



# Friends of Sherwood Forest

## Statement.

### Re RSPB's Aerobic Digester, NVC, Forest Corner, Edwinstowe.

#### Introduction.

I had encountered some really bad sewage like smells for some time on Forest Corner but my first real encounter was in late Autumn 2019 when I decided to try a new photographic technique in Sherwood Forest. The technique was a great success and revealed the Major Oak as it is not normally seen without any intrusion or harm to the Forest. I returned to my car at the RSPB car park and stowed my gear and decided on a Coffee at the Craft Centre opposite. Walking across the road I walked into a pocket of sewer gas that was absolutely vile, the stench was acrid. I panicked at the time and wondered which way to get out of this cloud of gas as it was not visible to the naked eye, I thought the **best way out was to keep walking forward**, thankfully I was right in my decision, had I have stopped I would possibly have been **asphyxiated**. On arriving at the Craft Centre I asked around from the Tennant's and was astounded to find that virtually every Tennant was affected and complaining about the acrid smell from the RSPB's compound.

On my return home I decided to do some research on Methane gas and it's properties as what I had experienced that day was shocking.

My only thoughts on this subject were from my childhood days when my Father a Coal Miner would talk of Coal Damp ( Methane Gas ) and the risk of explosion in the coal mines and why he had to have a twist of chewing tobacco in his snap tin because any form of lighted material was banned underground.

Searches on YouTube for Exploding Manhole Covers was very rewarding, if sadly comical. Manhole covers on sewers could be seen being thrown by explosions on video being launched up to 200ft into the air when Methane gas was ignited in a sewer. Further research on Methane Gas and Aerobic Digester suggested that someone somewhere

needed to do something to raise awareness and try to remove the offending plant at the NVC.

## **Methane Gas.**

Methane gas is odourless and not visible to the naked eye. In reality Methane will not kill you, what will kill you is the fact that methane gas will DISPLACE oxygen therefore asphyxiating you, passing out within seconds and probably leaving you dead within minutes. Methane itself has a peculiar way of behaving, as it will only explode within certain limits, defined as a LEL or Lower Explosive Limit. The highest limit it will explode at is 15% lowering down to 5% with Oxygen.

Now the funny bit... below 5% it probably will not ignite and nothing will happen, above 5% and you have yourself your own personal firework with explosions being potentially very violent to the point of taking life and causing considerable property damage.

Levels over 15% will result in another peculiar phenomenon where Methane will burn at speeds approaching the speed of sound racing along drains and sewers burning down and when it reaches the magic 15% level with Oxygen it will explode causing considerable harm to anything in it's path.

**The release of Methane gas into the environment is 30 times more damaging than whatever Carbon Dioxide could be.**

## **Hydrogen Sulphide.**

H<sub>2</sub>S ( Hydrogen Sulphide ) is produced during a process known as Methanogenesis i.e. Waste matter including faeces rotting down with the help of raised temperatures and producing Methane and Hydrogen Sulphide Gas. This process is known as Aerobic Digestion, the process is often found to be employed on small farms and sometimes in industry to supply gas for industrial processes or even domestic cooking.

Hydrogen Sulphide can and is harmful to human life and anyone suffering with a chest condition such as Asthma or COPD etc. can suffer irreversible harm on being exposed to this gas. The gas also has corrosive properties and will readily attack Aluminium.

## **Methanogenesis.**

As mentioned above this is a reaction that occurs with rotting waste matter, i.e. rotting organic waste and human faeces. The products of this reaction are Methane and Hydrogen Sulphide ( Rotten eggs smell ) plus other gasses depending on that substances are involved in the process.. Methanogenesis is employed in an industrial process to manufacture Methane gas in what is known as an Aerobic Digester. This is an **Industrial process that needs to be undertaken with great care and skill.** The Hydrogen Sulphide is removed from the gaseous mass and is vented into the atmosphere. Is is an accepted fact that all Aerobic Digester's are smelly and not suitable for urban occupied areas or town settings due to the often odious and unpredictable stench they emit. There are many various types of digester but all have the same end product, in reality no one digester is any better than another.

## **Craft Centre.**

Tenant's at the Craft Centre were very concerned initially regarding this problem and one or two reported pressure being brought to bear by RSPB employees and I felt that pressure was also being brought to bear by Newark and Sherwood District Council who ran the Craft Centre. I made considerable efforts to unite them but all my efforts seemed to be futile and an ensuing illness due to picking a Bug up from the Digester meant I could not longer undertake the task of organising and informing tenants of any progress, sadly I had to abandon them but on the plus side it was at a time when a resolution to this problem seemed to be in the offing. The Tennant's had my phone number so if they wanted to contact me they were free to do so. I have not heard from them since leaving them to their own devices.

## **Gas Detection.**

Methane is a highly combustible gas that can easily be detected with a hand held detector. The gas on Forest Corner was found to be escaping from two adjacent **ventilated DRAIN covers** on Forest Corner roadway situated between the Craft Centre and the Cricket Pavilion. The stench at those points was deplorable but was **only present while the RSPB's digester was unloading it's effluent** into the freshwater drainage system ( **Not into the Sewage system** ). The unloading of the Cistern which had a holding capacity of 12 Metric Tons could take several hours, I timed one such event and clocked one and a half hours before I had to leave and effluent was still pouring out of the digester when I left. The source of the gas could be traced back to the lower of the two compounds located midway between the VNC and the Bus Stop. I traced gas presence back to the Compound area where the HIDROSS heat pump was installed. Effluent was being pumped from the cistern while still fermenting. then pumped into the drains which were ventilated, fresh gas was in effect added to the gas already being discharged into the drains and presumably as these were freshwater drains they would run through the centre of Edwinstowe down the High Street and into the River Maun. Gasses would be emitted at every possible point on it's way down to the river and reports of sewage smells were noted by shopkeepers on the High Street.

