

Deep Moor Composting Facility

Fire Prevention Plan

Plan version: DPM FPP 3.0

Date of plan: June 2024

Site details

Site name: Deep Moor Transfer Station & Composting Facility

Site address: High Bullen, Great Torrington, Devon EX38 7JA

Operator name: Coastal UK Group Limited

Who this plan is for

All staff and contractors working at this site must be made aware of and understand the sites Fire Emergency Procedure.

In addition, all key members of the Company's Management and Supervisory Teams must read and understand this Fire Prevention Plan (FPP). The table below will be completed to provide a record of this;

Name	Position	Signature	Date
Steve Hadley	Managing Director		
James Bidwell	Group Operations Manager		
Lee Stroud-Eastwood	Deep Moor Site Manager		
Neil Browne	Site Engineer		
Wayne Martin	Group Compliance Manager		
Lyn Chadwick	Composting Operations Manager		
Charlie Nielson	Compost Assistant Manager		

The Fire Prevention Plan will also be provided to the Devon & Somerset Fire Service.

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Appendix 2 - Drainage Plan

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Types of combustible materials

Dry Recycling Transfer Station:

- Plastics,
- Paper,
- Cardboard,
- Mixed Waste containing combustible materials (DMR).

Composting:

- Compost,
- Green Waste (Plant Matter).

Combustible waste

The site for which this Fire Prevention Plan covers is separated into 2 distinct operations;

Dry Recycling Transfer Station – This operation accepts source segregated kerbside recycling collections from Torridge District Council and to a lesser extent, commercial dry mixed recycling collections.

The kerbside recycling contains food waste, mixed plastics and cans, cardboard, paper, and glass. All are stored on site pending removal to either our Exeter MRF facility for processing/ baling or direct to suitably permitted facilities for recycling or energy recovery.

Commercial wastes will mostly be in the form of mixed loads (DMR) containing paper, cardboard, plastics & metals. This is stored as a mixed material pending removal to our Exeter MRF facility for processing/ baling.

The site also accepts a small amount of mixed kerbside collections from rural areas covered by Torridge District Council. This material is brought to site in bins and segregated on site.

Composting – The site accepts source segregated Green Waste (Plant Matter) for Composting, mostly from Local Authority kerbside collections and Household Waste Recycling Centres. In addition, a small quantity of similar wastes are accepted at the site from commercial customers, e.g. landscapers.

The Green Waste is shredded and incorporated into windrows where it is actively managed and monitored during the composting process. At the end of this process, the material is screened.

The Screened Compost is then stored on site, pending an end-of waste-designation (PAS100QP). It is then dispatched from site.

Oversize material from the screening activity is re-shredded and removed from site to an appropriately permitted waste recovery facility, or incorporated into the current windrow being formed, mixed appropriately with freshly shredded Green Waste.

Small quantities of General Waste and DMR (Dry Mixed Recyclables) are generated by litter picking and site office activities. These wastes are stored pending regular collection in wheelie bins/ skips and taken to the onsite transfer stations.

Persistent organic pollutants

There are no wastes on site containing POPs.

Other combustible materials

Gas Oil, Oils & Grease are stored on site and used during the normal operation and maintenance of mobile plant. Gas Oil is stored in a bunded fuel tank with a capacity of 10,000 litres as shown on the Site Plan, Drawing No WD/N(16)/861 included as Appendix 1. All associated pipework is enclosed within the bunds for the tank.

Using this fire prevention plan

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

This Fire Prevention Plan (FPP) will be stored as a hard copy in a red file, labelled as 'Fire Prevention Plan (FPP)' within the site office. Site Staff will be shown where it is stored and will be able to access the file in event of any Fire at the site. The FPP will also be stored electronically on the company's shared network drive allowing operators access to the document for training at all times.

Testing the plan and staff training

Regular Fire Drills are undertaken at the site every six months. The drills will test the effectiveness of the sites Safe Working Procedure; Emergency Procedure - Fire Evacuation SWP 015 (see Appendix 4), the Fire Alarm System, Two Way Radio System and staff reactions. A record of each drill will be completed and retained on site with any areas identified for improvement, actioned as appropriate.

As part of an operator induction, site staff will receive training to ensure they understand the contents of the FPP and what to do if a fire breaks out on site. In addition to initial training site operators will receive regular tool-box talks and additional training on fire safety.

