



# Fire Prevention Plan



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#### SITE DETAILS

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Letchworth Garden City,

Hertfordshire,

SG6 2TT

#### **OPERATOR DETAILS**

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#### PERMIT REFERENCE

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APPENDIX	TITLE	DATE
Appendix A	CCTV Specification	-
Appendix B	Drainage Plan	14/12/2023

### **DRAWINGS**

REFERENCE	DATE	TITLE
K18.16~20~001	22/12/2023	Permit Boundary
K18.16~20~002	22/12/2023	Sensitive Receptors Plan (1km buffer)
K18.16~20~004	23/05/2025	Site Layout Plan
K18.16~20~005	22/12/2023	FRS Route Plan

### **TABLES**

TABLE	TITLE
Table 1	Combustible Waste
Table 2	Waste Acceptance Procedure
Table 3	Storage Times
Table 4	Pile Sizes
Table 5	Water Supply Calculations
Table 6	Fire Water Containment Calculations

### 1. SCOPE

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

- Site Management;
- Technically Competent Manager;
- Trained Site Operatives
- Visiting Contractors
- Emergency Services

This document has been prepared using the guidance and template provided by the Environment Agency (EA)<sup>1</sup> (as updated 11<sup>th</sup> January 2021).

This Fire Prevention Plan (FPP) was initially prepared for the Standard Rules (SR2021 No.13) Environmental Permit and is to be amended to support the variation application to amend the existing annual throughput to 15,000 tonnes per annum. Primarily, material will be processed more efficiently to allow the existing annual throughput to increase. Further to this an additional storage bay is proposed, a duplication of the existing bay.

The Operator, Murfitts Industries Limited (MIL) is part of the European Tyre Enterprise Ltd (ETEL) Group who are an international tyre and automotive service, maintenance and repair business group that operate multiple retail brands including Kwik-Fit and Stapletons Tyre Services (STS).

The variation will increase the annual throughput to 15,000 but the option to cover movement inter-group under the Non-Waste Framework Directive currently utilised within the permit will be retained.

This FPP supports the environmental permit issued to MIL which covers the physical treatment of non-hazardous waste (end of life tyres). A hard copy of this FPP will be available on site, and all staff shall be made aware of the measures outlined in the FPP. Required training of

<sup>1 &</sup>lt;u>https://www.gov.uk/government/publications/fire-prevention-plans-environmental-permits/fire-prevention-plans-environmental-permits#fire-prevention-objectives</u>

the related procedures shall take place, and in the case of an emergency the FPP shall be presented to the Fire & Rescue Service upon arrival to site.

This site is to operate as part of a nationwide network of hubs accepting EoLT for storage and/or treatment (baling) before onward transfer to other permitted facilities where EoLT are processed and shredded. This strategic operation is ancillary to the main activity of distribution of new tyres to the retail sector in the UK, and allows for a close-loop system for the tyre industry.

The Environmental Permit covers the management of EoL tyres which are collected on takeback following delivery of new tyres to retail outlets that are not part of the ETEL Group.

EoL tyres are also collected from Group retail outlets, these are handled through the same secure supply chain, and on-site process but are done so under a Non-Waste Framework Directive exemption.

Other hubs within the network, if they meet the appropriate location criteria, are to be operated in accordance with Standard Rules Environmental Permit (SREP) *SR2021 No 13: storage and mechanical treatment of end-of-life tyres for recovery.* The activities at the hubs are limited to either storage and onward transfer, or storage and baling prior to onward transfer, so are inherently low risk.

Volumes of EoL tyres stored on site are less than 100 tonnes, and given the secure supply chain and logistics control, typically remain on site no longer than 72 hours under normal operational conditions.

The processes that will be carried out at the Letchworth facility are the following:

 The EoLT are delivered to the site, some to the tyre bund for **storage** and onward dispatch to processing sites within the ETEL group.

The proposed annual throughput of the site is to increase from 5,000 tonnes to 15,000 tonnes, with no more than 100 tonnes on site at any one time.

