



Newhurst Energy Recovery Facility

Local Liaison Committee (LLC): Questions raised by LLC Members during and after the 29th July 2020 meeting

Questions from local resident Julia Howard on the committee's membership and Terms of Reference:

Q1. Does the committee have any terms of reference?

The terms of reference were agreed by the committee at its outset in 2008. These are to be reviewed as agreed at the last Liaison Meeting. As members will note, this is now an Item on the 12th October meeting agenda.

Q2. How did I get involved originally?

We have a record of Julia being one of the first two local residents to sign up for the committee (alongside Lynn Hobson). Julia was at the first meeting of the committee on 13th November 2008, just after the original planning permission for landfill and front-end treatment was approved. After the first meeting, we put an advert in the local paper to get some further interest and to extend the number of local residents on the committee to 6.

Q3. What exactly is my role?

The role of all LLC members is to represent the views of local residents in your area and to feed information back and forth as best you can. Clearly, we will also be disseminating information. Now that the site has planning permission and an Environmental Permit and is under construction, we want to hear and respond to any questions or concerns that residents may have about the construction and operation of the plant. As an operator in the local area we also want to hear about and discuss with you any local issues that are relevant

Q4. Has the university or Longcliffe Golf Club or Lubcloud got any representation on the committee, and should these be for example my focal liaison points?

None of the groups mentioned has individual membership on the committee. The makeup of the committee is included in the Terms of Reference and also in the Unilateral Undertaking. We do have contact with the University and the Golf Club separately, and we do speak to them on issues that affect both them and us.

- Q5. Who else sits in the same capacity as myself, i.e. not a local authority or agency member?

There are 6 local resident places on the Committee. Names were provided via email to Julia Howard.

- Q6. Which parish councils are involved, i.e. Charley?

Shepshed Town Council has two representatives on the committee. Charley Parish Council was also invited to attend originally, although they have never done so. We have always kept them as a corresponding LCC members and continue to send them minutes and information about the committee and meetings. They attended the meeting on 27th July 2020 and will continue to be invited going forward.

Further questions from resident Julia Howard on Technical Issues:

- Q7. Mark Revill from the EA has confirmed that Biffa has until 4 December 2023 to comply with the new air emissions in the new BATS requirements as it received its permit prior to the BREF review. It does not have to meet them at an earlier date. Please can Covanta and Biffa confirm that the design of the waste to energy plant will ensure compliance from the start with the new emission BAT standards .

MR for the EA said at the 27th July meeting that the new BAT air emission limits (AELs) were signed off in December 2019. Existing plant has a 4 years grace period to implement the new limits i.e. until 23rd December 2023. Any new plant operational after the end of 2023 will have to meet the new AELs. Although Newhurst does not have to comply until December 2023 we can confirm that the plant will comply upon commissioning. WB commented it is much better and more cost effective to include a change that you know is coming along in at the design stage than trying to retrofit.

- Q8: In the Decision Document to the permit issued by the EA, it refers to significant adverse impact in relation to the sensitive receptors at night with particular regard to the tipping hall louvre. Indeed, there is a precondition. My question is, the planning permission at condition 25 (2014 permission) States the noise level should not be above 55dBA and Mark Revill has referred to a different approach they will take in accordance with BS 4142, will there be two different noise levels to be monitored? And who will take responsibility for what, and for what period. Daniel Galpin from the LCC planning department referred to an 18-month monitoring period only for noise, is this to be inserted into the new permission not yet issued? And why is there a time limit now as there is no time limit in the 2014 planning permission.

The 18 months monitoring referred to through the planning is for background air quality, not noise. We are required to do 6 months pre-construction air quality monitoring (we have completed approximately 18 months pre-construction monitoring), six months construction background monitoring and 6 months operational background monitoring.

