



Fire Prevention Plan

Armthorpe, Doncaster

Prestige Aggregates Ltd.

Document Reference: 430/1—R1.1 – FPP



Minerals
Waste
Environment

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Document Title: Fire Prevention Plan
Document Reference: 430/1—R1.1 – FPP
Site / Project: Armthorpe, Doncaster
Client: Prestige Aggregates Ltd.

Document Versions

1.1 05/06/2024

Prepared by: MS / LA
Checked by: JMS
Approved by: JMS

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Fire Prevention Plan

Plan version: 1.3

Date of plan: 03/06/2024

Site details

Site name: Prestige Aggregates

Site address: Holme Wood Lane, Armthorpe, Doncaster, DN3 3EH

Operator name: Prestige Aggregates Limited

Who this plan is for

The purpose of this Fire Prevention Plan (FPP) is to guide staff and contractors in the prevention of a fire and to aid staff, contractors, and emergency services in the event of a fire.

The FPP has been produced from the Environment Agency template using information supplied by the operator.

Document revisions

Version	Amendment	Date	Approved by
V1	Original	June 2024	JMS

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In the event of a fire:

If a fire is discovered on site, the following actions will be taken:

- a) DON'T PANIC
- b) RAISE THE ALARM (IF NOT DONE SO ALREADY)
- c) NOTIFY THE SITE MANAGER (IF SAFE TO DO SO)
- d) DO NOT TRY TO TACKLE THE FIRE YOURSELF UNLESS YOU ARE TRAINED IN DOING SO AND YOU ARE SURE OF THE NATURE OF THE FIRE
- e) LEAVE ANY BUILDINGS USING THE NEAREST EXIT (I.E. FIRE DOOR OR ROLLER SHUTTER DOOR) AS QUICKLY AND AS ORDERLY AS POSSIBLE
- f) ASSEMBLE AT THE SPECIFIED FIRE ASSEMBLY POINT WHICH IS LOCATED BY THE SITE ACCESS GATES. THE SITE MANAGER OR DELEGATED OPERATIVE WILL BE IN CHARGE OF CALLING THE EMERGENCY SERVICES ON **999** AND ENSURING THAT ALL PERSONS WHO WERE WORKING AT THE SITE ARE ASSEMBLED SAFELY
- g) INFORM ALL NEIGHBOURING PREMISES WHO ARE LIKELY TO BE AFFECTED
- h) DO NOT RETURN TO THE SITE UNTIL YOU HAVE BEEN GIVEN THE 'ALL CLEAR' BY THE EMERGENCY SERVICES AND THE SITE MANAGER
- i) INFORM THE ENVIRONMENT AGENCY ON THE INCIDENT HOT LINE AND ALSO THE LOCAL OFFICER WHERE POSSIBLE

Types of combustible materials

Combustible waste

Products which may contain combustible materials	Fire risk	Ignition risk
Glass	Very Low / None	Very Low / None
Incidental Material (Plastics)	Medium	Medium
Incidental Material (Paper)	High	High
Incidental Material (Metal)	Medium	Low

Other combustible materials

Other combustible products on site (non-waste and not for processing)	Fire risk	Ignition risk
Hydraulic Oils	High	Medium
Diesel fuel for machines	High	Medium
Engine Oil	High	Medium
Pin and Bearing Grease	High	Medium
Compressed Oxygen Bottles	High	Medium
Compressed Acetylene Bottles	High	Medium

The waste glass on site itself is not combustible, however, given that there is a percentage of paper and plastic which comes in as part of the waste, it will be categorised as such for this document. This waste is the only combustible waste stream brought to site. Other waste streams are that such as brick, rubble and concrete. The whole floor area for the storage of the waste is an impermeable Cement Bound Material (CBM), made from recycled road planings and cement mixture. This is laid at least 300mm thick and compacted using a mechanical roller.

Persistent Organic Pollutants (POPS)

The waste accepted at the site does not contain POPs.

Objectives of this fire prevention plan

There are three primary objectives on this Fire Prevention Plan (FPP):

- To minimise the likelihood of a fire happening
- To aim to extinguish any fire within 4 hours
- To minimise the spread of a fire both within the site and to adjacent properties.

Using this fire prevention plan

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

A copy of the FPP will be stored in the weighbridge cabin and welfare office in a red file clearly marked 'Fire Prevention Plan'. An electronic copy will be held by the site's TCM / Site Manager in case of an emergency.