On arrival at the site any visitors will be asked to undertake a site induction, this includes discussions surrounding fire safety, including the location of the sites fire evacuation point.

Fire prevention plan contents

Activities at the site

This Fire Prevention Plan is to be submitted as part of an Environmental Permit variation application for the site. Currently the permit covers the operation;

EPR/VP3402BE/T001 – Former IVC site. Composting operations takes place on the open area to North of the site and Dry Recycling Transfer within the former IVC building.

The variation will introduce two separate Standard Rules under the one permit covering the following activities;

1. Dry Recycling Transfer Station:

- Waste Reception

Acceptance of waste from source segregated kerbside recycling and commercial recycling collections.

- Manual sorting of waste

Materials are verified and hand sorted aided by a Telehandler which enables the material to be moved and spread.

- Storage of waste

Wastes are stored pending removal from site for recycling/ recovery/ disposal

2. Composting:

- Waste Reception.

Acceptance of Source Segregated Green Waste arising from Local Authority kerbside collections, Household Waste Recycling Centres and limited quantities from commercial customers.

- Shredding and Windrow Formation.

Green Waste shredding using a mobile Shredder, loaded with a Telehandler. Shredded Green Waste is moved using a Telehandler and placed into windrows. Windrow formation is sometimes undertaken using the Swing Shovel.

- Monitoring & Turning

Composting of Green Waste in windrows, with regular temperature monitoring and windrow turning through the sanitation and stabilisation phases. Temperatures are monitored manually using a handheld probe. Windrows are turned using a 360° Tracked Excavator fitted with a specialist rake or bucket.

- **Screening**

Following completion of the actively managed composting phase, each batch is screened to produce certified grades of compost under PAS100QP. Material is screened using a mobile trommel screener. Material is loaded into the hopper of the screener using a telehandler. Screened material is moved away from the screener using a telehandler and placed into stockpiles pending dispatch. Oversize material from the screening process is moved using a telehandler to be re-shredded and either removed from site or reprocessed.

Site plan

The FPP Site Plan, Drawing No WD/N(16)/861, is included as Appendix 1.

The Drainage Plan, Drawing No WD/N(16)/862, is included as Appendix 2.

Plan of sensitive receptors near the site

The Sensitive Receptors Plan, Drawing No WD/N(16)/863, is included as Appendix.

Manage common causes of fire

Arson

The site is manned between the hours of 7:00am and 5:00pm, Monday to Friday. Outside of working hours, the site is secured by closing and locking the site entrance gates. The site boundary comprises a mix of fencing, concrete retaining walls and earth bunding. The site has a CCTV system which is remotely monitored outside of working hours. The main building on the site is also protected by an intruder alarm and fire alarm.

The specification of the Fire Detection System located at the site is appended, please see appendix 5.

Plant and equipment

All items of mobile plant operated at the site are inspected daily by the operator before use and are subject to regular maintenance in accordance with the manufacturer's requirements, including statutory inspections. All items of mobile plant are equipped with fire extinguishers and staff receive training on their safe use. In addition, the shredder has a fixed fire suppression system that will operate automatically, regardless of whether the machine is in operation or not. The shredder also has manual trigger points for the fire suppression system. Throughout each operational shift, plant operators regularly check machinery for build-up of potentially flammable materials and clear as necessary. These checks are also completed at the end of each shift with excess material removed before machinery is left un-attended. Mobile plant and machinery is parked overnight, a minimum of 6m from combustible material.

Electrical faults including damaged or exposed electrical cables

Electrics certification

The electrics at the site were installed as per the sites detailed design drawings by a suitably qualified person. Any additional electrical infrastructure is completed to specification and installed by a suitably qualified person. The Fixed Electrical Installations at the site are inspected and certified every three years by a competent electrician.

Electrical equipment maintenance arrangements

PAT testing is carried every 12 months by a competent person. All electrical equipment is visually inspected prior to each use. Where a potential fault is identified, the equipment will be isolated until inspected and repaired/ replaced, if necessary, by a competent electrician. The company use a number of electrical contractors across the group with suitable experience and have an ongoing relationship with a contractor who undertakes all such works at the Deep Moor site.

Discarded smoking materials

Smoking on site policies

Smoking is prohibited in all operational areas of the site. There are signs located around the site informing visitors and operators that smoking is not prohibited. A designated smoking area is provided away from the operational area for each of the operations. Stainless steel ash trays are fitted at these areas for disposal of smoking materials.

