# Fire Prevention Plan

PSH Environmental Limited

5 Wendover Road,
Rackheath Industrial Estate,
Norwich,
Norfolk,
NR13 6LH

PROVIDING SOLUTIONS, ENSURING COMPLIANCE

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# 1. Introduction

1.1. This Fire Prevention Plan (FPP) has been produced by Westbury Environmental Limited on behalf of PSH Environmental Limited (Operator) for a site at 5 Wendover Road, Rackheath Industrial Estate, Norwich, Norfolk, NR13 6LH (Site).

1.2. A FPP was produced in October 2018 by a third party (Aae Environmental Consultants).

1.3. This FPP Version 1 produced by Westbury Environmental Limited supersedes the October 2018 FPP produced by Aae Environmental Consultants.

1.4. This FPP has been prepared in accordance with the Environment Agency guidance on Fire Prevention Plans: Environmental Permits (FPP Guidance), last updated 11 January 2021. The FPP Guidance requires that the FPP accounts for the fire risk from potentially combustible waste types stored on the Site.

1.5. The objectives of an FPP are as described in the FPP guidance and are as follows:

- Minimise the likelihood of a fire happening.
- Aim for a fire to be extinguished within 4 hours.
- Minimise the spread of fire within the site and to neighbouring sites.

1.6. Minimum requirements for fire prevention measures are included within the FPP Guidance and relate to each of these three objectives.

**Using this FPP**

1.7. A copy of this FPP must be kept in the Site office and be readily available to all members of staff.

1.8. This FPP forms part of the Environmental Management System (EMS) for the Site. Completed forms (records) will be kept, as required by conditions included in the Environmental Permit.

1.9. All staff working on Site must understand the contents of this FPP to know what to do:

- To prevent a fire occurring.
- During a fire if one breaks out.

1.10. A fire drill will be completed on a six-monthly basis to test how well the FPP works and to make sure staff understand what to do in the event of a fire on Site. The fire drill will include:

- Checks that staff are trained on relevant procedures,
- Stockpile management,
- Fire detection,
- Fire suppression,
- Use of the Fire Quarantine Area,
- Firewater containment.

**Content of this FPP**

1.11. This FPP describes how PSH Environmental Limited will operate the Site in relation to the minimum requirements for fire prevention measures included within the FPP Guidance.

1.12. A Site Layout Plan has been produced as part of this FPP. The location of Site infrastructure, fire prevention measures and the storage of combustible wastes are shown on Drawing No. 21/023k 001 Site Layout Plan.

1.13. There is typically a risk of fire where potentially combustible wastes are stored. This FPP provides information on how PSH Environmental Limited will reduce the risk of an outbreak of fire and the potential impact that a fire may have.

1.14. A breakdown of the information that is included within each Section of this FPP is provided below.

- Section 2 of this FPP provides the Site information, including a list of sensitive receptors within 1km of the Site.
- Section 3 provides information of the management of the potential causes of fire.
- Section 4 of this FPP provides information relating to managing fire risk from the storage of combustible waste. This Section addresses self-heating potentially resulting in self-combustion. This Section includes information relating to maximum storage duration, waste pile sizes and volumes, separation distances, containment facilities and how heat generated in waste piles will be managed.
- Section 5 of this FPP provides information on the systems that are in place to detect a fire, both during and outside of operational hours.
- Section 6 of this FPP provides information on the contingency measures that are to be taken during a fire. This Section includes information relating to the cessation of imported waste and notifying neighbouring businesses.
- Section 7 of this FPP provides information on how PSH Environmental Limited will suppress and fight a fire. This Section includes information relating to the use of the quarantine area and the use of available suppression methods. Steps to be taken in relation to firefighting techniques are addressed for a fire occurring during and outside of operational hours.
- Section 8 of this FPP provides information on the steps to be taken after a fire before the Site becomes operational. This Section includes information relating to managing firewater and contingency measures that are in place to remove any burned materials.

## 2. Site Information

### Site Location

2.1. The Site is located approximately 7km northeast of Norwich and approximately 250m southwest Wroxham Road (A1151). The Site is accessed off Wendover Road.

2.2. The Site is surrounded by agricultural fields to the north, northeast and west and an industrial estate to the south.

2.3. The Site extends to approximately 3ha. The area covered by the Environmental Permit is shown on Drawing No. 21/023f 001 Permit Boundary Plan.

2.4. The Site is located within Flood Zone 1. There is a very low risk of flooding from rivers, seas, or surface water.

2.5. The Site is located within Groundwater Source Protection Zone 3 'Total Catchment'. The Site is located within a Principal aquifer with Secondary A superficial drift recorded.

### Hazards and Receptors

2.6. Sensitive receptors in close vicinity to the Site have been identified, see Drawing No. 21/023k 002 Sensitive Receptors Plan.

2.7. It is considered that a fire will present three main hazards to nearby sensitive receptors: heat from the fire itself, air pollution (predominantly from smoke emissions) and pollution to groundwater / surface water features.

2.8. Heat energy from a fire may reach sensitive receptors via direct fire spreading or by the deposit of burning embers. It is considered that burning embers are likely to extinguish when travelling over distances that exceed 100m.

2.9. Smoke produced from fires can contain harmful gases that are produced from the combustion process. The distance smoke will travel will be dependent upon the wind speed at the time of the fire, however it is considered unlikely that smoke will significantly affect sensitive receptors outside of a 1km radius.

2.10. Significant amounts of water and / or other chemicals may be used when controlling a fire. Firewater produced from tackling a fire has the potential to contain contaminants from the chemicals used, burned materials and other pollutants present on the site. The release of firewater from the Site as a result of a fire has the potential to cause pollution to groundwater / nearby surface water features.

2.11. Table 1 shows the approximate distance and orientation (from the Site) of nearby sensitive receptors located within a 1km radius of the Site.

**Table 1: Sensitive Receptors**

| No. | Receptor | Type of receptor | Bearing from Site | Approx. distance from Site boundary to receptor boundary (m) |
|---|---|---|---|---|
| 1 | Businesses bordering PSH Environmental Ltd, including Dreams Bridal, Bathroom Warehouse, JW Cars Service, and Camrider Norwich | Commercial | S, E | ~0 |
| 2 | Other businesses within the Rackheath Industrial Estate | Commercial | SE | 20 |
| 3 | Stracey Park | Recreational ground | W | 30 |
| 4 | Residential properties on Green Lane West | Residential | NW | 30 |
| 5 | Residential properties on Green Lane West | Residential | S | 70 |
| 6 | Rackheath Village Hall | Public facility | S | 200 |
| 7 | Ancient Woodland | Woodland | SW | 340 |
| 8 | Deciduous Woodland | Woodland | NW | 390 |
| 9 | Deciduous Woodland | Woodland | SW | 450 |
| 10 | Unnamed Surface Water Feature | Surface Water Feature | SW | 500 |
| 11 | The Springs Lake | Surface Water Feature | W | 590 |
| 12 | Residential properties off Sir Edward Stracey Rd | Residential | S | 610 |
| 13 | Deciduous Woodland | Woodland | S | 650 |
| 14 | Residential properties off Back Lane | Residential | NE | 700 |
| 15 | Residential properties off Wroxham Rd | Residential | SW | 740 |
| 16 | Industrial Estate off Green Lane West | Commercial | S | 790 |
| 17 | Hill Farm Lodge | Hotel | W | 830 |

**Waste Operations**

2.12. The Site extends to approximately 3ha. The area covered by the Environmental Permit is shown on Drawing No. 21/023f 001 Permit Boundary Plan.

2.13. This permit variation application seeks to make the following change to the Environmental Permit Ref. EPR/WP3594NR.

- Include the treatment process of washing.
- Add new waste codes to the permit, some of which are combustible wastes (see Section 4 Proposed list of additional waste codes).
- Increase the annual throughput for waste operations from 150,000 tonnes per year to 250,000 tonnes per year.

2.14. There are two buildings on the Site (Building 1 and Building 2), see Drawing No. 21/023k 001 Site Layout Plan.

2.15. Combustible waste is stored in Building 1, Building 2 and outside in the yard. Combustible waste is stored in sealed bays outside.

2.16. The design of the Site ensures a 'first in, first out' policy. The excavator is positioned at the front of the feedstock to ensure it loads the waste that has been stored on the Site for the longest amount of time first.

2.17. Residual waste that is treated and separated in Building 1 (RDF) is then directed to Building 2 to be baled and wrapped.

2.18. The finished wrapped RDF bales are stored outside on hardstanding. The RDF bales and the pre-processed feedstock are both potentially combustible.

