

# <u>Covanta Rookery Pit Incinerator - Reference No EPR/WP3234DY/A001</u>

**Dear Sirs** 

I am writing to you on behalf of Bedfordshire Against Covanta Incinerator (BACI) - A coalition of Residents, Parish & Borough Councillors and Action Groups members who are proactively expressing their concern and - where appropriate - protesting against the Covanta Incinerator at Rookery Pit.

There is a great deal of public interest in this development as demonstrated by the following:

**3,626** people have signed our petition located at <a href="https://www.gopetition.com/petitions/stop-covanta-building-an-efw-incinerator-plant.html">https://www.gopetition.com/petitions/stop-covanta-building-an-efw-incinerator-plant.html</a> - paper copy available if requested in writing

Our Facebook group member numbers are currently 1,448

Our website has received **8,287** visits since its launch in November 2016

We believe that a permit **should not** be granted by the Environment Agency to Covanta to operate an Incineration Plant to be located at Rookery Pit South, Bedfordshire.

There are a great many factors involved in this development the Environment Agency must take into consideration. These include: Covanta as an operator, Veolia as a supplier, the time elapsed since planning approval, the local area weather issues, the local area impacts, impacts further afield, Greenhouse Gases impact/Carbon Budget and Government Policies.

Since the Covanta Incinerator received planning permission in 2011 there have been a number of new and updated Governmental and EU policies regarding the Environment that will have significance in this permit decision. These include (but are not limited to) - Natural Environment White Paper, the England Biodiversity Strategy, Water for Life, the Waste Policy Review, the National Climate Change Adaptation Programme, the revised EU air quality standards and the Green Book: valuation of energy use and greenhouse gas emissions..

The decision by the IPC to allow planning for this Incinerator was made in a very different climate to the one we are faced with now.

Firstly - we believe that the National Permitting Service should take the opportunity to visit the site themselves to access the local issues first-hand.

Secondly - we do not believe that the Environment Agency can make an informed decision based on such out dated environmental impact reports. The time that has elapsed between the planning decision and the application for the Environmental permit is now over 6 years - and many documents that have been put forward for consideration as part of the permit application are dated 2010. The Environment Agency must require the applicant to commission a new Environmental Impact Report and associated assessments.

The lifespan of the Incinerator is calculated as approx 40 years. Common sense dictates that the Environment Agency must take into account not just the current situation - but those moving forward in terms of the impact on the immediate area (and any other area directly affected by the Incinerator), the aspirations for a zero waste society, climate change and how this long-term development will ultimately fit into Governmental policies.

#### **Local meteorological issues impacting Emissions**

In the document Air Quality Assessment and Human Health Risk page 28 6.2.2 Meteorological data and surface characteristics it is stated that the "The nearest meteorological station representative of conditions at Rookery South is at Cranfield Airport, located approximately 5.5 km west of the Facility. Annual data capture at the Cranfield station is approximately 43%, and so the remaining data has been obtained from Bedford Airport located 19 km north of the Facility, and Luton Airport located 23 km to the south-east of the Facility". However all of these locations are outside of the actual Vale and cannot possibility show a representation of the conditions within the Vale.

On page 31 of the Document Air Quality Assessment and Human Health Risk it states "Ground level NOx concentrations have been predicted through dispersion modelling." However this modelling has been based on meteorological data from outside of the Vale and therefore is not valid. The modelling included in the Document entitled Abnormal Emissions Assessment is therefore also incorrect.

The concentration of air emissions will be far greater than the assessment produced by Covanta indicate.

The Marston Vale is subject to temperature inversion where the local topography creates a 'bowl' like feature <a href="https://www.theguardian.com/news/2016/feb/29/weatherwatch-temperature-inversion-mist-moisture-pollution-high-ground">https://www.theguardian.com/news/2016/feb/29/weatherwatch-temperature-inversion-mist-moisture-pollution-high-ground</a>. This was demonstrated during the activity of the Brickworks in the area where visible emissions (which happened to be coloured brick-orange) were being 'dragged down' towards ground level.

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 are significant to meteorology because they block atmospheric flow - which in turn - causes the air over an area experiencing an inversion to become stable.

Areas experiencing inversions 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.

Air not subject to a temperature inversion event will decrease at a rate of 3.5°F for every 1000 feet up into the atmosphere. When this normal cycle is present it is considered an unstable air mass - and air constantly flows between the warm and cool areas. As such the air is better able to mix and spread around pollutants.

During an inversion event temperatures increase with increasing altitude. The warm inversion layer then acts as a cap and stops atmospheric mixing. This is why inversion layers are called stable air masses. They occur most often when a warm - less dense air mass moves over a dense - cold air mass. This can happen - for example - when the air near the ground rapidly loses its heat on a clear night. In this situation the ground becomes cooled quickly while the air above it retains the heat the ground was holding during the day.

As in the case of the Marston Vale - topography can also play a role in creating a temperature inversion since it can sometimes cause cold air to flow from high ridges down into valleys. This cold air then pushes under the warmer air rising from the valley, creating the inversion.

Rookery South is in a basin - low lying with a ridge of upland surrounding it. Rookery South lies 38m (124.7 ft) above sea level.

The height of the stack at 105m (344.5ft) (of which some will be below ground level in the pit) make it lower than the highest points along the rim of the 'bowl' at Cranfield of 112m and Lidlington at 130m. http://www.bedfordshiregeologygroup.org.uk/projects/The%20Mapping%20of%20Landscapes,%20Geology%20and%20Soils%20of%20Bedfordshire%20and%20Cambridgeshire.pdf Ref map 5 and https://bedsagainstincinerator.files.wordpress.com/2017/03/topography.jpg During low pressure depressions coming across from the South West – the air will be moving both upwards and in an anti-clockwise direction- but due to the height of the stack in comparison to the ridge around the Vale - it is unlikely the emissions would be lifted enough to clear the ridge.

During a high pressure system weather system - an anti cyclone - air moves slowly in a clockwise direction and instead of uplifting it descends from the Troposphere to the ground compressing as it does so - and the air pressure increases with this compression. A resident requested information from the Met Office regarding the number of high pressure system days for the 12 months from the 1st June 2010 to the 31st May 2011 which were as follows:

Greater than or equal to 1016.0 hPa: 233 days Greater than or equal to 1024.0 hPa: 89 days Greater than or equal to 1032 hPa: 24 days

During these high pressure systems - sometimes a layer of warmer air slides over the top of the descending air where it can act like a blanket and hold down the air and its pollutants. This is what is referred to as a temperature inversion event.

The Environment Agency need to obtain up to date meteorological data from inside the Vale for a period long enough to take into account the frequency of temperature inversion events. Without this data on the true nature of the dispersion (or not) of the emissions - the Environment Agency cannot hope to make an robust and informed permit decision.

Additionally in document Air Quality Assessment and Human Health Risk it is noted that nearby buildings can have an effect on the dispersion of the atmospheric emissions - however there is no mention of wind turbine located 250m from the Incinerator standing at 120.5m tall with rotating blades. It seems totally illogical that this factor has not been considered. The applicant should provide the Environment Agency with updated reports to show this 'building' and its potential effects.