Hot works safe working practices

Hot Works such as welding, cutting, grinding may be undertaken at site, as part of maintenance/ repair works. All such works will be planned and only undertaken where a Permit to Work has been completed and issued.

Prior to Hot Works being undertaken, the area affected will be cleared of all combustible materials. A Fire Watch will be maintained while the works are being undertaken and for a minimum of one hour following completion of the works.

Industrial heaters

Use of industrial heaters

No mobile industrial heaters will be used at the site. The only heaters will be standard (annually PAT tested) fixed and wall mounted in the offices and messrooms. No combustible materials will be stored on or near to heaters.

Hot exhausts and engine parts

Fire watch procedures

All items of mobile plant operated at the site are inspected daily by the operator before use. Where identified, any build-up of combustible material will be removed before operations commence.

Throughout each operational shift, plant operators will remain vigilant to any signs of fire. At any time, before the machine is to be left un-attended (such as break times) the operator will check the machine for signs of fire and dust settling on exhausts and engine parts and clear as necessary. The operator will ensure that un-attended machinery is switched off with the keys removed and parked away from combustible materials wherever practical.

These checks are also completed at the end of each shift with excess material removed before machinery is left un-attended.

Ignition sources

There will be no naked flames, space heaters or other sources of ignition within six metres of combustible and flammable materials and wastes.

Hot Works which may introduce such sources, will be controlled as set out earlier in this section (Hot works safe working practises).

Batteries

Any batteries entering the site will be placed in a sealed battery bin and removed from site to a suitable site for disposal. The battery bin will be located over 6m away from any ignition sources. Any hot works being undertaken at the site will be undertaken at least 6m from the battery bin and the hot works monitored as mentioned within the above section (Hot works safe working practise)

Leaks and spillages of oils and fuels

Gas Oil, Oils & Grease are stored on site and used during the normal operation and maintenance of mobile plant. Gas Oil is stored in a bunded fuel tank with a capacity of 10,000 litres. All associated pipework is enclosed within the bunds for the tank.

All items of mobile plant operated at the site are inspected daily by the operator before use. Where leaks of either oil or fuel are identified either before or during use, the equipment will not be used until the vehicle or plant has been repaired. All repair work will be undertaken by a suitably qualified mechanic.

A regular service will be completed on all vehicles and plant to ensure they are checked thoroughly at regular intervals for any maintenance issues.

A Spill Kit is located within the main waste reception building. Any oil leaks or spills will be cleaned up promptly by site operators and noted within the site diary.

Build-up of loose combustible waste, dust and fluff

In order to address the potential for fire resulting from the build-up of loose combustible waste, dust and fluff, controls at the site will include;

- Fuels, oils and greases are stored in designated areas with appropriate containment.
- All mobile plant and fixed equipment are inspected daily by the operator before use. Throughout each operational shift, plant operators regularly check machinery for build-up of potentially flammable materials and clear as necessary. These checks are also completed at the end of each shift with excess material removed before machinery is left un-attended. Mobile plant and machinery are parked overnight, a minimum of 6m from combustible material.
- Housekeeping is included as part of the routine site operations to minimise the build-up of loose/ discarded combustible materials and dusts.

Reactions between wastes

All waste is inspected to ensure it meets the sites acceptance criteria and requirements of the environmental permit.

All source separated materials are stored in separate stockpiles and therefore reactions between the wastes are not anticipated.

Mixed waste stockpile sizes and time held on site are kept to a minimum.

Mixed waste is separated out and sorted into its assigned stockpile.

Any waste identified as not-permissible will be segregated from other incoming waste and either re-loaded into the vehicle that it was delivered in, or the load will be quarantined.

Waste acceptance and deposited hot loads

Incoming waste is spread, sorted and verified during the operational day.

Stockpile temperatures are taken using a handheld heat gun to ensure that there are no hot spots prior to leaving sites.

There are temperature sensing cameras installed as part of the fire detection system located within the reception hall, if a hotspot is detected operatives will be notified.

Hot and dry weather

Tipping and sorting of mixed wastes are carried out within buildings to shade from direct sunlight. Heat guns are held on site to check stockpiles regularly throughout the day.

There are temperature sensing cameras installed as part of the fire detection system located within the reception hall, if a hotspot is detected operatives will be notified.

Storage times are kept to a minimum, this continues throughout hot and dry weather.

A water bowser is available for dampening down waste where needed.