2.19. Waste stored outside will be operated on a 'first in, first out' policy. Further information on the storage of waste and substances, in relation to managing fire risks, can be found in Section 4 Managing Fire Risks from the Storage of Waste

2.20. Flammable liquids, which are considered as a source of ignition in this FPP, are stored on the Site. Flammable liquids stored on the Site include fuel. The location of the fuel storage tank is shown on Drawing No. 21/023k 001 Site Layout Plan.

2.21. Further information on the waste operations carried out on the Site can be found in the Environmental Management System Appendix C Procedures and Forms, Procedure No 4.1 Recycling Operations.

## 3. Management of potential causes of fire

3.1. It is important to identify potential causes of fire on the Site in order to minimise these and reduce the likelihood of fires, thus addressing Objective 1 of the FPP Guidance; “minimise the likelihood of a fire occurring”. Potential causes of fire, taken from the FPP Guidance and how they apply to the Site, are listed in Table 2 Potential causes of fire below.

**Table 2: Potential causes of fire**

| Potential Cause of Fire | Applicable to the Site | Comments |
|---|---|---|
| Arson / Vandalism | Yes | The Site is secured by fencing around its perimeter and is not readily accessible by the public. The Site has CCTV cameras within the buildings on the Site. |
| Malfunctioning / breakdown of mobile plant, equipment or vehicles. | Yes | There is a risk of equipment and vehicles on the Site malfunctioning and/or breaking down. |
| Electrical faults (including damaged / exposed cables). | Yes | Damaged or exposed electrical cables and fittings on mobile and fixed equipment have the potential to give off excess heat / create sparks. |
| Discarded smoking materials | Yes | There is a risk of discarded smoking materials presenting a source of ignition. |
| Hot works undertaken for maintenance | Yes | Hot works may be carried out on the Site as part of routine maintenance. No hot works are carried out as part of regular operations. |
| Industrial heaters, furnaces, incinerators or any other naked flames. | No | No industrial heaters, furnaces, incinerators or any other naked flames will be present on the Site. |
| Hot exhausts on mobile plant, equipment or vehicles. | Yes | There is a risk of exhausts of machinery, equipment and vehicles remaining ‘hot’ after use. |
| Batteries in End of Life Vehicles. | Yes | End of Life Vehicles are not imported on to the Site. |
| Fuel and waste oil stored on the Site. | Yes | Fuel and oil are stored on the Site. There is a risk that fuel or oil could present a fire risk or source of ignition. |
| Leaks and spills from site vehicles. | Yes | Vehicles will be used on the Site to import/export waste loads. There is a risk of one of these vehicles leaking fuel or oil. |
| Leaks and spills from End of Life Vehicles. | Yes | End of Life Vehicles are not imported on to the Site. |
| Build-up of loose combustible waste, dust and fluff. | Yes | There is a risk of loose combustible waste, dust and fluff building up within storage areas of combustible waste. |
| Reactions between wastes. | No | Any potentially reactive waste types identified within a load will be separated and stored appropriately, using a quarantine area if necessary. Wastes such as lithium batteries are subject to strict waste acceptance and storage procedures. Waste Acceptance Procedures within the EMS will ensure that only permitted waste types are accepted on to the Site. Waste Acceptance Procedures will include:<br>• The List of Waste codes from the Environmental Permit.<br>• Instructions to visually check loads upon reception, acceptance and unloading.<br>See Appendix 5 Waste Acceptance Procedure. |
| Deposited hot loads (loads that are on fire) | No | Hot loads are not accepted on to the Site. |
| Self-heating resulting in self-combustion. | Yes | There is a low risk of self-heating within piles of combustible waste stored on the Site. |

| | | |
|---|---|---|
| Operations carried out by neighbouring businesses. | Yes | The Site has an industrial unit located to the south. One of the businesses on the industrial estate is a shred station, that shred mixed waste. |

3.2. The remainder of the points in this Section describe in detail how PSH Environmental Limited will minimise the risks associated with the potential causes of fire that relate to this Site, as identified in Table 2 Potential causes of fire above.

**Site Security**

3.3. Site security is important to reduce the likelihood of unauthorised access on to the Site. The Site is secured with fencing around the perimeter and is not readily accessible by the public.

3.4. The Site is constantly manned during office hours to prevent unauthorised access to the Site.

3.5. The Site is secured outside of operational hours and at any time when the Site is unmanned. There is three-metre-high palisade fencing on the perimeter and a lockable front gate at the entrance of the Site, which is secured during non-operational hours. There is also a secondary inner steel guard to prevent unauthorised access by vehicles during non-operational hours.

3.6. There is CCTV that has thermal imaging cameras in Building 1 and Building 2.

**Plant, Equipment & Vehicles**

3.7. Plant, equipment, and vehicles are used on the Site. Plant and equipment include machinery for the movement and treatment of waste on the Site. Vehicles are used to import and remove waste to and from the Site.

3.8. Mobile plant / equipment that is not being used will be stored at least six metres away from combustible waste types.

3.9. There is fixed plant located in the buildings. Fixed plant is located more than six metres away from combustible waste.

3.10. All Heavy Goods Vehicles (HGV's) / mobile plant are provided with fire extinguishers to aid in active firefighting. The function of fire extinguishers is checked on an annual basis, using Appendix 1 Inspection Checklists.

3.11. Plant and equipment have the potential to malfunction / breakdown. In some instances, this could cause a fire, which in turn could spread to combustible waste stored on the Site. Plant and equipment will be maintained in line with manufacturers recommendations to reduce the risk of breakdown / malfunction. Plant and equipment will be checked for malfunctions/damage on a daily basis by the Site Manager, using Appendix 1 Inspection Checklists. Any fault will be noted on the Inspection Checklists and rectified as soon as possible.

3.12. There is a risk of fuel leaking / spilling during refuelling of vehicles / mobile plant on the Site. Spill kits and absorbent materials e.g. soil are available on the Site and will be made available during refuelling. The condition / integrity of the fuel storage tank will be checked using Appendix 1 Inspection Checklists.

3.13. There is a potential for HGV's entering the Site to leak fuels and oils. Vehicles entering the Site will be owned by PSH Environmental Limited or their customers. Vehicles owned by PSH Environmental Limited will be maintained in line with manufacturers recommendations to reduce the risk of breakdown / malfunction, which will include any corrosion, cracks, or leaks in any fuel/oil tanks. Spills kits will be used in the event of a spill or leak from PSH Environmental Limited vehicles and any other vehicles on the Site.

**Ignition Sources**

3.14. Naked lights can present a source of ignition. No materials are burned on the Site. Smoking is only permitted in the designated smoking area to reduce the likelihood of any naked flames.

3.15. Hot works may be carried out on the Site as part of routine maintenance. No hot works are carried out as part of regular operations.

3.16. Hot works are carried out away from other ignition sources e.g. fuel. The area will be checked prior to carrying out hot works to check for potential ignition sources / combustible waste. A check will be made for 15-minutes after hot works have ended, to ensure that no sparks have ignited any combustible waste, see Appendix 4 Control of Causes of Fire Procedure.

3.17. No other naked flames, including incinerators, industrial heaters, space heaters, furnaces, are present on the Site.

3.18. The storage of flammable liquids is considered as an ignition source in the FPP Guidance. Fuel and oil are stored on the Site in a double skinned tank. Fuel and oil are considered as a potential source of ignition. There is a risk of fuel leaking / spilling during refuelling of vehicles / mobile plant on the Site. Spill kits are available on the Site and will be made available during refuelling. The condition / integrity of the fuel and oil tanks will be checked using Appendix 1 Inspection Checklists.

3.19. Oil and fuel storage at the Site will comply with the Oil Storage Regulations for Businesses (last updated 4th August 2020). Fuel and oil are stored in double skinned tanks in accordance with the Oil Storage Regulations.

3.20. All ignition sources present on the Site will be kept at least six metres away from combustible waste types.

**Electricity**

3.21. There are two mains electricity supplies on the Site. One supply provides power to the baler and the other supply provides power to the remainder of the Site, including the weighbridge and treatment plant in Building 1.

3.22. Damaged or exposed electrical cables and fittings have the potential to give off excess heat / create sparks. Power sockets can be overloaded which may result in the overheating of these sockets and wires.

3.23. Inspections of electrics are carried out by Site staff on a monthly basis to ensure that cables are in a good condition and sockets are not overloaded. Inspections are recorded using the Inspection Checklists form, see Appendix 1 Inspections Checklists.

**Build of Loose Combustible Waste**

3.24. Combustible wastes collecting around waste storage areas can present a fire risk. Separated combustible waste types are stored within stockpiles, bays, and containers on impermeable surfacing, either in a building or on the yard. The storage areas are shown on Drawing No. 21/023k 001 Site Layout Plan with labels indicating the waste to be stored in each.

3.25. Storage areas will be regularly cleared to remove any residual loose combustible waste, dust, or fluff. Each combustible waste storage area is assigned a letter, which is shown Drawing No. 21/023k 002 Site Layout Plan. These will be identified on maintenance schedules to ensure that clearing takes place at least every three months, see Appendix 1 Inspection Checklist.

