

Questions to Covanta/Biffa from LAQPG

No.	Question:	Response:
1.	<p>Discussions held with the University regarding their use of electricity or heat from the plan are purely “speculative”.</p> <p>The statement is made that Incineration is now regarded by HM Government as a high carbon process.</p>	<p>There have been past discussions with Loughborough University regarding supply of heat and or electricity. We would agree that the discussions have been “speculative”, and we would very much like to see them progress further. That said, the plant still easily achieves R1 status without supplying the University.</p> <p>Covanta has provided their R1 Calculation, and this is included with this response. This shows that the plant should easily achieve R1 status and will be classified as a “Recovery” operation.</p> <p>It would be helpful if LAQPG could provide the references that suggest energy from waste is a high carbon process so that we can understand the context and respond accordingly.</p>
2.	Who will buy energy from Newhurst?	We have a 15-year power purchase agreement with Smartest Energy on the electricity being supplied to the grid.
3.	If commercial customers are not forthcoming, what is the impact on investors?	Investment has been made on the basis of the contract for power export.
4.	If insufficient energy is actually sold, what happens to the R1 status, if this achieved?	We have a contract to supply electricity and the R1 calculation is based on only this, so the question is not relevant
5.	Questions raised about the absence of a condition on the planning permission requiring the restoration of the site in the event that the ERF become redundant.	<p>This is a permanent consent for an industrial facility. There is no intention to remove the plant – it will continue to operate and be updated and changed, as necessary.</p> <p>This issue was also addressed at the LLC meeting on 11.01.21</p>

6.	Who will be responsible for monitoring and reporting the vehicle movements?	The site operator i.e. Covanta is responsible for keeping records. There is a condition on the planning permission that requires records to be kept and to be produced on request by the Local Planning Authority.
7.	What happens if the daily number of movements is exceeded? Will excess vehicles be turned around?	Everything arriving at the plant will be under contract, so we have the ability to control deliveries to the site to ensure the permitted numbers are not exceeded. Nothing will arrive speculatively (if it did, it would not be allowed beyond the weighbridge).
8.	In the event that HGV's cannot be "tipped" due to, for example, a breakdown of the plant or the waste storage being full, can an assurance be given that vehicles will not queue outside the boundary?	If there is a planned shutdown, no vehicles would come to site. Customers would be notified in advance. If there were an unplanned shutdown, the waste bunker would still have capacity to accept waste giving sufficient time to inform customers that the site is shut. There is no possibility that vehicles would end up queuing outside of the site.
9.	Will the plant be subject to continuous monitoring, to ensure it does not exceed the permitted emission levels by use of bypasses during transient phases, meaning that the plant emits without filtering?	The Permit sets out those parameters which must be monitored continuously, and this is how the Plant will be operated. A bypass around the flue gas treatment system will not be installed (and is not permitted by the EA).
10	Under what circumstances will the plant shut down automatically and can automatic shutdown be overridden, if so by whom?	The plant will shut down automatically if there is a significant disruption to the process. This might be a variety of reasons, e.g. failure of equipment, loss of electricity supply, which results in one or more parameters reaching a threshold at which the Plant control system will initiate an automatic safe shutdown. This will be tested and proven during commissioning of the Plant. Any changes to the control and safety systems will only be permitted via a formal review and approval procedure and could only be undertaken by specialist personnel.
11.	Under what circumstances can the plant be shut down by the EA?	The EA cannot come to site and physically shut down the plant. Any EA-enforced shut-down would be due to a persistent and/or serious breach of the permit.