Prestige Aggregates' Management Systems and FPP form part of the staff and contractor induction to ensure all staff and contractors are aware of their responsibilities and know how to respond in the event of a fire.

Testing the plan and staff training

All new and existing staff will undergo induction training and annual refresher training / assessment on the contents and requirements of the FPP and specifically what to do if a fire breaks out. Tool-Box talks take place every 4 months to inform staff of recent changes either operationally or legislatively. These talks include assessing, compliance and knowledge of the FPP. The inductions, training and fire drills are the responsibility of the TCM/Site Manager.

The FPP will be reviewed annually, or sooner in the event of an operational change, near-miss, or incident. The training records (see example in EMS) will be retained in the site office and an electronic copy held as a back-up.

Activities at the site

Site activities are predominantly physical treatment of waste glass streams, and recycling of aggregate. As only the glass recycling element of the business includes any form of combustible wastes, these operations will be the primary focus of this FPP. All incoming vehicles arrive at the site entrance and report to the weighbridge/site office. The details of the load are recorded, and duty of care documents checked by the operator. If acceptable, a visual inspection is made of the load to correlate the load with the paperwork and Environmental Permit. If the waste is not as described or not suitable, it is rejected and returned either to the producer or to a suitable facility. If the waste complies, the vehicle is directed to the appropriate tipping area.

The whole glass recycling process is in one area on-site. The wagon tips the load and then vacates to the weighbridge to weigh-out and exit the site. During tipping, a second visual inspection is carried out. Should the waste be found to be unsuitable, it is either reloaded and removed from the site or quarantined with removal arranged at the earliest opportunity.

Once the waste has been tipped in the stocking area and a sample taken for testing, where appropriate, the excavator operator picks up the waste with the bucket and puts it into the stacking conveyor, the waste then travels up the belt, going under a magnet to remove any ferrous material, which is deposited into a skip, and via an Air-Hog, which removes paper and plastic, which is also deposited into a skip for removal from The Site. Once at the top of the stacking conveyor it drops into a Vertical Shaft Impact (VSI) crusher, which feeds via a chute a further conveyor belt under gravity. This belt takes the crushed material up and into a screener, which then sizes the material into the necessary piles. Once completed, the sand like elements are moved with a loading shovel to the necessary product bay. The other elements are returned to the re-processing area to be sent around this process again until optimal sizing is achieved.

Other products on site are tipped in different areas of the site in corresponding bays, following the same entry and exist procedures via the weighbridge. Once the material has been tipped, it is deposited into the corresponding bay with a loading shovel. All bays are built with the same fire-resistant blocks that the glass bay is made from and also built on the impermeable CBM on the floor.

Prestige Aggregates Limited employs a fitter who is trained in Abrasive Wheel use and also for Welding. These activities, where possible, take place within the workshop (off-site). The Oxygen and Acetylene bottles are kept within the workshop in a cage. The fitter is the only individual who is authorised to use these items. Any work taking place outside the workshop is subject to additional STOP (Substitute Technical protective measures Organisational protective measures Personal protective measures) assessments to manage the associated risks of these tasks.

Rejected wastes discovered at any stage in the process will be deposited in the quarantine area or rejected. Where necessary, particularly where the rejected waste discovered would be classed as a difficult, hazardous, or clinical waste, the Environment Agency will then be contacted to agree a course of action. The contents of the quarantine area(s) will be recorded in the site diary.

For outgoing wastes produced on-site, the driver of the collection vehicle will be instructed to report to the site/weighbridge office or the machine/plant operator. All relevant documentation will be completed, and the vehicle will be passed to pick up the load and take it to the designated recycler/disposal site. The product or waste will be loaded using the loading shovel.

Prevailing Wind



Wind rose from willyweather.co.uk (accessed 05/06/2024)

Site plan

The site plans are attached as Appendix 1 to this document:

430/1 – 1 – Site Layout Plan

430/1 – 2 – Schematic Drainage Layout

430/1 – 3 – Green Line Plan

430/1 – 4 – Fire Plan

Planned events and reasonably foreseeable unplanned events

Planned downtime

During planned downtime, material will be diverted to an alternative site through prior agreement and no waste would be accepted on site unless the site can accommodate it and process without delay.

