out in the terms and conditions of any contract with a feedstock operator.

It is anticipated that the majority of feedstock will be sourced from the north east. When a driver is obliged to take a break, there will be sufficient space on site for drivers to park their vehicles and rest to comply with their legal obligation. In addition welfare facilities are incorporated into the design of the scheme so drivers will be able to have access to these. There will be no need for drivers to park up on the highway.

Who is the independent highways consultant? Where is this information you refer to and if you will be making this information public?

The planning application includes the Transport Assessment, Travel Plan and Transport Chapter of the Environmental Statement (see chapter 7), which contains all relevant information. This is available publically on www.sunderland.gov.uk and on our website www.roltonkilbride.co.uk/sunderland.

Our planning application also lists all consultants used to carry out the studies required for our planning application (see the project directory, competence and contents); again, this is available publically at www.sunderland.gov.uk and on our website www.roltonkilbride.co.uk/sunderland.

REFUSE DERIVED FUELS (RDF)

What are the well-understood compositions of waste materials? Research and information passed on suggests that waste used by these facilities contains recyclable materials.

This raises concern that facility would be burning waste that should not be burnt and this would also weakens moves to encourage people to recycle more. How can you assure my constituents this will not be the case?

Your points about numerous compositional studies being undertaken is rather vague on when they were last done and by whom?

Further to this you say that this information is not in the public domain why is this? Has this information been independently verified and assessed? Who holds this information? And why has it not been made publically available? Who has conducted the raft of studies you refer to?

Waste composition and relevant studies

The composition of municipal waste has been measured and monitored by councils, DEFRA and private waste management companies for many years. This has resulted in numerous reports, which set out the material composition of residual wastes collected from a local level right through to national studies. These studies have informed waste disposal contracts throughout the UK. In some cases these studies are not publically available as they may form a part of a private contract.

Some examples of public sources of waste composition information are listed below:

<https://www.gov.uk/government/statistics/composition-of-local-authority-waste>

<http://randd.defra.gov.uk/Default.aspx?Module=More&Location=None&ProjectID=15133>

<http://www.wrap.org.uk/content/composition-municipal-waste-scotland>

<http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&Completed=0&ProjectID=18237>

http://www.cheshireeast.gov.uk/PDF/Waste_Composition_Study_2013_Kerbside_Household_Waste_Recycling_Centres_Waste_Full_Report.pdf

<http://gov.wales/docs/desh/publications/031201municipalwasteen.pdf>

<http://gov.wales/docs/desh/publications/100526municipalwastecompositionen.pdf>

http://www.bedford.gov.uk/environment_and_planning/rubbish,_recycling_and_waste/waste_management.aspx

In this case, it is anticipated that the waste will come from: municipal solid waste (MSW), non-hazardous commercial and industrial (C&I) waste (such as packaging materials) and RDF (the residual waste left over after recycling has taken place). It is also important to note that the plant will not process hazardous waste.

The composition of RDF is generally similar to municipal solid waste but with reduced recyclable content as the material has already undergone recycling. For example paper, card, glass, plastic, food and green waste, and metals would be regularly removed, however it is difficult and inefficient to recycle most contaminated or fragmented material such as a cereal box contaminated by left over food – this is discussed in more detail later in our response.

A considerable new source of information into the composition of RDF has developed over the past decade with the growth of the RDF export market. In almost all of these contracts there is a requirement to regularly sample and test the RDF in order to demonstrate its compliance with the respective contracts. Whilst these studies are not generally available publically as they are considered commercially sensitive it may be possible to ask a local authority or indeed DEFRA for a briefing in your parliamentary capacity.

In addition to these studies, the performance of Material Recovery Facilities (MRFs), Energy from Waste plants and other waste treatment facilities is continually monitored to ensure optimal performance and contract compliance. Statistics on the outputs from the processing of MSW are collected by DEFRA using local authority submissions. This provides another wealth of information on the waste being processed and information on MSW is freely and publically available.

Why recycle or use for fuel?

The recycling process begins with waste collections, which are made from a number of different receptacles (bins). These typically include bins for recyclable materials and one for residual waste. The reason for separating collections in this way is to ensure that other materials do not contaminate recyclable materials.