Prevent self-combustion

General self-combustion measures

In order to manage the fire risk due to self-combustion, the following controls are employed;

- Shredding Equipment is normally based at the site full time and therefore un-processed Green Waste is stored for short periods only (maximum 3-4 days in normal operating conditions).
- Regular temperature and moisture checks are undertaken on windrows through the sanitation and stabilisation phases.
- Screened compost complying with an end-of-waste designation (PAS100QP) is stored on site for a limited time only, before being dispatched off-site, with stockpiles meeting the maximum pile size and separation requirements set out in the FFP Guidance document, dated Jan 2021.
- There are temperature sensing cameras installed as part of the fire detection system located within the reception hall, if a hotspot is detected operatives will be notified.
- Stockpiles of residual waste are sorted and removed from site regularly.
- Stockpiles are temperature checked daily using a hand held temperature sensor.
- A Quarantine area is available to be used in the event of an emergency.

Manage storage time

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

All wastes received at the site are weighed in on the weighbridge and details including the customer, waste type, EWC, weight and date of delivery are recorded. Weighbridge information is stored centrally on the company's computer system and summary reports can be produced on site as required.

For the transfer operations, daily visual stock checks also take place and are recorded.

For the composting operation, the tonnage of Green Waste, shredded and formed into any windrow is recorded on the Batch Formation and Monitoring Record sheet, which is stored on site.

Green Waste is shredded daily in normal operating conditions with the earliest delivered green waste being shredded first.

Stock rotation policy

The dry recycling transfer station plastics & cans are stored in concrete tunnels (formerly IVC tunnels). There are a number of tunnels available for waste storage and so waste can be cleared from one tunnel whilst another tunnel is being filled. Material that has been on

site the longest will be cleared first. The other wastes stored at the transfer station are moved as we have loads, enabling us to clear tunnels regularly. All material stored on site will be removed adhering to strict maximum storage times.

For the composting, the earliest delivered green waste is shredded first in order to maintain effective stock rotation. Windrows are formed from freshly shredded green waste to the Northwest of the site. Each windrow is progressively moved towards the Southeast of the site by regular windrow turning completed during the sanitation and stabilisation phases of the composting process. The sanitation and stabilisation phases last for a total of twelve weeks. When the twelve-week process is complete, each batch is screened and moved to stockpile in the product storage area prior to dispatch.

Monitor and control temperature

Reduce the exposed metal content and proportion of 'fines'

The dry recycling transfer station accepts source separated kerbside recycling. Metal content will be within the plastics & cans mixed element in the form of waste packaging.

Wastes accepted at the composting site consist of source separated Green Waste and therefore contain only very incidental amounts of metals.

Monitoring temperature

Monitoring temperature is a requirement for wastes stored in the maximum pile sizes for longer than three months. In practice, incoming waste is normally processed within hours or a few days (following bank holidays etc.).

In normal circumstances, incoming waste is moved much more frequently, however, additional temperature monitoring is carried out.

Internal stockpile temperatures are to be monitored at the transfer station utilising temperature monitoring cameras, installed as part of the fire detection system (please see appendix 5)

At the end of each day, a temperature check is carried out on all transfer station stockpiles using a hand-held heat gun and recorded. Temperatures above 30 degrees are investigated on any stockpile. In this event, a telehandler will remove waste around any hot spot to try to identify the source of the heat.

Screened compost will not be stored for longer than three months. In any event, where storage exceeds three months, additional monitoring would be undertaken, using the trigger and limit values that apply to the stabilisation phase of composting.

Details of the monitoring undertaken during the sanitation and stabilisation phases are set out later in this document under the heading; Compost Production.

Controlling temperature

Details of temperature control requirements during the sanitation and stabilisation phases are set out later in this document under the heading; Compost Production.

Dealing with hot weather and heating from sunlight

Visual Inspection of all wastes is undertaken as part of day-to-day site management. During periods of hot weather, due regard will be given to the effects of heating from sunlight. Where necessary, windrows may be irrigated or if necessary, turned to mitigate the effects of the hot weather.

Wasted stored within the waste transfer station will be stored within the covered IVC tunnels, sorting will be undertaken within the enclosed waste reception hall. The glass stockpiles are the only stockpiles which are not covered.

Waste bale storage

No waste bales are stored at the site.

Manage waste piles

Storing waste materials in their largest form

Only green waste is shredded on site. The process for this is set out later in this document under the heading; Compost Production. Waste arriving at the waste transfer station is not crushed or shredded to reduce the wastes volume.