All deliveries to the site are planned:

- Under normal operating conditions all EoLT received will be processed and loaded into the waiting trailer and dispatched by the end of the following working day.
- Under abnormal conditions, e.g., plant breakdown or organised shutdown, delivered EoLT will be diverted to the Murfitts Industries Limited national network of permitted facilities.

The EoLT received at the site are contained either within the delivery vehicle, in the tyre bund or trailer (loose tyres). Some loose EoLT may be located outside of designated storage areas, upon the impermeable surface as part of handling activities namely the loading, unloading and movement of waste within the site.

The site location is shown on Sensitive Receptors Plan (K18.16~20~002), Permit Boundary Plan (K18.16~20~001)

The site layout plans show how key areas and processes are arranged (Site Layout Plan K18.16~20~004).

The permitted boundary covers approximately 0.12 ha, with the storage of EoLT undertaken on a limited part of this the area.

The site is located at Fourth Avenue, Letchworth Garden City, Hertfordshire, SG6 2TT with the site location is shown on drawing K18.16~20~002 Sensitive Receptor Plan (1km Buffer).

The National Grid Reference for the site is TL 23293 33116. The proposed site is located in an established industrial area on Fourth Avenue bordered by other established industrial and commercial activities. The closest residential area is located approximately 400 m NNW.

The A1 (M) is approximately 650 m east of the site, whilst the centre of Letchworth is 1.7 km south-west of site.

For more detail on the surrounding land use please see the Sensitive Receptors Plan (K18.16~20~002).

### 2. TYPES OF COMBUSTIBLE MATERIALS

### 2.1. Combustible waste

**Table 1: Combustible Waste** 

Waste Stream	EWC
End of Life (EoL) tyres	16 01 03

### 2.2. Other combustible materials (non-waste)

No other combustible material will be stored within the operational area, or in proximity to the storage bays. All fuels used for operating plant and machinery are stored away from waste piles and outside of the permitted area.

### 3. USING THIS FIRE PREVENTION PLAN

#### 3.1. Location

The plan is held in hard copy, and readily available at the site office during operational hours and is available on request to any visitors or contractors.

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

A hard copy of the plan shall be readily available at the site office during operational hours and is available on request to visitors and contractors. All staff are to read the FPP as part of their induction and sign a training log.

Any changes to the plan shall be communicated to staff via training.

Visitors and visiting contractors are given a brief overview key fire related measures such as the evacuation muster point and any fire extinguishers in their work area (details can be found in Appendix B). If their visits extend over considerable length of time or on a regular basis, then they will be encouraged to read the plan in full and sign a training log.

Emergency services will be allowed immediate access to the plan and further hard or digital copies can be made available if required.

### 3.3. Testing the plan and staff training

All employees as part of their site induction are instructed to review this FPP to understand measures to prevent fire occurring, measures to undertake during a fire event and actions following an event. A signed record will be kept of this. Feedback will be sought following this to understand if any further training and guidance is required.

Visitors to site will not be accompanied on site but will, during their induction to site, have the measures described within this FPP described to them.

Evacuation drills are conducted six monthly, unannounced and at a time at the discretion of the Site Management in accordance with the Fire and Emergency Evacuation Procedure. Drills are timed to ensure that site staff reach the assembly point in targeted timescales. Fire wardens will ensure that all areas of site are cleared and all personnel on site accounted for. Site is zoned so each Warden is responsible for a certain area, with each designated area signed off as cleared following the test. As described within this FPP, firefighting will only take place if safe to do so, in very low scale incidents. Larger scale incidents will result in the FRS being contacted, any scheduled deliveries diverted, and evacuation procedures carried out.



Following the drill any issues with infrastructure, training or adhering to the drill procedure are recorded and corrective actions recorded. Any issues are addressed through site meetings and further training if/when necessary.

#### Activities at the site 3.4.

The Letchworth facility is provided to store EoLT, taken directly from ETEL customers. The Letchworth facility is part of a wider network of 'hubs' which will store and/or treat EoLT before they are dispatched for further processing at one of the several facilities permitted and operated by MIL. The Hubs will be operated by ETEL staff.