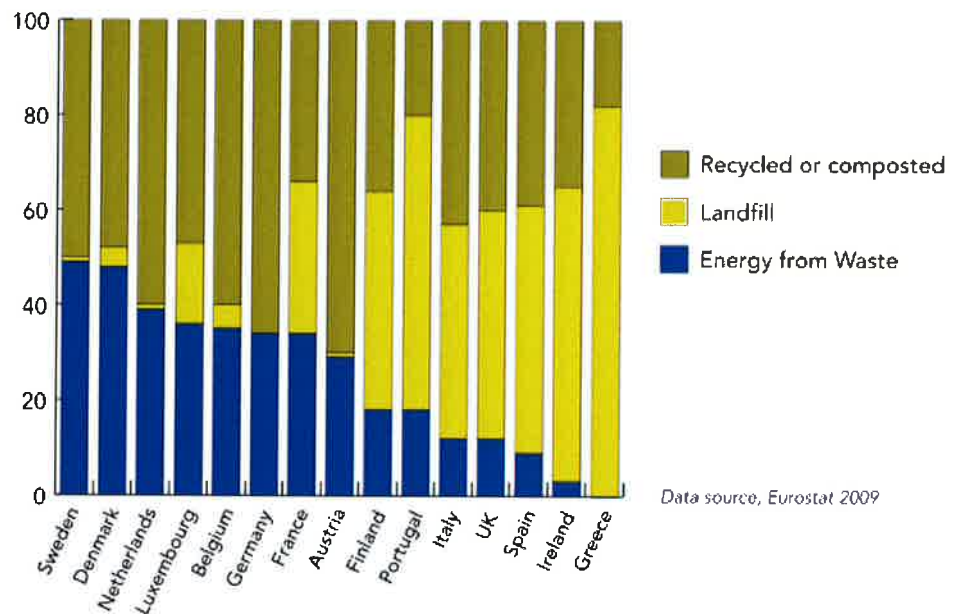
Contamination can be from 'non-target' recyclable materials (for example glass in a paper collection) or from other contaminants (such as food waste, oils etc). Contamination increases the amount of work required to reprocess materials back into useful products. The more contaminated a material is the less value it holds as a recyclable item both in monetary and resource terms.

The whole point of recycling is to provide a saving in energy and resources. Where more energy is spent to recycle material, the key question is - is it worthwhile? If more resources are used to recycle material, is this best use of resources? There is clearly a tipping point with contaminated materials when it is not efficient or 'environmentally friendly' to recycle them. At this stage the best option is to recover the energy entrained with the waste material rather than to simply bury this resource in landfill.

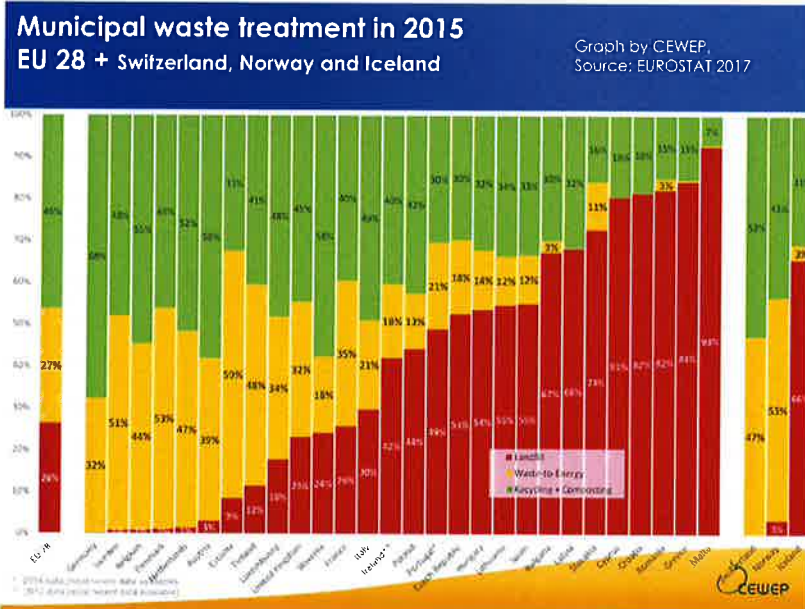
It is not a new claim that energy recovery can lead to a reduction in recycling and it is incorrect to imply that Energy from Waste solutions discourages more people to recycle. In fact, energy recovery forms a necessary support role to the recycling industry for the reasons outlined earlier. Unless materials can be collected completely uncontaminated, there will always be a level of reject and residue which cannot be recycled. For these materials it is better to recover the energy which would otherwise be lost if sent to landfill.

A number of EU countries, such as Sweden, Denmark, Germany and the Netherlands, are often held up as examples of good recycling practice. What is often overlooked is the concurrent use of Energy from Waste to support a well thought through efficient waste management and recovery system.

The graph below shows the recycling, landfill and energy from waste rates in 15 EU countries from 2009.



There is a clear correlation between increased recycling rates and increased Energy from Waste use, and vice versa. This graph is taken from the Renewable Energy Association's report Energy from waste: A guide for Decision Makers¹ but is reinforced by other sources including CEWEP from 2015², with statistics derived from Eurostat.



Figures from Eurostat also show the trend from 2001 – 2015 for recycling to increase along with Energy from Waste³.

