

# **Fire Prevention Plan**

# **Acton Composting Site**

Permit Reference: EB3007MG Veolia ES Landfill Limited

Trentham Road, Acton, Newcastle under Lyme, Staffordshire, ST5 4EE Grid reference: SJ 81597 41007

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# **Version History**

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### 1. Process Overview

### 1.1. Site description

#### 1.1.1. Type of site

Acton Composting Site 'the Facility' which is operated by Veolia ES Landfill Limited 'VES' uses open windrow techniques to generate soil improvement products from green waste inputs for use in agriculture.

The composting activity has been operating at the Acton site for nearly 15 years. The site currently produces peat free compost to the BS PAS 100 specification and is Quality Protocol certified. Green waste from kerbside collections and Civic Amenity 'CA' sites is accepted from Local Authorities including Newcastle-Under-Lyme and Dudley. The Facility will process up to 35,000 tonnes of green waste per annum.

The composting process carried out at Acton is configured in a way that minimises odour potential by maintaining input and oversized piles as in process, meaning that all waste received at the site during a day of operation is shredded and incorporated into an actively managed windrow virtually as it is received. Oversized material is recirculated back into the input waste stream on a daily basis.

#### 1.1.2. Site setting and location

The facility is in a rural location (Grid Reference SJ 81597 41007) between the villages of Acton and Whitmore which are small settlements approximately 3km from the outskirts of Newcastle-under-Lyme. The Facility is accessed from a track off Acton Lane which links the site to Trentham Road (A5182) and subsequently Whitmore Road (A53). The Facility is remote with no human receptors closer than 320m. There is a protected habitat (deciduous woodland) which borders the Facility to the north. The site falls under the Local Authority Jurisdiction of Staffordshire County Council and Newcastle-under-Lyme District Council.

The site is ideally suited to composting activities and even without any abatement controls is at low risk of causing an adverse impact due to the small scale of the overall activity and remote location. This odour management plan aims to set out the fire risk associated with the activity and the controls in place.

### 1.1.3. Operational profile

According to the planning consent, the core hours of operation of the site are 0800 - 1800 Monday to Friday and 0800 - 1300 on Saturday. There is no screening or shredding on Saturdays, Sundays, Bank or Public Holidays.

## 2. Detailed Process Stages

### 2.1. Waste Inputs

Green waste such as hedge, tree and grass clippings and other biodegradable green waste arising, is delivered to site in vehicles collecting from the local HWRC sites, weighed over the weighbridge and directed to the tipping area. Predominantly green waste inputs are supplied by the Company or as part of an integrated waste management contract with the Local Authorities. The description, nature and source of wastes are verified at the weighbridge. Details of the waste carrier, waste type (EWC code), client / source and quantity (tonnes) of waste are recorded on WIMS and / or on a Waste Transfer Note.

Waste will be processed in an efficient manner to ensure prompt turnaround to reduce any possible emissions to air and / or heat build-up.

Waste will be processed in the order delivered. The input bays will be managed so that waste can be treated on a first in first out basis.

Any incorrectly declared deliveries will be quarantined immediately and dealt with in line with local procedures and guidance as detailed in the permit and management system.

Pre-acceptance and waste acceptance procedures are in place for all waste accepted at the site to ensure that incompatible or reactive wastes are not accepted. In the event that a hot load is detected during acceptance, although each incident will be event specific, and the site management / fire marshal shall be responsible for managing the situation, the primary options are to direct the load to the quarantine area or if already deposited to isolate the waste from other waste if possible. In all events the emergency management plan would be enacted and the fire service will be called.

A full risk assessment for handling wastes is undertaken prior to opening any new facility. However the following is an outline of possible risks and the control measures that will be introduced to minimise any risk as far as reasonably practicable.

## 2.2. Storage & Loading

All storage bays will be constructed of 120 minute fire retardant concrete blocks with

the joints sealed with intumescent mastic to prevent the spread of fire and enable any fire which does occur to be isolated quickly.

Suitable material on arrival is shredded as soon as possible to reduce the volume and assist with accelerating the start of the composting process. The moisture content of the shredded material is assessed with additional moisture added as required with an optimum around 50-60%).