**Self-Heating resulting in Self-Combustion**

3.26. The risk of self-heating occurring within waste piles is influenced by the following:

- Waste type.
- Particle size.
- Storage time.
- Volume of stockpile.
- Ambient temperature / external conditions (including heat produced from waste operations).

3.27. Self-heating is a potential cause of fire, as it may lead to self-combustion. Self-heating can be managed in several ways. The FPP Guidance states the following:

***For all waste:***

- *Management of storage duration times for combustible waste.*
- *Good stock rotation to ensure quick-turnaround of materials i.e., first-in, first-out policy. Complete turnaround of waste and use of the first-in, first-out principle will ensure that waste is not stored on Site for periods longer than the maximum storage duration.*
- *Minimising stockpile dimensions, including height.*
- *Minimising stockpile volumes.*
- *Managing any seasonal variations in waste types.*

***For waste stored on Site for longer than 3 months:***

- *Temperature monitoring and implementing actions to be taken should trigger temperatures be reached.*
- *Routine turning of piles to ensure waste remains cool and localised heating is dissipated.*

3.28. Combustible waste stored on the Site will be stored for a maximum of three months. The FPP Guidance does not require that an operator monitors temperatures or routinely turns piles if waste is stored for less than three months. There is therefore no proposal to monitor temperatures or routinely turn piles on this Site.

3.29. It is considered that self-heating is a significant contributor to fire risk on waste sites. As such, this risk is addressed in detail in Section 4 Managing Fire Risks from the Storage of Waste.

# 4. Managing fire risks – waste storage

### Storage Duration

4.1. Restricting the maximum storage duration of combustible waste will reduce the risk of self-heating within waste piles.

4.2. The maximum storage duration for combustible waste stored on the Site is three months. This quick turn-around of waste will significantly reduce the risk of self-heating within waste piles.

4.3. Good stock rotation ensures effective management of the time that waste is stored on Site. Waste storage areas will be inspected daily to ensure that waste is not stored on Site longer than the maximum storage duration. Daily inspections and weekly reviews of storage areas will be recorded using Appendix 1 Inspection Checklist.

### Stock Rotation Policy

4.4. Good stock rotation ensures effective management of the time that waste is stored on Site.

4.5. The design of the Site ensures a 'first in, first out' policy. The excavator is positioned at the front of the feedstock to ensure it loads the waste that has been stored on the Site for the longest amount of time first.

4.6. Waste stored outside will be operated on a 'first in, first out' policy.

4.7. The Site operates a first in, first out policy for waste. Waste brought in first, is treated and sent out first. Incoming waste will be sorted and separated waste types will be stored in stockpiles, bays or containers for each waste type.

### Pile Dimensions, Volumes and Separation Distances

4.8. The recommendations within the FPP Guidance in relation to maximum waste pile sizes are proposed to be adhered to on the Site. Pile volumes of waste stored on the Site are less than the recommendations included within the FPP Guidance.

4.9. Storage areas are referenced with letters on Drawing No. 21/023k 001 Site Layout Plan. The combustible waste storage area sizes, maximum individual pile sizes, the volume for each waste type and the maximum storage times are shown in Table 3 Combustible Waste Storage Area Details and relate to the referenced areas on the Site Layout Plan.

**Table 3: Combustible waste storage area details**

| Storage Area Ref. | Storage Area Contents | On Site location | Storage Area Size (L x W x H) | Maximum Volume ($m^3$) | FPP Guidance Maximum Storage Volume ($m^3$) | Maximum Storage Time |
|---|---|---|---|---|---|---|
| Building 1 | | | | | | |
| B1-1 | Unsorted mixed construction & industrial waste feedstock | Building 1 | 16m*6m*4m | 384 | 750 | 3 months |
| B1-2 | Segregated plastics | Sheeted skip container in building | 5m*3m*4m | 60 | 750 | 3 months |
| B1-3 | Segregated paper & cardboard | Sheeted skip container in building | 5m*3m*4m | 60 | 750 | 3 months |
| B1-4 | Segregated wood | Sheeted skip container in building | 5m*3m*4m | 60 | 750 | 3 months |
| B1-5 | Residual mixed waste | Sheeted skip container in building | 7m*9m*4m | 252 | 750 | 3 months |
| B1-6 | Segregated textiles | Sheeted skip container in building | 5m*3m*4m | 60 | 750 | 3 months |
| B1-7 | Segregated metals | Sheeted skip container in building | 5m*3m*4m | 60 | 750 | 3 months |
| B1-8 | Paints | Sheeted skip container in building | 5m*3m*4m | 60 | N/A | 3 months |
| B1-9 | Ferrous Metal | Sheeted skip container or bay in building | 5m*3m*4m | 60 | 750 | 3 months |
| B1-10 | Lead batteries | Battery Storage | 5m*3m*4m | 60 | 450 | 3 months |
| Building 2 | | | | | | |
| B2-1 | Unsorted mixed municipal / residual waste feedstock | Building 2 | 10m*10m*4m | 400 | 750 | 3 months |
| Yard | | | | | | |
| E1 | Wrapped RDF bales | yard | 1.5m*1m*0.8m (typically, 30 bales) | 36 | 750 | 3 months |
| E2 | Wood | Stored in sealed bay externally | 10m*10m*4m | 400 | 750 | 3 months |
| E3 | Street Sweepings | Stored in sealed bay externally | 10m*10m*4m | 400 | 750 | 3 months |

4.10. A maximum pile height of four metres for combustible waste will be enforced on the Site in accordance with the FPP Guidance.

**Particle Size**

4.11. It is considered that the particle size of waste stored on the Site will not be a significant contributor to self-heating, due to the short time that waste will be stored on the Site i.e. three months.

**Waste Storage and Risk to Surface and Groundwater**

4.12. Combustible waste is stored in stockpiles, bays, and containers on impermeable surfacing, see Drawing No. 21/023k 001 Site Layout Plan.

4.13. The containers are designed to help prevent fire spreading, as well as prevent rainwater ingression and waste escaping as they are fully contained.

4.14. Storage areas are accessible by mobile plant and firefighting equipment to allow for a fire inside the storage areas, to be put out. The integrity of the containers for retaining water is checked as part of the Inspection Checklists, see Appendix 1 Inspection Checklist.

4.15. Containers are roll on, roll off. Therefore, they can be removed in the event of a fire by the mobile plant / vehicles present on the Site. Quick removal of these containers will help to prevent fire spreading.

4.16. If safe to do so, in the event of a fire within a container, mobile plant will be used to remove combustible waste from the vicinity of the fire, to minimise the likelihood of a fire spreading. Combustible waste will be transported to an area of the Site which is at least six metres away from any other combustible waste.

4.17. Mobile plant will be used to remove burned waste from the vicinity of the fire, to minimise the likelihood of a fire spreading as burned waste may reignite. Burned waste will be transported to the Fire Quarantine Area.

4.18. A six-metre separation distance is enforced between the stockpiles of waste on Site.

4.19. A six-metre separation distance is not enforced between containers and bays, as waste that is stored within containers are stored in small quantities and there are concrete walls separating the bays.

4.20. Processed RDF is stored in bales outside, on an impermeable surface, draining to the soakaway. These bales are wrapped, and the waste does not come into contact with the waste.

4.21. Only surface water that has come into contact with inert wastes drains to the soakaway.

4.22. Other wastes stored outside include green waste, wood waste and street sweepings. All these wastes are stored in storage bays.

4.23. The storage bays are constructed of an impermeable concrete surfacing and concrete walls. The ground level of the bay falls towards the back wall of the bay. Therefore, surface water is contained towards the back of the bay. If there was a heavy downfall and there was a risk that surface water would escape the bays, then this water would be pumped out and removed from Site by M Gaze Limited.

**Seasonal Variations**

4.24. Imported waste is mixed household, commercial and industrial waste. There may be seasonal variations regarding the amount of waste imported on to the Site. The export of waste will be increased during these variations to ensure that maximum storage durations of waste are not exceeded.

4.25. Additionally, the Site is located in Norfolk in which on average, there are 15 days per year that are above 25°C and 3 days per year above 30°C.

**Managing Temperatures within Waste Piles**

4.26. Waste storage time for combustible wastes is minimised to reduce the likelihood of heat building up within a waste pile to a point to where self-combustion could occur.

4.27. Combustible waste stored on the Site will be stored for a maximum of three months. The quick turn-around of waste will drastically reduce the risk of self-heating within waste piles.

4.28. The FPP Guidance does not require that an operator monitors temperatures or routinely turns piles if waste is stored for less than three months. There is therefore no proposal to monitor temperatures or routinely turn piles on this Site.

