



HOUSE OF COMMONS

LONDON SW1A 0AA

12 August 2020

Dear Sirs

DETERMINATION OF AN APPLICATION FOR AN ENVIRONMENTAL PERMIT UNDER THE ENVIRONMENTAL PERMITTING (ENGLAND & WALES) REGULATIONS 2016.

PERMIT NO.: EPR/ZP3537AT
APPLICANT: ENDLESS ENERGY LIMITED

We write as the Members of Parliament for Keighley and Ilkley, and Shipley to formally register our concerns and to raise some additional queries as part of this second consultation process. As you will be aware, the application site to which the proposed environmental permit will relate is situated within the Keighley and Ilkley constituency, and will have a major impact on the Shipley constituency.

We have severe concerns regarding an environmental permit being issued and would urge the Environment Agency (EA) to reconsider their 'minded - to - approve' position. This scheme, should it go ahead will have detrimental consequences for air quality, the environment and the health and wellbeing of our constituents.

We have read the consultation documents in full and provide this joint submission. As you will be aware from previous correspondence with the EA, we have been working closely with the Aire Valley Against Incineration Campaign Group (AVAI). This submission also reaffirms some of their points as well as highlighting concerns we have raised previously with the EA in a verbal and written format over the past few months.

We wish to raise the following points:

1) Inadequate and Unfair Consultation Process

We have found the whole consultation process to be incredibly frustrating and feel that much more could have been done by the EA to make the whole process much more accessible, transparent and open to all from the start.

We recall an initial telephone conversation Robbie Moore had with the EA to be informed the formal consultation process was going to commence that evening, and that it would be online only. We immediately raised concerns that it was to be solely online and that the EA had taken the decision to launch such an important consultation during the coronavirus pandemic. We also raised concern at length of the proposed consultation period. As such the launch date for the consultation was deferred by a week and the decision was taken by the EA that hard submissions, as well as electronic submissions would be accepted.

Throughout the consultation period, we have had to raise concerns on several occasions at the speed in which the EA was responding to valid requests for further information from the AVAI.

We have also raised concerns that no response to requests for information by the AVAI was received by the EA. As such, the consultation period has been extended, so that the general public, representatives and the AVAI have had more time to prepare and submit their submissions to the consultation process.

In addition to the concerns above, there are over 50 documents for the general public to review. Whilst we appreciate these could have been made available in a hard form, they were not made publicly available in a hard format in local libraries or community spaces as one would normally expect. The reasoning provided by the EA was due to the current coronavirus pandemic. To counteract this, we were told that more consultation time was being made available compared to a consultation being carried out during normal (non Covid) times. It is our view that for a proper and robust consultation to be carried out, it needs to be as open and transparent as possible, and by the very fact that the hard documents could not be viewed within community spaces, this limited the ability for the public to properly scrutinise the documents and thus contribute fully to the consultation process. The arrangement which had been adopted by the EA alienated members of the public without internet or digital skills, or access.

The restrictions on gatherings as a result of the emergency laws brought in to deal with the Covid pandemic has also meant that public meetings could not be held in which questions could be asked and further information gained on the documents which were open to review.

It is our view that all of this could have been avoided, with better planning and more openness on the part of the EA. There has been clear procedural unfairness and we would urge the EA to consider an extended consultation period in which all of the issues identified above can be properly addressed so that equality of participation in the consultation can be fully achieved.

2) Poor Referencing of Evidence and Documents

Upon reviewing the consultation documents, we have found that the draft decision document does not clearly reference evidence presented elsewhere in the 50 or so other supporting documents. Therefore, it is extremely difficult to match EA assumptions with the technical evidence on which they are based. We have found such difficulty enhanced by the fact that the documents are only able to be reviewed online.

3) Concerns regarding Noise and associated Modelling and Data used.

The Draft Decision Document (DDD), states that the EA

“are satisfied significant pollution from noise impact is not likely” and cite the information from the applicant’s assessment as evidence.

However, the Schedule 5 response note and document 0H800702 02 / 64 I 0001, show the noise modelling, originally carried out in 2013, was updated in 2016 and the attended noise monitoring dates from 2013. Given the size, scale and impact of the incinerator, it is our view that the EA’s decision should be based on more recent noise modelling and monitoring evidence. We also have concerns regarding the noise assessments which have been carried out and in particular the location and number of Existing Sensitive Receptors (ESR).