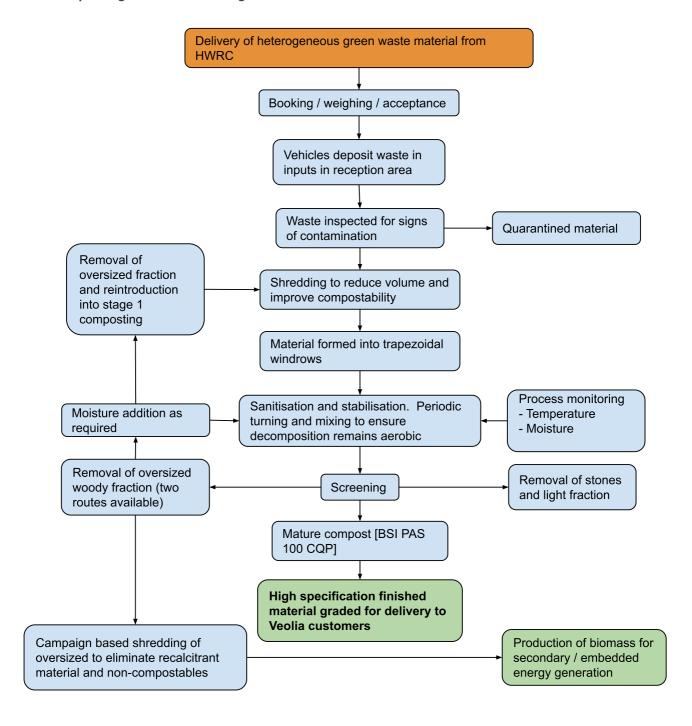
The shredded material is then formed into trapezoidal-shaped windrows in the central area of the site each row running lengthways east to west. Each windrow is approximately 25 - 30m in length and will hold approximately 450 - 550 tonnes of green waste.

This 'in process' material then undergoes sanitisation where the material heats in the early stages of the composting process as microbial degradation accelerates which results in denaturing of weeds, seeds and pathogens. Monitoring of temperature and moisture is carried out throughout this stage on a daily basis to ensure a required range of 60 - 70 °C. This is achieved through insertion of a temperature probe into the core zone of the windrow. Moisture adjustments are made as required from harvested rainwater supplies. The windrows are turned during the sanitisation process to ensure there is uniform mixing and heat distribution and introduce oxygen ensuring decomposition remains aerobic. Sanitization is complete once the requirements of PAS 100 CQP are met.

The windrows then enter a stabilisation phase where they are monitored weekly according to the PAS 100 CQP with moisture addition continuing as required. Monitoring of the temperature is carried out to ensure a required range of 45 - 70 °C is maintained. The critical control points and critical limits of composting during the actively managed composting phase (sanitisation and stabilisation phases) are identified within the site specific PAS 100 HACCP Analysis.

Sanitised, stabilised material is screened to remove stoney material unsuitable for further composting, a light fraction including plastic contamination and the generally woody / bulky 'oversized' fraction. The oversized fraction is stored in a 120 minute fire resistant bay for a maximum period of 3 months. The oversized fraction can be steadily returned into the shredding stage of the composting process. This is carried out to ensure optimum blending of carbon rich woody material and nitrogenous material e.g. grass is achieved. Alternatively, depending on demand or the amount present, oversized material can be further processed (picking and shredding) for subsequent use, off site, as a biomass fuel.

#### **Composting Process Flow Diagram**



## 3. Managing Common Causes of Fires

#### 3.1. Arson

The composting the site has a CCTV system which comprises a network of three camera arrays which extend coverage to the entire site. These CCTV cameras are monitored 24 / 7.

The site is fenced and is protected from vehicle access by means of gates which are closed out of operating hours. Out of site operating hours the site buildings are all locked. The diesel tank is locked such that access to the tank contents cannot be reached.

## 3.2. Plant & Equipment

All vehicles, plant and equipment will be maintained in accordance with manufacturer's recommendations.

The site, including all plant and equipment will be subject to a recorded daily check to confirm there is no build-up of loose combustible waste, dust and fluff. Daily checks are recorded for the site as a whole and all vehicles.

A daily check sheet is completed for all static and mobile plant. If an issue is identified then a defect sheet is completed, passed onto the maintenance team, and recorded in the electronic management system. Once appropriate repairs are completed the defect sheet is signed off and filed in the relevant plant information folder.

Examples of daily checks are contained in Section 19.

Plant maintenance activities will be in excess of 6m from any stockpile of waste. Mobile plant not in use out of hours is parked off site within the Rainlam Landfill compound.

All electrical installations repairs and maintenance will be carried out by suitably qualified electricians certified to NICEIC (National Inspection Council for Electrical Installation Contracting).

Portable appliance testing is carried out annually and fixed electrical systems are checked every 3 years.

## 3.3. Smoking Policy & Procedures

VES operate a Smoke Free Policy and have Smoke Free Procedures in place for the Acton Composting facility.

There is no designated smoking area within the compost activity boundary. The nearest VES smoking shelter for staff working at the Facility is located just outside the activity boundary in the carpark. This location is approximately 70m from the nearest waste.

