



Fire Prevention Plan

Guy & Wright Ltd.



Helping clients prosper through compliance

SITE DETAILS

Guy & Wright Limited
The Vineries
Green Tye
Much Hadham
SG10 6JJ

OPERATOR DETAILS

Guy & Wright Limited
The Vineries
Green Tye
Much Hadham
SG10 6JJ

DOCUMENT REFERENCE

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WHO THIS PLAN IS FOR

This plan is for the Technically Competent Manager, Site staff, contractors and the local Fire and Rescue Service (FRS). A copy of this plan will be kept on site and accessible for site staff, contractors or the FRS to review.

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DRAWINGS

REFERENCE	REV	DATE	TITLE
K163.1~20~040	1	03/12/2025	Permit Boundary
K163.1~20~041	A	19/12/2025	Site Layout Plan
K163.1~20~042	01	29/01/2026	Sensitive Receptors Plan (1km buffer)
K163.1~20~030	C	03/10/2025	Site Infrastructure Plan

FIGURES

FIGURE	TITLE
Figure 1	Wind Rose Indicating Prevailing Wind Directions

APPENDICIES

APPENDIX	TITLE	DATE
Appendix A	Emergency Evacuation Procedure	March 2025
Appendix B	Chemical or Acid Spill Action Plan	March 2025

1. SCOPE

This Fire Prevention Plan (FPP) is intended as a working procedure document to prevent and limit the causes of fire and to mitigate the impacts of fire should one occur. It applies to everyone on site:

- Site Management; Robert Jones
- Technically Competent Manager (WAMITAB); Robert Jones
- Trained Site Operatives
- Visiting Contractors
- Emergency Services

This document has been prepared using the guidance and template provided by the Environment Agency (EA).

This Fire Prevention Plan relates to the receipt, storage and anaerobic digestion of biodegradable wastes at The Vineries, Green Tye, Much Hadham, SG10 6JJ.

This FPP supports the issued environmental permit EPR/PP3793EU which covers the operations for the receipt, storage and anaerobic digestion of biodegradable wastes. A hard copy of this FPP will be displayed in the office on site and all staff shall be made aware of the measures outlined in the FPP. Required training of the related procedures shall take place and in the case of an emergency the FPP shall be presented to the Fire Rescue Service upon arrival to site.

The site location is shown on drawing K163.1~20~001 Sensitive Receptors Plan whilst the permitted boundary is shown on the plan K163.1~20~040. The site infrastructure plan (K163.1~20~030) and Site Layout Plan (K163.1~20~045) show how key areas and processes are arranged.

The waste activities undertaken are undertaken in an area approximately 5.2 ha.

The site is located at National Grid Reference TL 44251 18635 and the site location is shown on drawing K163.1~20~001 Sensitive Receptor Plan (1km Buffer). The National Grid Reference for the site is TL 44251 18635. The site lies in the village of Green Tye and is approximately 1.25km east of the village of Much Hadham and approximately 2.8km north-east of Bishop's Stortford. The immediate areas surrounding the site to the north and west are primarily agricultural land owned by Guy & Wright Ltd with residential properties to the south.

For more detail on the surrounding land use please see plan K163.1~20~001 Sensitive Receptors Plan Sensitive Receptors Table.

The site is approximately 5.2 ha, operates between 07.30 and 18.00 Monday to Friday and 07.30 to 13.30 on Saturday. The site is accessed via the metal gate in the south of the site (see Site Layout Plan K163.1~20~041). Waste is delivered to site by articulated lorries and dedicated vacuum tanks for the liquid wastes. All wastes received are subject to the waste acceptance procedure prior to being unloaded (See Section 8), during this stage any non-conforming waste will be rejected. These areas are marked on the Site Layout Plan K163.1~20~041.

2. CONSULTATION WITH THE FIRE AND RESCUE SERVICE

The local Fire and Rescue Service has inspected the site and reviewed the nature of the activities undertaken. Following this inspection, the Fire and Rescue Service has confirmed that the site is not considered to be a high-risk site in terms of fire risk.

During the inspection, the Fire and Rescue Service provided recommendations for appropriate fire prevention and mitigation measures proportionate to the assessed level of risk. These recommendations have been fully considered and are incorporated within this Fire Prevention Plan, including measures relating to site layout, storage practices, ignition source control, fire detection, emergency response arrangements, and staff training.