#### **Health Concerns**

A UK report entitled "The Health Effects of Waste Incinerators" by the British Society for Ecological Medicine was conducted in 2005 and then updated in 2008 <a href="http://www.bsem.org.uk/uploads/IncineratorReport\_v3.pdf">http://www.bsem.org.uk/uploads/IncineratorReport\_v3.pdf</a>. This report states ".... fine particulate pollution plays an important role in both cardiovascular and cerebrovascular mortality (see section 3.1) and demonstrating that the danger is greater than previously realised. More data has also been released on the dangers to health of ultrafine particulates and about the risks of other pollutants released from incinerators (see section 3.4). With each publication the hazards of incineration are becoming more obvious and more difficult to ignore"

They go on to state that " ......Large studies have shown higher rates of adult and childhood cancer and also birth defects around municipal waste incinerators: the results are consistent with the associations being causal. A number of smaller epidemiological studies support this interpretation and suggest that the range of illnesses produced by incinerators may be much wider"

Much of the other data available for evidence at the moment is from the US. The Energy Justice Network <a href="http://www.energyjustice.net/incineration/worsethancoal">http://www.energyjustice.net/incineration/worsethancoal</a> states that in comparison to Coal Fired Power Plants in order to release the same amount of energy Incineration releases:

- 6 times more Lead. A well-known toxin that diminishes intelligence and by lowering dopamine levels in the brain may even be tied to increases in violent behaviour and cocaine addiction
- 3 times more Nitrogen Oxide. A gas that primarily contributes to eye, nose, throat and lung irritation and respiratory problems like shortness of breath that can trigger asthma.
- 2 times more Carbon Monoxide. A contributor to the formation of ground-level ozone pollution, aggravating asthma.

• 70% more Sulphur Dioxide. A cause of acid rain – is also bad for lungs, with even short exposures to ambient levels causing "bronchial constriction and increased asthma symptoms.

A long awaited report from Public Health England is due to be published shortly. In light of the other evidence that is available - local residents are entitled to review the findings of this report and comment accordingly prior to the Environment Agency agreeing terms with - or granting a permit to - Covanta <a href="http://www.letsrecycle.com/news/latest-news/incinerator-health-study-results-expected-in-2017/">http://www.letsrecycle.com/news/latest-news/incinerator-health-study-results-expected-in-2017/</a>.

Document Air Quality Assessment and Human Health Assessment page 16 Table 4.1 it is unclear why some of the background readings are taken from 2013 and some from 2001. The 2001 readings will be 'tainted' by the then still operational Stewartby Brickworks. This error has been taken forward to Table 4.9 page 22. To have any relevance to the background readings currently experienced - the 2013 readings for Sulphur dioxide, Carbon monoxide, Benzene 0.36 0.45 and 1,3-butadiene must be made available to the Environment Agency and published for public consideration.

Page 3 Table 1 of the Plausible Abnormal Emission Levels Document - there appears to be no evidence cited for the origin of the amounts of some of the Plausible Abnormal Emissions and therefore the % Above Max Permitted Emission numbers are not supported.

Page 2 of the same document lists examples of what would constitute abnormal operating conditions but there is no practical basis put forward to justify the figures on Table 1.

There are major concerns that in the event of a permit being issued the amount of monitoring conducted by the Environment Agency appears very minimal in relation to the risks involved and are mainly based on operator own data rather than third party recordings.

#### **Diesel Emissions**

There are several issues relating to the HGV allowance of up to 594 movements a day to the site. The recent decision by Network Rail not to put a bridge over the crossing at Green Lane - puts the Kimberly College on Green Lane at considerably more risk as HGVs are forced to queue at the proposed double barriers before access to the site.

The lack of bridge now means that the road at the Level Crossing will be blocked currently for 12 minutes every hour (not including freight trains) – resulting in significant queuing – and when the Oxford to Cambridge line is complete there will be a minimum of 18 minutes closure causing considerable pollution at Kimberly College.

Traffic from the Rookery Pit will also be queuing waiting to come through the Level Crossing causing pollution to the outskirts of Stewartby Village and the forthcoming residential development of the old Stewartby Brickworks site. The traffic trying to get into the Pit will be causing hold ups and in turn this will be holding up local traffic trying to leave Stewartby. Looking back to the original planning documents prior to the announcement that Network Rail were looking to construct a bridge over the railway <a href="https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010011/EN010011-000511-Proposed%20access%20road%20with%20proposed%202.5m%20footpath%20at%20level%20crossing.PDF">https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010011/EN010011-000511-Proposed%20access%20road%20with%20proposed%202.5m%20footpath%20at%20level%20crossing.PDF</a> there doesn't appear to be any plans for traffic lights or a roundabout which is completely underestimating the new developments and extra traffic occurring since planning permission was given.

Recent studies have come forward regarding in particular children and air pollution http://bmjopen.bmj.com/content/6/6/e010004.full - this concludes that even low levels of pollution can have an effect in children. There are many schools within the Marston Vale and surrounds that deserve to be taken into account.

The recent concerns regarding diesel and pollution are highlighted by Transport and Environment " .....the emissions from diesel cars of nitrogen oxides on the road are typically five times higher than *measured* on the road – although performance varies widely between individual models. In contrast, emissions from most gasoline cars are similar in tests and on the road and about 10 times lower than produced by diesels." and " Diesel exhaust fumes cause cancer. Nitrogen dioxide causes a range of short-term health effects, like asthma; and longer term effects that shorten lifetimes. In the air, nitrogen oxides are converted into other harmful pollutants like fine particles and ozone."

# https://www.transportenvironment.org/sites/te/files/publications/2015 09 Five facts about diesel FINAL.p df

The government has recently published a number of initiatives to reduce greenhouse emissions and therefore pollution associated with transport <a href="https://www.gov.uk/government/policies/transport-emissions">https://www.gov.uk/government/policies/transport-emissions</a>. It appears from the Environmental Permit documents that Covanta have made no effort to factor in the additional effect of the HGV emissions or the extra risk of HGVs queuing near a local college or indeed knock on effect to the future Stewartby Brickworks development - either in a health aspect or indeed in relation to climate change.

The emissions from 594 HGV movements a day allowed by planning - appear to be totally overlooked by Covanta. The Environment Agency must put these diesel emissions together with the emissions from the Incinerator itself - when reviewing the overall emissions and effect on human health and environmental impact - with additional reference to the local effect of temperature inversion as previously decribed.

# The Forest of Marston Vale - Local Community Forest

The site chosen by Covanta is in the heart of the Forest of Marston Vale (one of twelve community forests). These were created in the 1990s in partnership between the Forestry Commission, the Countryside Agency and Natural England. These forests form the largest environmental regeneration initiative in England - creating high quality environments for millions of people by revitalising derelict land scarred by industrialisation - thereby providing new opportunities for leisure, recreation and cultural activities and enhancing biodiversity, preparing for climate change and supporting education and healthy living. The founding basis for all forests is a Government approved forest plan, a thirty year vision of landscape improvement. (www.communityforest.org.uk)

The Forest of Marston Vale is already taking shape. To date - over one million trees have been planted amounting to 10% woodland cover. There is a target of five million more or 30% cover by 2031. This will increase wildlife, new habitats including woodland, grassland, meadow, lake and wetland, conservation projects, new recreation opportunities and community involvement. All the benefits are already well under way. The new forest will continue to evolve and flourish as a valuable green belt in the Bedford/Milton Keynes corridor. (www.marstonvale.org)