## 3.4. Hot Works & Ignition Sources

Hot works will be carried out when required by external contractors and will be subject to a job specific risk assessment and fire watch requirements. There will not be any gas cylinders stored on site. This work would be subject to a job specific risk assessment and may depend on a number of factors including proximity to combustible material. Post works completion as an indication the relevant area will typically be monitored after 30 - 60 mins and may not be continuous with the area being revisited 1-2 times over the specified period.

Site operatives will be on continuous fire watch throughout operational hours and will be trained to recognise and act appropriately on the signs of self-heating and fire by means of tool-box talks and other methods as appropriate. Specific fire watch inspections will be made 3 times per day with one of the inspections included as part of the site shutdown / closure procedure at the end of each shift. All of the fire watches will include the inspection of hot exhausts and engine parts.

There will be no naked flames, space heaters, furnaces, incinerators, space-ships or other sources of ignition within 6m of any combustible waste.

There are two diesel fuel tanks on site, one situated to the south of the site near the leachate collection tanks, waste material is maintained 6m away from the tank. Another tank which fuels the screeners is situated to the east of the pad under the screener.

## 3.5. Cleaning Regime

Daily site inspections will be carried out for the build-up of loose combustible waste, dust and fluff. The inspections will be carried out by the site supervisor. Any areas identified by the inspection will be cleaned as soon as reasonably practicable. The Facility will be configured with the option to install dust suppression systems around the key operational areas to prevent the build-up of airborne dusts if operations

require. Any dust suppression system will be subject to servicing and maintenance in line with the manufacturer's recommendations.

All plant will be cleaned down of dust, fluff and loose material at the end of each working day, or sooner if required, and identified by the fire watch inspections throughout the day. All plant is maintained and serviced in line with manufacturer recommendations. All plant inspected on a daily basis and checks and defect reporting will be recorded. Alternative plant will be hired at short notice should it be required.

## 4. Preventing Self Combustion

## 4.1. Stock Rotation & Storage Times

Material will be processed through the site on a first in first out process. The table below describes stock rotation times. Note that inputs and oversized material are in process.

#### Stock rotation and storage times

Bay	Waste Type	Typical Storage Time	Max Storage time
Green waste inputs	waste inputs Fresh unprocessed green waste		1 day
Shredded green input	Shredded input waste	1 day	< 1 day
Oversize (in season)	Compost Oversize	1 day	< 1 day
Oversized (off season)	Compost Oversized	30 days	60 days
Windrows 1 to 10	Actively managed composting windrows	n/a	n/a
10mm Product PAS100 product	n/a	n/a	n/a

## 4.2. Temperature Control & Monitoring

#### 4.2.1. Temperature trigger levels

The following temperature action levels are in place which are applicable to the storage of oversized material during the off season. These levels are based on extensive operational experience within the Veolia Group and are under constant review where incidents or near misses occur or where new external information / quidance becomes available.

- Ambient Temperatures up to 50 °C Normal operation
- Warning Temperature > 50°C Monitor temperature trend over the following hour and if rising above 50°C attend site and investigate and move waste pile using loading shovels (if out of hours the information is reviewed and the site is attended if required).

 Action temperature >75°C – Notify Fire Service and put fire break procedure in place (if out of hours attend site immediately).

#### 4.2.2. Methods of temperature monitoring

The following methods of temperature monitoring are carried out on site -

- Temperature probe (PR): A 1m spike probe will be used for monitoring of active compost windrows targeting the core zone.
- Thermal imaging (TI): A hand held thermal imaging camera is used to monitor any piles for an increase in temperature. The camera is serviced and calibrated in line with manufacturer's recommendations. A backup or hired camera will be available either in the event of equipment failure or to cover repair calibration periods.
- Visual signs / firewatch (VIS): VES employs staff who are highly experienced in composting and wood recycling activities including recognising early signs of self combustion and fire caused by external ignition sources as well as at risk situations e.g. hot weather and hot exhausts. Early signs may include excessive steam, odour, rapid temperature increase, and visible flames. Refresher training is carried out periodically to ensure knowledge remains up to date and current. Previous incidents and lessons learned are shared within the group as well as locally.