**Lithium-Ion Batteries**

4.29. Lithium-Ion Batteries have the potential to explode when damaged, punctured, or overheated and are a significant ignition source for fires on waste sites.

4.30. Site operatives must be vigilant of items that may contain Lithium-Ion batteries when sorting incoming waste. Lithium-ion batteries must be separated and stored separately to other combustible waste types.

4.31. Lithium-Ion Batteries will be stored in quarantine within a container and under weatherproof covering.

**Persistent Organic Pollutants**

4.32. Some waste types stored on the Site may contain persistent organic pollutants (POPs) e.g. PVC plastic waste.

4.33. In the event of a fire, the fire service will be informed that there are wastes containing POPs on the Site (if there are any at that time) and will be notified where these are stored.

# 5. Detecting a fire

### Detecting a Fire Outside of Operational Hours

5.1. The CCTV system can be monitored remotely via a smartphone at all times during non-operational hours. The Site Manager can view the CCTV system 24/7. Signs of fire can be identified from the CCTV cameras and thermal cameras. Should a potential fire (or unusual heat generation) be identified on Site then the Site Manager will contact the emergency services.

5.2. Site Managers monitor the system throughout the night but at no set frequency. If evidence of fire or security breach is observed on the CCTV system remotely, then instructions will be sent to the appropriate member of staff or emergency services to attend the Site.

5.3. Norfolk Fire and Rescue Service have a target to respond to 80% of emergencies within 10 to 13 minutes for incidents where life is at risk. These targets were met every month in April to August 2021[1].

5.4. The nearest fire station, Norfolk Fire and Rescue headquarters is located approximately a 6-minute drive from the Site.

5.5. In the event that the Director (or other senior management) is the first responder, they will attempt to suppress the fire before the Emergency Services arrive, only if it is safe to do so. Information relating to active firefighting measures are included in Section 7 Suppressing a Fire and Firefighting Techniques.

### Detection of a Fire during Operational Hours

5.6. The CCTV system is operational on the Site and is monitored by PSH Environmental Limited employees during operational hours. Site personnel are always also on Site during operational hours.

5.7. All members of staff are trained to be vigilant to the signs of fire and to report any incidents to Site management.

5.8. The emergency services will be informed immediately, by the Operator, if there is any evidence / suspicion of a fire on the Site.

5.9. There will be two fire watches completed each working day. One will be completed at midday and one at the end of each working day. The fire watch will include checking for signs of a fire/heat build-up/smouldering materials from hot exhausts or engines. The twice daily fire watches are included on the Daily Inspection Checklist, see Appendix 1 Inspection Checklist.

5.10. Additionally, visual inspections are carried out throughout the working day by Site operatives to check for fires / potential causes of fire. Site operatives sort and separate the waste throughout the day and will therefore be able to quickly identify any signs that the waste is heating up, producing smoke, or showing any other signs of a fire.

[1] https://www.norfolk.gov.uk/safety/norfolk-fire-and-rescue-service/response/how-quickly-are-we-getting-to-you

## 6. Contingency measures during a fire

6.1. PSH Environmental Limited can quickly cease waste imports in the event of a fire. Vehicles used to import waste on to the Site are operated by PSH Environmental Limited and customers. All Site staff will be instructed to cease the importation of waste in the event of a fire.

6.2. Nearby businesses / residents may be contacted in the event of a fire. Contact details for these contacts are included on the Key Contacts Form within the EMS. In the event of a fire, all staff will inform others of the fire by activating the fire alarm / bell / horn. These are located throughout the buildings and Site office.

# 7. Fire suppression and firefighting

### Use of the Quarantine Area

7.1. PSH Environmental Limited have a Fire Quarantine Area that accords with the FPP Guidance requirements, see Drawing No. 21/023k 001 Site Layout Plan. The Fire Quarantine Area may be used for storing materials to prevent the spread of fire or to isolate materials that are likely to re-ignite or have been burned. The isolating of materials will aid in the overall suppression of a fire. The Fire Quarantine Area will be kept free of materials so that it can be used in the event of a fire.

7.2. The Fire Quarantine Area has sufficient separation distances (minimum of six metres) from any sources of ignition or building / perimeter boundary. The Fire Quarantine Area will be able to store approximately 200m$^3$ of waste which is 50% of the volume of the largest pile of waste stored on the Site.

7.3. Waste that has been placed in the Fire Quarantine Area will be removed from Site within five days.

7.4. The Fire Quarantine Area will allow for faster active firefighting with regard to the removal of burning / burned material.

### Use of Water

7.5. Fire extinguishers will be present on the Site. Fire extinguishers are located in all vehicles, all buildings and in the Fire Quarantine Area, see Drawing No. 21/023k 001 Site Layout Plan.

7.6. Fire extinguishers will be used as a first response measure in the event of a fire or to extinguish smaller fires before a larger problem arises.

7.7. Site operatives must only tackle small fires on the Site and must not put themselves at risk by trying to fight medium / large fires. In the event of a medium / large fire, the emergency services will always be contacted. Upon arrival on Site, the fire service will assume overall control of all firefighting activities.

7.8. Water is available via two fire hydrants, the nearest is located approximately 271 metres hose laying distance away from the Site entrance, see Appendix 2 Confirmation of Fire Hydrant. The Fire & Rescue Service have provided a map of how the hose will be lay, see Figure 1 Location of Fire Hydrants.

7.9. FPP Guidance states 2,000 l/min for 3 hours is appropriate for a 300m$^3$ stockpile of waste. Norfolk Fire and Rescue Service have advised that that all hydrants meet the British Standard (BS 750:2012) and therefore are able to deliver a maximum flow rate of 2,000 l/min to a device.

7.10. The emergency services can utilise the nearby fire hydrant in the event of a fire.

7.11. Whilst the Fire & Rescue Service are attaching their hose to the fire hydrant, water in the fire engine will be utilised. On average, a fire engine holds approximately 3000 litres of water.

### Building 1

7.12. It is calculated that a total of 460,800l (460.8m$^3$) of water would be required to extinguish a fire involving the largest pile of combustible waste stored on the Site in Building 1 (384m$^3$). It is calculated that it will take approximately 230 minutes (approximately 3.8 hours) to extinguish this fire using the water from the nearby hydrants alone, which is within the maximum 4-hour time stated in the FPP Guidance. The calculation is as follows:

- 2,000l/min x 180 min (3 hrs) = 360,000 l of water to extinguish a pile involving 300m$^3$ of waste.
- 360,000l of water / 300m$^3$ of waste = 1,200l of water per m$^3$ of waste.
- 1,200l per m$^3$ x 384m$^3$ (largest pile of waste on Site) = 460,800l (460.8m$^3$).
- 460,800l of water / 2,000l/min = 230 minutes (approximately 3.8 hours) to extinguish a fire involving the largest pile of combustible waste stored in Building 1.

**Building 2**

7.13. It is calculated that a total of 480,000l (480m$^3$) of water would be required to extinguish a fire involving the largest pile of combustible waste stored on the Site in Building 2 (400m$^3$). It is calculated that it will take approximately 4 hours (240 minutes) to extinguish this fire using the water from the nearby hydrants alone, which is within the maximum 4-hour time stated in the FPP Guidance. The calculation is as follows:

- 2,000l/min x 180 min (3 hrs) = 360,000 l of water to extinguish a pile involving 300m$^3$ of waste.
- 360,000l of water / 300m$^3$ of waste = 1,200l of water per m$^3$ of waste.
- 1,200l per m$^3$ x 400m$^3$ (largest pile of waste on Site) = 480,000l (480m$^3$).
- 480,000l of water / 2,000l/min = 240 minutes (4 hours) to extinguish a fire involving the largest pile of combustible waste stored in Building 2.