ESR1

It is concerning that there appears to be inconstancy in the selection and description of ESR1.

At a late stage it changes from 6 The Croft BD21 4ND to Thwaites House Farm BD21 4NA. No reason for the change is given and no description of either receptor is provided, other than their distance from the site boundary – extremely close, at 80m and 100m respectively. Explanation needs to be provided by the EA on this.

ESR2

We have severe concerns regarding the selection of ESR2 – Marley Cottages. Marley Cottages comprise of a small isolated group of houses situated right on a fast stretch of the Aire Valley Road, suffering exceptional levels of traffic noise. This high existing noise level of course enhances the Applicant's conclusions.

Marley Cottages are totally unrepresentative of the hundreds of terraced and semi-detached properties in narrow residential streets within 500-700 metres of the site. Indeed, none of the ESRs, including the additional three on Thwaites Brow Road requested by the EA at a late stage, two of which are farms, reflect the typical geographic layout or housing type and density of the area. Further explanation needs to be provided as to why this location was chosen?

Additional ESR's and Lack of Them.

From reviewing the evidence and data provided, it is our view that not enough review has been undertaken to wholly consider the noise consequences of the proposed incinerator. A much broader range of ESR's should have been incorporated within the review process.

Could the EA therefore explain why ESR's were not included in the following locations;

- Residential properties in quieter areas not immediately adjacent to the two main roads eg Garforth Road, Kinara Close, River Street, end of Westlea Avenue,
- Strong Close Nursery School
- Location on north slope of valley somewhat to the east of the site.

Additionally, rather than relying solely on the applicant's information, which will of course seek to show limited impact, we believe the EA should seek an independent assessment of likely noise pollution.

4) Unsubstantiated Assumptions about Noise Levels

The Schedule 5 Response Noise Note states that;

"The background noise levels used in the assessment were captured in 2013. Since this time, it is likely that the number of vehicles on the surrounding road network has increased, as generally the number of vehicles recorded on the UK road network increases every year. If the survey were to be repeated at the current time, it is likely that elevated noise levels would be recorded as a result of increased road traffic on the surrounding network. Therefore, the background noise levels used are considered to provide a robust assessment."

It is our view that measurements from seven years ago are not adequate to reflect noise from traffic in 2020. Whilst the number of vehicles may have increased, no evidence is supplied to prove this. Nor is evidence provided about the amount of noise currently created by an average vehicle. Further explanation is required by the EA as to why this is considered acceptable.

5) Topography and Temperature Inversions

Many members of the public remain concerned about the likelihood of increased pollution in the areas surrounding the proposed incinerator due to the site's location at the bottom of a steep-sided valley. Temperature inversions are a frequently observed feature in the Aire Valley. These inversions are caused by cold air drainage flow in the valley and they can effectively act as a cap on emitted pollutants.

The site of the proposed incinerator is situated at a very different topography and microenvironment to the weather station located at Bingley where the data used to assess the impact on temperature inversions has been used. We are informed that the night-time temperatures are often lower, and the day-time temperatures are often higher on the proposed incinerator site than it is for the Bingley weather station. Therefore, we remain unsatisfied that sufficient analysis has been undertaken by both the applicant and the EA to assess the impact of emissions being trapped within the temperature inversions that take place within the Aire Valley.

It is noted that a very similar situation to that in Keighley was encountered when a permit application was submitted to Natural Resources Wales (NRW) for a waste processing plant at Nine Mile Point, near Caerphilly in 2015. In order to fully quantify the effect of inversions on the maximum ground level pollution of NO₂, the NRW used German software; KLAM_21. In the permit refusal document reference PAN-000061, it was found there was a significant additive effect to the maximum deposition figure due to cold-air drainage, or temperature inversions.

The selection of KLAM_21 by NRW for the modelling of cold air drainage flow was described as follows on page 32 of the permit decision:

"KLAM_21 is the only commercially available software for simulating cold air drainage flow to NRW's knowledge."

It is noted that the AVAI submitted full details of the NRW permit refusal document to the EA at the first consultation stage. We understand they requested that KLAM_21 be used by the EA to model the impact of cold-air drainage on the maximum NO₂ ground level pollution. It is noted that such a request was addressed in the Draft Decision Document, in the section where the EA responded to queries received during at the first consultation. The EA have responded to such a request by stating;

"KLAM_21 is a method of assessing cold air drainage that can occur during inversions. We considered temperature inversions in our audit as discussed in section 5.2.4 We are satisfied that no further modelling work is required."