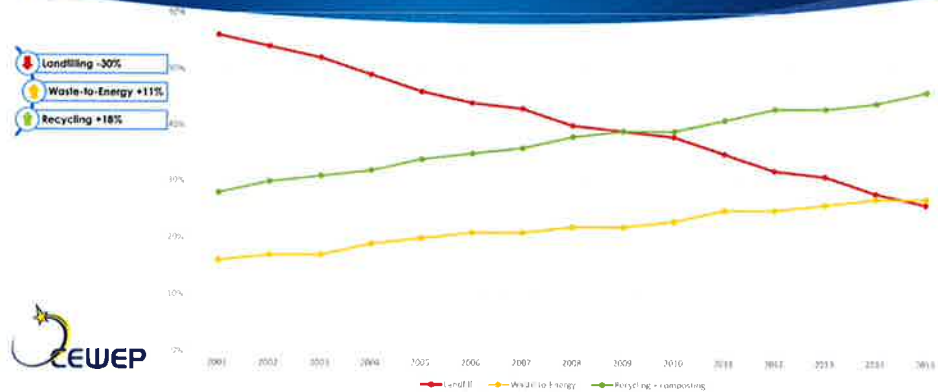
¹ <http://www.r-e-a.net/pdf/energy-from-waste-guide-for-decision-makers.pdf>

² <http://www.cewep.eu/wp-content/uploads/2017/08/Graph-3-treatments.pdf>

³ <http://www.cewep.eu/wp-content/uploads/2017/07/Graph-2001-2015.pdf>

Municipal waste treatment trends 2001-2015 EU 28

Graph by CEWEP,
Source: EUROSTAT 2017



This data all shows that far from being a detriment to recycling, Energy from Waste is a necessary part of a functioning and efficient system for managing waste and resources in a national economy. More Energy from Waste solutions do not result in less recycling and it is incorrect and simplistic to suggest that it is a zero sum equation.

Why is this plant necessary if there is capacity across the country already?

What the building of a plant in Washington will mean for capacity in the country for dealing with waste?

Research show that current incineration capacity is at 17 million tonnes (both existing and under construction) but the total tonnage incinerated in the country stands at only 9 million tonnes; meaning we currently have 8 million tonnes of underutilised capacity.

The waste consultancy Tolvik reported that at the end of 2016 ⁴ there were 37 operational Energy from Waste facilities in the UK, with a further four in commissioning, providing a gross total capacity of 11.76Mtpa. Tolvik also reports that 9.96Mt were processed in 2016 which represents 92.7% of the available capacity. It is very difficult to reach 100% processing capacity due to a number of factors including stoppages for maintenance and commissioning therefore this shows essentially full utilisation of the plants in current operation. As such it is clearly demonstrated that the UK does not have excess Energy from Waste capacity.

⁴ UK-EfW Statistics 2016 - <http://www.tolvik.com/wp-content/uploads/UK-EfW-Statistics-2016-report-Tolvik-June-2017.pdf>

In addition, the Environmental Services Association (ESA)⁵ – the trade association for the UK's resource and waste management industry released a briefing in November 2017 'The treatment capacity gap that urgently needs to be addressed'. ESA reports:

"Without policy intervention the industry believes that recycling rates will remain at around current levels. These are circa 45% for household waste and 60% for the commercial waste which is similar to household waste. The combined current "municipal" recycling rate is around 50%.

"If recycling trends follow those of more mature recycling societies in other parts of Europe, then the industry expects that the UK will achieve medium to long-term municipal recycling rates of 55%. At the industry consensus of 50-55% municipal recycling, the forecast treatment capacity gap is almost 6 million tonnes in 2030, even after factoring in a continuation of exports and the development of currently unplanned capacity."

The ESA briefing was informed by Tolvik's⁶ independent market review on the UK's residual waste also published in November 2017. The report concludes recycling rates are unlikely to rise much above current levels, which would leave the UK six million tonnes short of treatment capacity by 2030, even after factoring in a continuation of waste exports to the EU and the development of some currently unplanned facilities.

Further evidence of the need for more Energy from Waste capacity in the UK was provided in reports from Suez, who published 'Mind the Gap 2017 – 2030'⁷ and Biffa, who published 'The Reality Gap (2017)'⁸ in 2017, both reports conclude that there is a shortfall in infrastructure to deal with waste.

The proportions of waste collected, recycled, landfilled and sent for energy recovery are regularly monitored through collection of national KPIs, which are collated on the wastedataflow system www.wastedataflow.org.

Where will the Washington plant's waste be coming from? Will it be short distance? Or long distance?

We are unable to currently state the source of the fuel for the plant however it is anticipated that the majority of feedstock will be sourced from the north east. Whilst a feedstock study has been carried out showing the typical areas from which waste could be sourced, negotiations with contractors will take place in earnest once permission has been granted. The commercial format of contracts of this nature cannot be finalised until the facility is further along the development path.

⁵ ESA's briefing -

http://www.esauk.org/esa_reports/ESA_Briefing_Document_The_treatment_capacity_gap_that_urgently_needs_to_be_addressed.pdf

⁶ Tolvik's market review - http://www.esauk.org/esa_reports/UK_Residual_Waste_Capacity_Gap_Analysis.pdf.