#### Temperature control and monitoring frequency

Bay	Waste Type	Temperature monitoring method	Monitoring Frequency
Green waste inputs	Fresh unprocessed green waste	VIS	VIS - Continuous [in process material]
Shredded inputs	Shredded green waste	VIS	VIS - Continuous [in process material]
Oversize [in season]	Compost Oversize	VIS	VIS - Continuous [in process material]
Oversize [off season]	Compost Oversize	VIS, TI	VIS - Continuous, shift completion TI - Weekly
Preformed windrow	Windrow in the process of formation	VIS, PR	VIS - Continuous, shift completion PR - Process monitoring
Windrows 1 to 10	Actively managed composting windrows	VIS, PR	VIS - Continuous, shift completion PR - Process monitoring

10mm Product PAS100 product	n/a	n/a	n/a
product			

## 4.3. Excess temperature measures

Where excess temperature occurs and site attendance is indicated or required there are several possible courses of action available. These are likely to be a combination of:

- Installation of pre-emptive fire breaks to control the scale and duration of an emerging incident.
- Dismantling of waste piles to the quarantine area to allow for dragging out and cooling.
- Removal of nearby combustible waste even if the separation distance is greater than 6m to further minimise the risk of spread.
- Use of on site surface water runoff from leachate tanks to treat smouldering waste and as a cooling agent.
- Where an incident appears to be escalating, certain pre-emptive actions can be undertaken including filling of the available tractor and bowser.

## **5. Preventing Self Combustion**

#### 5.1. Waste Piles

During the main composting season March to October, raw inputs, shredded inputs and oversized material storage piles are 'in process' and there is no routine storage of these fractions overnight. During the off season oversized material may be stockpiled up to a maximum of 450m<sup>3</sup> as the composting process slows down.

#### Waste pile sizes

Storage fraction description	Fraction size	Waste Type*	Pile status	Max. waste Depth	Max. waste Width	Max. waste Height	Maximum Stored
Green waste inputs (open pile)	30 - 150mm	Fresh unprocessed green waste	In process	10	10	3	150m <sup>3</sup>
Shredded green waste (open pile)	30 - 150mm	Shredded green waste	In process	3	3	2	10m <sup>3</sup>
Oversize (open pile)	30 - 150mm	Compost Oversize	In process	3	3	2	10m <sup>3</sup>
Oversize (open pile)	30 - 150mm	Compost Oversized	Stored off season	15	15	4	450m³
Windrows 1 to 10	N/A	Actively managed composting windrows	N/A	45m	8m	4m	900 - 1000m <sup>3</sup>

\* Waste types described are expected operational formats based on site configuration and design however this plan should be read that bay designations could change provided FPP pile size vs size fraction are maintained below guidance volumes. This is to allow for the required flexibility in operations.

## 6. Preventing Fire Spreading

## 6.1. Separation Distances

All waste piles are 6m from any other waste pile buildings and other combustible or flammable materials as shown on drawing:

■ FPP plan (section 18)

Waste piles and active windrows may not be maintained 6m from the southern site boundary however the remote location of the site means that the risk to adjacent property is not as critical.

During the composting main composting season (March - October) the largest is the input pile which is 140m³. Note during the off season October - March there will be a standing pile of oversized material however the amount of material in active windrows will be less meaning 6m separation distance can still easily be maintained. The fire break procedure for the site is replicated below.

## 7. Quarantine / Refuge Area

The Acton site has a tight footprint and in order to most efficiently use the available space there are a number of quarantine options.

**Without isolated drainage (permeable ground)** - For isolation of wastes that are not burning there is an approximately 2000m<sup>2</sup> gravel apron in continuity with the concrete composting pad to the north west. This area is within the permit boundary but does not form part of the processing area. This area could be used as a temporary refuge for finished product or waste.

This area would be a suitable short term storage of waste inputs or partially composted windrow content during an incident if they were not burning and requiring active fire fighting water application. The impact of any potential leachate infiltration into permeable ground for 24 hours during a fire incident and the immediate 24 hours recovery phase would be insignificant.

As a precaution any waste will be kept a minimum of 6m from the adjacent tree line.

With isolated drainage (non permeable ground) - where a sealed quarantine area is required, e.g. where burning material is being dragged out to be extinguished,

quarantine space can be created by removal of non burning product or waste to the gravel apron.

Waste / compost material can be moved quickly with the 3 available loaders permanently stationed at the site. It will be readily possible to move enough material to the concrete pad within less than 1 hour to create a quarantine space large enough for 50% of the largest stockpile with a 6m buffer zone to other flammable material and the site boundary..

**Quarantine option A** - The Doppstadt screening equipment stationed to the north east of the site is tracked and can be moved in the event of a fire occurring. This equipment can be moved onto the gravel apron near to the site offices if required. In combination with relocation of the product and oversized piles. Moving this equipment creates a large working quarantine area to the north east of the pad. This area also comprises a product storage area which is situated on the sealed drainage system to the north eastern extent of the pad. The area comprises a 10 x 30m bay formed from A-frame push walls. In the event of a fire product could be decanted from the bay within 30mins to create space for quarantine.

**Quarantine option B** - Raw and shredded waste inputs can be moved to the gravel apron to create a working quarantine area to the south west of the pad. The shredder is tracked and can be moved.

## 8. Fire Detection

During standard operating hours (daytime), regular visual inspections of waste streams for signs of smoke and / or temperature checks will be carried out as follows.