Temporary Site Closure / Unplanned Events

Preparation for reasonably foreseeable unplanned events will be made by prior agreement to divert waste to an alternative, suitably licenced site, until such a time when The Site is able to accept waste.

Manage common causes of fire

Arson

The entire site, excluding the main gate, is bunded or has high walls formed from concrete 'lego' blocks, and will have security fencing, where applicable, on the bunds. The main gates are padlocked when the site is not manned.

The gates, fencing and bunds will be checked on a regular basis (daily) and the results of the inspections will be marked in the site diary. Defects in the gates and fencing which may permit unauthorised access to the site will be recorded in the site diary. Until repair is carried out, temporary measures will be taken before the end of the working day, to ensure that access to the site through the defective gate/fence is not possible.

During operational hours, all visitors are asked to sign in to and out of the site, and are accompanied at all times. Any unauthorised persons are reported to the local police.

Access to the site is not possible outside of normal operational hours (06:00-17:00).

Plant and equipment

The following plant and equipment are / will be used on site for the movement and processing of waste:

- HGVs (attending site, not located on site at all times)
- Loading Shovel
- Excavator
- Stacking Conveyor
- VSI Crusher
- Screener
- Jaw Crusher
- Scalper

Plant is only operated by trained drivers / operators. Training includes the requirement for daily checks for the specific plant operated in order to ensure they are operated safely and to prevent the failure of equipment which could have potential adverse impacts on the operations or the site.

Preventative maintenance is also in place for each item of plant or equipment. This is in place through manufacturers' maintenance and on-site internal preventative maintenance which is recorded in the preventative maintenance check sheet with any defects reported to the Site Manager for action and recorded in the site diary. All plant is equipped with a fire extinguisher, either carried in a cab for example, or attached to or next to fixed plant.

All unused mobile plant and machinery will be parked a minimum distance (6 meters) away from combustible waste sources. This will limit the potential for fire spread from machinery to material. All machinery will be visually inspected at the beginning and end of every shift.

Any major defects found during the daily site inspection which are likely to lead to a breach of permit conditions will be repaired or rectified by the end of the working day in which they are found, where possible. If a repair is not possible by the end of the working day the EA will be contacted to agree a suitable timescale for repair.

All defects and problems likely to give rise to pollution will be marked on the record form or similar form with repairs/solutions being carried out immediately.

Electrical faults including damaged or exposed electrical cables

Electrics certification

All electricals are checked, and PAT tested. The relevant test certificates can be found in the company's office. External cables are armoured and checked as part of site daily checks. Any faults recorded are actioned by the full-time fitter.

Regular maintenance and electrical checks are carried out by a qualified electrician throughout the year.

Electrical equipment maintenance arrangements

All electrical equipment will be included in a 'Electrical Equipment Maintenance Register' and will be checked on an annual basis. As above, PAT testing is carried out annually. The relevant test certificates can be found at the site office.

Discarded smoking materials

Smoking on site policies

Smoking is strictly prohibited on site.

Hot works safe working practices

Hot works would only occur on site as part of maintenance or repair programmes for plant and equipment, and do not form part of the waste processing operations at the site. A Hot Works Permit must be gained prior to hot works commencing, which will only be granted once a risk assessment and method statement has been produced. All dust and debris will be removed from the item requiring repair prior to hot works commencing which will be confirmed by the maintenance operative and site manager. A fire watch (see page 12) is carried out for at least 1 hour following completion of hot works. All hot works must have easy access to a fire extinguisher and must be monitored by the site manager. External contractors must be inducted and must also complete an appropriate risk assessment and method statement, agreed with the site manager who will issue the Hot Works Permit, prior to carrying out hot works.

Welding and Abrasive Disk work is predominantly undertaken within the workshop. This is undertaken by a qualified staff member. Manufacturers' instructions are followed for safe use of equipment. When required, a watcher is used with both Carbon Dioxide and Power Fire Extinguishers are available.

All hot works are operated under Risk Assessments for tasks, additional STOP assessments are completed should the work not be possible within the workshop.

Industrial heaters

Use of industrial heaters

The weighbridge office has an electrical heater installed. Measures are in place (signage and daily checks) to ensure that heaters are never covered and proper ventilation is maintained when heaters are in use.