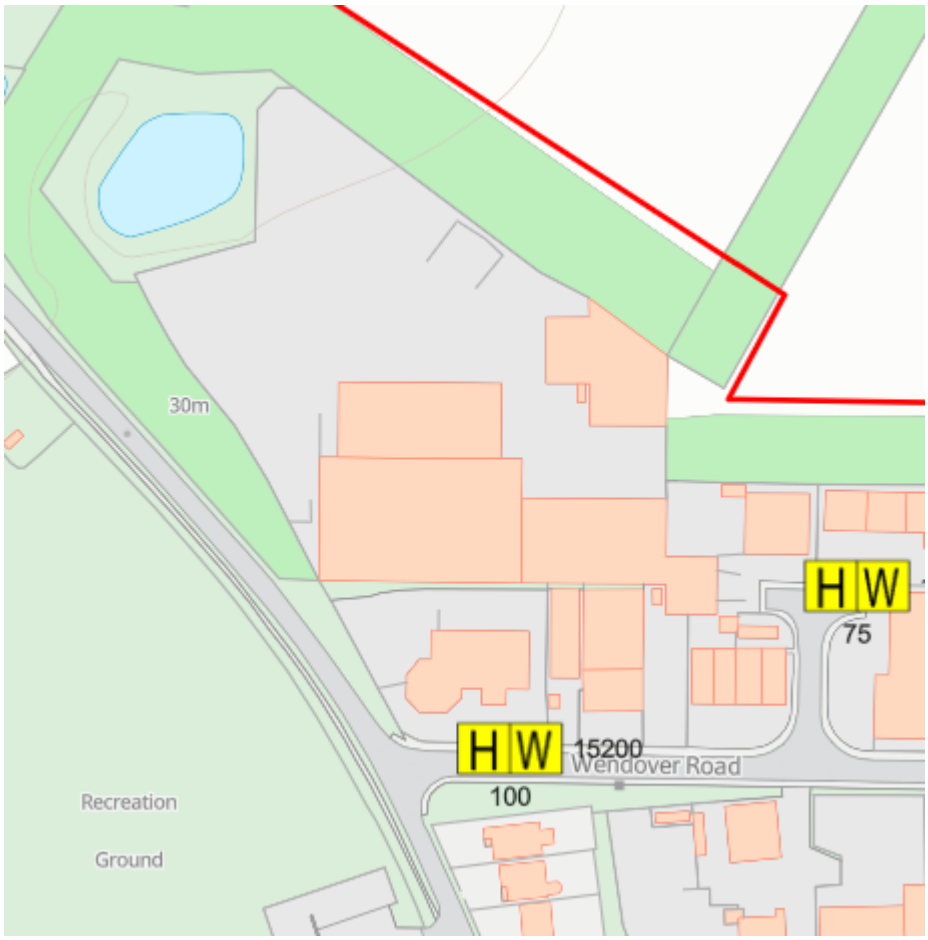
**Waste Stored Outside on the Yard**

7.14. It is calculated that a total of 480,000l (480m3) of water would be required to extinguish a fire involving the largest pile of combustible waste stored on the Site in the yard (400m$^3$). It is calculated that it will take approximately 4 hours (240 minutes) to extinguish this fire using the water from the nearby hydrants alone, which is within the maximum 4-hour time stated in the FPP Guidance. The calculation is as follows:

- 2,000l/min x 180 min (3 hrs) = 360,000 l of water to extinguish a pile involving 300m$^3$ of waste.
- 360,000l of water / 300m$^3$ of waste = 1,200l of water per m$^3$ of waste.
- 1,200l per m$^3$ x 400m$^3$ (largest pile of waste on Site) = 480,000l (480m$^3$).
- 480,000l of water / 2,000l/min = 240 minutes (approximately 4 hours) to extinguish a fire involving the largest pile of combustible waste stored in the yard.

7.15. Further information regarding managing firewater on the Site is provided in Section 8 Recovery after a fire.

**Figure 1: Location of fire hydrants**



**Firefighting Techniques**

Out of Operational Hours

7.16. The risk of self-combustion and self-heating of waste on the Site is low because of the following:

- Volumes of waste stored on the Site are less than the maximum stockpile sizes referenced in the FPP Guidance.
- The Operator operates a first in first out policy.
- During the night (non-operational hours), temperatures outside will be reduced and there will be increased airflow to the waste.
- There are thermal imaging cameras on Site, that will detect the first signs of self-heating.

7.17. There is a fixed water-based suppression system on Site. The control system activates a fixed water-based cannon suppression system at 95°C in Building 1 and 2. The system is designed to immediately remove surface flames from within the storage areas, ceasing spread of the fire and actively remove the presence of oxygen from the pile surface. This enables the waste then to be removed in a controlled manner and treated through the application of water.

7.18. A fire watch will be completed prior to Site closure to ensure there are no signs of self-heating.

7.19. Generally, the steps described in the section below on 'Firefighting Techniques - Within Operational Hours' would be implemented in the likely event the operator arrives on the Site prior to the emergency services.

Within Operational Hours

7.20. PSH Environmental Limited implement the following measures to minimise the impact of a fire:

- The emergency services will be contacted.
- If safe to do so, the fire extinguishers will be used to tackle any small fire on the Site.
- If safe to do so, mobile plant will be used to remove combustible waste from the vicinity of the fire, to minimise the likelihood of a fire spreading.
- If safe to do so, the above mobile plant will be used to remove burned waste from the vicinity of the fire, to minimise the likelihood of a fire spreading as burned waste may reignite. Burned waste will be transported to the Fire Quarantine Area.
- The Site Manager will liaise with the emergency services upon arrival to inform them of the locations of combustible materials and the active firefighting actions taken up to this point e.g. any chance of reignition of burned waste.
- The emergency services can use water from the hydrants, located close to the Site, to extinguish the fire and the water supply on the Site.
- Neighbouring residents and key contacts (including firewater removal company) may be contacted.

7.21. Fire Procedures within the EMS will be prepared to ensure the implementation of the requirements of this FPP on the Site. These procedures will form the basis for training and shall be followed in the event of a fire.

## 8. Recovery after a fire

### Drainage

8.1. Surface water drains collect water from the roofs of the buildings on Site and then lead from the roofs, across the site to the edge of the slab (concrete surfacing) on the Site. Surface water then leads from the edge of the slab to the soakaway (lagoon).

8.2. The surface water drains are laid to fall towards the soakaway (lagoon). To confirm, the only soakaway on the Site is the lagoon. Before surface water enters the soakaway, surface water goes through an interceptor (labelled as a storm separator on the Drainage Plan), located to the east of the soakaway.

8.3. The interceptor is a StormCleanser™. The StormCleanser™ is specifically designed to remove suspended solids, hydrocarbons, and floatable debris from the surface water runoff. Surface water enters the system via the inlet pipe, where the internal geometry enables low energy forced vortex flow patterns. These flow patterns allow the floatable material to gather and solids to settle at the bottom of the treatment chamber for subsequent removal. Settled sediment is retained within the sump storage of the unit, allowing easy access for suction cleaning. Re-suspension of the solids is minimised by the provision of a baffle plate (Catch Skirt), positioned above the sediment storage sump. There is also a valve fitted on the StormCleanserTM that can be used if needed. For example, if a fire was to break out and water was used as a suppressant method, the valve will prevent pollution from the water used entering the lagoon.

8.4. The surface water then goes to the soakaway and percolates through to the ground once suspended solids, oil etc is removed when it goes through the StormCleanserTM.

8.5. If there is a surface water surge more than the maximum treatment flow rate within the interceptor, it overflows a weir within the interceptor. This reduces the surface water flow rate.

### Managing Firewater

8.6. In the event of a fire, firewater will be contained on Site at all times.

Building 1

8.7. See the calculations of the volume of water / depth of water in Building 1 below:

- 460.8$m^3$ (volume of water that will need to be contained in Building 1) / 3,500$m^2$ (area of Building 1) = 13cm (depth of firewater within Building 1).

Building 2

8.8. See the calculations of the volume of water / depth of water in Building 2 below:

- 480$m^3$ (volume of water that will need to be contained in Building 2) / 1000$m^2$ (area of Building 2)= 48cm (depth of firewater within Building 2).

8.9. In the event of firewater within the buildings, any roller doors not used by the Fire Brigade, will be closed (if safe to do so) and sandbags will be placed along the access/egress to prevent water leaving the building. The sandbags can be stacked up to one metre in height. The sandbags will be stored on pallets in a sealed shipping container, that is easily accessed by a forklift.

Outside Yard

8.10. See the calculations of the volume of water / depth of water in the yard below:

- 480$m^3$ (volume of water that will need to be contained in the yard) / 5,600$m^2$ (area of the yard) = 8.5cm (depth of firewater within the yard).

8.11. The risk of fire in the waste stored outside in the yard is reduced due to it being outside in the elements (wind and rain). In the event of a fire in the yard, water will be contained on the Site, it will not go to the

soakaway. Sandbags will be used to contain water in the lowest areas on the Site, away from the soakaway.

8.12. The lowest points of the yard are within the bays, as the surfacing falls to the back of the bays. The bays are located at the highest point at the Site. Water will be contained within these bays. If water escapes the bays, then M Gaze Limited will be deployed to pump away the water.

**Contingency Measures – Managing Burned Materials**

8.13. Burned waste will be monitored following a fire, to check for the waste re-igniting and to ensure the fire is completely extinguished. Combustible waste may be removed from the location of the fire to the Fire Quarantine Area if necessary. This removal of burned waste will help to minimise the risk of fire spreading. Burnt materials will be sent to a suitably licensed landfill. Such landfills located in close proximity to the Site include those operated by Biffa Limited (Hazardous Waste) and FCC Environmental Limited (non-hazardous waste).