Maximum pile sizes for the waste on your site

Maximum pile sizes do not apply to compost that is actively managed and monitored during the compost process. Waste stored before and after active composting, and the dry recycling follow the maximum pile sizes below:

Waste Transfer Station:

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 ³	Max. time it will be stored
Plastics/ Cans	Dry Recycling Transfer Station	Bay	22	5	4	440	1 Month
Cardboard	Dry Recycling Transfer Station	Bay	22	5	4	440	1 Month
Paper	Dry Recycling Transfer Station	Pile	10	14	2	280	2 Weeks
DMR	Dry Recycling Transfer Station	Bay	22	5	4	440	1 Month
Glass	Dry Recycling Transfer Station	Bay	15.5	10.5	2	325.5	1 Month

Composting Facility:

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 / m³	Max. time it will be stored
Incoming Green Waste (Un-Shredded) / Compost Oversize	Composting Site	Pile	20	20	4	450	1 Week incoming green waste / 3 months compost oversize in normal operating conditions
Screened Compost (Various Grades)	Composting Site	Pile	17.5	11	4	442	3 Months in normal operating conditions

Where maximum pile sizes do not apply

For the composting activities, the maximum pile sizes do not apply when the waste is actively managed and monitored during the compost process. Waste stored before and after active composting follow the maximum pile sizes in the table above.

Waste stored in containers

Types of containers you are using

The wastes stored at the facility in containers are;

- 1x 240L Red Wheelie Bin (Storage of used Absorbent Materials)
- 1x 35Yrd Roll Top Ro Ro container for Food Waste
- 1x 12Yrd Skip for litter picking residues

Accessibility of containers

All of the above containers are readily accessible on site.

These containers will not be stored in corners to ensure they are accessible from multiple angles.

Moving containers in a fire

Containers on site can be moved in the event of an emergency using site equipment including telehandlers and excavators.

The red wheelie bin and the food waste container are wheeled and so can easily be moved around the site as required.

If necessary, a hook loader or skip loader may be required to move containers. This would be sourced from within the Coastal UK Group Limited fleet.

Containers will only be moved to create a fire break, if a container is ablaze it will not be moved.

Compost production

Procedures for active management and monitoring of the compost

Following waste acceptance, green waste is shredded using a mobile shredder and proceeds to active composting.

Open Windrow Sanitisation Phase

The dimensions of each windrow shall be 4-5 metres high (settled height), 8-10 metres wide at the base and up to 70 metres long. Compost turning and monitoring is carried out from on top of the windrow and therefore minimal windrow separation distances are required. Two windrows maybe separated for operational reasons if necessary, e.g. to allow machine access, otherwise windrows may touch at the very base only. This method allows windrow sides to remain open for aeration and inspection, including litter picking and additional monitoring if required. Each windrow will typically be 800-1000 tonnes, with minimum to maximum expected sizes from 400 to 1200 tonnes. During windrow formation the operator will state when the windrow reaches the required 'footprint' (of the dimensions above), allowing the total tonnage of the windrow(s) to be monitored from weighbridge records.

Throughout the sanitisation phase windrows are actively monitored for temperature and moisture content using a handheld temperature probe and squeeze test on a daily basis. The sanitisation process will last for 14 days during which period the critical limits must be met. During this period, a minimum of 1 turn is made to fully incorporate the compost.

Validated critical limits of sanitisation phase critical control points

Parameter	Sanitisation phase critical limits
Temperature	60 - 80 °C
Moisture content	45 - 65 % m/m
Minimum duration	10 consecutive days when temperatures and moisture are within the above ranges or 14 not necessarily consecutive days when temperatures and moisture are within the above ranges
Minimum number of turns	1 turn during the minimum duration above

Open Windrow Stabilisation Phase

Following the sanitisation phase, an 8-10 week stabilisation period occurs leading up to the point of screening. The windrows continue to be actively monitored for temperature and moisture content using a handheld temperature probe and squeeze test on a weekly basis. During this period, a minimum of 2 further turns are made.

Turning in both the sanitisation and stabilisation phases are done using a swing shovel, as is common practice nationally. It should be noted that the turning is done behind the swing shovel as it moves along the windrow. Compost is lifted with a specialist rake or bucket, 'throwing' rather than placing, compost onto the new adjacent windrow, and thereby giving good aeration to the compost. By working in front of the turned compost no compaction of

the turned compost takes place. Turning is aimed to be done during weeks 3-4 and 7-8, or when critical limits are exceeded.

