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PP/03B-15022 (NS)
EPR/AB3990HF/A001

11 February 2016

Business Fire Safety
01443 232523
firesafety@southwales-fire.gov.uk

Re: Application reference no: EPR/AB3990HF/A001

Operator: Agrivert Ltd

**Facility: Parc Stormy Anaerobic Digestion Facility, Stormy Down Porthcawl,
Bridgend CF33 4RS**

This Authority makes the following observations in regard to the above permit application: Fire Prevention and Accident Management Plan.

GOODWILL ADVICE

Fire Prevention

1. Housekeeping

The maintenance and cleaning programme should aim to keep levels of dust, loose fibre and paper and other combustible materials in buildings and around the site to a minimum.

Some materials can spontaneously combust under certain conditions, and the risk generally increases when materials are stored for prolonged periods. The storage time limits shown below should be used to inform stock rotation:

- Wastes whose particle size has not been reduced: 6 months
- Baled and compacted wastes: 6 months
- Wastes whose particle size has been reduced: 3 months
- Combustible fines/dusts: 1 month

Source: WASTE 28. Paragraph 5.5

Flammable materials such as oils, greases, fuels, paints etc should always be stored correctly including any compressed gas cylinders – further guidance can be found at the HSE website: <http://www.hse.gov.uk/waste/index.htm>

To reduce the likelihood of fire spread from stack to stack, stacks containing flammable materials should be interspersed with stacks containing inert materials in addition to the recommended minimum 'fire break' separation distances i.e. 10m between stacks and buildings; 5m minimum distance between individual stacks.

2. Heavy mobile plant

Mobile plant can pose an ignition risk to the wastes they come into contact with, particularly hot exhausts. You should instruct plant operators of this risk and ensure that wastes are cleared from around exhausts periodically during and at the end of each shift.

After use mobile plant should be parked in an area clear of any combustible materials – minimum 10 meters

Where it is proposed to use mobile plant to assist in any firefighting related activities you must ensure that plant operatives are trained and competent to carry out these tasks and that they are completely aware that any such action must only be done without risk to their own health and safety and that of others.

3. Site/plant shut-down processes

A significant number of waste site fires occur after working hours. To reduce this risk you should consider a formal close-down procedure including issues such as:

- Over-run of shredders, conveyors, screens etc to ensure that they are as clear of waste as practical.
- Shut-off and lock-off electrical power to the plant.
- Shut-off of other electrical items such as heaters.
- Clearance of waste which have accumulated under equipment.
- Ensuring that any flammable materials such as fuels have been secured.
- A fire-watch at least one hour after the end of operations.
- Check that mobile plant has been moved to a safe distance.
- Check that any fire detection and security systems have been activated and gates are secured etc.

4. Fire detection, alarm and suppression systems

To enhance the on-site security and provide an early detection of fire for periods when the site is not occupied consideration should be given to the installation of a camera type spark, infrared or ultraviolet fire detection system.

You should check with your insurer. Some insurers have specific requirements for detection and suppression systems. This can vary from insurer to insurer.

Accident Management Plan

The greater the size of any stacks of stored waste the longer it will burn for and the greater the risk posed to human health and the environment. It is not acceptable that wastes are stored in such a manner that stacks can burn for days, weeks or even in some cases for months. Accordingly, the first basic premise is that:

No individual stack of stored waste should be of a size that means it can continue to burn and pose a significant threat to human health or the environment for more than 24 hours.

This standard can be achieved either by the stack burning itself out within 24 hours or by being extinguished or controlled to the point at which it represents no significant threat to human health or the environment.

(Reducing Fire Risk at Waste Management Sites, WISH guidance 2014)

1. Content of the accident/emergency plan

The accident/emergency plan should be reviewed to include:

- Communication arrangements, such as named emergency contacts, key holders etc with their telephone numbers and likely response time (out of hours).
- Communications arrangements with neighbouring/nearby premises which may be affected.
- Hazardous and combustible materials on site, including wastes. To include locations, likely amounts, hazardous properties and other details – locations should be marked on your site plan.
- Specific hazards, such as gas cylinders, fuel stores etc – again marked on your plan.
- Normal number of people working on site and usual hours of work.
- Firefighting equipment on site and where this is located, such as location of hydrants, fire extinguishers etc.
- Any other equipment on site which may be used of use during a fire, such as heavy mobile plant which could be used to assist the FRS.
- Any specific environmental issues such as drainage issues for firewater, protected habitats neighbouring the site etc.