Murfitts Industries Limited operate a number of EoLT tyre recycling facilities across the UK, processing tyre into various size grades for reuse as sports pitch infill, artificial turf infill, playground rubber mulch, carpet underlay, road surfaces, and other uses.

### 4. PLAN OF SENSITIVE RECEPTORS NEAR THE SITE

Sensitive Receptors are shown on the Sensitive Receptors Plan (K18.16~20~002) and in the Sensitive Receptors Table.

The Sensitive Receptors identified are in all directions from the site.

### 4.1. Prevailing wind direction

The closest observing station where weather data is available is Saffron Walden. Figure 1 below illustrates the prevailing wind direction of SW which would transport any windblown emissions NE from site.

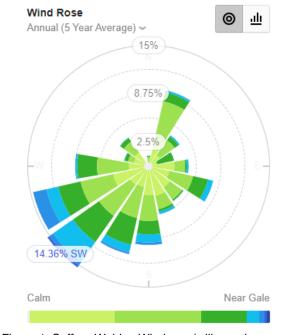


Figure 1: Saffron Walden Windrose (willyweather.co.uk)

### 5. MANAGE COMMON CAUSES OF FIRE

#### 5.1. Arson

The proposed site is secured by palisade fencing, and benefits from a gated entrance. It is located within a large industrial area with multiple neighbouring businesses, any unsolicited activities would be detected by the site's CCTV cameras which are monitored by an external security company 24/7/365. Additionally, STS occupy the wider site and operate 24/7. The site is also secured and locked outside of operational hours. In the event of an intruder or fire the external security company would notify the relevant emergency services and the relevant site contacts.

### 5.2. Plant and equipment

All site equipment will be maintained in line with the manufacturer's guidance.

All mobile plant will be equipped with fire extinguishers.

### 5.3. Electrical faults including damaged or exposed electrical cables

Any electrical faults noticed on site during normal inspections or throughout the working day are isolated.

A qualified electrician will be called to resolve the problem. If required, the electricity supply will be isolated at the fuse box to prevent an ignition risk.

### 5.4. Electrics certification

All electrics are certified every five years.

### 5.5. Electrical equipment maintenance arrangements

Electrics are fully certified by a competent person, every 5 years.

All electrical equipment is tested in accordance with equipment specific requirements, and portable appliances tested at a frequency dependant on type of appliance, age, and frequency of use.

### 5.6. Smoking on site policies

The site operates a strict no smoking policy in all areas other than designated smoking areas which will be located outside of the permitted area.

### 5.7. Hot works safe working practices

The works onsite do not require the introduction of a source of ignition to the working area and therefore do not require a related risk assessment. In the unlikely occurrence that hot works are required on site, a hot works permit can be issued.

#### 5.8. Industrial heaters and use

No industrial heaters are used on site.

### 5.9. Hot exhausts and engine parts

Staff shall remain vigilant when mobile plant and equipment for any signs of combustion and will carry out checks at the start and end of the working day to ensure there is no ignition risk.

When not in use, the mobile plant is stored away from any combustible material and equipped with fire extinguishers.

### 6. FIRE WATCH PROCEDURES

The site supervisor will conduct start and end of the day checks to the site, fleet, and the security of the site.

This will occur every day operations are undertaken, and when material is held with the storage bays.

Outside these times the staff of the wider STS site will be passing through the area and undertake informal checks.

This is complemented by the presence of CCTV (see Appendix A for representative specification) which is monitored 24/7/365 by an external security company who have direct access to duty staff at all times. Remote access for site managers will be implemented across all Hub facilities, which will allow site managers to view cameras and receive alerts at all times. CCTV cameras have sight of all combustible waste piles on site.

### 7. IGNITION SOURCES

The most likely causes of fire at the site have been identified and described below, with a summary of the management controls for restricting the possibility of a fire outbreak.

#### 7.1. Batteries

Batteries are not accepted on site and are unlikely to arrive on site as all EoLT's are source segregated.