The site is adjacent to the Forest Centre and Millennium Country Park which attracts over 400.000 visitors a year - and is a popular local family destination. Within the Country Park is Stewartby Lake. At 287 acres, this is just one of the habitats for many types of wildlife which includes a rich variety of birds. The Lake is a popular destination for all water sports. The Millennium Country Park is recognised - and has been for ten years - as one of the best parks and green spaces in the country via the Green Flag Award. (www.marstonvale.org/millennium-country-park)

The Central Bedfordshire Nature Conservation Strategy states the following about the environmental value of the pits and the Marston Vale Forest Centre <a href="http://www.centralbedfordshire.gov.uk/Images/guidance\_tcm3-5344.pdf">http://www.centralbedfordshire.gov.uk/Images/guidance\_tcm3-5344.pdf</a> "Wet woodland and scrub has also developed in some of the disused clay pits in the Marston Vale. These pits offer opportunities for the creation of a mosaic of wetland habitats including extensive wet woodland such as that already developing at Coronation Pit. This constitutes a valuable ecological resource." "...... there are only about 22.3 ha of discrete reedbed in the county; 20 ha of this was created in 1999 at the Marston Vale Forest Centre"

Covanta also state that the whole of the Rookery Pit South site is 95 hectares - of which they are using only 10 hectares. However - it seems extremely unenvironmentally minded to use the 10 hectares that are situated right up against the Millennium Country Park visited by 400,000 visitors a year - many of which are families - and the focus of a great deal of public money whose aim is to create "high quality environments ...... by revitalising derelict land scarred by industrialisation"

The total disregard for this important community resource and the public money that has been spent setting up and maintaining the Forest of Marston Vale is open to question . We believe the Environment Agency should take this environmentally based area into account during its decision.

#### **Designated Nature Sites - Local**

There are some notable designated nature sites in the area which could be affected by the Covanta Incinerator. Coopers Hill SSSI in Ampthill, Flitwick Moor Wet woodland SSSI, Maulden Church Meadow SSSI, Flitton Moor LNR, Kings Wood LNR, Marston Thrift LNR, Flitwick Wood LNR, Steppingley Hospital Orchard, Ampthill Cemetery, the Knoll CWS and Millbrook Churchyard CWS. These are all within 10km of Rookery Pit. In addition to the above - the Greensand Ridge has recently been recognised as a Nature Improvement Area (NIA) by the Local Nature Partnership and Central Bedfordshire Council.

The purpose of the Nature Conservation Strategy is to identify the overall aims, objectives and priorities for the conservation of biodiversity in Central Bedfordshire - bringing them together within a single document <a href="http://www.centralbedfordshire.gov.uk/Images/guidance\_tcm3-5344.pdf">http://www.centralbedfordshire.gov.uk/Images/guidance\_tcm3-5344.pdf</a>. The Nature Conservation Strategy states that" Central Bedfordshire's wildlife sites provide an important contribution towards the grassland, wetland and woodland habitats across the whole of Bedfordshire. These habitats are declining in quality and quantity nationally and so protection of Central Bedfordshire's sites is of wider significance"

The Environment Agency has a duty to protect areas which have been defined as of national and local importance from sources of pollution and environmental impact. These sites are protected by both UK and European Law namely Wildlife and Countryside Act (1981) http://www.legislation.gov.uk/ukpga/1981/69 and Conversation of Habitats and Species Regulations 2010 http://www.legislation.gov.uk/uksi/2010/490/contents/made

#### **Notable Local Wildlife**

There is officially recorded data of 24 Different Bird Red List Species within 1km of Rookery Pit South and a further 5 within 2km and 3 within 4km. This is data from 2014 onwards. There is also a record of an endangered butterfly/moth within 3km of Rookery Pit South and details of a moth in Ampthill Park which is not found anywhere else in Bedfordshire and the nearest other sightings are Surrey, Norfolk and Suffolk. Due to the sensitive nature of these records - please request further details direct from Nicola Ryan-Raine for clarification.

#### Air Pollution of Nature Sites outside of Central Bedfordshire

There is also evidence to suggest that the Wicken Fens - the oldest National Trust Nature Reserve in England-https://www.nationaltrust.org.uk/wicken-fen-nature-reserve/features/wicken-fen-nature-reserve- and "one of Europe's most important wetlands and home to over 9000 recorded species including many rare species of plants, birds and dragonflies" could be sensitive to pollution carried via wind from the Marston Vale. A study on lichens which are sensitive to air pollution (particularly Sulphur Dioxide) showed an increase in lichens following the closure of the Brickworks at Marston Vale

http://www.natureincambridgeshire.org.uk/volumes/nature-in-cambs-vol-52-2010.pdf Ref page 26. Wicken Fen is designated a National Nature Reserve, a Site of Special Scientific Interest SSSI, a Special Area of Conservation (a European designation) SAC and a RAMSAR site (international wetland designation) <a href="http://jncc.defra.gov.uk/pdf/RIS/UK11077.pdf">http://jncc.defra.gov.uk/pdf/RIS/UK11077.pdf</a>. Incinerators produce 70% more Sulphur Dioxide than coal fired plants (in addition to many others wind born pollutants)

http://www.energyjustice.net/incineration/worsethancoal - the inevitable impact to Wicken Fen would seem to be at odds with the Central Bedfordshire Nature Conservation Strategy and protection of RAMSAR sites.

#### Water Pollution - Local to further afield

We note that the Agency states the following in their Corporate Plan 2014-2016 - page 6 "We will protect and enhance water and wetland habitats..."

In the Document Environmental Risk Assessment section 6.2 Emissions to Water it states "All other surface water from the waste incineration plant will be collected in drains with oily water interceptors which will incorporate an isolating penstock valve installed on the discharge pipe. This water will then be discharged via an interceptor channel into an attenuation pond to be constructed as part of the

Rookery Low Level Restoration drainage scheme. This pond will be located adjacent to the Installation, in the north-west corner of the Site."

Original planning permission included a report detailing pumping of surface water from the attenuation pond into Rookery North and the nearby Millbrook brook <a href="https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010011/EN010011-000548-Flood%20Risk%20Assessment%20-%20Appendices.PDF">https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010011/EN010011-000548-Flood%20Risk%20Assessment%20-%20Appendices.PDF</a> Ref 10.3.3. In the absence of any additional or contradictory information we assume this is how Covanta still intend to periodically empty the attenuation pond.

The Millbrook brook cited drains directly into Stewartby Lake. Stewartby Lake is used for various water sport activities which involve direct contact with the water.

There is a direct path downstream from Stewartby Lake into the Great Ouse system. However - Stewartby Lake is also scheduled to be used to connect two sections of the proposed Bedford to Milton Keynes Waterway <a href="http://www.b-mkwaterway.org.uk/wp-content/uploads/2015/02/URS-Version-A-Z-Report Nov14.pdf">http://www.b-mkwaterway.org.uk/wp-content/uploads/2015/02/URS-Version-A-Z-Report Nov14.pdf</a> Section L page 20.

This part of the Bedford to MK Waterway will effectively link the Rookery Pit site to rest of the Great Ouse System down to the Wash - including along the way the Water Meadow at Portholme designated a Designated Special Area of Conservation (SAC) site which is directly fed by the Great Ouse River. <a href="http://jncc.defra.gov.uk/ProtectedSites/SACselection/sac.asp?EUCode=UK0030054">http://jncc.defra.gov.uk/ProtectedSites/SACselection/sac.asp?EUCode=UK0030054</a>. Pollution may appear diluted at first - however the effect will be accumulative over time with pollutants being absorbed and assimilated by wildlife and plants over the Incinerator's life span of up to 40 years.