Stockpiles of waste and compost windrows are monitored for temperature using the methods and at the frequencies described in section 4.2 above.

In the event of a fire being detected, site management would be contacted and would attend site. A rota system is in place ensuring that the out of hours monitoring service will always have a minimum of three contacts available on a 24/7 basis 365 days a year. Operatives would also be available out of hours in the event of the need for plant and machinery to be used to assist the Fire Service. The site has the option to use staff on call from the nearby Telford and Coven composting sites. Yellow plant on site have universal keys and can be driven by staff from the nearby sites.

Outside of standard hours (evening / night time), the site has a CCTV system which comprises a network of three camera arrays which extend coverage to the entire site. These CCTV cameras are monitored 24 / 7.

Emergency contact procedures and contact details are contained within section 15.

## 9. Fire Suppression

As no part of the activity is within a building no fire suppression system is fitted.

## 10. Fire Fighting

## 10.1. Fire fighting options

In the event of a fire taking place within the permitted area, firefighting options are likely to comprise a combination of techniques.

These measures include:

■ Controlled burn - The Acton site is a suitable candidate for use of a controlled burn in combination with other techniques. This option is appropriate for the Acton site because the remote location means that there is no risk to life or health. Shredding and screening equipment can be moved meaning there should be minimal risk to property. The prevailing wind and distance to receptors means that the air quality impacts are likely to be low. There is no risk of a fire spreading to high hazard area. There are no important or valuable buildings involved. The site is on an SPZ3 which means a fire fighting philosophy which prevents the risk of emission of fire water to the aquifer would be preferential (it is considered the risk can be minimised by management of leachate tank levels and tankering of water off site).

Pollution control measures in place at the site mean a controlled burn can be used in combination with other options (see below). Smaller quantities of hot waste material can be dragged out and quenched using the Fire Rescue Service' water jets.

- Active firefighting fire break procedure A significant element of the fire fighting strategy is the fire break procedure, utilising the staff and available plant on site this procedure contributes to fire fighting but also results in a significant reduction in the volume of water needed to extinguish a fire and reduces the subsequent volume of runoff generated. Inputs, shredded waste and oversized piles are in process materials. During the composting main composting season (March October) the largest is the input pile which is 140m³. Note during the off season October March there will be a standing pile of oversized material however the amount of material in active windrows will be less meaning separation distance can be increased. The fire break procedure for the site is replicated below.
- Use of stored surface water and sandbags The site has a below ground storage capacity of 82m³. This capacity is designed to capture surface water runoff from the but is managed to a minimum of 30% capacity providing approximately 25m³ of water. This water can either be applied directly to a small fire using the tractor and vacuum bowser.

Alternatively part of the quarantine area can be used to make a shallow quench. This would be achieved by using sandbags, clay mats and the 100 kerb surrounding the site to create an area of surface water ponding which can then be used to quench burning waste.

- Tractor and vacuum bowser A 10m³ tractor and bowser is available on site that can be filled from one of the underground leachate tanks. This can be used immediately on detection of a fire to direct a deluge of water to a specific location at a rate of approximately 0.45m³ / minute. The tanker can also be used to fill the bucket of a loader which can then be used to dump the water onto hot waste material.
- Suffocation using gravel / soils The site maintains a supply of crushed gravel used for repairs to the haul road. The amount of crushed gravel available is usually kept in the region of 25 T. The three loaders available on site can be used to overtip this material on burning waste to reduce oxygen supply to a fire. If necessary soils from the screening bund can be extracted using the loader and used in the same mannar to suffocate a fire.

#### 10.2. Fire Break Procedure

The fire break procedure will operate as outlined below and on their arrival as directed by the Fire Rescue Service:

→ Assess the location of the hot spot and surrounding material.

- → Report to Site Manager the details being carried out.
- The site manager or deputy will report the fire to the emergency service in the first instance and then follow the VES emergency plan. The Environment Agency Incident Hotline will also be notified.
- → A decision should be made as to the risk to the screener and shredder these are tracked and can be relocated to avoid damage and to create more space on the pad for quarantine.
- → One loading shovel is to start moving a bucket width of material from the windrow to the right of the windrow containing the hot spot.
- A second loading shovel is to start moving a bucket width of material from the windrow to the left of the windrow containing the hot spot.
- Non-burning material can be moved out of the way to the gravel apron and stockpiled. This material must be kept at least 6m from the adjacent tree line.
- → The third loading shovel can be used to create a quarantine area by moving waste / product from either the north east or north west of the compost pad. This will create space for dowsing and quenching burning material.
- → This process has been accessed and allocated a period of 10 30 minutes. All loading shovel drivers are experienced drivers who can drive at a swift safe speed.
- → Care must be taken when approaching the hot spot. The Operator should not approach the hot spot if the flames are assessed as being too dangerous to work in close proximity.
- → This procedure will be reviewed annually or as required following any incident.

