



**Plan version: 1**

**Date of plan: 18/9/23**

**Site details**

**Site name: Connetts Farm Compost**

**Site address: Land to West of Flightways Business Park, Dunkeswell. EX14 4RD**

**Operator name: Nick & Heather Stevens**

**For the Attention of:**

- Nick & Heather Stevens
- Fire Officers
- Contractors Working on Site



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## **1.0 Types of Combustible Materials**

### **1.1 Combustible Waste**

Types of combustible waste that you will have on site at any time:

- Compost
- Vegetation
- Waste Bark & Wood
- Plant Tissue Waste
- Animal Faeces
- Wastes from Forestry
- Waste from Spirit Distillation
- Malt Husks, Malt Sprouits, Yeast and Yeast Residues
- Fibre Rejects
- Sawdust and Shavings
- Paper and Cardboard
- Compostable Plastics
- Wooden Packaging
- Composite Packaging
- Textile Packaging
- Wood
- Off-Specification Compost

### **1.2 Persistent Organic Pollutants**

Persistent organic pollutants (POPs), may arrive on site as contrary waste. In the form of:

- Treated Timber

We will segregate POPs waste from non-POPs waste and place them in the contrary waste skip.



### **1.3 Other combustible materials**

All combustible materials received on site as waste are listed in section 1.1. However, there would typically be a selection of combustible non-waste materials on site that are not regulated by the Environment Agency.

## **2.0 Using this Fire Prevention Plan**

### **2.1 Where the plan is kept and how staff know how to use it**

A copy of this fire prevention plan will be kept in the draw of the filing cabinet in the right hand office in the site office building. A digital copy will also be kept on the following link.

### **2.2 Testing the Plan and Staff Training**

Both staff members on site have read and digested the content of this Fire Prevention Plan.

Simulated fire scenarios will be played out in order to test this plan and to aid in reinforcement of positive behaviours in the event of a fire for example:

- Scenario 1 – Stone in shredder causes a spark and ignites block feed chute.
- Scenario 2 – A pile of compost spontaneously combusts and smoke is seen drifting towards residential dwellings.
- Scenario 3 – The fire brigade are on site and fire water with debris, and charred wood are being washed in to a nearby field.

### **2.3 Fire prevention Plan Contents**

#### **2.4 Activities at the Site**

- Shredding of Wood and Plant Tissue
- Composting of Shredded Wood and Plant Tissue
- Crushing of Waste Bricks and Concrete
- Maturation of Compost
- Storage and Transfer of Waste

#### **2.5 Site Plan**

Please see Appendix 1 Site Condition Report.



## **2.6 Plan of Sensitive Receptors Near the Site**

Please see Appendix 1 Site Condition Report.

## **3.0 Manage Common Causes of Fire**

### **3.1 Arson**

Owing to the location of the site arson is unlikely. However, the operators understand that it is their legal responsibility to prevent foreseeable arson.

The site is surrounded by a fence and gates are locked at night to prevent entry to the site.

### **3.2 Plant and Equipment**

- Shredder (Sub-Contractor)
- Crusher (Sub-Contractor)
- Screener
- Tractor

### **3.3 Electrical Faults including Damaged or Exposed Electrical Cables**

#### **3.3.1 Electrics certification**

There are no electrics on site.

#### **3.3.2 Electrical equipment maintenance arrangements**

There are no electrics on site.

### **3.3 Discarded Smoking Materials**

Neither Nick or Heather Smoke.

### **3.4 Smoking on Site Policies**

This is a no smoking site. This applies to all staff, visitors and contractors.

### **3.5 Hot Works Safe Working Practices**

### **3.6 Industrial heaters**

No industrial heaters are used on site.



### **3.7 Hot Exhausts and Engine Parts**

The only hot exhaust on site is the tractor. The exhaust on the tractor is high up above the bonnet and does not come in to contact with combustible materials.

### **4.0 Fire Watch Procedures**

Compost heaps are regularly monitored for quality control purposes. And this involves daily temperature checks. All other combustible materials are stored in view of the site office and any steam or smoke (indicating elevated temperatures) would be seen by Nick or Heather.

### **5.0 Ignition sources**

Under this heading, replace this text with information describing any ignition sources and how you keep them away from combustible and flammable waste. List all possible ignition sources on your site and provide evidence to show they are 6m away from combustible and flammable waste. Consider showing these on your site plan.

If this section does not apply, say that and explain why.

#### **5.1 Batteries**

No unused batteries kept on site.

#### **5.2 Leaks and Spillages of Oils and Fuels**

No fluids (fuel or oil) are kept on site. Tractors and vehicles are fuelled off site.

No unscheduled maintenance on site.

All machines maintained to prevent leaks on any sort.