On noise, the planning permission sets noise limits of 55dBA at noise sensitive properties during the day and 42dBA at night. We have to achieve these limits at all times throughout the life of the plant. We will be required to comply with whatever conditions are in the planning permission and the permit. If these differ and one condition is more stringent than the other, then we will be required to comply with the more stringent condition.

Q9. Please can a statement be made by the planning department on the planning status of Longcliffe quarry. This was granted planning permission as was Newhurst quarry for landfill in 2007. What planning permissions currently relate to this area which is outside the waste to energy application site, but still owned by Biffa, in particular does the legal agreement entered into by the LCC which makes landfill extant (as confirmed by Mary) in relation to the Newhurst quarry apply also to Longcliffe. Steve Marriott was dealing with this following the last meeting in 2010/2011. And I believe the minutes recorded this as a live issue.

- *Longcliffe quarry was included in the original landfill permission dated 2009 because as part of the development of the Newhurst site for landfill, Biffa needed the space offered in Longcliffe for stone storage. At no point has Longcliffe had planning permission for landfill. There was no legal agreement with 2009 permission.*
- *The legal agreement came into play in 2011 with the first planning permission for the ERF. The red line planning and legal agreement boundary for the ERF does not include Longcliffe, however, because Longcliffe is included in the 2009 landfill permission, it is indirectly referred to in the legal agreement at clause 4.6.1 "obligations of the applicant" which states "not without the prior consent of the Council to carry out any further development and/operations associated with the 2009 Planning Permission and operations associated with the Mineral Planning Permissions other than restoration works".*
- *We therefore have no rights to carry out any development under the 2009 landfill permission in either Newhurst or Longcliffe i.e. we cannot landfill Newhurst and we cannot use Longcliffe for stone storage. All we are allowed to do is carry out restoration works. In the case of Longcliffe, this means allowing the site to naturally regenerate.*
- *Julia is right that Biffa has control over Longcliffe, and it will remain, as the legal agreement suggests, in its current state under restoration by natural regeneration. Any future use of the site would be outside the remit of this committee.*

Q10. Please can Charnwood release their latest air quality report which is required to be undertaken by Sec 82 of the Environmental act 1995 and confirm whether the present and future AQAL's are being achieved.

Link to ASR: <https://www.charnwood.gov.uk/pages/airpollution>

This shows no exceedance of the Air Quality Objectives in Shepshed.

Questions from Steve Cuff LAQPG (provided to Julia Howard)

Q11. Given that Biffa have recently been fined £350,000 for attempting to ship contaminated waste; what assurances can be given by the operator and the EA that no hazardous waste will be permitted to enter the Newhurst site?

This was a decision of the courts and the decision document is available publicly. Biffa will not be making any further comment at this stage and is currently considering its position.

For clarity, the Newhurst facility will only process residual waste. The Energy Recovery Facility is not permitted to treat hazardous waste.

- Q12. As we understand the purpose of the incinerator, it is to process residual waste; how will the operator ensure that no article made from a recyclable material enters the Newhurst site?

Where household waste is concerned, Local Authorities such as Charnwood Borough Council and North West Leicestershire Council are the waste collection authorities. They have waste reduction, composting and, of course, recycling initiatives in place. These initiatives are designed to make recycling easier and more widespread to minimise the quantity of recyclable waste in the residual (black bag) waste streams that could end up in landfill or being treated at an energy recovery facility.

Where commercial and industrial waste is concerned, the responsibility for removing recyclates is on the producer. The costs of landfill or energy from waste are significantly higher than the costs of recycling and so removing recyclable material from the waste stream in these circumstances makes both good sense commercially and environmentally. Biffa will be the fuel supplier for the plant, delivering commercial and industrial wastes from its customer base. Biffa provides a fully integrated service to its customers including recycling, composting, and residual waste disposal.

It should also be highlighted that the energy recovery process allows ferrous metals, such as iron and steel, together with non-ferrous metals, such as copper and aluminium, to be removed from the ash residue and sent to recycling facilities thus contributing to recycling rates. In the UK, the ash residue can be used as an aggregate by the construction industry.