### 7.2. Leaks and spillages of oils and fuels

No liquid wastes are accepted onto site. Liquids (fuels etc.) will be held in sealed containers away from vehicular movements. All such containers will be provided with secondary containment and have a spill kit available for deployment in close proximity should a spillage occur.

Any leaks or spills will be recorded in the daily site diary and event log. Incident Response procedure will be followed (see Site Layout Plan K18.16~20~004).

The site will utilise a simple 'Stop-Contain-Divert' model for containing spillages and have spill kits or granules available on site to protect the surface water system and to prevent pollutants from entering the site drains.

Site staff are trained and familiar with their use in an emergency through the use of spill drills.

### 7.3. Build-up of loose combustible waste, dust and fluff

Regular housekeeping and inspection of the site will occur at the end of the working day and weekly as minimum.

All equipment is checked prior to use and inspected as part of a daily site inspection routine.

Annually the storage bay will be emptied for a deep clean. This process will also be conducted as and when required.

#### 7.4. Reactions between wastes

Non-permitted wastes are rejected during inspection and acceptance. Site staff are trained in waste acceptance procedure and will carry out site inspections daily.

Given that the site receives a single stream of waste adverse reaction is extremely unlikely. If wastes are seen to react, then they are either isolated in situ if possible or moved away from waste piles and/or stored within a suitable sealed container.

### 8. WASTE ACCEPTANCE AND DEPOSITED HOT LOADS

EoLTs will enter the Letchworth Hub via STS vehicles, taken directly from ETEL customers. Upon entering site, a load is inspected against the relevant waste transfer documentation to ensure that descriptions are correct.

Deliveries are pre-booked to ensure control and to reinforce the site's acceptance procedure. All deliveries are undertaken by MIL/STS vehicles with no third-party involvement. EoLTs are checked prior to loading onto vehicles.

Once a visual inspection has been conducted and the load accepted, EoLT are taken to the tyre bund before loading into a trailer at dispatch. EoLT will then be taken to a facility for further processing.

Some loose EoLT may be located outside of designated storage areas, upon the impermeable surface as part of handling activities namely the loading, unloading and movement of waste within the site.

In the rare occasion that non-conforming waste may be found within loads, it shall be segregated and stored in excess of 6 m from waste piles or in a suitable container. Where there is risk of serious pollution, the Environment Agency shall be informed immediately.

Quarantined waste shall be removed from site within seven days and appropriate signage shall be used to identify quarantined waste. Records of rejection of non-conforming waste shall be recorded.

**Table 2: Waste Acceptance Procedure** 

WASTE ACCEPTANCE PROCEDURE	SPECIFIC STANDARDS
Waste inspection	All waste is visually inspected for non-permitted wastes, quality, and conformance with Environmental Permit requirements.  Non-conforming loads are refused entry and details are recorded.
Quarantine storage and waste which are reject	Dependant on the level of risk posed quarantined waste shall be removed from site as soon as practicable and within seven days. Appropriate signage shall be used to identify quarantined waste. Records of any non-conforming waste shall be recorded in the site diary.
Identification of wastes	Arriving waste must meet the standard of the relevant EWC code.

### 9. HOT AND DRY WEATHER

EoLTs are not accepted or stored in large quantities (see Section 11). The risk of hot and dry weather increasing levels of combustion is offset by quick turnaround times from delivery to processing to dispatch. Tyres on site are stored within a tyre bund whilst they await dispatch for further processing.

A First-In-First-Out (FIFO) policy is utilised on site to ensure that any impacts from hot and dry weather is minimised. Given tyres are stored within a tyre bund (bay) and usually dispatched by the following day, impacts from hot and dry weather are limited.

### 10. GENERAL SELF-COMBUSTION MEASURES

Self-combustion is unlikely to be an issue at the site given the limited time that material is held onsite. The core strategy is the First In, First Out (FIFO) procedure, waste first accepted is the waste first removed from site.

Daily checks are made on the site as part of the fire watch procedure.

Due to the limited period of time that waste is to be stored, the nature of permitted waste types and being stored in their largest form, the risk of self-combustion from a high temperature exothermic reaction is very low.

All operational staff will be required to remain vigilant and implement an informal fire watch throughout the day.