Validated critical limits of stabilisation phase critical control points

Parameter	Stabilisation phase critical limits
Temperature	45 - 80 °C
Moisture content	40 - 65 % m/m
Minimum duration	Typically 8-10 weeks when temperatures and moisture are within the above ranges (except during and up to 24 hours after each turn, if composting batches are turned during this phase)
Minimum number of turns	2 turns during the minimum duration

Screening

Following the actively managed composting phase, each batch will be screened to a 30mm certified grade under PAS100QP. Any oversize material will be re-shredded and either removed from site or reprocessed on site.

The screened compost will be transferred to the storage area and, subject to receiving a PAS100QP designation, is despatched from site for use in designated market sectors in accordance with the Compost Quality Protocol.

Prevent fire spreading

Separation distances

- Combustible waste piles of plastic and cans, cardboard and DMR stored within the dry recycling transfer station will be stored within bays separated by concrete walls, see heading; Fire walls construction standards.
- The waste paper pile is stored in the Southeast corner of the dry recycling transfer station building with a separation distance of six metres from other combustible or flammable materials.
- The glass storage area is located outside of the waste transfer facility, Glass is stored within a bay with built-to-specification concrete walls on 3 sides.
- Combustible waste piles within the composting activity will be stored with a minimum separation distance of six metres (where FPP storage requirements apply).

These requirements do not apply to waste being composted through the actively managed process.

Fire walls construction standards

The dividing walls that separate the bays within the dry recycling transfer station are 300 mm thick, intersecting the roof that is 250 mm thick, both are reinforced concrete grade RC32/40 to BS8500-2.

Glass storage bay and paper storage area

The concrete fire walls on site will;

- Resist fire (both radiative heat and flaming).
- Have a fire resistance period of at least 120 minutes to allow waste to be isolated and to enable a fire to be extinguished within 4 hours.

Storing waste in bays

Fire will be prevented from spreading from the waste that is stored in the bays by implementing the following;

- Full and frequent stock rotation will be carried out with a first in, first out policy that is monitored and recorded.
- There are temperature monitoring cameras located within the waste reception hall, information surrounding the specification of these is contained within Appendix 5, Fire detection system.
- Representative temperature checks are carried out on the entire volume of all the waste within each bay at the end of each day.

- The design and construction of the bays intersecting with the roof negate the need for calculation of flame height and radiation.
- A clear freeboard space of 1m minimum at the top and side walls of the Paper pile will be kept clear at all times to prevent fire spreading over and around the walls.
- Brands or lighted material will be prevented from moving outside the bay walls and potentially igniting other waste.
- Wastes at risk of ignition will be quickly and effectively removed to the quarantine area to isolate any bays with burning waste during an incident.

Quarantine area

Quarantine area location and size

Due to the nature of the activities on the site, it may be necessary to vary the location of the quarantine area available at any given time. At least one specified quarantine area will be kept clear at all times – unless it's being used in the event of the fire.

The location and dimensions of the quarantine areas are shown on the Site Plan, Drawing No WD/N(16)/861 included as Appendix 1.

The quarantine area will hold 225m³ (50% of largest pile as specified in the latest EA FPP guidance dated Jan 2021).

A separation distance of six metres will be provided around the quarantine area where appropriate.

How to use the quarantine area if there is a fire

In the event of a fire, providing it is safe to do so, we would use plant available at the site, to push up/ move materials and provide separation, to form a fire break to limit the potential for the fire to spread.

Material will only be moved to create a fire break, lit material will not be moved unless instruction is given to move lit material by the fire service and the material is relocated under their supervision.

Where use of the quarantine area is required, wastes will be moved to the quarantine area using site telehandlers. The site swing shovel may also be utilised to either isolate waste from adjacent to the fire affected area, or to stockpile in the quarantine area, depending on the exact circumstances.

Wastes will only be moved to the quarantine area if it safe to do so.

Procedure to remove material stored temporarily if there is a fire

This procedure will depend on the type of waste that has been stored in the quarantine area;

- Unburnt waste, isolated in the quarantine area; once the fire has been fully extinguished and any burnt material removed from the location of the fire, wastes may be returned to the original windrow or dry recycling bay location.
- Burnt waste, extinguished in the quarantine area; when the fire has been fully extinguished, the burnt material contained within the quarantine area will be assessed and removed to an appropriately permitted waste facility if necessary for disposal/ recovery. Any unburnt/ unaffected material that can be effectively separated, will be returned to the original windrow or dry recycling bay location.