#### **5.3 Build-up of loose Combustible Waste, Dust and Fluff**

Build up of dust and fluff can occur when shredding man made woods such as fibre board / MDF. However these wastes are not treated on site.

The shredding plant is also mobile, so dusts unlikely to accumulated owing to moving of air whilst in transit.

#### **5.4 Reactions between Wastes**

Not applicable. No reactive chemicals kept on site.

#### **5.5 Waste Acceptance and Deposited Hot Loads**

Hot loads will be rejected. Any hot loads that is unloaded prior to identification as such will be moved to the quarantine area.



## **5.6 Hot and Dry Weather**

Materials received on site are typically inert (concrete) or have a high moisture content (plant tissue). Once shredded the temperature is carefully monitored owing to quality control procedures.

## **5.7 Prevent Self-Combustion**

The operator will send a compost sample for isothermal calorimetry testing (basket testing). To determine safe storage time.

## **5.8 General self-combustion measures**

The compost windrows are frequently monitored for temperature. If they exceed 60c they are turned, and this causes them to cool.

The critical ignition temperature is likely to be 100oC or above.

## **6.0 Manage Storage Time**

### **6.1 Method used to record and manage the storage of all waste on site**

Potentially combustible waste are received in to composting area. Storage contrasts mean that these are shredded and placed in to composting bays on a weekly basis.

The composting process works on a 8 week cycle. At which point the finished product is bagged ready for export.

### **6.2 Stock Rotation Policy**

Potentially combustible wastes are processed for compost. This is a one way system, and thus stock is automatically rotated.

### **6.3 Monitor and Control Temperature**

#### **6.3.1 Storage Times**

No storage for over 3 months.

#### **6.3.2 Trigger Temperature**

will be define via isothermal calorimetry testing. Precuatory temperature of 100oC adopted in meantime.

#### **6.3.2 Actions**

Any wastes rising above 60oC will be turned to release heat.

### **6.4 Reduce the Exposed Metal Content and Proportion of 'Fines'**

There is no metal.

Fines are required part of compost. Temperature will be monitored. Fire avoided.



## 6.5 Monitoring Temperature

According to PAS100

## 6.6 Controlling Temperature

As per 6.3.2

## 6.7 Dealing with hot weather and heating from sunlight

As per 5.6.

## 6.8 Waste Bale Storage

No waste bales.

## 7.0 Manage Waste Piles

### 7.1 Storing waste materials in their largest form

Waste will only be shredded when it is fed in to composting system. The composting system is closely monitored for temperature and residence times.

### 7.2 Maximum Pile Sizes for the Waste on your Site

Complete this table to provide information about your waste piles. Individually list each area where waste is stored. For example, do not just list 'wood' as a general term for all wood on site when it is stored in more than one place or form.

If this section does not apply, say that and explain why. If not applicable, delete the table.

Waste stream	Location (must match site plan)	How it is stored For example this may include piles, bays, containers, skips, racks, bales	Max. length / m	Max. width / m	Max. height / m	Volume / m <sup>3</sup>	Max. time it will be stored (days)
Shred	Shred Pile	Pile	5	5	3	75	30
Sanitisation	Sanitisation Pile	Pile	5	5	3	75	30
Maturation	Maturation Pile	Pile	5	5	3	75	30





### **7.3 Where Maximum Pile Sizes do not Apply**

Compost

### **7.4 Waste Stored in Containers**

Contrary waste is stored in a container.

### **7.5 Types of containers you are using**

Skips from contractor.

### **7.6 Accessibility of Containers**

Containers are stored adjacent office. They can be driven up to. They are immediately accessible.

### **7.7 Moving containers in a fire**

Yes. Containers can be moved with tractor, or a winch if safe to do so.

### **8.0 Compost Production**

Yes compost is produced on site. All plant tissue and wood waste goes through composting system

### **8.1 Procedures for Active Management and Monitoring Of the Compost**

Temperature reading taken daily. According to PAS100

### **9.0 Prevent fire spreading**

[Guidance - delete]

There are 2 main ways of preventing a fire spreading, separation distances and fire walls. [Section 11](#) of the fire prevention plan guidance has more information about the measures you must put in place and describe in your plan.

Provide information about your separation distances, fire walls and bay storage under the headings below.

[Guidance ends]

#### **9.1 Separation distances**

All potentially combustible material is stored in piles, there is no poetically for stack collapse. Loose stack to loose stack spacing is 5 meters as per WISH Guide (Waste 28) Graph 1.

#### **9.2 Fire walls construction standards**

No fire walls will be used.



### 9.3 Storing Waste in Bays

No bays used.

### 9.4 Quarantine area

[Guidance - delete]

[Section 12](#) of the fire prevention plan guidance specifies all the information you need to provide about your quarantine area.