Designated Special Area of Conservation (SAC) sites are classed as sites of European importance and Central Bedfordshire Nature Conservation Strategy has written various directives into the strategy regarding this including "The Council will also ensure its actions do not have negative impacts on any internationally important wildlife sites external to Central Bedfordshire, including the Portholme Special Area of Conservation (SAC), Upper Nene Valley Gravel Pits Special Protection Area (SPA), and Chilterns Beechwoods SAC." <a href="http://www.centralbedfordshire.gov.uk/Images/guidance\_tcm3-5344.pdf">http://www.centralbedfordshire.gov.uk/Images/guidance\_tcm3-5344.pdf</a>.

There is concern that this link and then the decision to include Stewartby Lake in the Bedford to MK waterway was not fully considered during the planning process. During the planning process Natural England was asked for a EIA scoping opinion regarding European sites in the vicinity of the proposed Incinerator site - or 'in any way linked to it'. Natural England replied that there were none and subsequently Covanta used this as evidence that did not need to do a Habitats Regulations Assessment of likely significant effect on European Sites which would be a requirement of the Application <a href="https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010011/EN010011-000545-Report%20as%20to%20effects%20on%20European%20Sites.PDF">https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010011/EN010011-000545-Report%20as%20to%20effects%20on%20European%20Sites.PDF</a>

The Water Framework Directive should have also been consulted in light of the above link to the whole of the Great Ouse system and the many bodies of water surrounding the Incinerator site <a href="http://ec.europa.eu/environment/water/water-framework/index en.html">http://ec.europa.eu/environment/water/water-framework/index en.html</a>. The Water Framework Directive is a European initiative to improve and protect waterways and ".....it recognises that development near water bodies can affect their quality and ecology and it establishes a legal framework for the protection, improvement and sustainable use of the water environment. This includes lakes, streams, rivers, groundwater and dependent ecosystems." One of its objectives is ".....protecting the water environment from pollution from new and existing development including pollution from surface water run-off."

The Environment Agency needs to review the link between the Incinerator and Portholme and Covanta should now be tasked with producing a Habitats Regulations Assessment because The Rookery Pit site will be linked to a SAC site if water is to be pumped into the Millbrook brook. If this is not to be the case - will water be tankered off-site for disposal? This has only been suggested in the Environment permit documents for contaminated firewater - not normal operations of ensuring the attenuation pond is kept to an acceptable level to avoid flooding.

#### Seepage into Water table

There is further concern regarding seepage into the local water table. The plans provided by Covanta during the planning stage show a classification of the sides and bottom of the pit as "non-aquifer" <a href="https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010011/EN010011-000548-Flood%20Risk%20Assessment%20-%20Appendices.PDF">https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010011/EN010011-000548-Flood%20Risk%20Assessment%20-%20Appendices.PDF</a> Ref 8.6.4- however a geological paper released in 2013 classes the whole area of the pits as 'Evesham soils - which are slowly permeable" <a href="https://www.geolsoc.org.uk/Geoscientist/Archive/March-2013/Lie-of-the-Land">https://www.geolsoc.org.uk/Geoscientist/Archive/March-2013/Lie-of-the-Land</a> Ref Fig 6 and <a href="http://www.bedfordshiregeologygroup.org.uk/projects/The%20Mapping%20of%20Landscapes,%20Geology%20and%20Soils%20of%20Bedfordshire%20and%20Cambridgeshire.pdf">http://www.bedfordshiregeologygroup.org.uk/projects/The%20Mapping%20of%20Landscapes,%20Geology%20and%20Soils%20of%20Bedfordshire%20and%20Cambridgeshire.pdf</a> Ref map 8 Given the life-span of the Incinerator there is concern that in addition to pumping the surface water to local waterways - proper measures will not be taken to ensure contaminated water does not find its way into the water table and the agricultural land that surrounds the pit. This again is covered by The Water Framework Directive <a href="http://ec.europa.eu/environment/water/water-framework/index en.html">http://ec.europa.eu/environment/water/water-framework/index en.html</a>

# Noise, Odour and Light Pollution

The Rookery Pit South is in a uniquely quiet area which currently has extremely little noise or light pollution.

The increase in population in the Marston Vale includes 2 new large developments within 2 km of the site of Marston Park, Hanson's Reach and a new 6th form College in Stewartby as well as a new proposal of a residential development on the site of the old Stewartby Brickworks.

A plant operating 24/7 with the associated noise, light and odour will not only affect the new residents in these developments and beyond - but it must also be considered that a number of wildlife species rely on smell, dark conditions and use calls to communicate. The Incinerator site is adjacent to a wildlife park that will experience some small light disturbance from the new developments in Marston Moretaine and Stewartby - but will not be equipped to cope with the level of noise, light and odour pollution (individually and combined) that will occur during the construction and operation of the Incinerator.

The Bat Conservation Trust is particularly concerned with Light pollution and its effect on invertebrates, birds and mammals

https://www.google.co.uk/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0ahUKEwji5efI37 SAhXrA8A KHV2uAJcQFggeMAA&url=http%3A%2F%2Fwww.bats.org.uk%2Fpublications\_download.php%2F1330%2FB CT\_Interim\_Guidance\_Artificial\_Lighting\_June\_2014.pdf&usg=AFQjCNFQIIBuM\_3RgFQNH9yLbFnWp-2r0A&sig2=BNI2gUfAWzS6uGMKQjXuBA&cad=rjt

Noise pollution interferes with the way animals communicate, mate and catch prey. http://news.bbc.co.uk/earth/hi/earth\_news/newsid\_8305000/8305320.stm and http://theconversation.com/how-noise-pollution-is-changing-animal-behaviour-52339

There is now also evidence that bees and other pollinators are less effective due to odour pollution <a href="http://wildlifenews.co.uk/news/new-about-insects/air-pollution-impacts-on-bees-ability-to-find-food/">http://www.bbc.co.uk/news/new-about-insects/air-pollution-impacts-on-bees-ability-to-find-food/</a>, <a href="http://www.bbc.co.uk/nature/28017623">http://www.bbc.co.uk/nature/28017623</a>.

Despite reassurances from Incinerator Operators and environmental permits protecting residents - there are many documented cases of residents experiencing unexpected levels of noise, odour and light both during construction and during 'normal' operating conditions - for example:

http://www.liverpoolecho.co.uk/incoming/shadow-uks-biggest-incinerator-part-12406245

http://news.bbc.co.uk/1/hi/wales/south\_west/4350215.stm

 $\frac{http://www.plymouthherald.co.uk/bad-smell-in-plymouth-was-10-000-tonnes-of-rubbish-rotting-at-faulty-incinerator/story-29442904-detail/story.html$ 

In the Document Additional Noise Assessment Information page 3 states - "Movements of vehicles along the access road will be the same in character as existing vehicle movements along Green Lane. We do not, therefore, consider it appropriate to apply a character penalty to the vehicle movements on the access road or sources on site".

It is unrealistic and an insult to the local residents of Stewartby and pupils and staff at Kimberley College to claim that an additional up to 594 HGV movements a day will not cause any additional noise that needs to be factored in. The majority of the existing van movements will be turning off prior to reaching Kimberley College to the Veolia Hazardous Waste Transfer Site and therefore have less impact than those servicing the Covanta Incinerator which will go right past this sixth form College.