The operator will continue to maintain liaison with the Fire and Rescue Service as appropriate and will review fire prevention measures in the event of any significant changes to site activities, materials stored, or site layout.

3. TYPES OF COMBUSTIBLE MATERIALS

3.1. Combustible Waste

Table 1: Combustible Waste

Waste Stream	
Biodegradable food waste.	Garden and park biodegradable wastes.
Animal By Products (ABP).	Woode, paper, cardboard and composite packaging.
Solid wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing e.g. wood	Household and commercial waste (paper, biodegradable kitchen and canteen waste, edible oil and fat).
Wastes from the preparation and processing of meat, fish and other foods of animal origin	Waste packaging, absorbents, filter materials, wiping cloths and protective clothing.
Wastes from paper, pulp and cardboard production and processing.	Wastes from leather and textile industries.

3.2. Other Combustible Materials (Non-Waste)

Other chemicals stored onsite include fertiliser, herbicides and insecticide. These chemicals are stored in sealed, labelled containers with either spill containment tray or a bund in the COSHH store.

Liquid wastes such as fuel are stored in a bunded tank.

3.3. Persistent Organic Pollutants

The waste imported to site is not expected to contain persistent organic pollutants (POPs). If these are suspected, this waste will be segregated and stored separately in the quarantine area, until this can be removed from site.

4. USING THIS FIRE PREVENTION PLAN

4.1. Location

The Fire Prevention Plan (FPP) will be kept onsite and electronically available for use by site staff and management.

4.1. Where the Plan is Kept and How Staff Know How to Use it

A hard copy of the plan shall be readily available at the site office during operational hours and is available on request to visitors and contractors. All staff are to read the FPP as part of their induction and sign a training log. Any changes to the plan shall be communicated to staff via training. Visitors and visiting contractors are given a brief overview of key fire related measures such as the evacuation muster point and any fire extinguishers in their work area. If their visits extend over considerable length of time or on a regular basis, then they will be encouraged to read the plan in full and sign the training log. Emergency services will be allowed immediate access to the plan and further hard or digital copies can be made available if required.

4.2. Testing the Plan and Staff Training

Evacuation drills are conducted monthly at the discretion of the Site Management and are recorded in the site diary. Details on the emergency evacuation procedure are shown in Appendix A. Any issues addressed through site meetings and further training if necessary.

4.3. Activities at the Site

The maximum tonnage of permitted wastes to be processed by the facility during any one year shall not exceed 70,000 tonnes per year and the annual throughput will remain at a maximum of 100 tonnes per day. The substantial variation to a bespoke installation permit will remove the cap on ABP waste of 10 tonnes per day.

4.3.1. Waste Management Activities

The site will be operated as a waste management facility in accordance with the Environmental Permitting (England and Wales) Regulations 2016 (as amended), undertaking the acceptance, handling, storage and treatment of source segregated bio wastes including; liquid, sludge and solid wastes, combustion of the resultant biogas to produce electricity and the transfer of digestate for land spreading in accordance with the site's Environmental Permit.

Permitted activities are restricted to recovery or a mix of recovery and disposal of non-hazardous waste with a capacity exceeding 75 tonnes (or 100 tonnes per day if the only waste treatment is Anaerobic Digestion) involving biological treatment and storage of digestate and

other waste pending any of the operations numbered R1 to R12. The permitted activity codes listed in the current permit and part of this variation are listed below:

- R13: Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced).
- R3: Recycling/reclamation of organic substances which are not used as solvents.
- R1: Gas engines used principally as a fuel or other means to generate energy.
- D10: Incineration on land.

4.3.2. Waste Receipt and Acceptance

No hazardous waste is accepted onsite, and all waste deliveries are visually inspected before being accepted onsite. Waste is delivered to site in articulated lorries and unloaded in the reception area (see Site Infrastructure Plan; K163.1~20~030). Non-conforming loads are refused entry if noted before unloading has begun and details are recorded.

On arrival, vehicle details will be recorded in the site diary or similar document. Waste will only be accepted from companies who have provided a valid waste carrier registration and relevant Waste Transfer Note.