Hot exhausts and engine parts

Vehicles on site are checked prior to a shift starting as part of the site daily checks and are cleaned down periodically throughout the day and at the end of the shift. All Plant has a fire extinguisher installed within the cab. Fire watch procedures are in place as stated below.

Fire watch procedures

Fire watch procedures are in place at the site. A fire watch is carried out three times during the shift (roughly mid-morning, middle and end). Each fire watch is carried out for a 15-minute period. The fire watch involves visual observations, to check for things such as steam or smoke, or visual unusual heat radiation from a potentially combustible stockpile. Thermal imaging cameras (FLIR) are not used given the low risk of combustion.

A fire watch is carried out in the following circumstances:

- As part of daily visual observations of the stockpiles
- If a hot spot is identified by the following observations steam, smouldering or smoke.
- If hot works are required near to potentially combustible waste.

If a hot spot is found during the fire watch process, then the waste is either wetted down and / or spread and turned or smothered with inert material (if necessary). It is the site

manager’s discretion as to which method is most appropriate. If the hot spot does not cool when mitigation measures are actioned, and a combustion incident occurs then active firefighting would be carried out by fire trained staff in accordance with the active firefighting procedure (as detailed in this FPP). If there is a failure to tackle the fire safely then the fire service would be called. The EA would be informed of any incident of fire, regardless of whether the fire services were required.

Ignition sources

Ignition sources are listed below and are kept at least 6 metres away from combustible material.

Potential Ignition Source	Management of ignition source
Incoming waste contamination	Waste brought into the site could have contamination present including potential ignition sources such as batteries. Waste acceptance procedures are in place and visual inspections are made at 3 points along the process. Any waste found to be non-conforming is rejected at the earliest opportunity or quarantined ready for removal. Visual checks are carried out throughout the day by the site manager and site operatives, and fire watches are carried out.
Hot works	Hot works are managed through a permit process and only carried out in designated areas, unless for specific parts of fixed plant. Fire extinguishers are made available during all hot works and a fire watch is in place following completion of hot works.
Smoking	Smoking is prohibited on site.
Naked flames	There is a ‘no naked flame’ policy throughout the company.
Arson / vandalism	Security fencing / bunds and CCTV in place.
Heaters	There are 2 electrical heaters in each work cabin. Heaters are never covered and the proper ventilation procedures are in

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	place. Heaters are more than 6m away from any combustible waste storage.
Hot exhausts	All vehicles are cleaned down, when necessary, throughout the day, and at the end of each shift. Regular fire watches are carried out throughout the day.
Plant failure	Plant is maintained to the manufacturer's standards with planned preventative maintenance in place.
Operational sparks	Training is in place for all mobile plant operators to prevent contact or scraping of buckets on the floor of buildings / sealed surface areas to prevent the production of sparks.
Used batteries	Batteries no longer fit for use are stored within a quarantine cabin, at least 6m away from any combustible material. These are removed by an approved waste carrier to an approved facility, when there is enough waste to warrant the removal.
Build-up of waste	Maximum volumes of waste are in compliance with the EMS. All equipment is cleared of waste at the end of the shift and periodically throughout the day, where necessary.

Leaks and spillages of oils and fuels

All fuel storage tanks on site are bunded to contain any potential fuel leaks and are capable of containing a minimum 110% of the volume of the fuel tank. All pipework and associated infrastructure are located within the bund. Electronic locks are fitted to tank valves to prevent unauthorised operation. All valves and gauges on the tanks are constructed to prevent damage from frost. All storage tanks are inspected daily for damage, cracks or holes and repaired at the earliest opportunity if any are found.

All plant and vehicles on site are subject to routine preventative maintenance and manufacturer's maintenance. A spillage procedure is in place (in the EMS), which would be followed in case of leaks or spillage of oils or fuels.

A Spill Kit is available on-site (located in the weighbridge cabins with additional materials stored in the office / workshop off-site) including sand and absorbents. Spill kits will be checked as part of the site daily inspections to ensure sufficient supplies are available as and when required. Waste operations will be carried out on an impermeable surface with a sealed drainage system where required.

Build-up of loose combustible waste, dust, and fluff

Daily checks of plant and equipment include the requirement to check and ensure that any loose waste is removed. This has the potential to be generated from the waste glass stream and can become loose when it is processed. There are no issues on site with regards to the build-up of dust or fluff.

A cleaning regime is in place at the end of every shift.