In section 3.2 of the AQMAU audit document it states that CALPUFF was used to take into account the complex terrain of the Keighley site.

We understand that CALPUFF was de-listed by the Environment Protection Agency (EPA) in 2017 as one of their preferred models. Please see for reference; <https://www.epa.gov/scram/air-quality-dispersionmodelling-alternative-models>

Therefore, the following questions arise;

Why is CALPUFF modelling used as part of this analysis process if it was de-listed by the EPA in 2017?

Regardless of this, does CALPUFF take into account the additional impact of temperature inversions on maximum NO₂ deposition levels, as evidently NRW did not think it did in their decision document?

Full details of the additive effect of cold air drainage flows should be provided and if not KLAM_21 should be used in the modelling exercise to obtain this information.

It is essential that this information is provided for the Keighley permit application as it was made available in Wales by a sister organisation of the EA for a facility that had very similar topography.

6) Modelling of Pollution by the Emissions

The modelling uses data from Bingley weather station, located 262m above sea level, whereas the proposed incinerator is at roughly 85m above sea level. This discrepancy in elevation means that the estimated dispersion of emissions from the incinerator is based on information from a weather station in a raised position where wind speeds, behaviour and direction is different from those experienced in the valley. It is our view that the predicted pollution from emissions should be based on modelling from the proposed location of the incinerator. This would enable a more accurate assessment of pollution and likely emissions and enable more accurate prediction of compliance with official pollution limits – essential when the emissions are potentially lethal to humans and the environment.

The Air Quality Modelling and Assessment Unit (AQMAU) of the EA reviewed the applicant's submissions relating to air emissions and considered the impact for human health and ecological impacts. In their audit report (reference AQMAU_C1775_RP01), the EA suggested there was a likelihood of inter-model variation at the receptor sites, and there may also be variations in the meteorological data between the Bingley weather station and the weather at the proposed incinerator site.

If such variation was identified by the EA, why was further modelling and data not requested of the Applicant and why was the Applicant not required to submit an updated Air Quality Assessment which contained sufficient additional information so that such variation could be disregarded?

Upon reviewing the data sets, two of the weather data sets used in the AQMAU modelling checks were predictive weather data sets namely NWP and MM5 data. These dated from 2012 and 2001 respectively. Given that these data sets are 8 and 19 years old respectively, it beggars belief that these are up to date and reliable.

How representative can such old information possibly be of the current conditions?

Why was MM5 data used in the analysis process by the EA, as it is understood that this data is now obsolete and was replaced by WRF in 2005?

Further clarity is required on this issue.

7) Monitoring emissions

We are concerned at the lack of clarity and process relating to how the EA may monitor emissions being released from the site and how they may carry out effective enforcement action, should the applicant be in breach of any permitted rights that may be granted.

8) Negative Impact on Air Quality

We remain concerned that the meteorological data in which the EA have utilised as part of the modelling process to determine whether or not there is a detrimental impact on air quality has not been publicly shared. We note that both the AVAI and the two of us have requested such data to be made available but have been told by the EA that as the EA do not own the data, it could not be shared. This seems ridiculous as no doubt this data will have formed a vital part in the decision-making process the EA will have adopted to reach a 'minded to approve' decision, and yet this data is unable to be made publicly available.

Upon requesting a statistical analysis of the data from the EA, we have been informed that the EA do not currently hold such a report, nor has the EA carried on out as the raw data was only fed into modelling. This seems very untransparent and lacks openness.

How can the EA expect members of the public and local representatives to properly scrutinise the process and the 'minded to approve' conclusion which the EA has reached without having such analysis being performed and made publicly available?

Under Section 5 of this letter, we spend some time discussing the topography of the land surrounding the site and associated temperature inversions.