8.14. Ash and partially burned materials resulting from a fire will be contained and then removed from the Site. This is to reduce the risk of contaminants potentially leaching into surface water features / reaching groundwater. Burned materials will be sent to a suitably licensed landfill.

8.15. The importation of waste will resume as soon as the risk of further fires has been considered and the Site is determined to be safe.

## Drawings

| | |
|---|---|
| Drawing No. 21/023f 001 | Permit Boundary Plan |
| Drawing No. 21/023k 001 | Site Layout Plan |
| Drawing No. 21/023k 002 | Sensitive Receptor Plan |
| Drawing No. PSRH-CF-XX-XX-DR-A-7100 | Drainage General Arrangement Plan |

## Appendix 1

Inspection Checklists

## Appendix 2

Confirmation of Hydrant Flow Rate from Fire & Rescue Service

## Appendix 3

Fire Detection & What to do Procedure

## Procedure No. 7.7.1 Fire Detection and What to do

*Purpose: To ensure measures are taken to detect a fire on the Site and provide information on what to do in the event of a fire.*

| | | RESPONSIBLE PERSON | RECORD |
|---|---|---|---|
| 1. | This procedure outlines fire detection measures used across different sections of the Site and actions to be taken following the detection of a fire. | | |
| 2. | Fires will be detected by identifying visual (smoke and vapour etc), increased heat and burning odours. Upon detection of a fire, the Site Manager will be notified immediately. | | |
| 3. | Fires may also be detected using the thermal imaging cameras. | | |
| 4. | Appropriate action will be taken to ensure the affected area is isolated and that vehicles and staff are prevented from entering the area. | | |
| 5. | Information regarding fire suppression and containment can be found in Procedure No. 7.7.2 Fire Suppression and Containment. | | Procedure No. 7.7.2 Fire Suppression and Containment |
| 6. | In the event of a fire, it may be necessary to divert incoming waste loads to another facility so as not to disrupt the access and egress of the emergency services. | Site Manager | Appendix A.9 Contingency Plan |
| | **Waste Reception Area** | | |
| 7. | Fires in the waste reception area may be from Hot Loads. Hot Loads are managed in accordance with Procedure No. 7.7.2 Fire Suppression and Containment. | Site Operative | Procedure No. 7.7.2 Fire Suppression and Containment |
| 8. | A Fire Watch will be completed to monitor any signs of excess heat or fire beyond identified Hot Load. | Site Operative | |
| 9. | Staff and any drivers will evacuate the area. If a full site evacuation is needed, people will assemble at the emergency assembly point. | All | |
| | **Waste Operational Areas** | | |
| 10. | Building 1 and 2 have a thermal imaging CCTV system which monitors temperature of wastes stored within the buildings 24/7. | | |
| 11. | If the thermal imaging CCTV system records a temperature of more than 70ºC (degrees) during operational hours, a text is sent to Site Management to notify them of the increased temperature. | Site Manager | Appendix A.5 Fire Prevention Plan |
| 12. | If the thermal imaging CCTV system records a temperature of more than 70ºC (degrees) during non-operational hours, a text is sent to the Fire Team to notify them of the increased temperature. | | Appendix A.5 Fire Prevention Plan |
| 13. | When a text is received, the increased temperature is investigated to check whether a fire has started. | | Appendix A.5 Fire Prevention Plan |

| | | | |
|---|---|---|---|
| 14. | If the thermal imaging CCTV system records a temperature of more than 95ºC (degrees), it will be assumed that a fire has started. | | Appendix A.5 Fire Prevention Plan |
| 15. | If the fire is within a specific area or container, remove other wastes and containers from the impacted area as much as possible. This will help to isolate the fire. | | |
| 16. | The fire alarm will be sounded to alert staff of a fire. If needed, bell or horn will also be used to inform staff of a fire. | | |
| 17. | Shutdown and make safe any plant or equipment that is in use. | Site Operative | |
| 18. | Staff and any drivers will evacuate the area. If a full site evacuation is needed, people will assemble at the emergency assembly point. | All | |

**Offices**

| | | | |
|---|---|---|---|
| 19. | The fire alarm will be sounded to alert staff of a fire. | | |
| 20. | Staff and any drivers will evacuate the area. If a full site evacuation is needed, people will assemble at the emergency assembly point. | | |

**Fire Drill**

| | | | |
|---|---|---|---|
| 21. | A fire drill will be completed on a six-monthly basis as a minimum. This drill will go through what is to be done in the event of a fire and will typically include:<br>• Fire detection.<br>• Fire suppression.<br>• Use of the Fire Quarantine Area.<br>• Firewater containment. | | Form No. 7.7.1a Fire Drill |

## Appendix 4

Control of Causes of Fire Procedure

| | | RESPONSIBLE PERSON | RECORD |
|---|---|---|---|
| 1. | Potential causes of fire on Site are:<br>• Arson<br>• Plant and equipment failure<br>• Electrical faults including damaged or exposed electrical cables<br>• Discarded smoking materials<br>• Hot exhausts<br>• Ignition sources<br>• Leaks and spillages<br>• Build-up of loose combustible waste, dust or fluff<br>• Reactions between wastes<br>• Waste acceptance and deposited hot load<br>• Hot or dry weather<br>• Neighbouring businesses<br>• Prolonged waste storage. | | |
| | **Arson** | | |
| 2. | The Site has security measures in place and actions for when security is breached. Security measures are maintained to prevent breaches in security and the risk of arson from unauthorised access. | All | Procedure No. 3.5 Site Security<br>Procedure No. 3.3 Maintenance |
| | **Plant and Equipment** | | |
| 3. | Plant and Equipment are only used by trained staff. | Site Operative | Procedure No. 1.1 Environmental Training, Awareness and Competence |
| 4. | Plant and equipment are subject to planned preventative maintenance and serviced per manufacturer guidelines. Records of preventative maintenance and servicing are retained by PSH Environmental Ltd. Plant and Equipment may be cleaned when cool to prevent accumulation of grease, oil, fuels, dust, and fluff. | Site Manager<br>Site Operative | Procedure No. 3.3 Maintenance<br>Procedure No. 3.4 Housekeeping, Litter, Pest and Vermin Control |
| 5. | Plant and equipment are stored a minimum of six metres from combustible waste. | Site Operative | Drawing No. 21/023d 002 Site Layout Plan |
| 6. | Any maintenance or hot works on mobile plant are completed outdoors. | Site Operative | Procedure No. 3.3 Maintenance |
| | **Electrical faults including damage or exposed electrical cables** | | |
| 7. | Any electrical works are completed by a suitably qualified person. Competency and other records relating to electrical works are retained by PSH Environmental Ltd. | Site Manager | |

## Discarded smoking materials

| | | | |
|---|---|---|---|
| 8. | No smoking is permitted in waste storage and treatment areas. Smoking is only permitted in the designated smoking area by the Site Office. | | Drawing No. 21/023d 002 Site Layout Plan |

## Hot exhausts

| | | | |
|---|---|---|---|
| 9. | Fire Watches are completed on the plant and equipment that are in use during operational hours. Fire Watches identify dust settling of hot exhausts and engine parts. | Site Operative | |
| 10. | An additional Fire Watch is completed at the end of operational hours to identify any hot plant and equipment and dust settling on hot exhausts and engine parts. | Site Manager | |

## Ignition sources

| | | | |
|---|---|---|---|
| 11. | No vehicles will be parked in waste storage areas. | | |
| 12. | Not Hot Works are completed on mobile plant within waste storage and treatment areas. This is completed outdoors. | | |
| 13. | If Hot Works are needed on fixed plant within Building 1 or Building 2, the area will be cleaned beforehand, and all waste moved more than 10m from the works. | | |

## Leaks and spillages

| | | | |
|---|---|---|---|
| 14. | Leaks and Spillages have the potential to spread fire across the Site. | All | Procedure No. 2.1 Waste Acceptance |
| 15. | Plant and equipment are subject to planned preventative maintenance and serviced per manufacturer guidelines which reduces the risk of leaks and spillages. | | Form No. 3.3a Inspection Checklist |
| 16. | The quantity of fuel stored on Site is subject to the size of the tank. The tank is subject to integrity checks on the Inspection Checklist. Fuel, oil, and other substances are stored in accordance with Procedure No. 3.1 Fuel and Oil Delivery and Storage. Only trained staff will refuel plant and equipment. | | Procedure No. 3.1 Fuel and Oil Delivery and Storage<br>Procedure No. 3.2 Refuelling of Plant and Equipment |
| 17. | In the event of a leak or spillage, the spill response procedure will be followed. | | Procedure No. 7.3 Spill Response |

## Build-up of loose combustible waste, dust or fluff

| | | | |
|---|---|---|---|
| 18. | The Site operates a “first in, first out” approach to waste storage and treatment so it is unlikely for combustible waste, dust or fluff to build up. | Site Operative | |
| 19. | Implementation of the Housekeeping procedure ensures the Site is tidy. | All | Procedure No. 3.4 Housekeeping, Litter, Pests and Vermin Control |