In addition to on-site resources, VES as a large waste management company has the resources, including financial, to deal with a fire related incident and the subsequent aftermath such as contingency arrangements and fire water management.

All VES controlled vehicles using the site will be fitted with appropriate fire extinguishers.

### 10.3. Fire Rescue Service Locations

The Facility is located within the range of several Staffordshire Fire and Rescue Service Fire stations. Based on the availability of stations near to the site a response time of less than 20 minutes could be reasonably anticipated.

#### **FRS** locations

Station name	Address	Crew type	Distance from site (miles)	Journey time (Non emergency)
Loggerheads Community Fire Station	Market Drayton Road, Loggerheads, Market Drayton, TF9 4BT	Retained	7.7	16
Newcastle Community Fire Station	Knutton Lane, Newcastle under Lyme, ST5 2SL	Whole-time and retained on-call	4.6	12
Kidsgrove Community Fire Station	Lower Ash Road, Kidsgrove, ST7 1DG	Whole-time and retained on-cal	10.0	24
Hanley Community Fire Station	Lower Bethesda Street, Hanley, ST1 3RP	Whole-time and retained on-call	7.3	16
Longton Community Fire Station	Uttoxeter Road, Longton, ST3 1NS	Whole-time and retained on-call	7.8	14
Eccleshall Fire Station	Newport Road, Eccleshall, ST21 6BG	Retained on-call	11.9	22

## 11. Water Supplies

Environment Agency Fire Prevention Plan guidance bases fire fighting water volume estimates on a nominal pile size of 300m<sup>3</sup> and an application rate of 2000 litres a minute over a period of three hours active fire fighting. Based on guidance for a pile size of 140m<sup>3</sup> suggested water availability would be 167m<sup>3</sup>. Alternative fire fighting options including controlled burn and a proactive fire break procedure reduces the amount of water needed to control a fire.

Water supplies available at the site consist of:

■ Surface water collection tanks: Two surface water collection tanks with individual capacities of 70m³ and 18m³ are situated under the concrete pad on the south east edge of the site. These are primarily to capture rain water falling on the surface of the pad and are periodically emptied with the contents spread to land under a deployment. The tanks are managed so that they are both maintained to approximately a 30% minimum capacity providing between 25m³ and 82m³ of available water.

In combination with the measures described in section 10 the water availability.

## 12. Fire Water Management

The sites isolated drainage system means that there is no pipework connection to controlled waters either directly or indirectly through a sewage treatment works. There are two surface water collection tanks have a combined volume of  $82m^3$ . These cannot be guaranteed to be empty in the event of a fire however during the higher risk periods when waste is dryer and volumes are higher the chance of available capacity is much higher. As they are managed to 30% capacity storage volume for runoff will be  $0 - 57m^3$ .

In the event of a fire any water runoff will accumulate in the southern portion of the site which is retained by 100mm raised kerbing as shown on drawing FPP Plan (Section 18). Topographical information for this area of the site is not currently available but on the basis the south western half of the pad is  $3600 \, \mathrm{m}^2$  and the fall is shallow conservatively there is at least  $150 \, \mathrm{m}^3$  of available storage capacity. This could be confirmed by arranging a topographical survey during the winter when the pad is empty.

The compost material on site also has the capacity to hold large volumes of water and will provide some buffering.

Tanker shuttling can also be used to extract water from the underground surface water tanks. There is sufficient hose available on site to do this with the tanker stationed on the gravel apron in front of the site. Two tankers operating in tandem could extract up to an additional 150m³ over 3 hours.

## 13. Amenity Issues

The facility is located in a rural area surrounded by agricultural land. There are no residential receptors or major transport networks (except the River Thames) within 1km of the site. Should any fire create large amounts of smoke to be blown off site, the Manager / Supervisor will contact the closest downwind receptors as a courtesy and to provide updates on the ongoing management of the incident.

Key receptors within 1km of the site have been identified and are shown on the 1km receptor plan (Section 18).