Detecting fires

Detection systems in use

Current arrangements for fire detection at the site include;

- The site is manned between the hours of 7.00am and 5.00pm, Monday to Friday. All permanent staff are trained in Fire Awareness and the sites Safe Working Procedure; Emergency Procedure - Fire Evacuation SWP 015 included as Appendix 4.
- Any indication of a potential fire on site would prompt immediate action in accordance with the sites Safe Working Procedure; Emergency Procedure - Fire Evacuation SWP 015 included as Appendix 4.
- Regular Site Inspections are undertaken by members of the Management and Supervisory Team.
- Regular inspection of plant and equipment through the working day to ensure no build-up of dusty material.
- Regular inspection of input material, windrows and stockpiles throughout the working day.
- Clean down of shredders and mobile plant to remove dust etc. at the end of each working day or sooner if build up is detected.
- Fire Watch carried out during and after any Hot Works at the site.
- 24hr CCTV recording. CCTV system is displayed and monitored within the site office during operational hours and monitored remotely out of hours.

The main building utilises a fire detection system which includes temperature sensing cameras and features an alarm system, please see appendix 5 for the full specification. Certification for the systems

The fire alarm system used at the facility is a L5 NSI NACOSS GOLD & BAFE (SP203-1) approved fire alarm system, in accordance with the BS5839 Pt1 and I.E.E. regulations. Please see appendix 5 for the system specification.

Suppressing fires

Suppression systems in use

The level of protection measures around firewall construction between bays, detection measures and quarantine measures do not require an automated system to suppress a fire within the dry recycling transfer station building.

A number of manual measures, proportionate to the nature and scale of the dry recycling activities, are in place;

- Pre use checks for plant and equipment.
- Regular Site Inspections are undertaken by members of the Management and Supervisory Team.
- Regular inspection of plant and equipment through the working day to ensure no build-up of dusty material.
- Regular inspection of input material, windrows and stockpiles throughout the working day.
- Clean down of shredders and mobile plant to remove dust etc. at the end of each working day or sooner if build up is detected.
- Fire Watch carried out during and after any Hot Works at the site.
- Monitored Fire Alarm System in place.
- Fire Extinguishers located appropriately around site including in all mobile plant.
- Automatic Fire Suppression System fitted to Green Waste Shredder.
- Mobile water pump and hoses available at all times fed from the site's lagoon

Certification for the systems

Fire Extinguishers are inspected monthly and serviced annually.

Firefighting techniques

Active firefighting

The following resources will be available at all times to assist in fighting a fire where it is safe to do so;

Access; the site is accessed directly via Chastey Road that connects the B3232 and B3227 at High Bullen. The width of the road and site entrance provide suitable access for the Fire Service attending an incident. On site, beyond the weighbridge, the routes are kept clear to ensure access to all areas as required. If for any reason, at any time, the route is not clear, measures will be put into place to ensure clear access will be maintained to all areas of the site.

Mobile Plant; There are three telehandlers and a 14-tonne swing shovel available during normal operating circumstances.

In the event of a fire, providing it is safe to do so, plant available at the site would be utilised to push up/ move materials and provide separation, to form a fire break to limit the potential for the fire to spread.

In addition, these machines would be utilised to either move unburnt material to the quarantine area to limit the spread of the fire, or to move burning material to the quarantine area to be extinguished. These activities would be undertaken in conjunction with the Fire Service, where it is deemed safe to do so.

Staff; During operational hours, Site Staff and Supervisors/ Managers would assist the Fire Service in dealing with the incident, if safe to do so.

Outside of working hours, Site Emergency contact details are provided on the Site Entrance sign. It would be anticipated that site staff (including a key holder) could normally be in attendance within 30 minutes from receiving a call to attend site. An emergency fire kit including this FPP, site layout plans etc. will be kept on site for easy access in the event of a fire out of site working hours.

There are fire detection systems located within the waste transfer building, these systems are monitored remotely 24/7 and the site can be informed of any incident inside and outside of site operational hours.

Appendix 4 details the emergency procedure fire evacuation for the site.