⁷ Suez 'Mind the Gap 2017 – 2030' - <http://www.sita.co.uk/wp-content/uploads/2017/09/MindTheGap20172030-1709-web.pdf>

⁸ Biffa 'The Reality Gap (2017)' - https://www.biffa.co.uk/wp-content/uploads/2015/11/048944_BIFFA_Reality-Gap_2017Single-150817-2.pdf

As outlined previously in other areas of this response, the Highways Consultant has demonstrated that there will be no significant increase in traffic in the local area. Vehicles entering the site do not have a 'time slot' (possibly like a manufacturer who may operate a 'Just in Time Contract') in which to arrive and thus have no need to queue on the road outside of the plant. As you can see from the site drawings, there is adequate space within the site to manage the anticipated traffic numbers internally.

The comment made about going unnoticed clearly fails to grasp just how opposed to this plant the people of Washington and the wider area actually are.

We do not seek to ignore public opinion and indeed have spent considerable time talking, listening and providing information to the community. There are a number of parties willing to promote disinformation about the nature of the proposals. We have sought engage with the public through the planning consultation exercise to try to dispel some of the myths and untruths which have been attributed to the project, and thereby allow the local population to assess the benefits of such a proposal.

SAFETY

In reference to air pollution - regardless of how small this is, it is still in the completely wrong direction when it comes to reducing emissions and pollution to improve the air quality... I hope you could agree that we should be reducing levels, not increasing them.

Air quality is expected to improve between now and the opening of any gasification plant. This is due to improvements in vehicle emissions, with the newest vehicles emitting significantly lower levels of nitrogen oxides. These improvements are anticipated to be much greater than the small increases in concentrations as a result of the plant, and thus air quality will be better than at present, regardless of whether or not the proposed plant is granted permission.

The key for protection of the health of constituents is ensuring that any additional air pollution is minimised and will not lead to overall levels of pollution that exceed the thresholds above which there is the potential for harm to human health. This facility will adopt a very extensive and high-tech emissions control system that will ensure that emissions are kept to the lowest possible levels using Best Available Technology. This means using the best available technology to achieve the highest possible standards. These emissions must be below the levels set out in the Industrial Emissions Directive and will actually be considerably lower than the limits set out in this legislation for most of the time that the plant is in operation.

The air quality assessment has used a dispersion model to determine how these emissions will affect pollutant concentrations close to ground level, where people could be exposed to them. The assessment has assumed that emissions from the Plant will be at the maximum limits for every hour of the year, which is extremely worst-case. Despite this, the assessment has demonstrated that none of the air quality objectives (the levels above which there is the potential for harm to human health, principally in those more vulnerable, e.g. those with pre-existing conditions) will be exceeded in the local area, whether this facility is built or not. In reality, for most pollutants, concentrations will be well below the objectives. The conclusion that can be drawn from this detailed assessment, based on all of the latest scientific evidence, is that there is no risk of significant harm to human health as a result of the emissions from this facility.

There has been great care taken in carrying out the detailed air quality assessment work, with the advice of the highly experienced independent consultants who have carried out this work, being taken on board at every stage.

You mention exhaustive studies that show little or no harm to either human health to the environment, but yet again fail to outline what this means and where this information is coming from. I am especially keen to know if these are short or long-term studies and what consideration has been given to future generations?

The UK Government is clear that these facilities do not pose a threat to human health. All Energy from Waste technology and indeed any industrial emissions are bound by the same legislation, the IED.

The Health Protection Agency's report ⁹ on "The Impact on Health of Emissions to Air from Municipal Waste Incinerators" references ten specific studies into health effects near incinerators, which incorporate both long and short-term studies. This report drew extensively upon Defra's 2004 report ¹⁰ "Review of Environmental and Health Effects of Waste Management: Municipal Solid Waste and Similar Wastes", which reviewed over 600 separate papers on the health effects of waste management.

Mattiello ¹¹ et al reviewed 31 papers published between 1996 and 2010 covering incinerator emissions. This study concluded that facilities operating to historic emissions standards did show an increase in several types of cancer in the local area, but that modern facilities operating to the much stricter emissions standards in the IED show no such association.

A further assessment ¹² of the quality of studies undertaken into the health effects of emission from incinerators provides valuable insight into the relative robustness of studies undertaken, highlighting that some may draw conclusions based on insufficient evidence. This is why reports such as the three highlighted in the paragraph above, which have considered the results of several studies drawn together, should be given the most credibility.

The Health Protection Agency's report on "The Impact on Health of Emissions to Air from Municipal Waste Incinerators" is not time-specific, thus its conclusions relate to both current and future generations.

In addition the following studies are also relevant, although these studies examine incinerators, in terms of public safety gasification and incineration and other thermal technologies are governed by the IED, which sets safe limits for emissions from all industrial processes.