The solid waste is tipped into the steel hopper trough with an unloading device which has a storage area with a capacity of 180m³ and consists of a sealed, steel floor where any run-off is stored in a run-off tank and fed into the digestion process. The liquid wastes are pumped into the holding tanks through a double valve connection pipe. The liquid holding tanks each have a capacity of 50m³. Incoming liquid ABP wastes are delivered to site in dedicated vacuum tankers and pumped directly into the pre-pasteurisation tank and onward into the pasteuriser and digesters.

4.4. Site Inspections

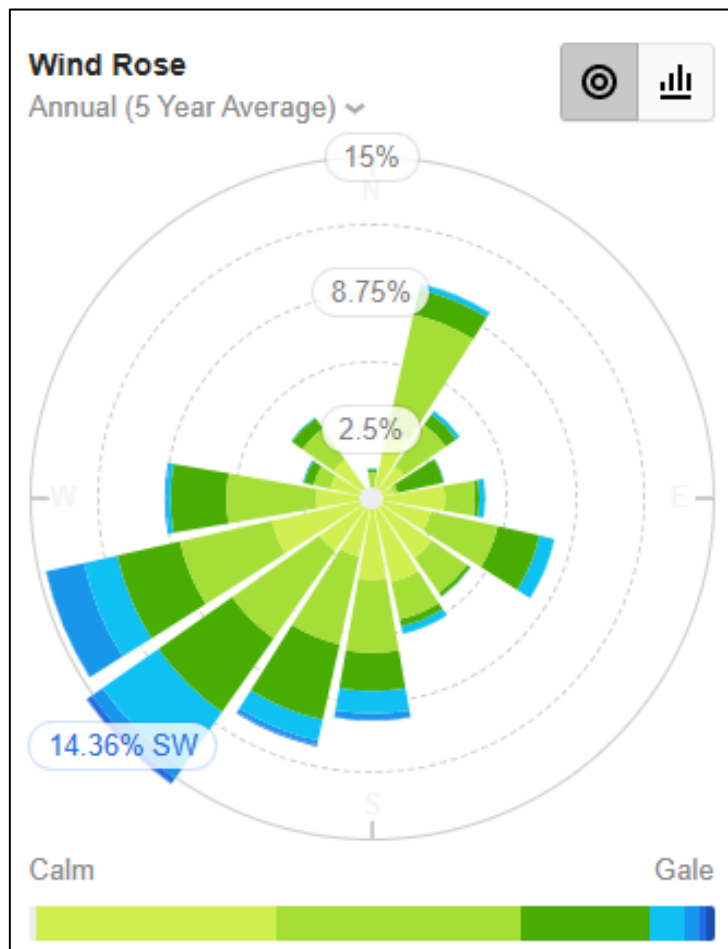
Daily site inspections of all site infrastructure and digestate lagoons are carried out by the Technical Competent Manager (TCM) or nominated person. All defects will be reported and logged in the Site Diary and recorded electronically.

A comprehensive inspection of the concrete surfaces are undertaken monthly, repairs are organised where defects are found to maintain the integrity of the surface and prevent the transmission of fluids.

5. PLAN OF SENSITIVE RECEPTORS NEAR THE SITE

Sensitive Receptors are shown on the Sensitive Receptors Plan K163.1~20~042 and in the Sensitive Receptors Table. The Sensitive Receptors displayed are in all directions. The closest observing station where weather data is available is Green Tye approximately 260m east of the site. Figure 1 below shows the wind rose for which indicates the prevailing wind is south-west.

Figure 1. Wind Rose Indicating Prevailing Wind Directions



6. MANAGE COMMON CAUSES OF FIRE

Prevention, and ultimately negating, the initial fire risk is given the highest priority in terms of controlling a fire. The operator employs the following methods to ensure fire prevention at the site.

6.1. Arson

There is an “on call” procedure shared between 3-4 members of staff whereby that member of staff will respond to any text/alarm call outside operational hours. The operator’s family live on the wider Guy & Wright The Vineries site, so there is presence onsite during non-operational hours.

The site is also surrounded by security fencing with CCTV cameras at the main site entrance and security lighting across the site. There will also be CCTV cameras installed around the new site office which is being constructed east of the waste reception area, and these cameras will cover the waste reception area.

