

18 April 2017

Dear Sir/Madam

**Environmental Permit for Covanta Energy Limited  
Permit Number: EPR/WP3234DY/A001**

Regulated facility type: 5.1 A (1) (b) The incineration of non-hazardous waste in a waste incineration plant with a capacity exceeding 3 tonnes per hour

**Regulated facility location: Rookery Pit Energy Recovery Facility, Rookery South, Stewartby, Bedfordshire, MK43 9LY**

I refer to the above application to yourselves by Covanta Energy Limited for an Environmental Permit.

CPRE Bedfordshire is strongly opposed to this application which we believe will harm the environment, for the following reasons:

- 1). **Air Pollution due to the meteorological phenomena of “Temperature Inversion” in the Marston Vale and its impact on the surrounding area.**
- 2). **Inadequate plans for the storage and disposal of “Bottom” and “Fly” Ash.**
- 3). **Inadequate control of mix of waste material for the Incinerator**
- 4). **Unacceptable increase in CO<sub>2</sub> and NO<sub>x</sub> emissions due to the operation of the incinerator, increased HGV movements in the local area and the transport of waste from distant locations.**

The details of CPRE Bedfordshire’s objections are as follows:

- 1). **Air Pollution due to the meteorological phenomena of “Temperature Inversion” in the Marston Vale and its impact on the surrounding area.**

**1.1 - Temperature inversion layers**, also called thermal inversions or just inversion layers, are areas where the normal decrease in air temperature with increasing altitude is reversed and air above the ground is warmer than the air below it. Inversion layers can occur anywhere from close to ground level up to thousands of feet into the atmosphere.

*30 years of standing up for Bedfordshire’s countryside 1987-2017*

CPRE Bedfordshire is the Bedfordshire Branch of the Campaign to Protect Rural England which exists to promote the beauty, tranquillity and diversity of rural England. We advocate positive solutions for the long term future of the countryside.



Inversion layers are significant to meteorology because they block atmospheric flow which causes the air over an area experiencing an inversion to become stable. This can then result in various types of weather patterns.

More importantly though, areas with heavy pollution are prone to unhealthy air and an increase in smog when an inversion is present because they trap pollutants at ground level instead of circulating them away.

### **1.2 - Local Topography**

Due to the topography of the area where the proposed Waste Incineration Facility is to operate - it will be located in a “basin” (Rookery Pit) which is surrounded by upland at a considerable difference in height.

### **1.3 - Air Pollution**

The local topography combined with high pressure weather systems commonly experienced in the Marston Vale area particularly during the winter, results in a “temperature inversion”.

In this instance, a layer of warmer air slides down over the top of the descending air and it can act like a blanket, holding down the air and its pollutants.

### **1.4 - Past experience**

This “smog” of pollutants due to temperature inversion was a very common experience for those people who lived in the Marston Vale and surrounding area when the brickworks were in operation. The output gases from the brickworks chimneys seriously polluted the air in the towns and villages for a considerable distance around the brickworks.

### **1.5 - Chimney Stack Height**

The chimney stack of the proposed Waste Incinerator is only 136 metres above ordnance datum or approximately 446 ft.

This does not provide sufficient height to enable the gases to disperse above the height of any temperature inversion.

**The communities of Cranfield, Millbrook, Lidlington, Aspley Guise, Ampthill and Woburn Sands would all be affected by high levels of air pollution.** The chimney will not be sufficiently high to enable gases to “clear” these communities situated at higher levels when a temperature inversion is active.

**To enable emission gases to clear these communities at times of temperature inversion the chimney would need to be at least 500 ft high!**

### **1.6 - Local Air Pollution**

Already, there are very serious problems of air pollution in the Marston Vale and the wider area beyond due to NOx and fine particle emissions and any additional toxins emitted from this incinerator, which will be prevented from proper dispersion due to temperature inversion, would be quite unacceptable.

### **1.7 - Air Quality Monitoring Stations**

To ensure the safety of local residents, Air Quality Monitoring Stations would need to be established in Cranfield, Ampthill, Lidlington, Aspley Heath, Woburn Sands, Wootton, Bedford and the Marston Vale. They would need to be operating 24/7 and hourly readings taken. The facility would need to stop operation on days when temperature inversions were active and pollution levels become unacceptable. This would clearly be impractical for the operator to achieve.