Reactions between wastes

The types of waste brought into The Site are unlikely to cause reactions. However, any incompatible waste encountered would be stored separately or quarantined until it can be removed to a suitably permitted site.

Waste acceptance and deposited hot loads

The waste acceptance procedure is as follows:

- All incoming waste vehicles report to the weighbridge at the site entrance. The details of the load are recorded, and duty of care documents checked by the operator. Acceptable waste types are listed in The Site's Permit.
- If accepted, a visual inspection is made of the load to correlate the load with the paperwork. The visual inspection also identifies potential fire risks and hot loads at an early stage. Each load is checked for steam or smoke, batteries (in particular lithium-ion batteries), oils or other contaminants (including rags soaked in oils or chemicals).
- If waste is not as described or not suitable, it is rejected.
- If the waste complies, the vehicle is directed to the appropriate tipping area.
- If any unacceptable wastes are found during or after the load has been tipped, they are quarantined in the designated quarantine area until the customer has been contacted to arrange onward movement and the Environment Agency informed.

The Site does not accept hot loads. If a load is later found to be hot after acceptance, it is moved to the quarantine area and a fire watch is carried out.

Hot loads are identified during the visual inspection of incoming waste, during initial inspection and during tipping. If an incoming waste load is steaming or smoking, then

the load is considered hot. Other potential fire risks that are identified at the weighbridge include batteries, oils, or other contaminants and rags soaked in oils or chemicals.

If a hot load is determined to be an immediate fire hazard or an emergency, then the active firefighting procedure is implemented.

Hot and dry weather

Daily fire watch checks will be carried out three times a day, as a minimum. During summer months when temperatures are in excess of 28°C, a fire watch will be carried out hourly on external materials through a visual inspection. Waste is stored outdoors though is unlikely to combust due to heating from sunlight.

Dust suppression is utilised during hot and/or dry conditions. Mist cannons are also used on site for additional coverage when / where required.

Prevent self-combustion

General self-combustion measures

The FIFO (First In, First Out) stock rotation principle is applied throughout The Site to ensure waste is not stored for longer than necessary and that older waste is moved before the newer, incoming waste. Most waste is processed as it arrives on site. Regular site inspections ensure that freeboard space is maintained, and piles are managed correctly.

The combustible waste piles are stored within fire-resistant bays. The fire watch procedure is followed to identify if any waste is self-heating.

The maximum dimensions of stockpiles of specific waste types are complied with to ensure that the stockpiles can be managed for heat build-up and that the correct separation distances are maintained. Complying with the maximum stockpile dimensions ensures that there is the lowest possible risk of fire spreading between piles of waste and between bays.

If there is plant failure and it is necessary to store waste for longer than specified in the EMS, then the fire watch is carried out more regularly.

Manage storage time

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

The details of incoming waste are recorded at the weighbridge and the duty of care documents are checked by the operator to check the load is acceptable. Waste is initially processed immediately upon arrival. The volume of remaining waste on site is calculated by deducting the finished product from the total received on site. It is aimed that all waste is processed within 10 days of receipt. It is not expected that waste from recirculation (when re-processing is required) would take longer than 90 days to be re-processed enough to become a finished product.

The quarterly waste returns are produced based on the details recorded on the site's recording system. The system records incoming and outgoing products or waste to automatically update the volume of waste on site at any one time. The system is updated, at a minimum, daily.

The following table shows that maximum storage times for different types of waste on site:

Waste stream	Location (must match site plan)	How it is stored For example this may include piles, bays, containers, skips, racks, bales	Max. time it will be stored
Glass Waste	Waste Glass Bay	Bay(s)	3 months
Incidental materials	Skips in processing area	Skip(s)	6 weeks
All other waste (non-combustible)	Inert waste bay	Bay(s)	3 months

If the maximum storage capacity of the site is reached, then no further waste would be accepted until waste can be removed from site and taken to a suitably permitted facility.

If waste is stored for longer than the durations listed above due to variations in supply and demand, plant failure or another emergency, then stockpiles will be specifically monitored during daily fire watches and the readings recorded in the site diary.

Stock rotation policy

The FIFO principle is applied to all waste types. The FIFO procedure will be followed for any material that is going to be processed on site, thus ensuring stockpiles of historic material do not build up. When material arrives, the Weighbridge operative directs vehicles to the appropriate tipping area to be offloaded and checked. Material is then processed from the front of the stockpile which ensures material is processed in line with the 'first in first out' principle.