- Q13. As we understand the relationship between Biffa and Covanta, the latter will actually operate incinerator: what is the legal process by which the Environmental Permit can be transferred from Biffa to Covanta?

This will be done via the standard permit transfer process through the EA. We are well versed with this process and have done it on numerous occasions e.g. when acquiring businesses and selling surplus land/sites

- Q14. It is predicted that within the operating life of the Newhurst incinerator, CO₂ emissions from EfW could be 10 times the average carbon intensity of the UK electricity grid; this is a significant barrier to decarbonisation of the electricity supply; would the operator like to comment?

Where is this prediction made? In order to comment fully we would need to see the analysis so we can review it. However, our initial response is that this is missing the point. The EfW process is carbon saving, not creating, because it will divert residual waste from landfill and methane (CH₄) from landfill emissions.

Importantly, the latest science from the Intergovernmental Panel on Climate Change (IPCC) states that methane is 84 times more potent than CO₂ over a 20-year span, hence landfill will have a much greater carbon/GHG impact. The following report from Policy Connect supporting EfW, also Minister Rebecca Pow's support may be of interest:

<https://www.letsrecycle.com/news/latest-news/policy-connect-backs-efw-as-best-available/>

- Q15. If the incinerator fails to operate at the required temperature of 850 degrees for a period exceeding 2 seconds, what is the operator required to do other than report to the EA. At what point should the incinerator cease to operate under these circumstances. There is growing support in Government circles and elsewhere for Carbon Capture and Storage (CCS) to be a requirement for all new waste incineration plants in the UK, probably as a BAT.

For clarity's sake, all EfW plants in the UK must reach 850 degrees centigrade for two seconds or more before waste can be introduced for treatment. This is not only an Environmental Permit requirement; it is also a regulation under the EU's Industrial Emissions Directive.

Under normal plant operating conditions and to comply with the Environmental Permit requirements, an infra-red Pyrometer is installed in the furnace first pass area to provide a direct measurement of the 850°C / 2-second criteria. The auxiliary burners (also situated in the furnace area) are equipped with start-up devices, so that they will automatically go into operation to prevent the flue gas temperatures in the furnace falling below 850°C (the set-point is higher than this to act as a buffer)

- Q16. There is growing support in Government circles and elsewhere for Carbon Capture and Storage (CCS) to be a requirement for all new waste incineration plants in the UK, probably as a BAT. What is the Biffa view of this? Presumably, Biffa wants to be part of decarbonising the UK.

Both Biffa and Covanta support initiatives that will decarbonise our economy and society - principally because climate change is widely recognised as the single biggest challenge facing the world today.

As referenced in a previous response, the EfW process is carbon saving, not creating, because it diverts residual waste away from landfill where waste degrades and rots. This then produces methane (CH₄) from landfill emissions. As referenced in a response above, the latest science from the Intergovernmental Panel on Climate Change (IPCC) states that methane is 84 times more potent than CO₂ over 20-year span, hence landfill will have a much greater carbon/GHG impact.

Alongside waste reduction, re-use and recycling, we can all increase our efforts to minimise the amount of residual waste the UK produces, and which then requires treatment, landfilling or overseas export to European EfW facilities. A number of heavy industries (including power generation and electricity intensive manufacturers) are, or planning to introduce, carbon capture and storage (CCS) technologies. Looking ahead, energy from waste facilities will play a critical role as the UK transitions to the electrification of cars and other forms of transport.

However, the reality is that no UK EfW plants employ CCS technology. Indeed, until very recently, there weren't any CCS technologies on the market to install or retrofit to EfW facilities. That said, both Biffa and Covanta will be closely watching a CCS pilot project at an operation plant in the Netherland to assess its effectiveness. (Further information can be found here - <https://www.energylivenews.com/2020/10/05/uks-carbon8-to-deploy-carbon-capture-tech-at-dutch-waste-to-energy-plant/>)

Q17. Will CCS now be added to the design for Newhurst, or will CSS be retro-fitted at an industry-estimated cost of £100 million?

