



ENVIRONMENTAL MANAGEMENT SYSTEM

**Fire Prevention Plan
Reference: EMS-OP-03
VERSION 5 Dated 19 June 2024**

Phoenix Yard, Swinborne Road, Burnt Mills Industrial Estate, SS13 1EF



Fire Prevention Plan

Document Reference: EMS OP 03

Issue Number: 5

Issue Date 19.6.2024

DOCUMENT CONTROL SHEET

Version Reference	Date	Reason for Change	Issued by
2	8.2.2021	Schedule 5 Notice	AC
3	15.2.2021	Further Information	AC
4	15.3.2023	Application to Vary Permit	AC
5	19.6.2024	Request for information from EA	AC



Fire Prevention Plan

Document Reference: EMS OP 03

Issue Number: 5

Issue Date 19.6.2024

CONTENTS

1	INTRODUCTION.....	1
	1.1 Purpose.....	1
	1.2 Scope.....	1
	1.3 Objectives.....	1
	1.4 Site Location.....	1
	1.5 Roles and Responsibilities.....	2
	1.6 Summary of Operation.....	2
	1.7 Process Overview.....	3
2	CAUSES OF FIRE.....	4
3	FIRE PREVENTION PLAN.....	5
	3.1 Site Plan(s).....	5
	3.2 Material Receipt, Treatment and Storage.....	5
	3.3 Fire Quarantine Area.....	8
	3.4 Signage.....	9
	3.5 Training, Awareness and Visitors.....	9
	3.6 Security.....	10
	3.7 Planned Preventative Maintenance.....	10
	3.8 Hot Exhausts.....	11
	3.9 Hot Works.....	11
	3.10 Electrics.....	11
	3.11 Industrial Heaters.....	12
	3.12 Hot Loads.....	12
	3.13 Leaks and Spillages.....	12
	3.14 Build-up of Loose Combustible Waste, Dust and Fluff.....	12
	3.15 Reaction between Wastes.....	13
	3.16 Ignition Sources.....	13
	3.17 Batteries.....	13
	3.18 Hot and Dry Weather.....	13
	3.19 Additional Actions.....	13
4	FIRE DETECTION AND MANAGEMENT.....	15
	4.1 Detecting and Suppressing Fires.....	15
	4.2 Firefighting strategy – During Operational Hours.....	15
	4.1 Firefighting strategy – Out of Hours.....	16
	4.2 Managing Fire Water.....	18
	4.3 Incident Management.....	19



Fire Prevention Plan

Document Reference: EMS OP 03

Issue Number: 5

Issue Date 19.6.2024

1 INTRODUCTION

This document provides the Fire Prevention Plan for the Waste Facility at Phoenix Yard, Swinborne Road, Burnt Mills Industrial Estate, SS13 1EF.

This is a standalone document and includes the following plans:

WAWL-SR-FPP-01 – Fire Prevention Plan

WAWL-SR-FPP-02 – Fire Prevention Plan – Wider Area

Fire Prevention Plan Version 3 was approved by the Environment Agency on 15 February 2021.

This version has been prepared to support an application to vary the permit. The internal layout of the waste transfer station has been updated. The operator has installed more storage bays to manage different types of waste. Whilst it is proposed to increase the annual throughput to 120,000 tonnes per annum, the maximum pile size on site will not increase.

1.1 Purpose

The primary purpose of this Fire Prevention Plan (FPP) is to guide staff and contractors in the prevention of fire. This FPP also confirms the actions to be taken in the event of fire to minimise any impact on the environment and to control the fire where appropriate.

This FPP will be issued to the Fire Brigade in the event of a fire to aid with firefighting.

1.2 Scope

This FPP has been prepared in accordance with Environment Agency guidance.¹

1.3 Objectives

The objectives of the Fire Prevention Plan are:

- To minimise the likelihood of a fire occurring.
- To aim for a fire to be extinguished within 4 hours.
- To minimise the spread of fire within the site and to neighbouring sites.

1.4 Site Location

The site is located at Phoenix Yard, Swinborne Road, Burnt Mills Industrial Estate, SS13 1EF.

The site is in within an established industrial estate.

The site has two entrances. For the operational facility, waste vehicles will enter the site from Courtauld Road and leave the site via Swinborne Road. For the purposes of fire access, both entrances would be available.