- The Impact on Health of Emission to Air from Municipal Waste Incinerators Advice from the Health Protection Agency (2013), Health Protection Agency
- Public inquiry into the non-determination by Nottingham City Council of the planning applications for Eastcroft Energy from Waste plant: Third line development (resubmission) (2008), Professor James Bridges
- Health Effects of Municipal Waste Incinerators – A Literature Survey (2006), Dieter Schrenk, MD PhD
- Waste Incineration and human health effect – literate review and environmental medical risk assessment (2011), MVV

⁹ Health Protection Agency (2009) *The Impact on Health of Emissions to Air from Municipal Waste Incinerators*

¹⁰ Defra (2004) *Review of Environmental and Health Effects of Waste Management: Municipal Solid Waste and Similar Wastes*

¹¹ Mattiello et al (2013) Health effects associated with the disposal of solid waste in landfills and incinerators in populations living in surrounding areas: a systematic review

¹² Ashworth et al (2014) Waste incineration and adverse birth and neonatal outcomes: a systematic review

There should be no consideration that the plant would or could fail

With respect to your comment "there should be no consideration that the plant would or could fail". In the interest of public safety it would be utterly irresponsible of Rolton Kilbride as a developer to not consider an event of plant failure. Having measures in place to protect public safety in the event of plant failure does not mean that the facility is expected to fail. These measures may never be deployed but as I am sure you will agree it is critical to have these in place to ensure there is no negative impact on the community or environment should there be an issue.

It is absolutely imperative that every possible scenario is considered in detail in terms of potential equipment failures, so that measures are in place to ensure that under no circumstances will there be unacceptable levels of emissions to air. As with all forms of machinery, parts can wear quicker than expected, or even fail due to manufacturing defects.

However, the facility is designed so that, should this happen, measures will automatically be implemented by the computer systems controlling the process to prevent unacceptable emissions to air. The stack will be fitted with continuous monitoring systems for several key air pollutants and any time the threshold for emission limits are approached, the computer systems controlling the process will automatically adjust either the waste feed, other parameters affecting the combustion process or the emission control system to reduce these pollutant emission levels in order that the threshold is not breached.

Should an emission limit be exceeded, waste feed will automatically shut down and emissions will rapidly drop, ensuring that any exceedance is minor and temporary, and could be considered to fall well within the worst-case assumptions employed in the air quality assessment, i.e. they would not result in any impacts beyond those predicted in the air quality assessment, and thus the impacts would remain insignificant.

The Environment Agency closing down the facility would obviously be a last resort and not one that would be of benefit to the facility's operator. This is why the extensive control measures outlined above are included in the design of the facility to ensure that no such scenario is ever necessary. Emissions will be adequately controlled and reported to the Environment Agency to ensure that the facility can continue to operate and do so while having an insignificant effect on the health of local residents.

I cannot agree with the conclusions you make from this, as yet again, as I mention previously the effects of these new plants are not completely known

Again, as before the UK Government is clear that these facilities do not pose a threat to public health. It is incorrect to infer that that this plant is 'new' in terms of air pollution, as it is still bound by the IED regardless of the technology, which are levels set after decades of studying the impacts of emissions from incineration. These levels are set at a point which the Health Protection Agency is clear that they do not have a negative impact on health.

Modern incinerators, while adopting different technology to historic incinerators are still effectively combusting the same material. The key differences however are in the management of the combustion process and emission control systems employed. The gasification process proposed generally generates lower emissions than the older 'mass burn' plant. In addition emission controls on historic incinerators were minimal, while those of modern facilities are extensive and efficient, keeping pollutants to an absolute minimum. Modern incinerators will emit the same pollutants that old incinerators did but at vastly lower concentrations.

As such, to suggest that the impacts of “these new plants” have not been extensively researched is unrealistic; the impacts of historic incinerators have been extensively researched and it is this research that has led to the adoption of highly efficient emission control systems at modern incinerators. The research into the impacts of emissions from historic incinerators has also focussed on the same pollutants that are of concern from modern incinerators, therefore the effects of these pollutants are reasonably well-known. As such, the impacts of modern incinerators, which will emit the same pollutants but at much lower levels, can be inferred with confidence from the research done into historic incinerators. This research will have been taken into account by the many studies that have been undertaken into the health effects of incineration, on which the Health Protection Agency’s conclusions were based.

The Health Protection Agency report concludes that “modern, well managed incinerators make only a small contribution to local concentrations of air pollutants. It is possible that such small additions could have an impact on health but such effects, if they exist, are likely to be very small and not detectable”. It is worth putting this contribution into context. Table 5.22 of the air quality chapter of the Environmental Statement submitted as part of the planning application presents nitrogen dioxide concentrations at specific receptors with and without the proposed development. The highest total concentrations are predicted at Receptor 9, a property adjacent to Glover Road. Here, the total annual mean nitrogen dioxide concentration in 2021, with the proposed development, is predicted to be 21.2 $\mu\text{g}/\text{m}^3$ (noting that the air quality objective is 40 $\mu\text{g}/\text{m}^3$, so this concentration is well below that which could be considered potentially harmful). Of this 21.2 $\mu\text{g}/\text{m}^3$, the emissions from the stack at the proposed facility will contribute 0.2 $\mu\text{g}/\text{m}^3$. Traffic generated by the scheme will contribute 0.1 $\mu\text{g}/\text{m}^3$. Existing traffic on Glover Road will contribute 3.5 $\mu\text{g}/\text{m}^3$, and ‘background’ sources will contribute 17.3 $\mu\text{g}/\text{m}^3$, of which some 36% is coming from the wider road network. Therefore, one must consider the likelihood of significant health effects from the emissions associated with the proposed facility, contributing 0.3 $\mu\text{g}/\text{m}^3$ in total, compared to those of wider road traffic emissions, which will be contributing some 9.6 $\mu\text{g}/\text{m}^3$. It is clearly wrong therefore to suggest that this facility will have significant health effects for local residents while ignoring the far more significant contribution from wider road traffic emissions.