## Hot Works

| | | | |
|---|---|---|---|
| 20. | Hot works are carried out away from other ignition sources e.g. fuel. | | |
| 21. | The area will be checked prior to carrying out hot works to check for potential ignition sources / combustible waste. A check will be made for 15-minutes after hot works have ended, to ensure that no sparks have ignited any combustible waste. | | |

## Reactions between wastes

| | | | |
|---|---|---|---|
| 22. | Authorised wastes accepted onto Site are unlikely to be reactive. Implementation of strict waste acceptance criteria will ensure that no waste types which, when mixed, would create a ‘reaction’ e.g., explosion are accepted on to the Site. | Site Operative | Procedure No. 2.1 Waste Acceptance |
| 23. | Wastes are stored separately by waste type and grade. | | Site Layout Plan |

## Waste acceptance and deposited hot loads

| | | | |
|---|---|---|---|
| 24. | Waste received on Site has been subject to checks implemented through the Waste acceptance procedure. | Site Operative | Procedure No. 2.1 Waste Acceptance |
| 25. | Hot Loads are managed with the Fire Suppression and Containment Procedure. | All | Procedure No. 7.7.2 Fire Suppression and Containment |

## Hot and dry weather

| | | | |
|---|---|---|---|
| 26. | As most waste is stored within Building 1 or Building 2 and the “first in, first out” approach is used, it is not considered that hot and dry weather will increase the risk of fire. | | |
| 27. | If there are more than two days of hot and dry weather, additional Fire Watches are completed. Fire Watches will be completed and recorded regularly for wastes stored outside. | Site Manager | |
| 28. | The temperature of wastes stored outdoors will be checked using the mobile thermal gun. If a temperature of 70ºC is recorded, additional temperature checks are completed. | Site Manager | Appendix A.5 Fire Prevention Plan |

## Neighbouring businesses

29. The Site is located within Rackheath Industrial Estate which contains other industrial premises, including a decorating supplier, wedding dress supplier and suppliers of vehicles and associated parts. These premises are located next to the Site.

## Prolonged Waste Storage

| | | | |
|---|---|---|---|
| 30. | Combustible wastes are stored in accordance with the Waste Storage Plan. | Site Manager | Form No. 2.4.1a Waste Storage Plan |
| 31. | The Site operates a “first in first out” approach to waste storage where possible. This means that wastes are removed from Site as soon as possible. This shortens the duration of waste storage and reduces fire risk. | | |
| 32. | Temperature checks using a mobile thermal gun are completed on a daily basis on all wastes stored on Site. | Site Manager | |

## Appendix 5

Waste Acceptance Procedure

**Procedure No. 2.1 Waste Acceptance** **V.3, October 2023**

*Purpose: To ensure that all waste accepted for treatment is acceptable under the conditions of the Environmental Permit.*

| | | RESPONSIBLE PERSON | RECORD |
|---|---|---|---|
| | **Environmental Permit & Waste Codes** | | |
| 1. | The Environmental Permit contains the list of waste types that are permitted to be accepted at the site. A table containing the codes and descriptions of waste types that are permitted on this site is included at the end of this procedure, see Table 1 and Table 2 Permitted Waste Types.<br><br>If unsure if a load can be accepted, the list of waste types should be consulted. Alternatively, the Site Manager should be consulted. | All | Table 1 Permitted Waste Types |
| 2. | Unsuitable waste types are rejected in accordance with the Waste Rejection Procedure. | Site Operative | Procedure No. 2.3 Waste Rejection Procedure |
| 3. | The maximum amount of waste which can be accepted to the Site each year shall not exceed 200,000 tonnes, as stated in the Environmental Permit. This annual tonnage allowance is divided between the operations completed on Site:<br>• Recycling operations: 150,000 tonnes per annum<br>• Recovery pre-treatment operations (RDF production): 50,000 tonnes per annum | Site Manager | |
| 4. | The Site does not typically experience seasonal variation in quantity or quality of incoming waste material. | Site Manager | |
| | **Waste Pre-Acceptance** | | |
| 5. | Following a customer enquiry, information about the waste is requested from the waste producer. Such information could include type of waste to be placed in the skip. | Site Manager | |
| 6. | For other wastes received at the site, for example soils and construction / demolition waste, information such as site history, site investigation reports / laboratory test reports / hazardous waste assessments will be requested. This information is recorded on the Waste Information Form. | Site Manager | Waste Information Form 2.1a |
| 7. | Review of the information in the Waste Information Form will determine if the waste is acceptable or not, or if there is the need for (further) sampling / testing / Hazardous Waste Assessment.<br><br>A judgement should be made as to the necessity to obtain comprehensive information at this stage. If the source of the waste is not likely to be contaminated, then it may not be necessary to obtain a full site investigation or hazardous waste assessment. If the source of the waste is likely to be contaminated, then a full site investigation and/or a hazardous waste assessment should be requested. | Site Manager | Procedure No. 2.2 Waste Classification<br><br>Waste Information Form 2.1a |
| 8. | If required, a Hazardous Waste Assessment (based on WM3 Guidance) is completed in accordance with the Waste Classification Procedure. | | Procedure No. 2.2 Waste Classification |
| 9. | All associated Waste Information records and Hazardous Waste Assessments will be kept along with Waste Transfer Notes in a secure location. These records will be maintained for a minimum of two years. | Site Manager | Waste Information Form |

| | RESPONSIBLE PERSON | RECORD |
|---|---|---|
| 10. Pre-acceptance information requirements will be reviewed when:<br>• There are changes in the waste.<br>• There are changes in the process generating the waste.<br>• Received waste does not conform to pre-acceptance information provided. | Site Manager | |
| **Collection of waste** | | |
| 11. A driver arriving at a site to collect waste will ensure:<br>• Waste is accurately described.<br>• The waste matches the description given in the Waste Information Form, if available.<br>• A Waste Transfer Note is issued with the load and that the description matches the load.<br>• Loads containing wood comply with the requirements below for wood waste and do not contain potentially hazardous wood. | Site Operative | |
| 12. If the driver suspects the load does not match the description on the Waste Transfer Note, the driver contacts the Site Manager as soon as practicable. The description on the Waste Transfer Station may be changed as a result of discussions and agreement. | Site Operative | |
| **All Vehicles** | | |
| 13. All third-party hauliers used for transporting waste must be an upper tier waste carrier registered with the Environment Agency. | Site Operative | |
| 14. Details of third-party haulier waste carrier registrations will be retained in the Site office. | Site Operative | |
| 15. Periodic checks should be completed on registration certificates of third-party hauliers to ensure they remain valid. If the registration has expired, a copy of the renewed registration is requested. | Site Operative | |
| **Acceptance of Waste onto the Site** | | |
| 16. Drivers of vehicles delivering waste provide a completed Waste Transfer Note to the Site Operative unless a Season Waste Transfer Note has been provided. | | |
| 17. A Season Waste Transfer Note is a document that covers transfers for up to twelve months. Season Waste Transfer Notes may be given to wastes from a given site if the waste is well characterised or a consistently generated waste. | | |
| 18. The Site Operative will complete the section relating to transfer of waste and will return the Waste Transfer Note to the driver keeping a copy of the Waste Transfer Note for their own records. | Site Operative | Waste Transfer Note |
| 19. Unless a Season Waste Transfer Note has been provided, a Waste Transfer Note for every load is obtained from the driver. | Site Manger | Season Waste Transfer Note |
| 20. Waste Transfer Notes are checked to ensure they contain the following:<br>• Vehicle registration and driver's name and signature.<br>• Waste haulier name and valid waste carrier's registration number.<br>• Name, address (of source site) and signature of the transferor.<br>• Name, address (of destination site) and signature of the person receiving the waste (transferee). | Site Operative | Waste Transfer Note |