¹ <https://www.gov.uk/government/publications/fire-prevention-plans-environmental-permits/fire-prevention-plans-environmental-permits>



Fire Prevention Plan

Document Reference: EMS OP 03

Issue Number: 5

Issue Date 19.6.2024

The site is surrounded by other industrial premises, although no building on adjacent sites is within 25m of the waste transfer station building.

A map of key receptors within 1km is shown in Annex A.

1.5 Roles and Responsibilities

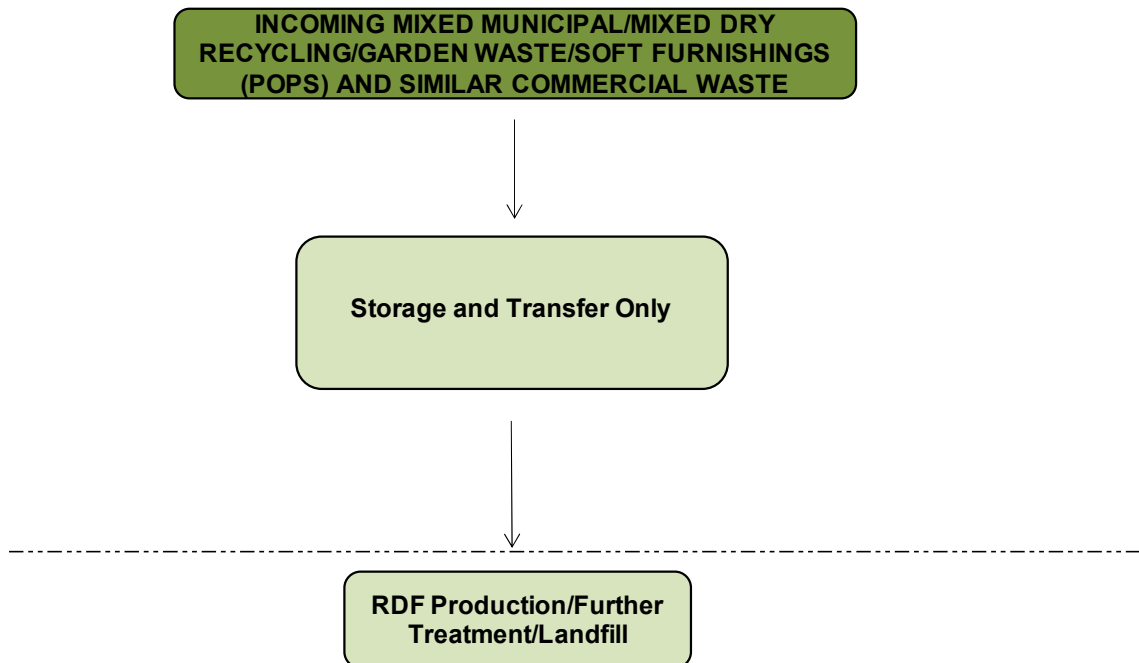
The Site Manager has responsibility for ensuring these procedures are adhered to. The Site Manager is specifically responsible for:

- Ensuring the adequate training of staff and contractors working on site regarding the content of these procedures.
- Ensuring the adequate provision of resources such as personal protective equipment (PPE).
- Ensuring the provision and maintenance of handheld fire extinguishers and other firefighting equipment at the site is adequate.

1.6 Summary of Operation

The process is based on the following:

Figure 1 – Process Flow Diagram





Fire Prevention Plan

Document Reference: EMS OP 03

Issue Number: 5

Issue Date 19.6.2024

1.7 Process Overview

This will be a straightforward transfer facility only. The site will receive waste collected by or on behalf of local authorities, or commercial mixed waste only.

The waste will predominantly be EWC 200301 Mixed Municipal Waste. This will include black bag residual waste and source segregated dry recyclables. Garden waste is also received and transferred from the site (EWC 200201).

The site also receives and transfers bulky waste, and soft furnishings that may contain Persistent Organic Pollutants (POPs). Both are classified EWC200307. POPs may be found in soft furnishings (sofas, sofa beds, chairs, stools, futons and beanbags). From the 1 January 2023, these wastes were no longer permitted to be sent to landfill. As a result, local authorities collecting these wastes through their bulky waste collection service, required temporary storage sites, pending transfer to an authorised facility. There is a bay on site for storing this waste.

The bays on site are numbered and are used for specific waste streams, although the contents may be interchangeable depending on market conditions.