Your point fails to realise is that the building of this plant and the workings of this plant will contribute to everyday activities that add to poorer air quality – such as vehicles you will use

The air quality chapter of the Environmental Statement submitted as part of the planning application has included detailed dispersion modelling of road traffic emissions, including the additional development-generated trips by both cars and HGVs, alongside the dispersion modelling of the main stack emissions. It has considered the everyday contribution of the proposed development to local air quality.

Chapter 5 of the Environmental Statement contains all relevant information. This is available publically on www.sunderland.gov.uk and on our website www.roltonkilbride.co.uk/sunderland.

VISUAL IMPACT

Smell from the chimney

The facility is very unlikely to cause any detectable odour issues. The odour risk assessment undertaken as part of the Environmental Statement demonstrated that the odour effects on all local receptors would be negligible and the proposed development was judged to be insignificant in terms of odour effects.

The gases being exhausted from the stack will have been combusted at over 850 °C. At such temperatures the vast majority of odorous compounds will be destroyed, thus the emissions from the stack will have minimal odour associated with them. The waste handling areas within the facility represent a far more significant potential source of odours, but extensive odour mitigation measures will be adopted in the Flue Gas Treatment Process, to ensure that there are no odour impacts off-site. The air quality chapter of the Environmental Statement submitted as part of the planning application included the extensive odour risk assessment and it is recommended that this is referred to if concerns regarding potential odour impacts persist. This assessment highlights all of the potential sources of odour at the facility, along with the mitigation measures to be adopted to control odorous emissions.

Chapter 5 of the Environmental Statement contains all relevant information. This is available publically on www.sunderland.gov.uk and on our website www.roltonkilbride.co.uk/sunderland.

As before, we are happy to offer a tour of an Energy from Waste facility to you, so you can make an informed decision for yourself.

You mention that the views of the chimney are confined to a long distance, however what this fails to realize is how flat the town of Washington is and that this chimney – as I already stated in my letter which I feel was ignored – would be higher than Durham House which is the tallest building in town and can be seen from many vantage points.

The proposed stack would be taller than the surrounding buildings, however the height of the stack at 57m, it is the minimum height that can be used in order to meet the relevant emissions targets as set by the Environment Agency. The stack has been designed to be as narrow as possible.

Our visual impact assessment concluded that:

"The nature of the Proposed Development, together with the context provided by the land uses surrounding the Application Site, would mean that the Proposed Development is considered to be appropriate to the setting and townscape character of the site and the surrounding industrial area.

The introduction of the Proposed Development would not result in any significant effects on local landscape or townscape features or elements, or the character of the landscape / townscape within and around it.

Effects upon visual amenity would also be generally not significant with only three locations assessed as subject to significant visual effects."

The visual assessment is available publically on <http://www.sunderland.gov.uk> or our website www.roltonkilbride.co.uk/sunderland as part of our Environmental Statement (see chapter 6).

I also find it odd to say that the building is set in a context to blend into the background... I don't understand how anyone who lives in the town could see a chimney that is higher than Durham House or such a large building so close to residential homes as blending into the background regardless of the number of trees you plant to mask the plant from up close.

Again, as above, our visual impact assessment details the proposed views. Efforts will be made to screen the building with landscaping, and in fact parts of the building will be below ground in order to try and minimise visual impact. Having undertaken studies the facility is not visible from large parts of Sulgrave and Barmston. This is demonstrated in the ZTV (see figure 6.5 of the Environmental Statement) and the corresponding photomontages and viewpoints (see figure 6.6 of the Environmental Statement).

As you may be aware, the current state of development on the Hillthorn Business Park is in its early stages. The land has been designated for industrial development and a consultation is taking place at present, <http://www.iampnortheast.com>.

We do understand that design is a subjective issue but it has been designed to be in keeping with the emerging landscape.

ENVIRONMENTAL CONCERNS

In your letter, you mention measures will be taken around pollution prevention and control measures during construction – I would be interested to know more details about what these are?

The air quality chapter of the Environmental Statement submitted as part of the planning application has incorporated a construction dust risk assessment. This has established the likely dust emissions from the construction works, the sensitivity of the local area and then the overall risk of impacts. Appendix 5.9 then sets out an extensive list of mitigation measures for the construction works that will be adopted to minimise dust impacts during the construction works.

Chapter 5 of the Environmental Statement contains all relevant information. This is available publically on www.sunderland.gov.uk and on our website www.roltonkilbride.co.uk/sunderland.