Both the AVAI and we have asked the EA to provide the actual results obtained relating to the quantitative additional impact of temperature inversions on the maximum pollution levels. This is a perfectly reasonable request, but we have been informed by the EA that it is not possible to quantify the additional impact of temperature inversions because the models the EA have used automatically predict concentrations during temperature inversions. We have been informed that the modelling data specifically does not take account of the effects of temperature inversions. This is a huge concern. The proposed site of the incinerator is at the bottom of a valley, situated in close proximity to many homes, schools and nursing homes. It would seem that the impact of the temperature inversions on air quality have not been properly explored by the Applicant, nor scrutinised by the EA. We wish to reiterate that it is our belief, based on the information put before us that this scheme, should it become operational will have a huge detrimental impact on the health and wellbeing of many residents within the Aire Valley.

When in enquiring further about the modelling which the Applicant and the EA has performed, we have been informed that ADMS will model a stable atmosphere where the air flow is more likely to be around hilly terrain as opposed to over it. We have also been informed that ADMS will also model capping inversions in appropriate stable meteorological conditions. We are flabbergasted that this has not been done to date and well in advance of the consultation period being launched, and that it would appear the EA have reached their 'minded to approve' decision without this modelling having been undertaken. Can the EA therefore confirm a) why the consultation commenced without such analysis being undertaken, and b) how a 'minded to approve' decision was concluded upon without due thought and consideration having been given to this important point.

9) Stack Height

The height of the incinerator stack is obviously a key 'best available technique' issue in ensuring the effective dispersion of any emissions. The importance of the stack height is reflected in the fact that the EA has posed three separate questions to Endless Energy on this topic during their assessment of the permit application.

It is noted that within the Air Quality Assessment (AQA), reference ED 10527, the following was stated;

In the case of the proposed Clean Energy Facility, a further constraint was placed on potential stack heights by planning constraints. It was considered that a stack height of 60 m would be the maximum acceptable height in planning terms. Consequently, while lower stack heights were investigated, the approach adopted was to ensure that the modelled impact using a stack height of 60 m was acceptable, and that forecast levels of released substances complied with all relevant air quality standards and guidelines.

Upon consultation with AVAI whom have extensive knowledge of all the planning documents associated with the Endless Energy planning application to Bradford Metropolitan District Council (BMDC), it is noted that any reference in the planning documentation which stipulated a maximum stack height of 60 metres is missing. It is our understanding that the planning approval granted by BMDC does not stipulate stack height as a condition.

This raises the following question; has the EA requested written evidence from the Applicant regarding the planning constraint on the stack height? And if so, why has this information not been made available for public scrutiny?

It is noted that in other environmental permit applications it has been customary to plot the increase in stack height against the pollutant process concentration until there is no further reduction in the values of the pollutant process concentration. From reviewing the evidence provided, it is clear that this approach was not adopted. The consequence of this is that have not demonstrated the stack height at which pollutant process concentration values levels off.

We have been informed by AVAI that they have analysed the details of the stack height assessment results from figure 2 on page 18 of the first AQA, reference ED10527. With reference to the NO₂ annual mean values, the AVAI have determined an increase in the stack height to 65 metres would reduce the pollutant process concentration by a further 1.4%. Compared to the maximum pollution level of 14% shown on the plot at a 45 m stack height, this would mean that for a 5 metres stack height increase from 60 to 65m there would be a reduction in the pollution figures of 9%.

The question arises; why was further analysis not required or carried out which takes into account a continued increase in the stack height beyond 65m to a height and corresponding pollutant data which clearly illustrates a significant drop in the pollutant process concentration?

The EA requested the Applicant carried out a cost benefit analysis of the stack height.

The cost benefit analysis submitted by the Applicant focussed on the marginal cost of increasing the stack height above 60 m. The figures the Applicant provided indicated the cost of a 15m increase from 45 m to 60 m was in the region of £5,000 to £10,000 but that a 5 m increase from 60 m to 65 m would cost £220,000. The Applicant's explanation was that this very significant

increase in costs would be incurred because major changes in the basement structure would be required for any further increase in the stack height.

Did the EA request a detailed Structural Engineer's report from the Applicant to validate the need for such major structural changes and if so, did the EA query the associated sharp increase in cost?

Does the EA consider that a cost benefit analysis is an appropriate tool to help justify the issuing of an environmental permit? Surely a permit should not be issued if the resultant impact air quality is too great, regardless of the cost of the scheme?

As the AVAI have detailed within their submission to the consultation, technically a stack height of 60m for this type of facility cannot be considered BAT. The deciding factor therefore then becomes one of cost effectiveness when considering an increase in the stack height.