12.	How are start-ups controlled to ensure there is no spike in pollutant emissions above safe levels?	Start-ups are largely controlled automatically with occasional operator check points according to an approved start-up procedure. The flue gas treatment system is preheated and pre-coated with reagents prior to start-up. Auxiliary burners are used during start-up to slowly warm up the plant prior to the required temperature before waste is incinerated, as required under the permit.
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Questions to Covanta/Biffa on R1 and Carbon Capture

1.	We understand it is intended Newhurst will obtain an R1 status. If so, what would be your target. Can this be explained so an understanding can be achieved as to the importance or not of achieving this target. (it is understood R1 status is granted to the most energy efficient producing incinerators from 2008, having at least a .65 energy coefficient	The currently calculated R1 value for the plant is >0.8 and the calculation is appended to these responses.
2.	Would Biffa please send the link when finalised of its calculation for its R1 status.	A copy of the current calculation is appended to these answers. Please note that the calculation has been carried out by Covanta as the plant operator. The process is ongoing, and Covanta will be required to continue to demonstrate the R1 status of the plant throughout its operational life. Ongoing validation submissions will be required.
3.	Does your calculation of R1 include heat offtake?	<p>The current R1 calculation includes only electricity production. The efficiency of the Plant for electricity-only production is expected to be one of the highest in the world.</p> <p>The plant has been designed so that any future heat export can be achieved efficiently by using steam which has already been used to produce electricity. This can only improve the R1 figure.</p>
4.	Planning Condition 29 to locate the heat offtake pipe route has not yet been complied with.	The condition requires we provide a route to the boundary of the site for approval by the LPA before commencing operations. The work to provide this detail is ongoing and the condition will be complied with. The plant will be CHP ready upon commencement of operations.
5.	Can it be confirmed whether the option is being taken to install continuous emissions monitors.	Continuous Emission Monitors will be installed and have always been included in the design for the Plant. This is the normal approach at EfW Plants in the UK. Continuous monitors will be installed for those parameters stated as "Continuous measurement" in Tables S3.1 and S3.1(a) of the Permit.

6.	Can you confirm whether pre-operational condition P07 has been fulfilled? If so, may we have the link to the air dispersion modelling which forms part of the Air Emissions Risk Assessment you undertook in 2018.	P07 is now discharged. Further comment on this is provided by the EA in their response.
7.	Can you confirm it is Biffa's responsibility to ensure that the waste is correctly monitored and it is they who would be penalised for allowing hazardous waste to enter the stacking bays?	The permit lists the types of waste that can be accepted at the plant. The plant is only permitted to accept non-hazardous wastes. It is the responsibility of the producer to correctly describe the waste they are producing but ultimately, everyone from the producer, through those who transport the waste and the operator of the plant has responsibility for ensuring only compliant waste is accepted at the site.
8.	What actual control and monitoring procedures would be in place that can be checked by the EA or other statutory body to ensure this takes place – in particular has the Waste Management Scheme be written and what does it say about the acceptance of unsuitable material.	Covanta will have operating procedures (e.g. spot checks on tipping floor and visual inspection by crane driver) prior to incineration.
9.	Can the TATA CCUS industrial scale Carbon Capture and Utilisation project be monitored. Could this be included in the construction with the aid of a grant?	The issues around carbon capture were answered following the meeting in July 2020 and are also included in the FAQ section on the web site.

Questions for the Environment Agency

<p>1.</p>	<p>In relation to Q2, I notice in the Permit at 3.5.5, regarding daily emissions, there appears to be an option for continuous monitoring of emissions, is this correct and if so do you know if continuous emission monitors are to be installed. If they are not installed how do emissions get monitored and is live data to be made available.</p>	<p>The continuous emissions monitoring referred to in permit condition 3.5.5 is actually required by condition 3.5.1 which references schedule 3 to the permit. These are mandatory requirements of the Industrial Emissions Directive (IED). The continuous monitoring serves to show that the combustion process is well controlled and that pollutants potentially most impactful on local air quality are sufficiently controlled and within the prescribed limits of the IED. Periodical monitoring is also required by the IED for other pollutants for which there may be no approved continuous monitoring method. Whether the operator would be willing to provide a link to live emissions data is one for them, but there is no legal basis to require it.</p>
<p>2.</p>	<p>Regarding Q4, do you have the PO7 (pre operational condition on the review of the air dispersion modelling) fulfilled yet and if so please may we have the link to the final air dispersion assessment carried out forming part of the Air Emissions Risk Assessment, which you forwarded to me; I note that this must be done after determination of the option of whether one or two incineration lines are to be implemented, and at least 2 years before commissioning. If this is still outstanding, are you aware of its data collection yet? And Is this the additional work you were referring to in your response to my previous question in 4, where you said more work is needed. - in particular would you able to comment on whether there are any discrete sensors now included on the university site, and if so, why not. (4.1)</p>	<p>This was some of the additional work to be undertaken. The operator has fulfilled the pre-operational condition PO7. I include their submission and my report. Regarding discrete sensors, there is no requirement for such.</p>
<p>3.</p>	<p>In Q5 you refer to the waste acceptance procedures, I assume PO12. I also note the planning Permission has had this condition removed, their condition 36. Are these one and the same, do you have it yet and who monitors the performance. We are told by Biffa that it is the producer of the waste who is responsible if</p>	<p>Pre-op condition PO12 does refer to the waste acceptance procedures required to be in place before commissioning and acceptance of waste. We have not received any submissions to this yet. The waste acceptance procedures form part of the environment management system for the site and come under the auspices of the Environment Agency in determining compliance</p>