Bays 1 and 2 will be used to receive mixed black bag waste on a batch process. Whilst one bay is being emptied, the other bay will be used to receive waste.

Bays 3 and 4 will be used to manage the dry recyclables and garden waste respectively. Bay 5 will be used to store POPs. Bay 6 will be used as an emergency store only.

The separated wastes will be loaded into an articulated HGV to facilitate efficient onward transportation.

There will be no treatment carried out.



Fire Prevention Plan

Document Reference: EMS OP 03

Issue Number: 5

Issue Date 19.6.2024

2 CAUSES OF FIRE

The following have been identified as potential causes of fire and their relevance to this site is given in Table 1.

Table 1 Causes of Fire and Applicability to the Site

Cause of Fire
Arson or vandalism
Self-combustion
Plant or equipment
Electrical faults
Naked lights
Discarded smoking materials
Hot works, for example welding
Industrial heaters, furnaces, incinerators, space heaters
Hot exhausts
Open burning
Damaged or exposed electrical cables
Reactions between incompatible materials
Leaks and Spillages
Hot loads deposited at the site
Build-up of loose combustible waste
Hot and Dry Weather



Fire Prevention Plan

Document Reference: EMS OP 03

Issue Number: 5

Issue Date 19.6.2024

3 FIRE PREVENTION PLAN

The site will be operated in accordance with an Environmental Management System. Operational Procedures are set out in EMS-OP-01.

In addition to the Operational Procedures, the following reasonable actions will be taken to minimise the risk of fire, in accordance with Environment Agency guidelines.

3.1 Site Plan(s)

The following site plans are relevant:

WAWL-SR-FPP-01 – Fire Prevention Plan

WAWL-SR-FPP-02 – Fire Prevention Plan – Wider Area

3.2 Material Receipt, Treatment and Storage

3.2.1 Waste capacity

The annual throughput will be 120,000 tonnes.

The maximum storage limits are set out in Table 2.

3.2.2 Waste Acceptance

Waste acceptance procedures are set out in EMS-OP-01 Operating Procedures. The procedure involves:

- **Documentation.** The driver will arrive at the site and provide Waste Transfer Notes to the site office and the load will be weighed.
- **Visual checks.** The vehicle will be directed to a loading bay, depending on the contents of the load. As the waste is unloaded, a visual check will be carried out to ensure that the waste is acceptable.
- **Exit from site.** The driver will then drive out of the building and leave the site.

Any incidents of non-conformance will be recorded in the Non-Permitted Waste Form EMS-FR-02. The waste will be from approved contracts, either the waste collection contractor, local authority or a commercial client. The residual waste, mixed dry recycling and garden waste will be delivered in Refuse Collection Vehicles.

Bulky waste may arrive in rollonoff containers, caged vehicles or vans.

The site will not receive wastes that are incompatible and the likelihood of receiving non-compliant waste will be low. However, there may be occasions whereby residents or business have placed non-compliant waste in their bin. The following procedure will be implemented if non-conforming waste is observed:

If waste arrives on site which is tipped then non-permitted wastes are found:

- a) The vehicle and waste, as tipped, will be photographed.
- b) The waste is immediately separated into the quarantine area pending off-site removal



Fire Prevention Plan

Document Reference: EMS OP 03

Issue Number: 5

Issue Date 19.6.2024

- c) Management Informed of non-permitted waste
- d) The customer will be informed of the breach and will be required to collect the non-permitted waste or be charged for the additional handling costs associated with transferring to another authorised facility
- e) Record maintained of non-permitted waste, quantity, source, date and client/source of waste.

An example of waste that may be encountered would be WEEE.

The machine operator will remove any obvious large items of non-compliant waste and these will be placed in a quarantine area. There will be no sorting of the waste. It will be transferred off-site for further processing or disposal. Any items encountered that contain batteries, will have the batteries removed for storage in a separate battery box. This box will be a weatherproof container, located away from buildings and other combustible materials. The location is indicated on Drawing WAWL-SR-FFP-01.

3.2.3 Waste storage times, Stock Management and Rotation

The waste will be received and removed from the site typically within 24 hours. The operator maintains a fleet of articulated vehicles and will have full control over loading and transferring the waste.