The integrity of all fences and locks will be regularly inspected and any damage identified will be repaired as soon as practically possible.

6.2. Plant and Equipment

The site has a forklift truck to move solid waste from the reception area to the macerator. This is inspected daily and/or before each use.

Regular maintenance and inspection programmes of all onsite plant and machinery will be undertaken. Daily site checks ensure that preventative maintenance can be undertaken.

Flow meters, pressure gauges, pressure relief valves, level sensors and temperature probes are monitored continuously using the site’s SCADA software linked to pre-set alarms that notify users by text if levels are exceeded. There is an “on call” procedure shared between 3-4 members of staff whereby that member of staff will respond to any text/alarm call outside operational hours.

6.3. Delivery Vehicles

Waste is delivered to site in articulated lorries and vacuum tankers. Delivery vehicles are supervised by site staff during the unloading of waste into the reception area (solid waste) or liquid holding tanks (liquid waste).

Delivery vehicles are not stored in the reception area, this is only used for waste delivery and unloading.

6.4. Electrical Faults Including Damaged or Exposed Electrical Cables

Any electrical faults noticed on site during normal daily inspections or throughout the working day are isolated. A qualified electrician will be called to resolve the problem. If required, the electric shall be switched off at the fuse box to prevent an ignition risk.

No electrical cables or devices are located near the waste reception areas.

6.5. Electrics Certification

All electrics are certified every 5 years.

6.6. Electrical Equipment Maintenance Arrangements

Electrics are fully certified by a competent person, every 5 years. All portable items of electrical equipment are listed in a register and tested by a competent person at regular intervals (PAT Testing). All electric systems are fully certified and maintained by qualified contractors.

A copy of the electrical testing and certification is stored electronically as part of the site's Management System.

When not in use, electrical appliances will be turned off.

6.7. Discarded Smoking Materials

The site operates a strict no smoking policy in all areas.

Hot loads are not accepted onsite. If received, these will be placed in the quarantine area as shown on site layout plan K163.1~20~041.

The site operates a strict no smoking policy in all areas.

6.8. Hot Works Safe Working Practices

Hot works are not permitted within 6m of combustible waste.

6.9. Industrial Heaters and Use

Four CHPs are located onsite however they are not located near the waste reception area. Further information is detailed in Section 7.5.

There are no portable heaters held onsite.

6.1. Hot Exhausts and Engine Parts

Operational staff will be required to remain vigilant when using plant and equipment for signs of fire caused by dust settling on hot exhausts and engine parts.

Plant and equipment will be checked prior to use of the build-up of combustible material and where required cleaned down before use.

7. FIRE WATCH PROCEDURES

Guy & Wright Ltd. employees are present across the waste processing and reception areas during operational hours and so a fire watch is ongoing.

The site manager or nominated person will conduct start and end of the day checks to the site, fleet and the security of the site. This occurs everyday Monday – Saturday. Operating hours are:

- Monday – Friday: 07:30 to 18:00
- Saturday: 07:30 to 13:30

No operations on Sundays or Bank Holidays. As the operator's family live onsite, there will be presence onsite during non-operational hours.

8. IGNITION SOURCES

Any sources of ignition will be kept at least 6 metres away from any combustible or flammable waste onsite. Naked flames are prohibited within the site buildings.

8.1. Batteries

Batteries are not accepted onsite, and all loads delivered to site are visually inspected. Any unauthorised waste delivered to site is refused entry.

If batteries are identified within the load after accepting the waste, this will be quarantined and removed from site by the supplier.

8.2. Leaks and Spillages of Oils and Fuels

All fuel and oil stored onsite are within appropriate containers and benefit from secondary containment. Other chemicals stored onsite include fertiliser, herbicide and insecticide. All chemicals stored onsite are within sealed storage containers with either a spillage containment tray or bund, to prevent the leakage from the container of any materials that might leak from any of the containers stored within it.

All containers stored within the site will be clearly marked with their contents and capacity. Container openings will be securely sealed before being moved around site to prevent spillages. COSHH Assessments are kept electronically onsite for all chemicals stored onsite.

Any leaks or spills will be recorded in the daily site diary. The Site will utilise a simple 'Stop-Contain-Divert' model for containing spillages. Spill kits are strategically placed within the site to protect the surface water system and to prevent pollutants from entering the site drains. The chemical or acid spill action plan (Appendix B) shows the spill response procedure.