Water supplies

Available water supply

The site benefits from having a lagoon situated near to the entrance of the site where surface water run-off is collected. The level of the lagoon is maintained to ensure that a minimum 450,000 litres of water is always available in event of a fire. The maximum lagoon volume exceeds 800,000 litres.

A tank of approximately 100,000 litres of stored rainwater is located adjacent to the dry recycling transfer station building.

In addition, a settlement pond located within the adjacent landfill is a further source of firefighting water and the level will be maintained to ensure that a minimum 250,000 litres of water is always available in event of a fire.

The combined capacity from these three sources will be used to satisfy the overall supply needed over 3 hours in litres, as shown below.

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
450	3001.5	540,270	100,000 Litres in Roof Water storage tank 450,000 Litres min in on site storage Lagoon 250,000 Litres min available from Adjacent Landfill settlement pond Total water available = 800,000 Litres

Managing fire water

Containing the run-off from fire water

All combustible waste stored at the site is stored on concrete surfacing which drains to the leachate pump sump. In the event of a fire, water will be pumped from the sump to the lagoon. Based on the maximum pile size and calculations of water volume required, earlier in this FPP, the water level in the lagoon will be maintained below a maximum level to ensure there is sufficient capacity to contain the run-off of fire water (350,000 Litres). If additional capacity is needed, we have the capability to discharge from the lagoon to on-site leachate treatment works.

In addition, the company have emergency contacts with local providers of tanker services. If necessary, removal of fire water would provide further on-site storage capacity. The need for such action, would be reviewed by a member of the company's management team on an ongoing basis throughout the duration of the incident. Any fire water removed from the site would be disposed of/ recovered at a suitable permitted facility.

During and after an incident

Dealing with issues during a fire

The company also operate additional recycling activities within the boundary of the adjacent landfill site. If it is necessary to divert incoming wastes, this site could be used as an alternative.

The company operate another Green Waste composting site at Hill Barton Business Park, near Exeter. If it is necessary to further divert incoming green waste, this site could be used as an alternative.

The company has a documented procedure that details the key internal personnel to be contacted in an emergency, together with their roles and responsibilities in the event of such an emergency.

Notifying residents and businesses

The company have identified sensitive receptors in the locality, these are shown on the Sensitive Receptors Plan, included as Appendix 3.

They would be contacted in the event of a fire in order of priority based on proximity, weather conditions and scale/ location of the incident.

Wherever possible, these receptors will be provided with regular updates and informed when the incident is resolved.

It is noted that the Deep Moor site surrounding the composting and dry recycling transfer station activities is an open site with good access. The adjacent waste operation activities are managed by the company. These activities are well spread out and involve relatively low numbers of staff. The five adjacent permitted waste activities are;

1. Deep Moor Landfill Site – Non-hazardous Landfill.
2. Deep Moor Waste Recovery Facility – Household, commercial and industrial waste. transfer station with treatment.
3. Deep Moor Civic Amenity and Composting Site.
4. Deep Moor Asbestos Transfer Station – SR0809 No 9 Asbestos Transfer.
5. Deep Moor Restoration – SR2010 No 5 Mobile Plant for Reclamation, Restoration.

Clearing and decontamination after a fire

Following any fire, the company will work with the Fire Service, Environment Agency, Local Authority and any other interested parties to ensure the site is de-contaminated as quickly as possible to an agreed standard. Any materials requiring off-site disposal/ recovery will be removed to appropriately permitted facilities as soon as is practical.

Making the site operational after a fire

In addition to clearing any contamination, the following actions may be required before the site can be operational after a fire;

- Complete any repairs/ inspection to Mobile Plant & Machinery.
- Check integrity of the Dry Recycling Transfer Station building following fire.
- Check integrity of Compost Slab following fire (Isolate any damaged areas until repairs can be arranged).
- Remove any fire water from the site lagoon for off-site disposal/ recovery if required.
- Replenish any Fire Fighting Equipment used in response to the incident.

The company will at all times assist the Fire Service and other interested parties investigating the cause of any fire. When this process is complete, the company will take further actions as required, which may include;

- Reviewing the effectiveness of the FPP and EMS.
- Review effectiveness of Staff Training.

Appendix 1

FPP Site Plan, Drawing No WD/N(16)/861

Appendix 2

Drainage Plan, Drawing No WD/N(16)/862

Appendix 3

Sensitive Receptors Plan, Drawing No WD/N(16)/863

Appendix 4

Emergency Procedure - Fire Evacuation SWP 015

Appendix 5

Fire Alarm System Specification