We also note that no new background readings are supplied for Kimberley College. This facility is home to 414 full-time students. Background readings were taken in 2008/9 whilst the building was a head office for Hansons. An office building is a very different case to a sixth college full of 16-19 year olds. The Environment Agency must require a new background reading in order to fully informed.

#### **Threat to Farming/Land Degradation**

Rookery Pit is surrounded by land used for farming. Bedfordshire as a whole appears to be gaining momentum in food growing and production with projects such as Tastes of Bedfordshire which support over 70 food producers in the area - however - there is a growing trend amongst both buyers and consumers to be aware of where the produce is grown and reared. Produce and meat from Central Bedfordshire could become less attractive compared to the same from an area without such an obvious pollution issue in the future. This is turn could lead to degrading of farming practice in the area as the produce ultimately commands a lower price overall.

# **Ash Processing and Dust Pollution**

Incinerators produce bottom and fly ash which amount to a least 25% by volume of the original waste - a percentage of this is now highly toxic and requires transportation to specialist toxic landfill sites. We are concerned that Covanta intends to store some of this Ash in piles in an outside area.

Document - Supporting Information describes the Ash processing system. We note that the building described as designated roofed IBA storage area will be open at two sides and there is no indication regarding how dust and odour from this building will be suppressed. We note that the purpose of this building is for the ash to dry out and therefore at the end of this process it will become readily airborne as dust.

The Ash will then be moved by loading shovel to a nearby building- which will presumably create more dust again it is unclear how dust and odour will be controlled at this point.

There also appears to be no contingency plan regarding flooding of in particular the ash processing buildings and areas. The site is currently subject to flooding and the use of the attenuation pond for all surface water and possible used firewater seems to be poorly thought out and requires some extra planning in light of Covanta's history regarding frequent fires and the associated water needs and disposal.

There is also concern regarding the loading and transportation of the fly ash. The British Society of Ecological Medicine states "This fly ash is light, readily windborne and mostly of low particle size. It represents a considerable and poorly understood health hazard."

http://www.bsem.org.uk/uploads/IncineratorReport\_v3.pdf Ref page 6 and this fly ash will readily adhere to vehicles when loads are transferred any therefore spread whilst being transported to one of the only two toxic landfill sites in the country located at Kings Cliff nr Peterborough and Port Clarence Middlesbrough.

#### **Fire Risks**

Referring to the Document Fire Prevention Plan page 5 states "The report is provided as a preliminary Fire Prevention Plan (FPP) for the Rookery South ERF, and will be subject to review following completion of detailed process design, which has not yet been undertaken. Detailed process design is programmed to commence in 2017 following selection of an EPC contractor to undertake the construction works."

If a detailed process design of the Fire Prevention Plan has not yet been completed - and will not until a contractor is assigned - how can the EA justify issuing a permit when such an important issue has not been fully

described? The EA currently has no evidence to prove that Covanta is able to minimise and control fire outbreaks or indeed minimise and control any emissions or contaminated water seepage if the full plans are not known.

Also in the Document Fire Prevention Plan page 21 4.7.4 it is stated "It is acknowledged that the provisions for the supply of firewater are not in accordance with the 2,000 litres/minute for 3 hours as required by the FPP Guidance. The waste bunker (the largest single volume of combustible waste within the Rookery South ERF) is a contained concrete structure, with two hour fire walls (refer to section 4.4) and the provisions for fire-fighting in this area are specifically designed to extinguish any fire within the waste bunker within two hours. These provisions for firewater are in accordance with NFPA850 and are required by Fire Insurers. If the firewater tank is combined with storage for process water requirements, then the tank shall have different suction levels for the two duties to maintain the required fire water capacity available for fire protection at all times."

Given Covanta's recent operational history with regard to fire breakouts - it is totally inappropriate for them to not have the correct amount of water purely for sole use as firewater stored onsite. Please see below the more recent fire events at Covanta operated plants.

Plant	Date	Link	Notes
Covanta Environmental Solutions, 2242 Carl Drive, Asheboro	26/2/17	http://myfox8.com /2017/02/26/crew s-work-to-make- sure-community-is- safe-after-massive- asheboro-fire/	"Five different fire departments used more than one million gallons of water to contain the fire in about four and a half hours."  "Right now, the EPA is asking people to not eat any fish from Haskett's Creek, that's near where the fire started and likely where a lot of that water used to put it out was drained into."
Covanta Fairfax Waste to Energy Facility in Lorton, Virginia	3/2/17	http://www.nbcwa shington.com/news /local/Firefighters- Respond-Blaze- Trash-Disposal- Center 412635913.html	"Three stories worth of trash caught on fire at the Covanta Fairfax Waste to Energy Facility in Lorton, Virginia, fire officials say."  "Fire officials says the blaze could take days to extinguish."
Montgomery County Resource Recovery Facility operat ed by Covanta	8/12/16	http://www.wasted ive.com/news/cova nta-facility-under- investigation- following-dayslong- fire-in- maryland/433610/	"Officials in Maryland are investigating whether ongoing issues at the Montgomery County Resource Recovery Facility operated by Covanta played a role in a December fire."  "According to records the facility had 105 days of unscheduled outages between March and October of 2016, which meant the county had to find alternative disposal methods for 55,000 tons of waste. The site often stored more than its 12,000-ton limit, including the day that the fire began, though Covanta said this did not violate its state permit."
Montgomery Covanta trash incinerator	17/7/16	https://www.germ antownpulse.net/si ngle-	"Montgomery County Fire Rescue Units were on the scene of a large trash fire at the Montgomery Covanta trash incinerator plant on Martinsburg Road in

plant on Martinsburg Road in Dickerson		post/2016/07/18/ Crews-Remained- on-Scene-of- Dickerson- Incinerator-Fire- All-Night	Dickerson throughout the night on Sunday, until Monday morning."  "Firefighters used large volume deck guns and master streams to attack the fire. MCFRS called in mutual aid from Frederick County's Carroll Manor Airboat 928 airboat to assist with ventilating the fire and clearing the smoke. Piringer said the fire was contained to the large pile of trash but was not completely extinguished."
Covanta Essex New Jersey	21/2/15	https://www.law36 0.com/articles/886 184/covanta-sues- co-over-2-7m-in- fire-damage-at-nj- plant	"Covanta Sues Co. Over \$2.7M In Fire Damage At NJ Plant."  "The lawsuit against ECM Services LLC asserts that the 2015 fire at the Covanta Essex Co. facility occurred because ECM did not follow the proper procedures in addressing mechanical problems with the condensing system of the turbine generator at the plant."
Covanta Niagara New York State	16/2/14	http://www.niagara- a- gazette.com/news/local news/covanta- issued-notice-of- violation-issued- over-failure-to- report/article 8910 bda4-481a-58f4- a203- fde87d8025a2.html	"Covanta issued notice of violation issued over failure to report fire."  "Covanta did submit an incident report within the required five-day time frame detailing the Feb. 16 incident at its facilities off of 56th Street, but failed to give verbal notification within 24 hours, as is required by state law for "emergency events, including but not limited to fires, explosions or on-site spills," according to the letter from Weiss."  The company also failed to report the spill of hydraulic fluid during the fire discovered during a visit from a DEC investigator on Feb. 19, according to the letter. The report makes no mention of the hydraulic fluid spill found during the DEC's site visit.  Covanta spokesman Michael Regan said the plant did not call the DEC to report the incident because they considered the fire to be too small to warrant a report.
TULSA, Oklahoma	24/1/14	http://www.newso n6.com/story/2453 8694/firefighters- extinguish- dumpster-fire-at- tulsas-trash-to- energy-plant	The Tulsa Fire and Berryhill Fire Departments were called out to a fire at the Covanta trash to energy plant at 122 South Yukon early Friday.  Fire officials said trash in a dumpster inside the facility caught fire at about 12:30 a.m.
TULSA, Oklahoma	11/1/11	https://groups.goo gle.com/forum/#!to pic/greenyes/izYi Anmrak	The fire at Covanta Energy's Resource Recovery Facility, where the city of Tulsa sends most of its trash, was reported shortly before 5:30 p.m. by several passers-by who saw flames coming from the building's second and third stories, Tulsa Fire Department spokesman Tim Smallwood said. Workers spread out the trash, and firefighters were "putting as much water on it" as they

the pit, so Smallwood exped while and that firefighters water on it for a long time T	•
------------------------------------------------------------------------------------------	---