8.3. Build-Up of Loose Combustible Waste, Dust and Fluff

Regular housekeeping and inspection of the site including the waste reception area and road is undertaken. All solid waste delivered to site is covered.

Speed limits are in place on the site roads to limit the production and dispersion of dust.

8.4. Reactions Between Wastes

Liquid and solid wastes are store separately within the site. No hot loads are accepted onsite and all waste deliveries are visually inspected and supervised by a site operative.

All waste feedstock is blended as part of the Anaerobic Digestion process. If wastes are seen to react, then they are either isolated in situ if possible or moved to the quarantine area (see Site Layout Plan K163.1~20~041).

8.5. Combined Heat and Power Engines (CHPs)

There are 4 CHPs onsite which utilise biogas produced during the anaerobic digestion process. This biogas is extracted under slight negative pressure into the gas dome onsite before being passed through a scrubber and carbon filter prior to combustion.

The heat produced from the CHPs is captured and used in the onsite greenhouses owned and operated by Guy & Wright Ltd. The produced electricity is sent to the National grid.

The combustion process is fully automated and controlled by Supervisory Control and Data Acquisition (SCADA). This includes the temperature probes which if temperatures exceed the set values, this activates the pre-set alarms that notify users by text if levels are exceeded. There is an "on call" procedure shared between 3-4 members of staff whereby that member of staff will respond to any text/alarm call outside operational hours.

9. WASTE ACCEPTANCE AND DEPOSITED HOT LOADS

Waste acceptance checks and procedures comply with the site permits and associated environmental legislation. Only waste types detailed in the permit will be accepted at the site. No ad-hoc deliveries are accepted onsite and no hot loads are accepted onsite.

All waste deliveries to site will only be accepted from companies who have provided a valid waste carrier registration and relevant Waste Transfer Note and a record is kept of all accepted and rejected waste. This record contains:

- Date of arrival;
- Producers' details;
- Previous holders;
- A unique reference number;
- Intended treatment/recovery route;
- Accurate nature and quantity of waste, including hazards; and
- Storage location.

Quarantined waste shall be removed from site within 72 hours and appropriate signage shall be used to identify quarantined waste. Records of any non-conforming waste shall be recorded in the site diary.

Table 2: Waste Acceptance Procedure

WASTE ACCEPTANCE PROCEDURE	SPECIFIC STANDARDS
Waste Inspection	All loads will be visually inspected and supervised by Guy & Wright Ltd. staff. All deliveries are also supervised by a site operative.
Identification of Wastes	All waste must conform to the EWC codes on the Permit and the written description provided by the waste producer.

WASTE ACCEPTANCE PROCEDURE	SPECIFIC STANDARDS
<p>Quarantine Storage and Waste Which are Rejected</p>	<p>If a non-conforming waste is identified within the load, the load is refused entry and the site operator overseeing the delivery will alert the site manager or nominated representative. Where non-conforming waste is found after it has been accepted, they will be placed immediately into the designated quarantine area (Site Layout Plan K163.1~20~041). The site manager will discuss with the supplier and agree an appropriate action which could include reloading the waste and returning to the producer, quarantine the waste until further investigation or reload and send for disposal to an appropriate waste disposal facility.</p>

10. HOT AND DRY WEATHER

Some waste is internalised and therefore the impact of hot and dry weather is limited. To limit the impacts on waste that is not covered a date rotate policy is in place on site; oldest waste is cleared first while waste pile sizes are kept to a minimum.

Daily visual inspections during operational hours will also identify hot spots. CCTV is also present at the site entrance and members of staff live on the wider Guy & Wright Ltd. The Vineries site, so there is presence onsite outside of operational hours.

10.1. Prevent Self-Combustion

The core strategy is the First-In-First-Out (FIFO) procedure, waste first accepted is the waste first treated onsite, with continual visual monitoring during operational hours. Biodegradable waste is only stored for a short period of time within the specified waste bays (tipping area) before entering the pre-treatment process. The tipping area is separate into two bays by a retaining wall, so waste can be segregated.

Liquid waste is stored in holding tanks for a maximum of 48 hours before being included in the Anaerobic Digestion process.