Recirculated waste stock is rotated continually by the operators on site. It is moved by loading shovels and excavators towards the operator that feeds it into the plant. When it is turned over it is moved closer to the operator and allows for a free flowing rotation to minimise the risk of fire.

Monitor and control temperature

Reduce the exposed metal content and proportion of 'fines'

Larger metal fractions are removed from loads as they are tipped on site. The initial process is to put the load into a stacking conveyor which has an over-band magnet on it. The scrap metal bin is collected and replaced by an approved waste carrier and facility when it is full. When working at optimal capacity it would typically take 4-6 weeks to fill the skip.

Monitoring temperature

Glass waste temperature does not reach sufficient temperatures within the pile sizes due to the low amount of paper and plastics, and the processing timeframe, to require temperature measurements. Manual temperature monitoring is therefore not carried out. The procedure used is at the Site Manager's discretion. Should neither of these techniques work, and a combustion event occurs, the active firefighting procedure takes over.

Should a plant breakdown occur that would mean that waste would be stored beyond 3 months, the temperatures will be monitored until the breakdown had been repaired and the processing times return to below 90 days.

Controlling temperature

Waste stockpiles are agitated during the loading/sorting and segregating process which prevents the build-up of heat. The processing of waste does not produce additional heat.

The site operates under a FIFO principal to ensure that older waste is processed before new waste, reducing standing times.

No specific procedures are required for controlling temperature (other than fire watches, detailed above).

Dealing with hot weather and heating from sunlight

Waste is stored outdoors and is unlikely to combust due to heating from sunlight.

In hot weather (above 28 degrees), more regular fire watches will be carried out every 2 hours. Plant dust suppression and mist cannons are used to dampen down material during sustained periods of hot and dry weather.

Waste bale storage

Waste bales are not produced or stored on site.

Manage waste piles

Storing waste materials in their largest form

Waste is stored in its delivered form (predominantly 50mm). Waste arriving at The Site is processed at the earliest opportunity. Equally, once processed, waste leaves The Site at the earliest opportunity. Wastes containing larger elements are not accepted at the site. Any loads containing such items will either be rejected upon arrival, or quarantined and removed from site at the earliest possible time.

Maximum pile sizes for the waste on your site

Waste stream	Location (must match site plan)	How it is stored For example this may include piles, bays, containers, skips, racks, bales	Max. length / m	Max. width / m	Max. height / m	Volume	Max. time it will be stored
Glass waste	Raw glass material bays	Bay	18.5	12.5	3	345m ³	<3 months
Incidental materials	Skips in processing area	Skip	6.1	2.4	2.6	30.58m ³ (40 yard skip maximum capacity)	6 weeks
All other waste bays are for non-combustible waste	-	-	-	-	-	-	-

Prevent fire spreading

Separation distances

The combustible waste is separated into different bays. These are divided using concrete blocks, and therefore, a 6m separation distance is therefore not required between waste piles. Incidental combustible wastes are stored in skips and are over 6m from each other.

Fire walls construction standards

‘Lego’ concrete block walls are used for fire walls (see details below).

Storing waste in bays

‘Lego’ concrete blocks are appropriate for resisting both radiative heat and flaming. They are designed to have a fire resistance of at least 120 minutes, typically achieving Class A1 of BS EN 13501-1:2002. All waste arriving at The Site is stored in concrete bays constructed from these concrete blocks, if it is not immediately sent for processing. Once processed, it is removed from The Site at the earliest possible time. All waste arriving at The Site is recorded in accordance with the duty of care and Waste Acceptance Procedures.

Waste bays are never over-filled, with a freeboard of 1m maintained at the top of bay walls, which seeks to prevent the possibility of burning material moving out of the waste bay and igniting other wastes. If possible, and safe to do so, burning materials may be pushed to the back of a bay to further prevent this from happening. The 1m freeboard limit is marked on the bays using spray paint. The marking is checked and reapplied if required as part of site daily checks.

If other wastes are considered to be at risk of ignition, these will be removed to another bay or the quarantine area, to prevent the spreading of fire.