It appears that Covanta - in order to allay fears of not enough water to meet the requirements of 3 hours - state that they can have a combined process and fire water tank. Process water will be highly contaminated and there will be no guarantees that this water will not contaminate areas that are not controlled with appropriate measures during a fire outbreak event. There is mention that they will test the water afterwards - who will oversee this to ensure it is correct? What happens to any water that leaked outside already? In a fire fighting situation whether or not water is going outside the building will not be the primary concern. The soil outside of the building has been assumed in Covanta planning documentation to be Oxford Clay and non-permeable. The Geological Society's report of 2013 <a href="https://www.geolsoc.org.uk/Geoscientist/Archive/March-2013/Lie-of-the-Land">https://www.geolsoc.org.uk/Geoscientist/Archive/March-2013/Lie-of-the-Land</a> Ref Fig 6 states the soil to be Evesham soil and slowly permeable. We also note that the Waste Storage Discharge area rather than being located in the middle of the site area - is actually quite close to the edge of the boundary of the site on the same side as the local brook which enters Stewartby Lake before running into the whole of the Great Ouse system - and also the Millennium Country Park visited by 400.000 people a year many of which are families.

It is also worth noting that unlike the States - any fire fighting needed in the UK will be at the tax-payers expense.

The Environment Agency need to ensure Covanta is fully equipped with the entire amount of water for the sole use of fighting fires in an on-site tank. Furthermore we feel that the Environment Agency should not make any decision regarding a permit until a full process design of the Fire Prevention Plan including number and location of fire hydrants is seen and agreed as fit for purpose.

# **Greenhouse Gases/Carbon Budget**

Via the About Us Page <a href="https://www.gov.uk/government/organisations/environment-agency/about">https://www.gov.uk/government/organisations/environment-agency/about</a> - we note that the Agency states the following in their Corporate Plan 2014-2016 page 6 " Addressing the causes and impacts of a changing climate remains a priority that runs through all of our work. Around half of the UK's greenhouse gas emissions are covered by regulatory and economic schemes that we operate" and on page 22 " We will..... Support government in achieving its commitments under the Climate Change Act and the EU climate and energy package to reduce greenhouse gas emissions. Improve energy efficiency and increase the proportion of energy produced from renewable and low carbon sources"

Covanta claim that the energy produced will be low carbon. Evidence from UK Without Incineration and Isonomia show that for every tonne of waste burned more than a tonne of CO2 is released into the atmosphere <a href="http://ukwin.org.uk/oppose-incineration/">http://ukwin.org.uk/oppose-incineration/</a> and <a href="http://www.isonomia.co.uk/?p=2876">http://www.isonomia.co.uk/?p=2876</a>. This means that incineration has a higher carbon intensity than conventional use of fossil fuels - and should not be viewed as 'clean' or 'green' energy. Friends of the Earth estimate 33% more greenhouse gases are released during incineration of waste than during use of traditional gas-fired power stations <a href="https://www.foeeurope.org/incineration">https://www.foeeurope.org/incineration</a>. The Energy Justice Networks suggests the figures are more like 2.5 times more CO2 is released during incineration compared to coal fired power plants <a href="http://www.energyjustice.net/incineration/worsethancoal">https://www.energyjustice.net/incineration/worsethancoal</a>. It is hard to see how incineration will help towards the carbon emissions reductions that the UK is legally required to comply with as part of the Carbon Budget section of the Climate Change Act <a href="https://www.theccc.org.uk/tackling-climate-change/reducing-carbon-emissions/carbon-budgets-and-targets/">https://www.theccc.org.uk/tackling-climate-change/reducing-carbon-emissions/carbon-budgets-and-targets/</a>. In order to reach future targets the UK will need to decrease emissions by 3% a year. If the Covanta Incinerator is allowed to operate it will be releasing over 480,000 tonnes of CO2 per year (at full capacity) for the next 40 years.

Planning consent for the Covanta Incinerator put no restriction on the catchment area where waste could be obtained from <a href="https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010011/EN010011-000938-Statement%20of%20Reasons.pdf">https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010011/EN010011-000938-Statement%20of%20Reasons.pdf</a> Ref 8.15.

Diesel fuelled HGVs will be travelling to and from commercial clients from anywhere in the Country - further adding to the carbon footprint of the operation of the Incinerator.

The Document Greenhouse Gas Assessment page 5 states " It is most likely that the power displaced by the Facility would otherwise be generated by gas-fired combined cycle gas turbine (CCGT) power plants, or from coal fired power plants."

This statement in itself is based on old criteria. Coal fired power generation has now virtually disappeared from the UK electricity grid and gas powered plants no longer reflect the true low carbon content of marginal generation. The Government' own Green Book sets out the anticipated greenhouse gas factor for marginal generation over the next few years <a href="https://www.gov.uk/government/publications/valuation-of-energy-use-and-greenhouse-gas-emissions-for-appraisal">https://www.gov.uk/government/publications/valuation-of-energy-use-and-greenhouse-gas-emissions-for-appraisal</a>

Using the figures in the Green Book - the net effect of the power station over the period 2020 to 2050 will be on average 130,000 tonnes CO2e per annum extra emissions not a saving of 1,800 tonnes CO2e as shown on Table 4.1 page 9. Over its lifetime the Incinerator will add the equivalent to global warming an estimate of an extra town with 13,000 households.

It is right that Covanta do not take into account the displacement due to Heat export as in reality there is little chance of them attracting a heat customer due to the location and this is merely a tactic to make the figures appear more conservative.

In light of Covanta's miscalculation of the Greenhouse Gases they will be responsible for - we fail to see how the plant will operate at a standard that will not ultimately see Covanta paying large fines through the EU Emissions Trading System (EU ETS) - which together with lack of long-term LA contracts and no heat customers - calls into question the long-term financial viability of this plant.

The amount of greenhouse gases this plant will produce if it was operational even today is clearly unacceptable. The lifespan of the plant is likely to be 40 years. Even over the next 10 years - how will this plant and the Environment Agency address the ever increasing call for low emissions? To issue a permit to this project would be at odds with your own primary aims regarding greenhouse gases emissions and low carbon energy.

#### Waste Hierarchy/Zero Waste Society impacts/Waste Content

We note that the Agency states in their Corporate Plan 2014-2016 Page 21 that one of your main aims is - "We will ...Contribute to meeting the government's obligations and targets arising from EU waste regulations, including Trans-frontier Shipments and the Waste Framework Directive, and in taking forward actions from its Waste Policy 22 Review and the Waste Prevention Programme for England aimed at moving towards a 'zero waste' society."