During the winter the gas could be detected close to the ground and was found **inside** the Craft Centre in the central Atrium area to be anything between 18 to 24 inches deep, rising when entering shop units to around 36 inches. This could have been disturbing for small children and dogs.

## **Harm to Public. ---- Main areas of harm.**

Aerobic Digester Chamber exploding,

Loss of life, Life changing injuries, multiple lacerations, death due to blood loss, physical injury due to flying debris. Trauma and Shock. Severe damage to building close by.

Manholes Exploding.

Burns, Loss of life due to debris and flying manholes,

Methane Gas.

Possible Asphyxiation, Loss of consciousness, falling and associated injury and possible Death.

Hydrogen Sulphide. ( Rotten Eggs Smell ).

Thoracic ( Chest )problems due to long term exposure, in particular Asthma sufferers and COPD victims.

Bacteria and Viruses, A haven for bugs to breed and mutate including Covid-19

### **RSPB's Aerobic Digester.**

The Digester the RSPB constructed does not follow conventional lines, **the RSPB themselves vehemently deny having a Digester.** ( Including their Legal Department ).  
Format.

Poop ( Faeces ) is pumped up into a 12 cubic meter cistern ( 2.600 gallons ) from the lower level of the NVC by way of two 50mm pipes from a macerating pump. The macerated liquid faeces is deposited in the Cistern buried in a Chamber located directly under the waste bin compound at the NVC, **No WARNING signs are displayed.** The effluent is heated to produce Methane gas which is presumably collected and stored in a pressure vessel ready for the gas to be used in the kitchens. The workings of this digester seem to be erratic and lacking proper control. The HIDROSS heat pump is supposed to warm the effluent up to encourage Methanogenesis producing Methane gas, but it would appear that at times and all too often the effluent is discharged while still being digested along with the gas stored in the chamber ready for collecting and storing. The resultant discharge of partially digested effluent is so overpowering it can knock a man off his feet and is very harmful to the atmosphere. Bear in mind that to produce Methane gas legally in an Aerobic Digester you are required to temper the process by including ground food waste to stabilise the process. There was a very substantial food

grinder located at the side of the Hidross heat pump however this vanished and has not been seen since, conclusion the digester was run without any material to temper the process and as such was operated in an illegal manner. **The Digester has neither been certified or subject to exemption by the Environment Agency, who really did not seem bothered about the matter.**

## **DANGER.**

The cistern is situated BELOW the level of the Drains and so to effectively discharge the effluent which is highly toxic the RSPB installed **TWO electric submersible pumps** in the cistern to manage this task. The problem here is according to information I have before me these two pumps are rated for Heavy Duty use only and not to a higher standard of being suitable for use in HAZARDOUS ENVIRONMENTS. What is the difference, well a heavy duty submersible pump has exposed cables with no extra protection. They would have a plastic float switch that could fracture due to constant changing heat levels exposing bare terminals and switchgear. The casing and overall construction would not be to the same standard as a pump manufactured for hazardous environments and the price difference would well and truly be substantial due to the increased specification needed to make these motors safe and fit for purpose to work in an EXPLOSIVE atmosphere.

Attendant Dangers. while the pumps are standing idle liquid ingress can seize the pump bearings and cause overheating when run, a resultant electrical short circuit and fire in any exposed cabling, net result a massive explosion in the Chamber hosting the cistern. Any spark whether static or otherwise could have the same effect. **Bear in mind that the chamber would at all times be heavily laden with Methane gas a single spark would cause an instant burn down and violent explosion resulting in substantial property damage and possible loss of life.**

## **Viruses and Bacteria.**

Alongside all other concerns there is also the attendant dangers of bugs being harboured in the cistern and even being cultured and mutating. I myself have caught a virus from this digester and have not even handled anything to do with the system or it's operation.

The bug has now survived for more than 8 weeks and has only just recently shown any signs of abating, symptoms included griping stomach pains night and day, fatigue and general malaise. **This system has the capability to manufacture superbugs very easily and even to distribute viruses such as Covid-19 without warning by droplet infection in the same manner as I caught my infection.** With the constant comings and goings of Visitors to the NVC there is a very real danger that in any epidemic the entire Midlands region could be infected with one bug after another.

## **The Establishment.**


Numerous complaints have been made to various government agencies regarding this matter and all have been met with disdain and reluctance to act with regard to **Public Safety.**

## **RSPB Legal.**

The RSPB's senior legal adviser has contacted me and made false allegations regarding harassment, knowing full well they were **malicious** and designed to frighten me off my investigation of this matter. The Senior Legal adviser I have dealt with has refused to answer poignant questions regarding the digester or even to say what they need a cistern in front of the NVC capable of holding **12 Metric tons of Faeces.** Vital questions have been repeatedly asked of them **only to be ignored.**

## **Conclusions.**

This Aerobic Digester is **dysfunctional** and apparently has problems with servicing, causing considerable annoyance and distress to anyone faced with walking past **offending freshwater drain covers on Forest Corner** or having to work in the vicinity of this plant. It is considered to present serious dangers to not only the Environment but also to life and limb, the possibility of an explosion or contracting disease are very real



( The author is already suffering from a Bug contracted from this digester ). It is abhorrent beyond belief to think that so many Government agencies have been contacted and refused to act or do anything constructive to resolve this issue. **We conclude that this Digester must be closed down for the protection of the Public and never allowed to be operated again due to the lack of foresight in design and operation of this plant by the RSPB.**

Signed

Adrian Wilson,  
FoSF Founder and Governor.

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