Your quarantine area(s) must be within the permitted site and shown on the site plans.

It must be large enough to:

- have a separation distance of at least 6m around the quarantined waste
- hold at least 50% of the volume of the largest pile, row or block of ELVs or containers

You must provide justification for the chosen size and volume of your quarantine area and demonstrate that it meets these 2 criteria.

[Guidance ends]

#### 9.4.1 Quarantine area location and size

Under this heading, replace this text and describe your quarantine area location and the separation distance. Include the location on your site plan. Also describe your quarantine area's size and your justification for this size and volume.

#### 9.4.2 How to use the quarantine area if there is a fire

Under this heading, replace this text and set out how you will use your quarantine area in the event of a fire.

#### 9.4.3 Procedure to remove material stored temporarily if there is a fire

Under this heading, replace this text to explain your procedures for removing material temporarily stored in the quarantine area if there is a fire.

If this section does not apply, say that and explain why.

## 10.0 Detecting Fires

### 10.1 Detection Systems in Use

The principal means of detecting a fire on site would be via the means of monitoring temperature which is undertaken daily.

### 10.2 Certification for the systems

Annual calibration of temperature probe.



## **11.0 Suppressing Fires**

### **11.1 Suppression Systems in Use**

No building.

### **11.2 Certification for the Systems**

NA.

## **12.0 Firefighting Techniques**

### **12.1 Active Firefighting**

The resources needed include:

- plant you can use to move waste around the site, for example loaders, excavators, material handlers
- staff
- available water supply
- finances

You can use a variety of firefighting techniques together or separately to extinguish a fire. These include:

- applying water to cool unburned material and other hazards
- separating unburned material from the fire using heavy plant
- separating burning material from the fire to quench it with hoses or in pools or tanks of water



Firefighting techniques may also include suffocating the fire using soil, sand, crushed brick or gravel. However, you can only do this if:

- the Environment Agency has agreed you can do this
- you remove and dispose of contaminated material as soon as it is safe to do so

Your staff may use all of these techniques on the site if they are suitably trained and are supervised by the FRS. However, protecting the health and safety of people on site must be your priority.

## 12.2 Water Supplies

### 12.3 Available Water Supply

A new hydrant will be installed adjacent to site entrance. Minimum water pressure (as guaranteed by OFWAT) will supply in excess of 500 litres per minute.

### 12.4 Show the calculation for your required water supply

Maximum pile volume in cubic metres	Water supply needed in litres per minute	Overall water supply needed over 3 hours in litres	Total water available on site in litres
75	500	90,000	>90,000

### 12.5 Managing Fire Water

the site is located within a groundwater SPZ1, SPZ2 or SPZ3	No
there any private drinking water abstractions within 50 to 100m of the site	No
the groundwater vulnerability maps flag that the site is in a high, medium-high or medium risk category	Yes – Fire water will be contained in bunded area, on impermeable concrete and then tankers will remove contaminated water for appropriate treatment.

### 12.6 Containing the Run-Off from Fire Water

As above.

649m<sup>2</sup> Area. 30cm bund. Triangular cross section = 50%.  $649 \times 0.15 = 97\text{m}$  or 97,000 litres.



## **13.0 During and after an incident**

### **13.1 Dealing with Issues During a Fire**

All waste deliveries are pre-arranged and can be cancelled if required.

### **13.2 Notifying Residents and Businesses**

Residents and Businesses to the east of site will be informed via text message or email if there is a fire on site.

### **13.3 Clearing and Decontamination after a Fire**

All firefighting residue will be presumed to contain POPs and disposed of at an appropriately permitted site.

### **13.4 Making the Site Operational After a Fire**

Site will return to operation pending:

- Fire is fully extinguished
- All firefighting residue disposed of.
- Full report made to Environment Agency.
- This plan updated to account for any short comings.
- All broken equipment replaced.
- Surfaces checked for damaged
- Site infrastructure checked for damage and repair as needed.

## **14.0 Limitations**

*For the avoidance of doubt, the parties hereby expressly agree that the Consultant takes no liability for and gives not warranty against fire, fire water damage, fire damage to persons or property or natural environment in relation to the performance of the service.*

*This report gives estimates of likely scenarios and waste volumes, but does not accept liability associated for the use of these figures in preventing fire, fire water damage, fire damage to persons or property or natural environment. Options appraisals are given as example only. Responsibility for design / services and resulting levels of performance rests with the client and or developer.*

*This report is produced for the sole use of the Client, and no responsibility of any kind, whether for negligence or otherwise, can be accepted for any Third Party who may rely upon it.*

*The conclusions and recommendations given in this report are based on our understanding of the future plans for the site.*



*The scope of this report was discussed and agreed with the Client. No responsibility is accepted for conditions not encountered, which are outside of the agreed scope of work.*