Incineration on a mass scale especially on a purely financial and commercial basis (i.e not in partnership with a LA) such as the Covanta Incinerator - will find it hard to conform to the Waste Hierarchy of Reduce, Reuse, Recycle, Residual and will inhibit the progress towards a circular economy that will be required in order to address our waste moving forward https://bedsagainstincinerator.wordpress.com/incineration/incinerationand-recycling-and-the-circular-economy/. In order to be financially viable the Incinerator will need the 480,000 tonnes of waste each and every year of the 40 year life-span regardless whether or not the waste is indeed residual. Although Requirement 41 of the Development Consent Order requires the Incineration of waste to take place only in accordance with the Residual Waste Acceptance Scheme dated 8 July 2011. We note that the IPC did not see fit to define 'residual waste' in the DCO - thereby giving Covanta the ability to 'feed' the incinerator with materials that should be dealt with higher up the Waste Hierarchy https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010011/EN010011-000938-Statement%20of%20Reasons.pdf. In this document ref 5.24 Covanta claim that it would not be financially sound to not send the correct waste for recycling rather than Incineration - however - many new Incinerators have been built or are in the process of being built since the proposal was considered and eunomia now project that incineration capacity will exceed the available quantity of residual waste in the UK in 2020/21. <a href="http://www.eunomia.co.uk/reports-tools/residual-waste-infrastructure-review-10th-issue/">http://www.eunomia.co.uk/reports-tools/residual-waste-infrastructure-review-10th-issue/</a> If built the Covanta Incinerator will only be operational in 2020. This further raises concerns that only 'residual' waste will be used by Covanta.

Incinerators of this scale would also appear to be at odds with European opinions that ".....over-capacity in incineration undermines waste prevention, re-use and recycling, drives waste imports to feed existing underused facilities and can represent high-costs for the tax payers. Priority should be given to the development of the necessary infrastructures to ensure high re-use, recycling (including composting) rates including the development of the necessary separate collection systems (whether door-to-door or through collection points and/or civil amenities)."

http://ec.europa.eu/regional\_policy/sources/docgener/informat/2014/guidance\_3\_thematic\_objective\_6\_wast\_e\_management.pdf

A comparison of the Local Authority Collected Waste statistics <a href="https://data.gov.uk/dataset/local authority collected waste management statistics">https://data.gov.uk/dataset/local authority collected waste management statistics</a> and locations and capacity of Waste Incinerators by UKWIN <a href="https://bedsagainstincinerator.wordpress.com/incineration/incineration-and-recycling-and-the-circular-economy/">https://bedsagainstincinerator.wordpress.com/incineration/incineration-and-recycling-and-the-circular-economy/</a> ref slide 7 shows that there is a depression of recycling rates related to percentages that are being sent to Incinerator plants.

We also note the change of primary waste stream from Domestic to Commercial.

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 now is to burn mainly commercial waste provided by a third party - Veolia. The Statement of Reasons document shows that the IPC was not as convinced that non-residual waste may not find its way into the Incinerator if the source was Commercial and Industry <a href="https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010011/EN010011-000938-Statement%20of%20Reasons.pdf">https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010011/EN010011-000938-Statement%20of%20Reasons.pdf</a> Ref 5.25. A recent study by the Right Waste Right Place campaign sponsored by <a href="maintain.gov/Environment Agency">Environment Agency</a>, <a href="Maintain.gov/Natural Resources Wales">Natural Resources Wales</a>, <a href="CIWM">CIWM</a> and ESAET showed that 56% of UK companies were not complying with the correct processes regarding waste and recyclables. The Study further shows that 1/4 of these Companies were not sorting waste into recyclable and residual at all. It is understood that Veolia will be the third party in charge of providing the commercial waste for the Incinerator - however - Veolia's own Environmental record is not good.

This is further illustrated by the minutes recorded of a recent Community Liaison Panel 20/03/17 where David Cowan a representative of Veolia confirmed "..that the waste being targeted is comingled waste, residual waste was defined by the waste producer"

The Environment Agency's own Document Additional guidance for: The Incineration of Waste (EPR 5.01) page 6 https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/297004/geho0209bpio-e-e.pdf states - "The purpose of an incinerator is to maximise the safe destruction of waste and to minimise the production of residues in terms of their quantity and harmfulness. The nature of the wastes treated and the throughput dictate the quantities of residues produced" How is the Environment Agency able to make a determination of the residues produced if the representative of Veolia believes that the content of the waste is in the hands of the waste producer (i.e customer) and the only reassurance the operator Covanta can give is that maybe the driver or the operator may be able to indentify non-permitted or incompatible waste by a visual inspection of the outside of a HGV's worth of heap of waste?

To further illustrate Covanta/Veolia's obvious plan to burn recyclables the Document Fire Prevention Plan page 9 shows a table of waste to be 'treated' at the Rookery South Incinerator. The codes clearly include waste items that are recyclable and should be dealt with further up the waste hierarchy.

Although your system appears to require the use of Waste Transfer Notes - we note in the Table of Waste appearing in Fire Prevention Plan Document page 9 there are several codes which refer to 'mixed' or 'Offspecification batches' which will allow for hidden recyclables or even worse.

On page 17 of the Fire Prevention Plan it states "Waste acceptance procedures will be developed by Covanta for the Rookery South ERF. These will include considerations for incompatible wastes and hot loads. Contracts with dedicated waste companies will be put in place for the delivery of all wastes to be incinerated within the ERF. The Contracts will have detailed waste specifications for the wastes to be delivered. This will restrict the incompatible wastes to be delivered to the facility. Upon arrival at the gatehouse, the waste vehicles will be directed to the waste reception area. Non-permitted wastes or incompatible waste will be identified by the

delivery driver or by the operator through examination of the fuel prior to it being discharged and as it is being unloaded into the waste reception areas. Wastes which are rejected will be transferred to dedicated quarantine areas. Quarantine areas will be designed in accordance with the requirements of the EA's fire prevention plan guidance."

It is extremely unclear how exactly non-permitted or incompatible waste will be identified. Covanta state that the driver may identify this issue - how? - what training will the driver have in this area? how will they be able to see anything but the top or back layer of the waste? It is also suggested that the operator may be able to tell whether the entire load of HGV waste is non-permitted or incompatible waste - again how will this happen from just a visual inspection of the outside of the heap? This type of inspection is not up to the job. Additionally - the fact that Covanta is unsure who will be in charge of this very very ineffective way of identifying this important issue - further adds to the conclusion that they are not concerned with what waste is or is not incinerated.

Looking forward - we note that Veolia have a hazardous waste transfer station located on Green Lane Stewartby just outside of the Rookery Pit sites. We are very concerned that the inclusion of Veolia on this development as the waste provider will ultimately see Covanta asking for an permit that you may grant them now to be amended to include hazardous waste. At the time planning permission was granted by the IPC not only is it clear they were of the opinion that mainly domestic waste would be burnt but also Veolia were not part of the equation and they could not have possibly considered this current arrangement with the looming possibility of a hazardous waste contract. We also note that Veolia appears to be linked Internationally with the largest supplier of medical waste Stericycle/SRCL.

To grant a permit to a commercial only venture Incinerator of this scale that will operational for 40 years - despite knowing there will not be enough residual waste to sustain it for that length of time - is a total odds with your duty of care to this community and your own aims as defined in your Corporate Plan as a contributor to a 'zero waste' society.