PUBLIC ENGAGEMENT

Some of these arrived with “junk mail” and understandably; constituents may have simply recycled the leaflet immediately on receipt. Was this ever taken into consideration as part of your work to ensure a proposer and effective consultation happened?

With respect to your comments regarding leaflet distribution and constituents placing these into recycling, as I am sure you will appreciate, we are not in control of what individuals chose to do with their mail ‘junk’ or otherwise.

We were made aware of some distribution issues by individuals throughout the consultation and we worked to rectify these during the door drop process. There are limitations however, for example if a property displays a sign prohibiting marketing materials then a delivery cannot be made, and access to a property is not always possible. We used other channels of communications as stated in my previous letter to try to counter these issues but we do accept that despite all efforts leaflets may not always reach their required destination.

How many local residents then contacted your or attended the event you held?

Overall throughout the process we received 282 enquiries, feedback forms, emails and other communications over the lifetime of the project. 324 visitors attended consultation events. This is clearly not the only way of measuring the effectiveness of our leafleting as it is at individuals’ discretion to attend or contact a developer upon receipt of a leaflet. We cannot be responsible for how individuals elect to deal with their mail. More information on our community engagement is available in our Statement of Community Involvement available publically at www.sunderland.gov.uk or on our website www.roltonkilbride.co.uk/sunderland.

Constituency office did not receive a leaflet

Residential properties were prioritised; we shall log your constituency office’s postcode with the distribution company.

I have to strongly criticise you for even considering that 180 individual responses were something to feel proud of on such an important matter like this. Those numbers are hardly representative of the area.

To be clear, we have provided 180 detailed responses to queries from stakeholders, to address their concerns. We do take pride in addressing each query individually and seeking to provide a very tailored response. Regardless of the numbers, this is a matter we take very seriously. Whilst 180 people have been minded to write to us we have dealt with many more queries face-to-face. We have provided many opportunities for this to happen in line with our obligations to consult. The planning department deems we have satisfied this requirement of the planning process. Whilst you may believe that 180 responses may not seem sufficient to you, we maintain that it is perfectly reasonable if people wish to be able to make their views known through other means eg petitions or representations to the local planning authority.

COMMUNITY BENEFITS

As stated in my previously letter 30 - 35 full time jobs will be created by the facility. It would be the intention to recruit and train employees from the surrounding area where possible. Our socio-economic assessment summarises the key effects as:

- Provision of circa 175 to 228 additional jobs during the construction phase in the construction sector
- Provision of 35 direct jobs during the operational phase as well as indirect jobs supported in the local economy to service the facility
- The jobs will include elementary jobs during both the operational and construction phases which provides choice for those seeking employment
- The provision of new jobs locally which may meet the needs of local residents
- Investment in construction, operation and maintenance all of which will provide for indirect effects including generating work for local tradesmen
- The increase of the local disposable income (for employees of the facility and tradesmen) which will have induced effects on local economy
- The above is estimated to provide an additional £1.6M GVA per annum for the local economy; and
- The provision of lower priced sustainable energy for local businesses, reducing business costs which may be used to expand or enhance businesses (including new jobs and/or increased wages)

Our socio-economic assessment is available publically on <http://www.sunderland.gov.uk> or our website www.roltonkilbride.co.uk/sunderland as part of our Environmental Statement (see chapter 13).

In terms of need, the bottom line is the UK needs more energy – particularly for the manufacturing industry to be successful. We maintain that the facility will provide a reliable form of decentralised source of energy for local business, ensuring a secure supply of low cost and low carbon energy enables business to be competitive, making it attractive to invest, which is vital in the current economic climate.

The energy project will be a source of continuous energy provision, which can be used to support manufacturing operations and boost business competitiveness through lowered operating costs.

The facility will also have a positive impact in terms of reducing green house gas emissions, saving tonnes of CO₂e over its 25 year life. Therefore not only will the facility lower operating costs, but it will also allow consumers to decarbonise their energy supply.

Gasification technology overall is low carbon, and this is recognised by the technology's eligibility under the Contracts for Difference (CfD) scheme - a private law contract between a low carbon electricity generator and the Low Carbon Contracts Company (LCCC), a government-owned company. More information on the CfD scheme is available here: <https://www.gov.uk/government/collections/electricity-market-reform-contracts-for-difference>.

The UK Government recognises that Energy from Waste facilities produce renewable energy in their report 'Energy from Waste: The Debate' where it is stated that energy generation from the biogenic fraction of the waste stream (food, cardboard, paper etc.) is classed as renewable. The report is available here: <https://www.gov.uk/government/publications/energy-from-waste-a-guide-to-the-debate>.

Over 50% of the facility's feedstock will be classed as biogenic; the Renewable Energy Association (REA) classifies the biogenic content of waste as between 50 - 68%¹³. Energy generated from these biogenic materials displaces energy generated from fossil materials and provides a valuable contribution to reducing emissions of fossil carbon into the atmosphere. This energy is considered renewable and as a result the facility is a generator of renewable electricity.