Quarantine area

Quarantine area location and size

The location of the quarantine area is shown in Plan ref: *430/1 – 1*. It is separated into bays of approximately 12.5m x 18.5m and sealed with an impermeable CBM floor (approximately 230m²). The quarantine area is therefore large enough to contain over 50% of the largest combustible waste bay. There are additional small quarantine bays near the site entrance for individual loads or specific items.

How to use the quarantine area if there is a fire

The quarantine area can be used in two ways if there is a fire:

1. Remove hot / smouldering / burning waste (if possible and safe) to isolate it from other waste, and subsequently extinguish any fires.
2. Remove other waste, in order to prevent unburnt waste from igniting.

Procedure to remove material stored temporarily if there is a fire

If waste is already in the quarantine area, and the area is needed for emergency use in the case of a fire, the already stored waste could be moved to another concrete / sealed surface area of The Site. Waste would only be moved to an area where ignition was unlikely, and it would not block emergency access.

Detecting fires

Detection systems in use

The site uses manual detection, together with gas-horns to alert staff in the event of discovering a fire. There is no automated fire detection system, given the low risk of fires, both starting and spreading.

Certification for the systems

Due to the low risk of fires at The Site, there are no certified systems required.

Suppressing fires

Suppression systems in use

No specific fire suppression system is proposed at the site due to the low risk of fire and low tonnage on site.

Certification for the systems

N/A

Firefighting techniques

Active firefighting

Approved operators will be trained to use the site's firefighting infrastructure competently and safely. Should a fire be detected on site, trained operators will attempt to extinguish the fire with the equipment on site (fire blankets, extinguishers) and separate burning material from unburnt. If this isn't possible, the Fire Rescue Service should be called immediately, followed by the EA's incident reporting line.

The preferred method of fighting a fire that is self-contained and manageable, with no danger of spreading, is to attempt to extinguish with fire blankets, extinguishers and accessible water.

All operations in the vicinity of the hot spot or combustion incident will cease and plant will be removed from the vicinity (if possible) until the hot spot has been assessed and, where appropriate, remediated. Where it is deemed necessary, the affected area will be isolated from the rest of the pile and / or other piles moved away.

The preference is to extinguish material in-situ and to use techniques that will produce minimal residues where this can be done safely without increasing fire risk. The methods to cool a hot spot in situ include use of water, separating the unburned or burning material (whichever is most accessible) from the pile, or smothering with inert material. If it is not ideal to cool in situ then the preferred means would involve site operatives using plant to remove material from the affected area of the pile, spreading it on the adjacent ground where it does not compromise minimum separation distances and allow cooling immediately adjacent to the pile. Failing that, the material would be moved into the quarantine area.

If there is an identified risk of combustion, actions to cool the waste pile would be enacted. This could involve wetting down the pile, turning the pile or adding inert materials. If the cooling actions are not successful, such that a hot spot develops into a combustion incident the fire trained site operatives will tackle the fire as detailed in

the fire procedure. Should they be unable to safely tackle the fire, then the fire service will be called.

Out of hours detection

Given the low risk of fire, and the low overall tonnage of combustible materials, as well as limited risk of fire spreading to adjacent properties, no specific out-of-hours detection is proposed. However, there is night-time security presence on-site during out of hours for manual detection of a fire.

The fire service will be called immediately to any fire. The staff are trained and capable of:

- operating water supplies to provide initial response;
- operate plant and machinery required to assist the fire service, if necessary;
- waste handling to minimise the spread of fire or to spread and cool affected waste;
- removing unaffected waste, plant or equipment to a safe place.

Water supplies

Available water supply

The nearest fire hydrant is located on the access track into the wider site, just off Holme Thorpe Lane (approx. 230m from the site boundary). It is unknown what the maximum flow rate of this fire hydrant is, though contact has been made with Yorkshire Water to establish this. Nevertheless, the fire hydrant meets BS 750 2023 and is assumed to be suitable for the industrial estate on which it is located, meaning a minimum flow rate of 4500l/min (as required for a large industrial estate). However, as a worst-case scenario, the flow rate is assumed to be a minimum of 1200l/min, which would be the minimum for any industrial estate.

Diggin Dyke is also located south of The Site and it may be possible to source water from here to extinguish a fire, though there is no direct access, other than an access track to the northeast of The Site. The access track does not connect to The Site directly.

In addition, The Site has its own mains supply, and The Site's sealed drainage system would store a supply of water, though the total would vary depending on when it had most recently been emptied. Nevertheless, there are several alternative water supplies which means that the fire hydrant could be supplemented with other water sources.