1. Water Supplies

While fire extinguishers are useful in tackling small fires, the majority of larger waste fires are likely to be fought with large amounts of water. If you do not have a sufficient water supply it is possible that any small fire will be allowed to develop whilst supplies are sort, the likely outcome being a long lasting incident which will, at the very least have a very negative impact on your business. E.g.:

Fire fighting a 300 cubic meter stack of combustible material will normally require a water supply of at least 2,000 litres a minute for a minimum of three hours. This is a total of 360,000 litres or 360 tonnes of water.

To put this into context if you have three stacks of baled combustible waste of 300 cubic meters each it would take a pool of water five metres deep, 15 metres long and 15 metres wide to fight a fire in all three stacks.

It is recommended that the planned on-site water storage tank supply will need to be boosted either by additional tank(s) or the provision of a hydrant. If the nearest hydrant is more than 100 metres away you should consider an on-site hydrant(s) and/or installing a fire main to allow sufficient water to be available.

The location of hydrants, on or off site, should be included in your accident/emergency plan and should remain easily accessible. Hydrants should also be tested periodically to ensure they work.

If you have, or plan to, install firefighting equipment such as water-spray/deluge or sprinkler systems, fixed water monitors etc then these will also have to have their own water supply requirements. You should seek competent advice on your site's likely total water supply demand for firefighting equipment to ensure it's adequate to the total demand required.

2. Fire appliance access

Access to Fire Service vehicles to and around your site should be unobstructed at all times and meet as a minimum the requirements in the table below. You should also consider how fire appliances can turn around once they have entered your site.

Appliance	Min Width of Road (m)	Min Width of Gateway (m)	Min Clearance Height (m)	Min Weight Restriction (tonnes)	Min Stack Access Requirements (m)
Water Tender	3.7	3.2	3.7	12.5	4 - for at least ¾ of the perimeter length
High reach	3.7	3.2	4	24	4

Further guidance can be found in the following documents:

Technical Guidance Note (TGN7.01)

<http://www.cfoa.org.uk/16192>

Waste Industry safety & Health Forum (WISH)

<http://www.ciwm.co.uk/wish>

THE REGULATORY REFORM (FIRE SAFETY) ORDER 2005 (“THE ORDER”)

The Order applies in England and Wales. It covers general fire precautions and other fire safety duties which are needed to protect ‘relevant persons’ in case of fire in and around most ‘premises’.

Responsible persons as defined by the Order are responsible for ensuring that the provisions of the Order are fully complied with, including the carrying out of a suitable and sufficient assessment of the risks to which relevant persons are exposed. If your premises are licensed, you are required by the Order to record the significant findings of the assessment. The assessment can be incorporated to form part of your site accident plan.

Information and advice on carrying out a fire risk assessment are available by consulting the appropriate Fire Safety Order guide which is available from the Department for Communities and Local Government (DCLG) website via the following link:

http://www.southwalesfire.gov.uk/English/business_fire_safety/guides/Pages/default.aspx

http://www.southwalesfire.gov.uk/English/business_fire_safety/guides/Pages/default.aspx

If responsible persons are of the opinion that they do not have the necessary experience or skills to carry out a fire risk assessment, they must appoint one or more competent persons to assist them in identifying the general fire precautions required. Further guidance on choosing a competent risk assessor is also available via the above link.

In order to ascertain compliance with the provisions of the Order, an audit of the risk assessment and premises may be carried out in due course in accordance with South Wales Fire and Rescue Service's risk-based inspection programme.

Should you require clarification of any matter mentioned above, please do not hesitate to contact South Wales Fire & Rescue Service Business Fire Safety department on the number given above.

Yours faithfully
Signed

A handwritten signature in black ink, consisting of a stylized 'P' followed by a series of horizontal strokes.