In addition to reducing carbon emissions the facility also lowers methane emissions when compared to the landfilling of waste. Waste processed by the facility would otherwise end up going to landfill. When waste is landfilled it biodegrades producing typically a 50:50 split between methane and CO₂. Methane is a considerable green house gas contributing 25 times more to green house gas emissions than CO₂ over a 100 year period. This is found in the UK Government's conversion factors spreadsheet under the refrigerants tab: <https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2017>

CO₂ is not combustible; it is directly released into the atmosphere from landfill, methane is however captured¹⁴. In a landfill site capable of capturing landfill gas (which all modern sites are required to be) it is generally assumed:

- 75% of the methane is captured
 - o 50% of which (so 37.5% of total) is used to generate energy (electricity and heat)
 - o 10% is oxidised to CO₂ (2.5% of total)
- **The remaining 22.5% is released into the atmosphere**

The energy centre on the other hand would emit very little to no methane, displacing the methane emissions of the waste, which would otherwise be sent to landfill.

Landfills are a significant source of green house gas emissions in the UK, particularly due to methane release, and are responsible for 4% of all UK emissions. <https://www.gov.uk/government/groups/acumen-assessing-capturing-and-utilising-methane-from-expired-and-non-operational-landfills>.

¹³ The REA's Gasification and Pyrolysis Group response to the RO Banding Review 2012, 12 January 2012 - <https://www.r-e-a.net/resources/consultation-responses>
<https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2017>

¹⁴ DEFRA - energy recovery for residual waste A carbon based modelling approach (February 2014)

The energy centre would be displacing power from what is already quite a fossil fuel heavy (predominantly gas) electricity grid. Given the quantities of power the Energy Centre will generate, the large biogenic fraction of the energy centre's fuel, the methane displacement of landfill, and the high carbon content of the UK's electricity grid, the energy centre is likely to actually reduce the UK's green house gas emissions over the period of its operation, providing a net benefit to the UK.

DAVID AND GOLIATH

We too are concerned about the levels of misinformation regarding the project. A clear example of this is a Q&A published by UKIP Sunderland, November 14 2017. Amongst others, I would like to draw particular reference to the following point raised, which is utterly incorrect:

"Will it provide jobs? – NO: it is a Japanese design and it requires specialists to operate it so either all, or the majority, of the 35 jobs will be taken by Japanese workers."

We have been clear from the outset that our intention is to recruit and train employees from the surrounding area where possible. Most Energy from Waste technology is provided by international firms, but it is perfectly normal to recruit and train from the local area and this would be in line with our plan.

Another example would be the UKWIN report on gasification – a failed technology. Opponents of this facility are citing this report as a reason to object to our proposals on the basis that gasification technology is unreliable. Unfortunately this report only features the eight plants in the UK that have failed; it does not taken into account the many plants that have been operating safely over many years. In the case of Rolton Kilbride, it is particularly inappropriate as it does not cover the Japanese technology we are proposing to use. However the report is being used to spread unnecessary fear and alarm.

It would be useful to understand what you would determine to be a convincing engagement. We have endeavoured at all times to be transparent and accountable and reject the notion that this consultation has not been effective. As mentioned earlier the council have deemed it appropriate.

The answers we have supplied can be independently verified. The UK has been slow to adopt new technology and the situation arising in Washington is not uncommon, where those in opposition challenge accepted evidence and government policy.

Regardless of party, successive governments have tightened industrial air quality standards continuously to the point where they can be satisfied it does not pose a health or environmental issue. The same debate is now considering domestic emissions and the impact that will have on individuals particularly in respect of transport and heating options.

The facility will provide a secure supply of energy to help make the automotive sector more competitive. In addition this project will not only support existing business but also protect the thousands of jobs within the supply chain, which forms a crucial backbone to the north east economy. The automotive sector has recently been explicit that Brexit could make manufacturing vehicles in the UK uncompetitive. The potential impact on regions like the north east could have significant economic and social implications.

Inward investment is also an essential element of a thriving economy and one the north east has fought long and hard to attract. The energy centre proposal represents an investment of £135 million into the local economy. Our project could act as a catalyst for other investment.

As a responsible developer experienced in this sector we fully understand that a technically complex development like this may cause your constituents genuine concerns. However the proposed development will use proven gasification technology to support and enhance employment in the local automotive sector and wider supply chain including professional and skilled services.

We accept, that you may not wish to support the proposal, but we have gone to considerable lengths to ensure that people have access to the correct information. Some concerns raised throughout this process, both real and perceived, have been either greatly exaggerated or plain untrue. We would be grateful that you work with us to ensure that people can access the correct information so that overall a responsible approach can be taken in whether to support or object to the planning application.

Yours sincerely
for and on behalf of Rolton Kilbride Limited

A handwritten signature in black ink, appearing to read 'A. Needham', with a long horizontal flourish extending to the right.

Andrew Needham
Managing Director

c.c Mr Peter McIntyre, Executive Director of Economy & Place, Sunderland City Council
Iain Fairlamb, Head of Planning and Regeneration, Sunderland City Council
Irene Lucas CBE, Chief Executive of Sunderland City Council