Site inspections are carried out routinely each day with a formal 'End of Day' carried out to check for fire risks and signs of self-heating will be immediate reported and dealt with.

Onsite there is only one storage location; the tyre bund where loose tyres are stored whilst they await dispatch to a facility for further processing. The associated dimensions and/or tonnages are listed in the Section below.

In the event of a fire from self-combustion the firefighting techniques detailed in Sections 16 and 18 will be implemented.



### 11. MANAGE STORAGE TIME

**Table 3: Storage Times** 

WASTE STREAM	EWC	MAX. STORAGE TIME ON SITE	MAX. STORAGE LIMIT ON SITE
End-of-life tyres (bund)	16 01 03	72 hours	197.5 m³ per pile (approx 33T)

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

Under normal operating conditions waste will arrive in a 'Just in Time' supply chain and will leave site in the same manner. However, where operational requirements dictate, there may be a requirement to store loose EoLT's for a maximum of 72 hours either before or after processing under normal operating conditions.

Under normal operating conditions EoLT's will flow through the site by the following working day, significantly less than the 3-month period identified in fire prevention plan guidance as requiring extra measures to prevent self-combustion.

### 11.2. Stock rotation policy

Waste will be managed on a First In, First Out (FIFO) procedure, waste first accepted is the waste first removed from site, though in reality EoLT will be dispatched by the next working day so stock rotation is not a concern.

### 12. MONITOR AND CONTROL TEMPERATURE

### 12.1. Monitoring & controlling temperature

No formal temperature measurement will be undertaken.

Daily site inspections incorporate monitoring of temperature for any waste stored on site. Site staff are trained to be vigilant for any signs of self-heating throughout the day and are trained in first response to any fire detected.

Waste accepted on site is not deemed as high risk for self-heating or combustion. The quick turnaround times prevent the build-up of latent heat. All materials stored are in limited quantities and stored within bays.

CCTV cameras monitor the operational area and are managed 24/7/365, by an external security company. Remote access for site managers to view CCTV cameras will be implemented. CCTV cameras have site of all combustible waste piles (see Appendix A for representative specification of cameras).

### 12.2. Dealing with hot weather and heating from sunlight

EoLT's are stored outside and on an impermeable surface and within a tyre bund with concrete walls. The quick turnaround times reduce the impact of direct heat from sunlight whilst only small quantities are stored at any one time.



#### **MANAGE WASTE PILES** 13.

### 13.1. Storing waste materials in their largest form

Waste is stored in its largest fraction size.

### Maximum pile sizes for the waste on your site

Storage locations are identified on K18.16~20~004 Site Layout. Two stockpiles are located on site, both the dimensions indicated below.

**Table 4: Pile Sizes** 

WASTE STREAM	LOCATION	HOW IT IS STORED	MAX. LENGTH (M)	MAX. WIDTH (M)	MAX. HEIGHT (M)	VOLUME M <sup>3</sup>	MAX. TIME IT WILL BE STORED
EoL Tyres (loose tyres)	Input area	Whole, loose, in tyre bund bay	10.2	10	2.3	197.5*	72 hours

<sup>\*</sup>Section of the pile will reduce in height and width to account for reduced height in fire wall and open section – this has been accounted for to produce total above.

### 13.3. Waste stored in containers and types of containers

Containers are not used for storage on site.

### 13.4. Accessibility of containers

N/A.

#### 13.5. **Moving Containers in a Fire**

N/A

### 14. PREVENT FIRE SPREADING

### 14.1. Separation distances

The quarantine area (5 m x 8 m x 2.5 m), identified in Site Layout Plan K18.16~20~004, can hold more than 50% (100 m³) of the largest waste pile (197.5 m³) at any one time. In the event of a fire, a minimum separation distance of 6 m will be provided in order to adequately isolate burning material and prevent the spread of fire.

A minimum separation distance of 6 m from all permanent structures is also provided, unless separation distance requirements are reduced by way of fire walls and bays designed to an appropriate level of fire resistance.