There are two bays used for transferring mixed municipal waste (black bag waste). Bay 3 is used to received dry recyclables. Bay 4 receives garden waste and Bay 5 is used for POPs. Bay 6 is a spare bay that is used for contingency storage only.

For all waste types, the waste will be received and reloaded at the end of each working day. Normal routine operations will aim to empty the bay at the end of each working day. If there is not enough to load one articulated vehicle (24 tonnes), it will be loaded out the next working day.

No waste will be kept on site for longer than 3 months.

During the Daily Checks the site manager will also check for any signs of combustion and hotspots. Hotspots are unlikely to occur given that:

- The wastes are stored within a building and will not be subject to any direct heat sources, or indirect such as sun light; and
- The waste will be removed at the end of each day or within 24 hours.

However, if the Site Manager is aware of localised warming, it will be dissipated by turning the waste in the bay.

The site has contingency plans in place if outlets become unavailable.

3.2.4 Waste and product storage stacks

Table 2 shows the maximum storage limits.



Fire Prevention Plan

Document Reference: EMS OP 03

Issue Number: 5

Issue Date 19.6.2024

Table 2 –Storage Limits

Waste Type	Storage Area	Max. Height	Max. Volume	Notes
Bay 1 (mixed municipal – black bag)	18.5mx7m 129.5m ²	4m	230m ³	The waste is loaded out daily.
Bay 2 (mixed municipal – black bag)	18.5mx7m 129.5m ²	4m	230m ³	The waste is loaded out daily.
Bay 3 (mixed municipal – dry recyclables)	7m x 9m 63m ²	3m	95m ³	The waste is loaded out daily.
Bay 4 (Green Waste)	7m x 9m 63m ²	3m	95m ³	The waste is loaded out daily.
Bay 5 (POPs)	6.5m x 9m 58.5m ²	3m	88m ³	This is a recent provision to assist local authorities deal with changes for dealing with soft furnishings (EWC 200307). Waste is loaded out daily.
Bay 6 (Spare – Overflow)	8m x 4m 32m ²	3m	48m ³	This is used only as a contingency overflow for specific loads. Waste is loaded out as a priority.
Quarantine x2	2m x 2m 4m ²	2m	8m ³	Cages

Note: volumes and area are not based on uniform block dimensions.

Mixed municipal waste may contain a mixture of plastic, food, paper, cardboard, nappies, textiles and glass. With reference to the EA guidance there no maximum storage size for this specific category. For individual components such as textiles, plastics, and cardboard, the maximum pile size for loose waste is 750m³. The maximum pile size will be 230m³. The waste will be loaded into articulated lorries which could hold approximately 100m³.



Fire Prevention Plan

Document Reference: EMS OP 03

Issue Number: 5

Issue Date 19.6.2024

A constant flow of bulk vehicles is planned to attend the site throughout each day to ensure that the waste in all bays is maintained at such a level as to ensure that it is removed within 24 hours of arrival. For black bag waste, the second bay will continue to be used whilst waste is being loaded from the other bay. This batch operation allows the operator to ensure that one bay is completely empty and can be cleaned down on an alternate day basis.

Once the recycling and/or garden waste rounds have completed, WAW will arrange to empty these bays, in preparation for the next day deliveries. These rounds are routine collection and therefore WAW has a clear understanding regarding the daily throughputs and arrange waste collection accordingly.

The POPs will be stored temporarily before being transferred to an authorised site. As with the other waste streams, WAW can arrange for haulage at any time to ensure that the capacity is maintained. The POPs waste will be subject to the first in – first out principle.

No shredding takes place on the site. The waste will be kept in its largest form.

Storage bays 1 and 2 have a rear and side wall that is 4.8m high, constructed using Legio bricks. The dividing bay wall is 4m high. The waste may be stored up to 3.8m high against the 4.8m high wall, and up to 3m adjacent to the 4m high wall. These levels are delineated on site using the bricks as height markers and ensure that a 1m freeboard is provided between bays.

Storage bays 3-6 have a rear and side wall that is 4m high, constructed using Legio bricks. The dividing bay walls are 3.2m high. The waste may be stored up to 3m high against the 4m high wall and up to 2.2m adjacent to the 3.2m high wall. These levels are delineated on site using the bricks as height markers and ensure that a 1m freeboard is provided between bays.

All bay walls are constructed using Legio blocks. Legio Blocks have been certified to have a fire resistance of 240 minutes. See Annex F.