#### Presence of key receptors (1km screen)

Receptor Type	Presence
Air Quality Management Area (within)	No
Air Quality Management Area (adjacent 2km)	No
Residential	Yes
School	No
Hospital	No
Nursing and care homes	No
Groundwater	Yes, Principal Aquifer
Source Protection Zone	Yes, 'SPZ' 3 (Total Catchment), approximately 675m from the associated SPZ 2 (Outer Protection Zone)
Water for human consumption	No
Ecological receptor SSSI, SAC, SPA, pSPA, RAMSAR	No
Ecological receptor (other)	Yes, Deciduous Woodland

Childcare facility	No
Other	Yes, See table (key offsite receptor type and location)

#### Key offsite receptor type and locations

Receptor (non VES)	Туре	Distance to	Direction	Grid reference	
		site boundary (m)	from site	х	У
Principal Aquifer (SPZ3)	Groundwater	0	N/A	381596	341006
Principal Aquifer (SPZ1)	Groundwater	1000	South	381192	339999
The Rookery Deciduous woodland	Protected habitat	10	North	381545	341029
Acton Lane	Residential	320	East	382002	341073
Three Mile Lane	Commercial, site of historical interest inc public events / weddings	500	North west	381090	341270
Three Mile Lane	Church	490	West	381037	341034
Three Mile Lane	Commercial, tea rooms	510	West	380998	340972
Acton Lane / Brent Lane	Residential	410	West	381090	340874
Track off Acton Lane	Commercial, farm shop	450	South	381718	340527

The site is located on a principal aquifer and with a Source Protection Zone 'SPZ' 3 (Total Catchment), approximately 675m from the associated SPZ 2 (Outer Protection Zone).

## 14. Contingency Measures

In the event of a fire to ensure effective waste removal and protection of the environment, and in the event of a closure of the intended outlet for the material treated on the site, the following contingency delivery points will be utilised according to tonnage requirements and availability;

Other Veolia Group Treatment and Disposal Facilities:

- Telford composting site
- Coven composting site
- Ling Hall composting site

To ensure effective control of incoming waste in the event of a breakdown and/or non-availability at the facility, the following contingency delivery points are available, to ensure the protection of the environment;

- Telford composting site
- Coven composting site
- Ling Hall composting site

In the event of a fire, water retained within the compost area will be removed by road tanker to a suitably licenced facility. VES operates an extensive fleet of waste water tankers with a 24 hour call out availability.

Following the extinguishing of a fire and only when the site is cleared of all fire damaged wastes, fire water and the infrastructure repaired, checked and drainage systems cleaned and reinstated will the site be in a position to re-open. Prior to re-opening, the local Environment Agency office will be contacted and evidence provided to demonstrate the site is fit for purpose.

## 15. Fire Drills

A fire drill will be carried out every 6 months, following each drill an assessment is undertaken and any lessons learned will be implemented. A number of the site staff will be specifically trained and appointed as Fire Marshalls.

The fire drill will vary on each occasion and cannot be prescribed in advance. The precise nature of the drill will be decided by the fire marshal and operational

management based on factors such as perceived risk, incidents at other facilities, experience of staff and consultation with Health / Safety / Environmental advisers etc. The drills will generally be focused around aspects of the FPP and Emergency Plan.

# **16. Emergency Management Plan**

**Emergency information and contacts** 

Site Name:	Acton Compost	Environmental Permit Reference: EB3007MG			
Address and Grid Reference:	Acton Composting Site, T Staffordshire, ST5 4EE. (				
Operating Hours:	M- F: 08:00 until 18:00 Sa	t: 08:00 until 13:00			
Facility Type:	Acton Compost	No of Staff Drivers/Loaders: Transfer Station: Office:	4		
Site Manager:	Carl Taylor	Telephone:			
Route from nearest Off Trentham Rd, N	main junction lewcastle Under Lyme, Stoke	e, ST5 4EF			
RESPONSIBILITIE In the event of an e	S/CONTACTS emergency/incident contact:				
Emergency Coordinator 1:	Carl Taylor	Telephone:	07899 912131		
Emergency Coordinator 2:	Steven Wall	Telephone:	07557245673		
General Manager:	Malcolm Marshall	Telephone:	07917896900		
Business Line Director:	Steve Mitchell				
R&A Environmental Adviser Manager	Julian Kaye	Telephone:			
Crisis Hotline:	08450 710755				
Emergency Spill Response:	08007838020				
Emergency Services Direct Dial:	999				

## 17. Management System

Veolia ES Landfill Limited has a detailed management system which is audited to the three main standards, ISO 9001, ISO 14001 and OHSAS 18001.

The following documentation should be considered during any planning, reviewing or auctioning of the above plan.