	hazardous waste is accepted, but can you explain who exactly this body is, councils, Biffa, or Covanta? (It is stated in PO12 that the waste procedure should state the systems by which wastes unsuitable for incineration at the site will be controlled)	with the permit. Any additional conditions the local authority may apply as part of the planning permission is not a matter for the Agency. The reference to the responsibility of the producer to accurately describe their waste is separate to the permit requirements on the operator to receive and handle waste in a way that does not pose a significant risk to the environment. The producer is obliged by law to correctly characterise and describe the wastes they produce. The Agency has a wider role in checking that this is happening and taking appropriate enforcement action where necessary.
4.	When all the pre-operational measures (PO) are completed can the public view the documents (also the Improvement Programme Requirements)	Yes. Submissions against a permit condition are normally available on the public register (subject to some exclusion provisions in the regulations).
5.	We find it hard to understand whether what is emitted from the stack is what impacts ground toxins. We note that in the Air emissions Risk Assessment 2018 undertaken by Biffa at tables 6-1 and 6-2 PM2.5 particulates have been excluded from predicted maximum ground levels for short term impact but are included for long term impact. Please can you explain the significance of this and why that is.	This was part of the permit variation determination but I expect that PM2.5 was not included in the short term assessment simply because there is no short term air quality objective to assess it against, only an annual mean.
6.	The impact of terrain modelling is included in the Air Emissions Risk Assessment, but we cannot see where the relevance of this is included in the findings! Has it changed anything?	Terrain modelling is integral to the air dispersion model. Typically, consultants may turn off that element to show what the modelled impact is with and without just as is the case in the sensitivity analysis in the report. As you can see there is little impact in this situation.
7.	IC2 requires a written proposal be provided for the tests to be carried out to determine the size distribution of the particular matter in the exhaust gas emissions to air from emission points identifying the fractions within the PM10 and PM2.5 ranges prior to any tests. Has the proposal been given the written approval yet and if so, may we have the link?	This is a standard improvement condition and is not due until after commencement of normal operation.

8.	Additionally, at p 19 in the decision document to the permit it states that there is currently no emission limit prescribed nor any continuous emissions monitor for particulate matter specifically in the PM10 or PM 2.5 fraction. Please can you explain why this is. And why this is not taking place until 6 months of the completion of commissioning. Similarly, the importance of 1C3 for chromium.	Legally it is total particulate matter that is required to be monitored and this has an emission limit value set by the IED. Both PM10 and PM2.5 fractions are part of that total. There is presently no specific legal requirement to set an emission limit for the smaller fractions. The air impact assessment modelled both these sub-categories as if the total particulate emitted at the specified IED limits were comprised of wholly PM10 or PM2.5 for their respective air quality objectives. It demonstrated that they were insignificant. That this improvement condition requires submission after the commencement of normal operation is in itself quite normal as the data gathered should be representative of the plant in the state it is expected to spend most of its working life. The improvement conditions relating to emissions, such as IC3, can be viewed as confirmatory checks for the modelling conclusions.
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