11. GENERAL SELF-COMBUSTION MEASURES

Self-combustion of wastes is very unlikely due to the methods of storage and the type of waste that is accepted onsite.

The core strategy is the FIFO procedure, waste first accepted is the waste first removed from site. Site staff remain vigilant for any signs of combustion from waste piles on site and daily site inspections are made on the site as part of the fire watch procedure.

All site staff are trained in the Fire Prevention Plan and company emergency procedures during the induction (Appendix A).

In the event of a fire from self-combustion, the firefighting techniques detailed in Section 19 and 22 will be implemented.

12. MANAGE STORAGE TIME

Managing waste storage onsite is a key factor in reducing the fire risk. Table 3 below details the storage, volume/stockpile size and storage time for each waste type.

Waste segregation is unnecessary as all wastes are macerated and mixed prior to introduction to the anaerobic digestion process. Therefore, all solid wastes are stored together in the reception area, and this includes all the solid waste EWC codes listed in the List of Waste document (K163.1~09~007).

Table 3: Storage Times

WASTE STREAM	MAX. STORAGE TIME ON SITE	MAX. STORAGE LIMIT ON SITE
Solid Waste	<24 hours	180m ³
Liquid Waste	<48 hours	100m ³ (two 50m ³ holding tanks)

12.1. Method Used to Record and Manage the Storage of All Waste on Site

Storage of waste on site is managed through a spreadsheet using data from the weighbridge and quarterly returns from the Environment Agency.

There is likely to be some variation in the daily quantity of waste received on site, however the maximum daily amount of waste accepted on site shall not exceed 100 tonnes.

12.2. Stock Rotation Policy

Policy on site follows the FIFO procedure with waste received first being treated onsite first.

Wastes awaiting anaerobic digestion are stored in the reception area for a maximum of 24 hours.

13. MONITOR AND CONTROL TEMPERATURE

13.1. Reduce the Exposed Metal Content and Proportion of 'Fines'

No metal waste is accepted onsite.

13.2. Monitoring Temperature

Visual inspections of the waste occur at the start and the end of the operational day as well as ad-hoc throughout the day. Site operatives are trained to identify potential signs of self-heating.

Temperature probes monitor the anaerobic digestion process as part of the SCADA system. Should the temperature exceed the pre-set levels, this activates the pre-set alarms that notify users by text. There is an "on call" procedure shared between 3-4 members of staff whereby that member of staff will respond to any text/alarm call outside operational hours.

13.3. Controlling Temperature

To help control temperature of waste storage areas the site operates a FIFO procedure and attempts to keep storage time to a minimum given the amount of waste on site. Waste stored externally in the reception area is stored for less than 24 hours.

By managing waste piles carefully, the risk of self-combustion will be prevented, and the likelihood and scale of a fire will be limited.

13.4. Dealing with Hot Weather and Heating from Sunlight

The FIFO procedure operated on site reduces the storage times on waste.

13.5. Waste Bale Storage

There is no waste bale storage onsite.

14. MANAGE WASTE PILES

14.1. Storing Waste Materials in Their Largest Form

Only physical sorting occurs on site to separate into different waste fractions as part of the macerator process. The macerator reduces the particle size of the waste to approximately 12mm, before storing the waste within one of 6 holding tanks.

Solid waste is store in its largest fraction size to reduce reactions between waste. All solid waste is stored in the reception area which is divided in two by a wall and has a maximum capacity of 180m³. Liquid biowaste is stored separately in bunded holding tanks.

Waste segregation is unnecessary as all wastes are macerated and mixed prior to introduction to the anaerobic digestion process.

14.2. Maximum Pile Sizes for the Waste on Your Site

Table 4: Pile Sizes

WASTE STREAM	LOCATION	HOW IT IS STORED	MAX. LENGTH / M	MAX. WIDTH / M	MAX. HEIGHT / M	VOLUME / M ³	MAX. TIME IT WILL BE STORED
Solid Biowaste (loose)	Reception area (south section)	Loose	9	6.5	1.5	90	24 hours
	Reception area (north section)		8	6.5	1.5	90	24 hours

14.3. External Storage

Waste types awaiting processing are stored externally on an impermeable surface. This waste is stored or a maximum of 24 hours.