**1.8 - The applicant has failed to consider the commonly experienced local phenomena of “temperature inversion” in any of its background documents regarding their application for an Environmental Permit and therefore has no plans to counter the increased pollution it most certainly will cause.**



**1.9 - A complete and detailed meteorological study of Temperature Inversion in the Marston Vale and the impact of it in terms of air pollution on the surrounding area needs to be undertaken before any consideration is given to authorising an Environmental Permit.**

## **2. Inadequate plans for the storage and disposal of “Bottom” and “Fly” Ash.**

**2.1 - The plans provided by the applicant for the storage and disposal of the highly toxic “bottom” and “fly” ash are totally unacceptable.**

The applicant is suggesting outside storage with the pollutant being prevented from being subject to wind dispersal by “damping down” with water.

These proposals - both external unprotected storage and damping down - are entirely inadequate for a highly toxic material which will be made up of very fine particle elements. These elements are very light and easily transported considerable distances by wind etc.

It is also far from clear where the applicant is proposing to finally dispose of the ash waste and this should be identified and agreed before any Environmental Permit is considered.

The applicant should be looking at “best available technology” methods to store and dispose of these materials and not the archaic, entirely ineffective solutions proposed.

## **3. Inadequate control of mix of waste material for the Incinerator**

### **3.1 - Applicant’s proposals do not separate waste streams and are therefore unacceptable**

It is the intention of Covanta to “feed” the incinerator with materials of a high calorific content that are generally capable of being recycled. This is at odds with sustainable practice the aims of which are: Waste prevention, re-use and recycling leaving incineration as a last resort.

Material suitable for recycling should be taken out of the waste stream much earlier in the process.

When the DCO was agreed by the IPC, the intention was that the incinerator would burn municipal waste provided by Local Authorities. Covanta’s intention is now to burn mainly commercial waste provided by a third party - Veolia.

A recent study by the “Right Waste Right Place” campaign supported by the Environment Agency showed that 56% of UK companies were not complying with correct processes regarding waste and recyclables. The study also shows that 25% of these companies were not sorting waste into recyclable and residual at all.

Much of the waste should be recycled and not incinerated - the applicant’s application is therefore unacceptable.

### **3.2 - Applicants proposals for waste identification prior to incineration are inadequate and not assessed by an “independent” organisation**

It is essential, in order that emissions from the incinerator are properly regulated that the incoming waste stream is properly identified.

The applicant proposes that they will undertake this task. This not acceptable.

The process needs to be undertaken by an entirely independent organisation.

**Unless the applicant is completely clear about the content of the waste streams for the incinerator it will be impossible to determine the toxicity of the output gases from the incinerator chimney -the applicant is unable to provide this level of certainty.**



### **3.3 - Potential for the inclusion of unidentifiable hazardous waste streams**

There is concern that “sealed waste” e.g. from hospitals may be included in the waste streams. There are no proposals to ensure that this does not occur.

**3.4** The applicant intends to use reagents such as lime to remove hazardous components from their emissions. They have chosen to disregard the considerable emissions of greenhouse gases from the production of these reagents.

**4). Unacceptable increase in CO<sub>2</sub> and NO<sub>x</sub> emissions due to the operation of the incinerator, increased HGV movements in the local area and the transport of waste from distant locations.**

**4.1 - The issue of air pollution throughout the UK particularly due to CO<sub>2</sub>, NO<sub>x</sub> and small particle emissions is now critical.**

At many locations surrounding the incinerator and in the south of the UK generally, NO<sub>x</sub> emissions and air pollution generally is at or above recommended EU maximum levels. This was overlooked when the IPC granted the applicant the DCO.

The entire operation for which an Environmental Permit is requested will result in increasing CO<sub>2</sub>, NO<sub>x</sub> and small particle emissions.

**4.2 - The majority of towns and cities across the UK are now looking, as a matter of urgency, at all means to reduce these pollutants in a major effort to improve air quality.**

**It therefore makes no sense whatsoever to increase local air pollution through the increase of HGV traffic to this mega incinerator when good practice insists that incineration should take place in the local area where the waste is produced.**

The original DCO allows that HGV traffic can be increased to almost 600 movements per day and this application requires at least 200 movements per day.

Apart from putting increased traffic on an already overcrowded highway infrastructure it will certainly increase local air pollution. This is unsustainable and unacceptable.

**4.3 - The applicant is proposing to take waste from the London conurbation and from other distant urban areas including the West Midlands.**

It simply does not make sense when the Mayor of London has stated that the number of HGV's entering and leaving the metropolis should be substantially reduced, in order to improve air quality, that this operation will increase HGV movements in and out of the capital.

Again, this is an unsustainable and unacceptable practice.

For all the above reasons CPRE Bedfordshire believes that the Environment Agency should refuse this application for an Environmental Permit.

Yours sincerely

Gerry Sansom  
CPRE Bedfordshire