| | RESPONSIBLE PERSON | RECORD |
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| • Permit number or exemption reference of site receiving the waste (if applicable).<br>• Description of waste including waste type, waste source, waste containment and waste quantity.<br>• List of Waste (LoW) code.<br>• SIC Code of the waste holder using SIC Codes (2007).<br>• Date and time of waste transfer and waste transfer note number.<br>• Confirmation that the Waste Hierarchy has been considered. | | |
| 21. Loads will be visually checked by Site Operatives prior to tipping to ensure that an accurate written description and List of Waste code has been provided on the Waste Transfer Note.<br><br>Authorised waste types for acceptance are detailed in the Environmental Permit and in Table 1. | Site Operative | Waste Transfer Note<br><br>Table 1 Permitted Waste Types<br><br>Appendix B.1 Environmental Permit |
| 22. The weight of the load will either be:<br>• Weighed on site<br>• Weighed prior to arriving on site or<br>• Will be calculated from the volume.<br><br>The volume of waste will be recorded to allow reporting in the quarterly waste returns. | Site Operative | Waste Returns |
| 23. After initial checks by the Site Operative, loads are then directed for tipping, inspection and stockpiling in the offloading area. | Site Operative | |
| 24. Each load is visually inspected during tipping by Site Operatives. Inspections are made to check the accuracy of the waste description provided on the Waste Transfer Note again and to identify the presence of contravening waste types within a load. | | |
| 25. The Site Manager shall be immediately informed if there are discrepancies with the load or its paperwork. | | |
| 26. Any potentially reactive waste types e.g. Lithium ion batteries or hazardous items, identified within an accepted load are separated and quarantined. | Site Operative | |
| 27. If the load is not acceptable under the Environmental Permit, then, if possible, it should be rejected from site in accordance with the Waste Rejection Procedure. | Site Operative | Procedure No. 2.3 Waste Rejection |
| **Wood Waste** | | |
| 28. Only non-hazardous wood can be accepted on the Site under the Environmental Permit. Wood that has been treated or coated with potentially hazardous preservatives or paint may be hazardous. Potentially hazardous wood cannot be accepted at the Site, unless it is evidenced that the wood is non-hazardous. | | |
| 29. Waste wood is categorised in accordance with a grading system A to D. Wood graded A to C is acceptable at the site, however if it includes any of the items listed below, then these must have been separated out and classified to evidence that they are non-hazardous.<br>• Fence posts (not fence panels)<br>• Decking | | |

| | RESPONSIBLE PERSON | RECORD |
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- The following items are only relevant if from pre-2007 buildings:
- Barge boards, fascia's and soffits
- External joinery (wooden windows and conservatories)
- External doors
- Roof timbers
- Tiling and cladding battens
- Timber frames / joists

8.17.

If these are classified as hazardous, they should not be accepted on Site.

30. All wood identified as Grade D should be assumed to be hazardous and not be accepted at the Site unless it is evidenced that it is classified as non-hazardous waste.

31. Grade A wood, is pre-consumer waste wood and untreated wooden packaging (clean untreated wood). Grade A wood includes:
    - Pallets
    - Solid Timber (softwood or hardwood)
    - Furniture / kitchens natural wood (drawers, tables wardrobes)
    - Wooden packaging
    - Cable drums
    - Wood working off cuts
    - Plain chipboard
    - Plywood

32. Grade B wood is mixed wood / business waste wood including building and demolition materials and domestic furniture made from solid wood. This may also include Grade A material as above. This may include treated wood and is regarded as non-hazardous. Grade B wood includes:
    - Decking
    - Skirting boards
    - Window frames
    - Internal doors
    - Garden sheds
    - Fence posts / panels
    - Garden products (furniture, tables)

    The above items are subject to the requirements described in item 29 above.

33. Grade C wood is mixed wood that has been treated and classified as non-hazardous. Grade C wood includes:
    - MFC (Melamine Faced Chipboard)
    - Worktops
    - Hardboard and MDF
    - Civic Amenity Wood Waste

    The above items are subject to the requirements described in item 29 above.

34. Grade D wood is wood waste that has been treated with hazardous substances and therefore likely to be hazardous. This wood may only be accepted if it has been evidenced that it is non-hazardous. Grade D wood includes:
    - Railway sleepers
    - Telegraph poles
    - Waste wood from hydraulic engineering, such as wood from docks
    - Waste wood from industrial applications such as cooling tower timbers, wood block flooring or moulds
    - Waste wood from boats, carriages, and trailer beds
    - Waste wood treated with creosote

| | RESPONSIBLE PERSON | RECORD |
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- Barge boards
- External fascias
- Soffit boards
- External joinery (wooden windows and conservatories)
- External doors
- Roof timers
- Tiling and cladding battens
- Timber frames and joists

The above items are subject to the requirements described in item 29 above.

## Regulatory Position Statement (RPS) 291

35. Amber items of waste wood can be accepted onto Site under RPS291. — Site Manager

36. Amber items of waste wood are not classified as hazardous or non-hazardous. Amber items of waste wood are classified as 'potentially hazardous'.

37. Amber items of waste wood are from buildings between 1950 and 2006 and are: — Site Manager
    - Roof timbers
    - Tiling and cladding battens
    - Timber frames and joists

38. Amber items of waste wood are also from buildings built between 1950 and 1995 and are: — Site Manager
    - Barge boards
    - External timber cladding
    - External doors
    - External windows

39. Amber items of waste wood will be accepted onto Site as non-hazardous under a Waste Transfer Note. — Site Operative

## Waste Containing Persistent Organic Pollutants (POPs)

40. If you are unsure if the waste types you accept onto Site contain POPs, you can: — Site Manager
    - ask the supplier or manufacturer of the material.
    - test the material yourself to find out the concentration of any POPs in it.
    - get the material analysed by a laboratory.

41. A description of the waste to be accepted onto the site is entered in the Waste Information Form during the waste acceptance process. — Site Manager — Procedure No. 2.1 Waste Acceptance; Form No. 2.1a Waste Information

42. In the Waste Information Form, waste upholstered domestic seating is: — Site Manager — Form No. 2.1a Waste Information
    - described as 'domestic seating waste containing POPs'.
    - classified as the waste code 20 03 07.

43. The above description is also used for waste upholstered domestic seating containing POPs where it has been mixed with other waste (not containing POPs). For example, in a skip or bay of bulky household waste.

| | RESPONSIBLE PERSON | RECORD |
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| 44. All reasonable steps are taken to avoid mixing POPs waste with other waste during storage, collection, and treatment. | Site Operative | Procedure No. 2.1 Waste Acceptance<br><br>Procedure No. 2.4 Waste Storage & Handling |
| 45. If POPs waste is mixed with other waste that does not contain POPs, the entire load is considered as POPs waste. | Site Manager | |
| **Compliance Testing** | | |
| 46. Compliance testing will be carried out on waste accepted on to the Site. The purpose of compliance testing is to ensure that the information provided during pre-acceptance was representative on the waste received and that the waste is acceptable. | Site Manager | Waste Information Form 2.1a<br><br>Procedure No. 2.2 Waste Classification |
| 47. If a Hazardous Waste Assessment was not completed as part of pre-acceptance, then compliance testing and a Hazardous Waste Assessment may be carried out as part of acceptance compliance testing. | | |
| 48. A Hazardous Waste Assessment, in accordance with WM3 Guidance, will be completed using the test results received from the laboratory. This Hazardous Waste Assessment will classify the waste as non-hazardous or hazardous. | | |
| 49. If a waste sample is classified as hazardous, then the corresponding waste pile will be quarantined and removed from the Site in accordance with the Waste Rejection Procedure. The Hazardous Waste Classification Report will ensure that this waste is removed under the correct LoW code. | | Procedure No. 2.3 Waste Rejection |
| 50. Hazardous wastes will be sent to a suitably licensed facility and accompanied by a Hazardous Waste Consignment Note. | | Procedure No. 2.2 Waste Classification<br><br>Procedure No. 2.2.1 Waste Sampling<br><br>Pre-acceptance flow chart<br><br>Consignment Note |
| 51. In the case of sending samples of waste wood for analysis for waste classification be sure to request the correct list of analysis determinands which is particular for wood. | | |
| **Tracking and Records** | | |
| 52. Waste Transfer Notes will be appropriately stored for a minimum of two years. | Site Manager | |
| 53. Other records that should be retained include:<br>• Waste Information Form<br>• Sampling Information<br>• Lab data relating to samples<br>• Hazardous Waste Assessments | Site Manager | Waste Transfer Note<br><br>Waste Information Form |

| | RESPONSIBLE PERSON | RECORD |
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| 54. Information from the Waste Transfer Notes will be used to provide the necessary data to complete 'Waste Returns' as required by the Environment Agency. | Site Manager | Waste Returns |

55. The Site has a system for waste inventory and stock control for incoming wastes. The system contains the following information as a minimum:
    - The date the waste arrived on Site.
    - The original producer's details (or unique identifier).
    - Waste Transfer Note number.
    - Waste pre acceptance and acceptance information
    - The intended treatment or disposal route
    - The nature and quantity of wastes held on site
    - Where the waste is physically located on site
    - Where the waste is in designated recovery or disposal process
    - Identifying the staff who have taken any decisions about accepting streams and who have decided on recovery or disposal options
    - Details that link to relevant transfer notes
    - Details of any non-conformances and rejections, including consignment notes for waste rejected because it is hazardous.

**Consequence**

56. The consequence of not following this procedure may result in unsuitable waste being accepted on to the Site. This may constitute a breach in the conditions of the Environmental Permit, in addition to causing potential contamination of the Site.