14.4. Procedures For Storing Whole End of Life Vehicles

N/A

14.5. Waste Stored in Containers and Types of Containers

No solid waste is stored in a container.

Liquid biowaste is stored in two liquid holding tanks which are bunded. Other liquid wastes such as fuel, oil and delivered liquid waste are stored in appropriate containers which are either bunded or benefit from secondary containment.

15. PREVENT FIRE SPREADING

15.1. Separation Distances

Stockpiles of solid waste on site are stored internally within separated bays. Further detail of the internal storage arrangements are presented in Section 13 and depicted in the Site Layout Plan (K163.1~20~041).

As all the solid waste is macerated and mixed prior to introduction to the anaerobic digestion process, waste segregation is not required.

15.2. Fire Walls Construction Standards

Due to the liquid content in the waste and the maximum storage time (24 hours), it is unlikely that the waste will combust. Therefore, there are no fire walls onsite.

16. QUARANTINE AREA

16.1.1. Quarantine Area Location and Size

Quarantine area and the associated 6 m separation distance is shown on the Site Layout Plan (K163.1~20~041). In accordance with the guidelines set out by the Environment Agency, the quarantine area can hold up to 50% of the largest waste pile.

The maximum quantity of waste which can be stored in the quarantine area is 1520m³, which covers more than the required 50% (90m³) as dictated by the largest waste pile. Any unacceptable waste that is put in the quarantine area will remain onsite for a maximum of half a day.

16.2. How to Use the Quarantine Area if There is a Fire

Quarantine area to be used for both burning and non-burning waste; may also be used as an area for non-conforming, possibly hazardous waste.

Where safe to do so, or under the supervision of the Fire and Rescue Service (FRS), the mobile plant on site can be used to move and deposit waste within the quarantine area. Plant drivers will be appropriately trained to operate site plant during such emergency situations and any plant used for such operations will be suitable for the task.

16.3. Procedure to Remove Material Stored Temporarily if There is a Fire

Once the quarantined waste has been cooled / extinguished, it will be removed from site and taken to a suitable licenced waste facility.

17. DETECTING FIRES

17.1. Detection Systems in Use

Daily site inspections are conducted by the TCM or nominated person.

Staff are present during all processing, loading or waste movement operations and are trained to be extra vigilant for signs of a fire throughout the working day.

Members of staff live on the wider site, so there is presence onsite outside of operational hours.

18. SUPPRESSING FIRES

18.1. Suppression Systems in Use

There is a water tank within the Guy & Wright The Vineries wider site which is used by Guy & Wright Ltd. for irrigation and supplied by a groundwater abstraction borehole. This water tank has a capacity of approximately 90,000 litres and this can be used for fire suppression if required.

A fire hydrant is located on the main road adjacent to site and there are fire hoses located across the site (see Site Infrastructure Plan: K163.1~20~030) There is also a large surface water pond located on site which provides additional water supply if required.

18.2. Fire Extinguishers

Water, powder and CO₂ extinguishers are located onsite and are maintained and services by an external specialist contractor. The location of the fire extinguishers is shown on Site Infrastructure Plan (K163.1~20~030).

19. FIREFIGHTING TECHNIQUES

Detailed below are the responses and actions which may be undertaken by operational staff members to isolate and extinguish burning or smouldering material upon detection. All operational staff members will be trained in the below techniques and the principles identified within this document. It must be noted that firefighting techniques should only be used if safe to do so, and in the event of a fire becoming out of control precedent should be given to the safe evacuation of the site and contacting the FRS.

19.1. Initial Response

The local fire service will be informed immediately upon detection of the fire. The closest whole time fire station (Hertford Fire Station) is located approximately 10km to the south-west of the site, and local 'Day crewing' fire stations are also located within closer proximity to the site.

In the event of a fire, the person discovering the fire will raise the alarm prior to making contact with the fire service. The procedures and protocols will then be implemented (Appendix A), these include the evacuation procedure, emergency communication protocol and contingency and emergency procedures.

19.2. Active Firefighting

Active firefighting means always having the resources available to fight a fire during operating hours and when the site is closed.

No one should attempt to fight a fire unless they have received training in the use of fire extinguishers and then only if this can be done without risk. Fires will be tackled by a minimum of two trained operatives.