It is therefore surely essential that the stated additional costs provided by Applicant in the event of any increase in stack height be fully validated by the EA. This validation should surely be based on a detailed and costed Structural Engineers report which is scrutinised by the EA. It seems ludicrous that an Applicant's word is taken for granted as part of this process.

This raises the question; at what level of additional expenditure to achieve a 9% reduction in pollution, or at a greater reduction level would the EA consider reasonable?

10) Lifespan and ongoing compliance

There is no information in the consultation documents about the possible lifespan of the incinerator and for how many years it is planned to be operational. This brings into question the safety of many of the assumptions made in the DDD as there is no timeframe for the operation of the permit, no recognition for monitoring of the incinerator and other relevant standards may change – and no mechanism for ensuring that the permit may need to be reconsidered or reviewed or operations at the incinerator changed.

11) Decommissioning

There is no detailed information about criteria, standards and timescale that must be met when the incinerator, if it goes ahead, is eventually decommissioned. No consideration is given to a situation where the operator is unable to, or does not wish, to operate the plant, does not produce an adequate decommissioning plan, and how the EA intends and is able to force operation if it will not allow surrender of the permit.

12) Concern about Impacts on Health

In the DDD, the EA state;

"We are still satisfied that there will not be a significant impact on air quality or health when taking into account local weather conditions and the location in the valley."

The EA cite the modelling used and an audit they have undertaken, but the EA do not properly explain what exactly the level of impact on air quality or health will be. This lack of precision about the impacts of potentially lethal substances and processes has not answered residents' queries and concerns fully and properly. Even the expert scientific opinion you cite on page 40 of the draft decision document, is yet to reach a conclusion and the PHE, whilst saying a municipal waste incinerator does not pose a significant risk to public health, does not specify what level of risk is posed. Again, residents need to be provided with this information.

On p47 of the DDD, the EA states

"Taking into account all of the expert opinion available, we agree with the conclusion reached by PHE that "While it is not possible to rule out adverse health effects from modern, well-regulated municipal waste incinerators with complete certainty, any potential damage to the health of those living close-by is likely to be very small, if detectable."

We and many others believe that until it is possible to rule out any and all adverse health effects, the incinerator should not be built, and the permit should not be granted.

13) Insufficient Odour Management Plan

We are concerned that a number of the questions asked by the EA to the Applicant are not satisfactorily answered. There are a lot of vague references such as cleaning being carried out 'periodically' or 'as necessary'.

We are not convinced that the Applicant has taken all precautions to contain odours, especially during periods when the plant is shut down and waste remains on site. The increase in quantity of waste being burned will more than likely mean an increase in the number of lorries delivering to the site each day. This in itself is not a matter for the EA to deliberate on but with an increase in the number of lorries this could result in lorries queueing to unload. This in turn results in a greater risk of odours.

We can see no indication as to where quarantined waste i.e. waste that is not fit for burning will be stored. Other incinerators identify locked quarantined areas. There are a number of areas where we do not feel confident that the developers have fully addressed all of the issues.

14) Electrical Efficiency of the Incinerator

We understand the electrical efficiency calculations of the proposed incinerator have been overestimated by the Applicant. Can you confirm you have reviewed this and are completely satisfied that the incinerator will be as efficient as the Applicant states? Please can you provide evidence of this and confirm how this has been reviewed and calculated by the EA. Can the EA's calculations be made available to the public as they appear not to be at this moment in time?

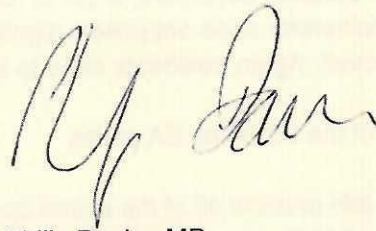
To summarise, we have severe concerns regarding the evidence base which has been put forward and the subsequent analysis and lack of scrutiny which has been carried out by the EA to reach a 'minded to approve' position. It is our view that issuing an environmental permit would be completely the wrong thing to do and therefore we would urge the EA to completely reconsider their position. This scheme, as presented will have detrimental consequences for air quality, the environment and the health and wellbeing of our constituents.

We would be grateful if you could acknowledge receipt of this letter, and we look forward to receiving a full and detailed reply to the many concerns outlined above.

Yours faithfully



Robbie Moore MP
Member of Parliament for Keighley & Ilkley



Philip Davies MP
Member of Parliament for Shipley