### 14.2. Fire walls construction standards

The site will use fire walls around the tyre bund. There is the requisite space on site to allow 6 m separation distances from buildings and other wastes. Loose tyres are stored in the tyre bund whilst they await dispatch for further processing. Walls are made up of legio blocks conforming to the REI 240 fire resistance standard and are therefore fire resistant for at least four hours.

### 15. STORING WASTE IN BAYS

Loose EoLT are stored within the tyre bund, approximately 2.3 m high (maximum). Fire walls create a bay where the loose tyres are deposited for storage while they await dispatch for further processing at one of the MIL facilities.

### 16. QUARANTINE AREA

#### 16.1. Quarantine area location and size

Quarantine area and the associated 6 m separation distance is shown on the Site Layout Plan (K18.16~20~004). In accordance with the guidelines set out by the Environment Agency, the quarantine area (8 m x 5 m x 2.5 m) can hold more than 50% (100 m³) of the largest waste pile (197.5 m³) and is provided with a 6 m separation distance from other structures and waste storage areas.

### 16.2. How to use the quarantine area if there is a fire

The quarantine area can be used for both burning and non-burning waste. In the event of a fire, where safe to do so, burning or smouldering material will be isolated and transferred to the quarantine area for extinguishing. Use of this area will only be carried out where safe to do so, or under instruction of the Fire Service.

### 17. DETECTING FIRES

### 17.1. Detection systems in use

Staff will be trained to undertake two scheduled fire checks throughout the operational day (start and end of the day).

The site is remotely monitored 24/7 by CCTV, and in the event of an intruder or a fire the alarm will be raised with emergency services and nominated site personnel. Remote access for site managers will be implemented which will supplement the monitoring by the external security subcontractor. Representative specification of the cameras utilised is included within Appendix A.

All staff will remain vigilant to monitor for the outbreak of any fires and raise the alarm if there are any fires on site. They will notify the appropriately appointed out of hours contact and emergency services.

### 18. SUPPRESSING FIRES

### 18.1. Suppression systems in use

There are strategically placed fire extinguishers on site. These will be utilised in the event of a small fire that can be extinguished quickly and safely by site staff. All staff handling and processing waste are trained in the use of fire extinguishers. Fire extinguishers are subject to regular checks and maintained in accordance with the manufacturer's guidance. If used in a fire event the extinguisher is replaced at the nearest opportunity.

The primary suppression system in a larger scale event would be either or both of the fire hydrants located on Fourth Avenue (see Site Layout Plan). These are both located within the statutory 100 m guidance as outlined by the Fire Prevention Plan guidance and maintained by the Local Authority to ensure they can be used effectively in an emergency situation.

The FRS will utilise these hydrants if called; they shall be called where it is not safe to extinguish with fire extinguishers.

### 19. FIREFIGHTING TECHNIQUES

### 19.1. Initial response

The aim of the initial response is to extinguish a fire in its earliest stage before it can take hold, using the in-situ fire extinguishers which are placed at key locations. Site staff are aware of locations for fire extinguishers.

### 19.2. Transfer and storage area

Upon detection, only if safe, the burning or smouldering material will be extinguished in-situ, by trained staff members using the extinguishers.

If it is not safe to fight the fire in-situ, waste will be isolated from the rest of the pile and moved to the quarantine area for extinguishing.

If it is not safe to tackle the fire, the Fire Service will be called, and material left within the storage areas.

### 19.3. Fire and Rescue Service Strategies

In the event of a fire, the Fire Service has one access point to the site (see Site Layout Plan K18.16~20~004, and the FRS Access Route Plan K18.16~20~005) and may consider the following strategies.

### **Early Intervention**

- Apply water to specific burning areas of small, localised fires.
- Isolate and transfer material to the quarantine area for spreading out and cooling with water.

Fire extinguishers are accessible across the site.

### 19.4. Out of Hours

Should a fire be discovered out of hours via CCTV monitoring the Fire Service shall be notified as well as nominated site personnel. When remote access of cameras is available for site managers, they shall also be notified through this system as well as from the external security company.