As stated above, new CCS technology for EfW facilities is in its infancy, and is set to be trialled at a pilot project at an operation plant in the Netherland. Until the results of this pilot project are known, it would not be appropriate to comment further at this stage.

Q18. Has a feasibility study been undertaken yet? If not, what are the plans for this?

No, for the reasons stated above. CCS in the EfW is currently in a trial phase and is not available at present as standard BAT technology.

Additional Questions asked during the Liaison Meeting:

Q19. JH asked whether it is possible to have a couple of stakeholders included, specifically the University and the Golf Club. Graham Howard, the Facilities Manager at the University has particularly expressed an interest.

MH thought it would be useful to have someone from the University but that would open it up to all comers. CR was concerned the liaison committee will get too big. We already have too many members from Charnwood BC and Shepshed TC. MT said she would take that up with both organisations. (this has since been resolved). The terms of reference set out the agreed membership.

Q20. JT asked if any fly ash would be stored on site or taken away daily in sealed containers.

MT answered a small amount will be stored on site in silos, but it is taken off site regularly in tankers via a sealed pipe.

Q21. JL asked if the committee can have, in writing, that the new BAT ael's will be achieved from the start of operations rather than waiting until December 2023.

Please see response to question 7 where written confirmation is provided.

Q22: MH said the single concern is the emissions from the plant. A lot of papers make all sorts of claims about the emissions. Unfortunately, Covanta or Biffa are not the best people to say how safe the plant is. The people we trust most are the local EHO's. Please can you discuss with them to explain how you control emissions and monitor the plant in language that can be understood.

Modern EfW plants in England can only operate with an Environmental Permit from the Environment Agency (EA) under the Pollution Prevention and Control regulations. Other parts of the UK have their own respective agencies with similar powers. Operators must continuously monitor in real time and report emissions from the plant.

The EA inspect facilities regularly and tightly enforces regulations. Importantly, Public Health England reviewed the latest scientific evidence on the health effects of modern

incinerators and concluded in its position paper (3rd September 2009), that any potential damage from modern, well run and regulated incinerators is likely to be so small that it would be undetectable.

To put this into perspective, the UK's Environmental Services Association (ESA) puts EfW emissions into context, *stating 'in 2015 home wood burners generated 785 times more particulate matter, while road traffic emitted 45 times more NOx, and Bonfire Night alone produced 10 times more dioxins than EfW across the whole year.'*

We recognise that EfW operations and emission control procedures are important subjects for LLC members and wider communities. As such, Biffa and Covanta would be happy to arrange dedicated presentations on this subject at future LLC meetings. In addition, we will also invite the Environment Agency and Environmental Health Officers to contribute to this to provide greater insight from the regulatory and enforcement perspectives.

Q23. CR asked if Covanta would offer any grants to the local area?

MT confirmed there are no planning conditions that require this to happen. However, DS is raising this topic with the project's Board to assess if a community funding scheme could be established once the facility has commenced commercial operations.

Q24: CR said, rather than talking to the University about heat offtake, there is in Loughborough, Rainbows Charity for children at end of life. If possible free electricity or heat should go to them rather than the University.

DS clarified that EfW facilities generate electricity that goes directly to the national grid which is distributed in the normal way. There are plants in the UK that distribute heat locally. We are going out early on this to see what inward investment might arise from the use of the heat. MT commented that the heat would not be given gratis to the University and Bob Bebbington commented that in order to use the heat, you need a user very close to the plant for efficiency. The University is an obvious choice as they are very close to the site. The fact remains that the shorter the distance the more efficient it is.