#### Key management system documents and references

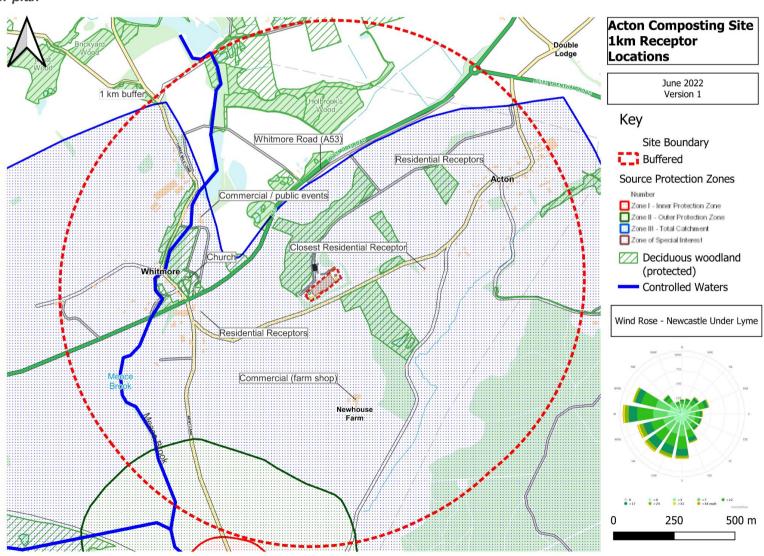
Rey management system do		
Document Name	Description	Reference Number
Environmental Aspects/Impacts Register	A review of the site and its operations to calculate its impact on the environment using a matrix scoring system. By highlighting any risks, measures are implemented to reduce the risk	ENV/2/004/001
Register of Significant Environmental Aspects	A summary of the above with relevant control methods assigned to each point	Local
Objectives & Targets	Continual improvement register undertaken by each contract. Local objectives set including environmental targets	SYS/2/003/001
Monitoring and Measurement of ENV performance	This document establishes the overarching procedures for monitoring and measuring Environmental Performance. It also outlines the process for ensuring alignment with VES corporate requirements	ENV/2/002
Environmental notification system	This procedure sets out the process by which employees may identify health, safety and environmental concerns and near misses. It is not mandatory but may be used to record matters where immediate access to AVA is not available. It also provides a mechanism for providing feedback to the originator of the concern / near miss	HS/2/31
AVA	AVA is the Veolia's online reporting tool for observations, accidents, incidents and near misses. This tool is also used	NA

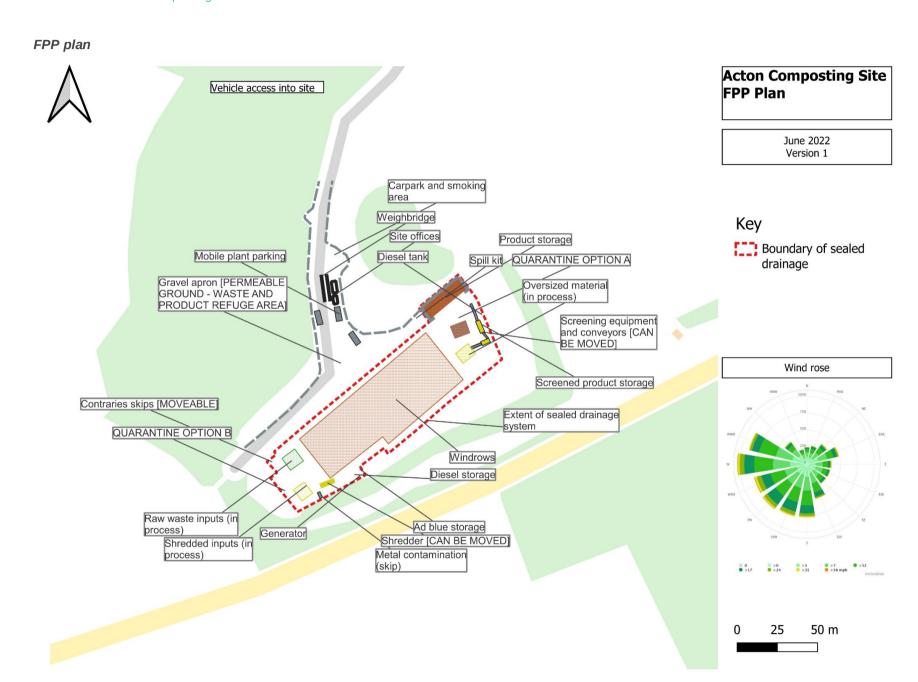
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	to register site visits from recognised authorities. Permit reviews are also undertaken via this portal. All reports registered are monitored via the QHSE department, department heads and regional directors.	
Regulatory Documents	These included WML, Permits and exemptions as well as working plans	Local
Business Continuity Plan	This document covers the most significant impacts that could occur with recovery time objectives set against each activity type as to ensure compliance with regulatory authorities whilst minimising business disruption. The plan is reviewed yearly or earlier if it is needed to be activated and is subject to plan exchange and drills.	SYS/2/028/001

Document reference numbers are correct at the point this document was reviewed, some environmental documentation is cross fed into H&S documents

## 18. Drawings

1km receptor plan





# 19. Example check sheets

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				medde											20.0	<i>7.21</i>			
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