### 20. WATER SUPPLIES

### 20.1. Available Water Supply

Site has access to a number of hydrants in the locality (Fourth Avenue) well within the 100 m distance specified within the guidance, the nearest fire hydrant is shown on the Site Layout Plan K18.16~20~004. This will be available for use in the event of a fire occurring. Given these hydrants are utilised by the FRS and local water company, it should be assumed that they have been installed and maintained in accordance with the relevant BS 750 standard or the equivalent.

The water will be supplied from the nearest fire hydrant see plan: K18.16~20~004 Site Layout Plan. The two fire hydrants located on Fourth Avenue are maintained by Hertfordshire County Council and tested periodically.

### 20.2. Water supply calculation

**Table 5: Water Supply Calculation** 

A	В	С	D	
MAXIMUM PILE VOLUME (m³)	WATER SUPPLY NEEDED (L/min)	WATER SUPPLY NEEDED OVER 3 HOURS (L)	TOTAL WATER AVAILABLE ON SITE (L)	SUFFICIENT SUPPLY?
See Table 4	Based on 1200l/m³ - Pile volume (A) x 6.67L	(B x 180 minutes)	From hydrant (See Table 6 below)	Is D greater than C
197.5	1317	237,060	720,000	YES



	VOLUME OF WATER REQUIRED	197.5 m³		
REQUIRED	MAXIMUM PILE SIZE 173 m <sup>3</sup>	<ul> <li>FROM EA FPP GUIDANCE</li> <li>2000 litres x 180 minutes = 360,000 litres per 300m³</li> <li>360,000 litres/300m³ = 1,200 litres / m³ of waste</li> <li>1200 litres / 180 minutes = 6.67 litres / m³ / minute</li> <li>SITE SPECIFIC REQUIREMENT</li> <li>Based on largest pile size.</li> <li>197.5 m³ x 1200 litres = 237,000 litres / 1000 = 237 m³</li> </ul>		
	Fire Hydrant	Assumed supply (100 mm pipe supply):  • 2000 l/min x 180 minutes =360,000 litres  • 360,000 x 2 = 720,000  • 720,000 litres/ 1000 = 720 m <sup>3</sup>		
	TOTAL AVAILABLE	<b>720</b> m <sup>3</sup>		

## 21. MANAGING FIRE WATER

### 21.1. Containing the Run-Off from Fire Water

The site benefits from an impermeable surface and sealed drainage system complete with an interceptor which includes a shut off valve to isolate water discharge in the event of a fire and prevent the discharge of contaminated firewater to wider drainage network. See Drainage Plan (Appendix B). Kerbing approximately 0.2 m high surrounds the perimeter of site preventing the egress of surface water to the wider environment.

Based on the calculations provided in Section 20 to determine firewater requirements, the anticipated volume of water required in accordance with EA FPP guidance is 207,600 litres. Whilst it is likely that a significant proportion of water used to fight the fire will evaporate, containment calculations are presented to account for containment of the total volume. The site surface and the interceptor (see Appendix B) shall provide sufficient containment.

### **TABLE 6 FIRE WATER CONTAINMENT CAPACITIES**

FIRE WATER CONTAINMENT			
Maximum volume of fire water run-off (based on pile sizes)	237 m <sup>3</sup>		
Surface area available for fire water storage	1127 m <sup>2</sup>		
Total Catchment volume  *Additional capacity supplied by the interceptor = 12 m³	1127 m <sup>2</sup> X 0.2 m = 225 $\mathbf{m}^3$ Total = 237 m <sup>3</sup>		

### 22. DURING AND AFTER AN INCIDENT

### 22.1. Dealing with issues during a fire

During a fire, operations shall cease, and all incoming waste is diverted from the site.

Site staff will only engage in active firefighting if safe to do so. The Fire Rescue Service shall be contacted and presented with FPP on arrival.

### 22.2. Notifying residents and businesses

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

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

### 22.3. Clearing and decontamination after a fire

After an incident a third-party contractor will be instructed to clear any residue (liquid or solid), decontaminate areas onsite impacted by a fire, and desilt the interceptor.

### 22.4. Making the site operational after a fire

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

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



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