Q25: PW asked about traffic routing. Now the M1 improvements have been put in place, traffic coming off the M1 is not an issue but the traffic travelling along the A512 to the west is still an issue, particularly at peak times. PW suggests we might want to consider requiring drivers to go via the A42/M1 rather than the A512. It adds about 5 miles but most of this is at 56mph rather than 30mph.

Paragraph 8.124 of the approved traffic assessment states:

"The distribution and assignment of HGVs has been undertaken with reference to the sources of waste, as indicated by the applicant's own waste model, assuming the quickest route. This results in 92% of HGV's arriving from the M1 Motorway J23 and just 8% from the west via the A512. Staff vehicles have been assumed to arrive on a 50:50 distribution."

In real terms that equates to approximately 20 HGV movements (10 vehicles) on the A512 route each day with not all of these occurring during the peak hours. That is not to say that we couldn't reduce this further as suggested and we will keep this under review. The plant will not commence receipt of waste until at least 2022.

Questions/Requests for Information received after the Liaison Meeting

Q26. Email from Max Hunt 26/08/20: *"I'm sure you and David have seen this article: Legal challenge over UK's exclusion of incinerators from emissions target <https://www.theguardian.com/environment/2020/aug/25/legal-challenge-uk-exclusion-waste-incinerators-emissions-trading-scheme> published yesterday. I am sure your EfW plant will be within any operating legal limit on carbon emissions and as we know it's rather less damaging than landfilling residual waste.*

However, so that we are fully briefed would it be possible for Biffa or Covanta to present the information available on Carbon emissions from the proposed plant at the October meeting, please?

You will appreciate that some of us are regularly asked about climate change targets and carbon reduction and your project is no exception."

As the Guardian article states, a challenge is being independently brought forward against the Government department, BEIS. At present, the UK Emissions Trading Scheme (ETS), which was created during in 2005, will commence in January 2021, with 'installations for the incineration of hazardous and municipal waste' being exempt from the ETS.

It would not be appropriate for operators and developers of energy from waste facilities to comment or speculate further on this challenge until the legal proceedings have run their course.

When calculating carbon footprints of any energy-from-waste facility (EfW), the full life cycle of a given development must be considered and accounted for. Taking carbon footprints at each phase of development in isolation is not only inaccurate, it can also lead to unfounded conclusions.

In general, the carbon footprint of the construction phase of solid waste management facilities is considered insignificant, when compared to the emissions associated with the waste management processes themselves, especially in light of the long-term viability of EfW facilities.

On a broader scale, energy-from-waste facilities are widely recognized throughout the world as a tool to reduce greenhouse gases. In fact, the [International Panel on Climate Change](#) called EfW a "key greenhouse gas mitigation technology" and the [World Economic Forum](#) identified EfW as "one of eight technologies likely to make a meaningful contribution to a future low-carbon energy system.

For more information, visit <http://covanta-csr.com/environment/addressing-climate-change/>.

Further information: Drivers for EfW and EU Directives

EfW is an important part of an overall integrated waste management approach, recognized in the European Union waste management hierarchy as preferable to landfilling for those materials remaining after waste reduction, reuse, and recycling efforts have been exhausted. After recycling takes place, EfW facilities recover energy from remaining waste materials in an environmentally sound manner. While doing so, EfW facilities reduce the need for fossil-based energy and reduce greenhouse gas emissions relative to landfilling.

EfW is a sustainable solution and plays a part in the circular economy by generating energy and recovering metals and aggregates for recycling; burying waste in a landfill is not sustainable. When waste is buried in landfills it decomposes and generates methane. Methane is a very potent greenhouse gas (GHG), over 30 times more potent than CO₂.

Therefore, with the objective of addressing climate change, the European Union has issued a directive to limit the landfilling of biodegradable municipal solid waste to 35% of the quantity landfilled in 1995. EfW is a net reducer of greenhouse gas emissions because it does not create the methane that landfill produces, in addition to offsetting the need to burn fossil fuels in power plants.