If necessary, and under the supervision of the Fire and Rescue Service, site machinery may be used to assist in fighting fires that break out on site. This may include, spreading out waste in order for the fire to be more easily tackled, removing adjacent unburned materials to prevent the spread of fire, and placing inert material over the fire to starve it of oxygen.

Fire extinguishers are accessible across the site and their locations marked on the Site Infrastructure Plan (K163.1~20~030). Site staff are aware of locations for fire extinguishers and hoses.

There are also fire hoses located across the site which can be used by trained operatives to control the fire. The locations of the fire hoses are shown on Site Infrastructure Plan (K163.1~20~030).

20. WATER SUPPLIES

20.1. Available Water Supply

Site has access to a fire hydrant located on the main road adjacent to the site, 120m east of the site entrance. There is fire hoses located onsite (See Site Infrastructure Plan K163.1~20~030) which can be used to connect to the onsite mains water supply or offsite hydrant.

Small fires can be tackled using the site's fire extinguishers, fire hose and mains water supply, as detailed in Section 17.

20.2. Show the Calculation for Your Required Water Supply

EA Guidance stipulates that a 300m³ pile of combustible material will normally require a water supply of at least 2,000 litres a minute for a minimum of 3 hours. Based on the largest waste pile (180m³), Table 5 below shows the water supply calculations for the available water onsite.

The assumed supply of the onsite fire hydrant (100mm pipe supply) is based on 2,000 litres per minute.

Table 5: Water Supply Calculation

MAXIMUM PILE VOLUME IN CUBIC METRES	WATER SUPPLY NEEDED IN LITRES PER MINUTE Pile volume x 6.67	OVERALL WATER SUPPLY NEEDED OVER 3 HOURS IN LITRES Water supply per minute x 180	TOTAL WATER AVAILABLE ON SITE IN LITRES (Approx. 90,000litres in water tank and 2,000 litres/min from hydrant)
180	180 x 6.67 = 1200.6	1200.6 x 180 = 216,108	450,000 litres

Guy & Wright Ltd. would also implement measures to reduce the size of the maximum waste pile using the site's forklift to relocate non-burning materials.

21. MANAGING FIRE WATER

21.1. Containing the Run-Off From Fire Water

The waste reception area benefits from an impermeable surface and sealed drainage system. The drainage system by the waste reception area connects to a run-off tank which feeds into the digestion. This run-off tank can be shut-off from the anaerobic digestion system after a fire event, to contain any fire water.

Based on the calculations provided in Section 20 to determine firewater requirements, the anticipated volume of water required in accordance with EA FPP guidance is 216,000 litres. Whilst it is likely that a significant proportion of water used to fight the fire will evaporate, containment measure have been considered within the waste reception area.

Three sides of the waste reception area have raised walls to contain firewater (approximately 2.00m in height). The fourth side of the waste reception area connects to a concrete slab area (approximately 500m² in size) where waste fire water can be collected and removed from. There is also a soil bund between the macerator (south of the waste reception area) and the two digester which will prevent fire water migrating to this equipment.

22. DURING AND AFTER AN INCIDENT

22.1. Dealing With Issues During a Fire

During a fire, operations shall cease, and all incoming waste is diverted from the site. Site staff will only engage in active firefighting if safe to do so. The Fire Rescue Service shall be contacted and presented with FPP on arrival.

22.2. Notifying Residents and Businesses

In the event of smoke emissions becoming an issue the site manager will inform neighbouring residents and businesses through the city council website and their social media channels.

The Environment Agency shall be contacted as per permit requirements on the Environment Agency Incident Hotline: 0800 80 70 60.

22.3. Clearing and Decontamination After a Fire

After an incident a contractor shall be contacted to empty the drainage, clear any residue (liquid or solid), decontaminate areas onsite impacted by fire and take any waste off site.

22.4. Making the Site Operational After a Fire

After an incident the site shall be inspected fully for any signs of damage to infrastructure and where appropriate fixes made. Site will not reopen until this has taken place.

The root cause of the fire will be established, and all site procedures and this document will be reviewed and updated where necessary. Staff will be training will be undertaken to embed lessons learnt and ensure any changes in practices and operation are clearly understood.



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