# **Export of Heat**

On the document entitled Heat Plan we note the Potential Customers map. Most are established and there would be a great financial cost associated with providing the necessary pipes etc. Most of these potential customers are also too far away to be of any meaningful benefit to warrant such expense and inconvenience on the part of the customer. We note to be considered 'Good Quality' CHP under the CHPQA scheme, the quantity of heat exported to a heat network must be sufficient to achieve a Quality Index (QI) of at least 100. An average heat export capacity of 21.0 MWth is required to achieve a QI value of 100, assuming a Z ratio of 5.9.

Additionally the disturbance that will occur in laying the pipework for use with heat export will cause more destruction of habitats disturbance to wildlife - yet another reason the location is totally unsuitable.

We believe that Covanta has kept the CHP factor of their development alive in order to be received more favourably in relation to Best Available Technology/Techniques (BAT) and Energy Efficiency in the eyes of the Environment Agency. Our belief is it is that the development will be primarily an Incinerator of Waste and secondarily a poor producer of a limited amount of electricity and Covanta are not concerned with employing BAT.

#### **Lifespan of Incinerator**

The proposed Covanta Incinerator does not employ the latest methods in the waste incineration sector of gasification and pyrolysis. The plant will not be operational until 2020 and therefore is expected to last until 2060.

During an interview for the Washington Post earlier this year - Joey Neuhoff the Regional Vice President for Covanta stated "When a plant reaches middle age, parts start to fail, and you need to keep critical spares available. We didn't have a good critical spare inventory" <a href="https://www.pressreader.com/usa/the-washington-post/20170109/281925952697898">https://www.pressreader.com/usa/the-washington-post/20170109/281925952697898</a>

We are concerned that in 2040 which is 'middle age' for this particular Incinerator - the parts associated with this already old type of Incinerators will be hard to find and may not still be manufactured leading to less than optimum performance.

# Covanta as a Competent Operator

Covanta have been operating Incinerators in the US since 1986. However - despite longevity in this sector - this does not reflect a Company who is a reliable and competent operator. Covanta has consistently been fined numerous times for various violations for emissions and safety issues. The US typically has more lenient emissions levels than the UK - and there is much concern that Covanta will be unable to operate effectively under more strict regulations without compromising Public Health and the environment.

There are too many violations to list - however the following website lists incidents that have resulted in fines from 2013 - 2016 <a href="http://violationtracker.goodjobsfirst.org/parent/covanta">http://violationtracker.goodjobsfirst.org/parent/covanta</a> - together with the table above under Fire Risks.

Despite this record Covanta has continually stated its experience, expertise, successful and established record in both Incineration operations and management. Statements such as "......Covanta's proven expertise and operating procedures will ensure industry-leading performance for the Rookery South Project" and "Covanta operating performance statistics demonstrate excellent environmental track record and availability throughout plant life" <a href="https://mmetag.files.wordpress.com/2009/11/rookery-clp-1">https://mmetag.files.wordpress.com/2009/11/rookery-clp-1</a> 250716-final.pdf

The lack of communication with the community since their renewed interest in the site is staggering. Due to the time elapsed since planning permission was granted there are a great many residents who are totally unaware of the Incinerator.

Several new large housing estates have been built in the meantime and despite the proximity to the Rookery Pit site - the majority of these new residents to the area did not receive any indication of the Incinerator on their searches prior to purchase.

The Community Liaison Panel (CLP) was resurrected but it should be noted it is a small group by invitation only and is not open to the public.

Covanta has made no attempt to conduct any open or awareness events open to the public.

Covanta made a commitment to send out Newsletters to all households in the electricity subsidy scheme parishes - namely Cranfield, Houghton Conquest, Lidlington, Marston Moretaine, Millbrook, Stewartby and Wootton. This was promised in December 2016. In April 2017 Covanta advised the CLP that the Newsletter would finally been delivered as promised. However many residents that were aware of the Incinerator were noting that they did not receive a Newsletter even though they were resident in the agreed parishes. BACI conducted a survey on the BACI facebook group to gauge percentages that had received the Newsletter in the agreed parishes. These figures showed that less than 50% of respondents had received Covanta's Newsletter. This calls into question the true number of residents that have been made aware of their right to respond to this Environmental Permit.

The content of the Newsletter is also misleading to the public quoting "....municipal, commercial and non-hazardous industrial residual waste, left after recycling and composting efforts" Covanta are implying that municipal will be the primary waste stream and that they have some control over whether or not it is 'residual' -the quote from their Veolia 'partner' at the CLP states it is down to the customer to make the decision regarding residual and Covanta's own stated visual inspection techniques for excepting waste at the plant are extremely ineffective to say the least.

The Newsletter content continues "Covanta is a world leader in providing sustainable waste and energy solutions, and its 42 Energy- from-Waste (EfW) facilities safely convert approximately 18 million tonnes of waste from municipalities and businesses into clean, renewable electricity to power one million homes" We question the use of 'clean' in light of the greenhouse gases in will clearly produce as described previously. We also question the use of the word 'safely' given Covanta's increasing problems with meeting imposed environmental limits and the continuous stream of fire related 'incidents'.

There also appears to be some misdirection on Covanta's part regarding the basic information of the proposed plant. The Environmental Document Supporting Information quotes "The plant is expected to process a nominal 585,000 tonnes per annum, based on an assumed annual operational availability of 7800 hours" However Covanta's own website and press release in May 2016 state "480,000 tonnes of residual waste".

We do not believe the Environment Agency has any indication that would suggest that Covanta will be able to work within any permit requirements imposed on them given their previous history in these matters.

#### The Environmental Permit Process Notes

Some of the documentation is poorly presented for online viewing. Some of the appendixes do not appear with the documents they are referring to e.g Additional Information for Duly Making Document. Some documents are poorly referenced e.g Air quality assessment and human health risk assessment Document also includes The Greenhouse Gas Assessment document but it is not referenced by the title.

Many of the documents contain scientific data that would be hard for members of the public to comment directly on and a further extension in order to have more time to explore these documents was rejected.

#### Conclusion

Environment Agency's own Document Permit Notes states "We want to make the best decision when permitting. Listening to the views of others helps us to take account of concerns, or local environmental factors, that we may not be otherwise aware of.

We will only issue a permit if we believe that harm to the environment, people and wildlife will be minimised and that the operator has the ability to meet the conditions of the permit. Providing a business can prove that the proposed activities meets all the legal requirements, including environmental, technological and health requirements, then we are legally obliged to issue a permit, even if some people do not approve of the decision."

There are many factors to take into consideration but we believe that based on the current information supplied - the Environment Agency can not issue a permit on the basis of "the operators ability to meet conditions of the permit". Certain key documents are not up to date, some data has been modelled and stated incorrectly and some documents have not been included in the permit.

Additionally we believe that based on the information available - the Environment Agency can not issue a permit on the basis that the "business can prove that the proposed activities meets all the legal requirements, including environmental, technological and health requirements". Despite being regulated in the US - Covanta has been fined numerous times for various violations for emissions and safety issues and continues to have regular fire outbreaks. This record speaks for itself - proving that they are unable as a business to work within legal obligations such as permit restrictions.

Nicola Ryan-Raine

on behalf of Bedfordshire Against Covanta Incinerator (BACI)

bedsagainstcovantaincinerator@gmail.com

www.bedsagainstincinerator.com