Water access (mains supply) is located approximately 20m from the Waste Glass Bay, shown on Drawing Ref: 430/1 - 1, and can be made accessible to the Fire Service if required. The worst-case scenario of 1,200l/minute from the fire hydrant is not sufficient in accordance with the table below. However, given that the flow is likely higher than this (at 4,500l/minute), and that it could be supplemented by mains supply and water from the dyke, and, that only a fraction of the waste in the bay is actually combustible, it is considered likely that a sufficient water supply exists at The Site.

Maximum combustible pile volume in cubic metres	Water supply needed in litres per minute	Overall water supply needed over 3 hours in litres	Total water available on site in litres
345	2,301	414,207	Hydrant supply, mains supply and possible dyke supply.

Managing fire water

Containing the run-off from fire water

The Site is within a Zone III total catchment Source Protection Zone. The groundwater vulnerability of The Site is 'medium'. The majority of the site lies within Flood Risk Zone 1, however the south-western corner of the site is within Flood Risk Zone 2.

All operations will take place on an impermeable surface with a total area of approximately 2.7h (26,990m²). There is also a pump and IBC tank that can be used to collect water until an approved fire water collection company can arrive on site to move the waste. There is a requirement for 414m³ of storage space for fire water at the site. The Site can accommodate this amount of fire water with the use of Osmo barriers for the site entrance area (see below).

If a fire were to occur, Osmo flood barriers (or similar) would be placed around any point of the site (based on a dynamic risk assessment) where firewater could leave The Site via gravity, though this is likely to only include the site entrance. The remainder of the boundary has sufficient fire water protection in the form of security bunds / walls. The Osmo flood barriers would be stored in the weighbridge office, with additional items stored in the site office (off-site).

In addition to the containment, a tanker company (such as Quest Waste Management in Wakefield) would be called out to remove water during the event to reduce the amount of fire water held on site.

During and after an incident

Dealing with issues during a fire

During and after a fire, operations would cease until the Fire Service/Environment Agency confirm the site can be reopened. All incoming waste would be diverted to a permitted site through arrangement with the site operator.

Notifying residents and businesses

The following neighbouring businesses would be contacted in the event of a fire by the TCM / Site Manager, or a member of staff designated to do so by the TCM / Site Manager. All surrounding businesses that could be impacted by the fire would also have a site representative visit to ensure they are aware of the ongoing incident.

- The Sandbag Company – 0330 088 5593 and / or contacted in person
- Tarmac Armthorpe – 01302 831280 and / or contacted in person
- Spinks Builders Brick Storage Yard – 01302 554254 and / or contacted in person

Clearing and decontamination after a fire

In order to clear and decontaminate the site after a fire, the Fire Service would advise when the residues would be safe to be removed off site. The wastes would then be assessed by the Site Manager to gauge their properties before being sent to onward sites. All damaged waste and waste from the decontaminating process would be sent to a suitably permitted landfill; the waste is unlikely to be hazardous so would be sent to a non-hazardous landfill with prior permission.

The site would then have a full deep clean after a fire following the removal of burnt waste to a suitably permitted facility. Fire water run-off will be removed from site by a specialist contractor (such as Quest Waste Management – details below) and disposed of accordingly.

- Quest Waste Management, Head Office, Trident House, Milner Way, Ossett, WF5 9JE – Tel 0333 358 8222

Making the site operational after a fire

A full investigation will take place following a fire which will include a remediation assessment detailing how the site can return to being operational. Any fire damaged waste shall be removed from site to a suitably permitted facility at the earliest opportunity. Damaged plant and equipment will be assessed and repaired or replaced as necessary. Damage to buildings will be inspected by an engineer (where appropriate) and repaired.

From the structural reports the Company's Operations Director will determine whether the site is safe to re-open, either with no damage occurring or with minor repairs that can take place whilst the site is operational. If major repairs are needed an assessment will be made into the length of time this will take and the continuation of the use of alternative outlets in the short/ long term. All clean-up work of waste and debris would be carried out internally and any structural work would be quoted for by an external qualified engineer/ builder.

The site will be required to be fully functional and able to meet the requirements of the EMS prior to waste operations recommencing.

The FPP will be reviewed and updated, where appropriate, following an incident.

Appendix 1: Site Plan