There are two cages stored outside for ventilation. This are used to hold any gas canisters encountered in the waste. A separate battery box is also provided. This is a weatherproof container, stored away from the building.

3.2.5 Diesel Tank

Diesel will be used to fuel the mobile plant. A 5,000l tank is provided. No combustible materials or waste will be stored within 6m of this tank. This is a bunded tank, meeting the Control of Pollution (Oil Storage (England) Regulations 2001.

Spillage kits will be provided on site and kept in the site office.

No smoking signage will be clearly displayed and maintained.

Dry powder type extinguishers will be provided.

The tank and bund will be subject to regular inspections as part of the daily site checks, See EMS-FR-03. It will also be maintained in accordance with the manufacture's specification.

3.3 Fire Quarantine Area

The Fire Quarantine Area is a dedicated emergency or quarantine area which is always available. It is proposed to use the sunken loading bay to transfer any smouldering waste. The machine operator would be able to load the smouldering waste over the wall and into the bay.



Fire Prevention Plan

Document Reference: EMS OP 03

Issue Number: 5

Issue Date 19.6.2024

The bay is sunken and therefore sits at a level approximately 1.4m below the floor. With a 3m high wall separating the waste from the loading bay, this provides a difference of 4.4m. The smouldering waste can be doused in water and the water will collect in the sealed drainage system.

The water for this would be obtained from the jet wash hose which is used in the vehicle wash down area. This will have a reach of 30m.

If there is a lorry in the loading bay, this will be removed immediately to allow access. The driver is always in the vehicle and in direct radio contact with the waste transfer station staff during loading.

The allocated area is approximately 18m x 3m (54m²) and would be able hold approximately 135m³. This is based on an overall depth of waste of 2.5m. This is at least 50% of the maximum pile size.

In the event of a fire, burning waste, if safe to do so, waste will be moved to the Fire Quarantine Area using machinery.

The Fire Quarantine Areas will be labelled.

3.4 Signage

Signage will be positioned throughout the facility showing Fire Exits and the position of extinguishers and other relevant firefighting equipment.

All waste storage areas will be clearly marked to ensure the correct waste types are stored in the permitted bays.

The company will reinforce fire prevention messages using signs with key messages for staff.

3.5 Training, Awareness and Visitors

All staff and contractors working on-site will be aware of this FPP and will understand its contents.

Through site inductions and staff awareness and training, Waste A-Way will ensure that all relevant staff and contractors will:

- Understand what they must do during a fire.
- Know where the fire prevention plan is kept.
- Participate in exercises to test how well this FPP plan works and to confirm staff understand what to do. A full drill will take place annually.
- All new staff will receive induction training.
- Staff training on H&S and Fire Prevention will take place annually, or after any changes to operational practices.

In addition:

- Fire alarms will be tested weekly (this is a notification alarm)
- An annual fire drill will be carried out to test the effectiveness of the evacuation plan



Fire Prevention Plan

Document Reference: EMS OP 03

Issue Number: 5

Issue Date 19.6.2024

- A nominated member of staff will be trained to satisfy the function of a Fire Marshal.

For visitors to the site:

- They will be escorted at all times following signing in.
- They will understand the no smoking policy for the site.
- When signing in, information on the fire exits and muster point will be provided.

As set out in the Operational Procedures, training and awareness raising will be recorded.

As part of the EMS, Waste A-Way will ensure staff and contractors follow safe working practices when undertaking all activities which pose a fire, health and safety and environmental risks, such as those set out in this Fire Prevention Plan.

Annex B contains a FPP staff training record form.

3.6 Security

The following security features will reduce fire risks, particularly from vandalism and operational risks:

- The site will be secured by lockable gates.
- The facility will always be manned during routine operations.
- CCTV is provided.
- A 24 hour security guard will be provided.
- The facility will be secured with perimeter fencing.
- All functions of security will be checked daily, and information recorded on the Daily Checks Form, EMS-FR-03.
- All management have access to the CCTV using mobile phones. This allows 24 hour coverage.

CCTV cameras are within the building. The positions are shown on Drawing No WAWL-SR-FPP-01.

3.7 Planned Preventative Maintenance

The programme of routine planned maintenance will be provided for each item of plant and machinery, as well as the processing equipment to prevent breakdown and faults which may pose a fire risk.

All faults which require corrective action will be reported to the Site Manager to be implemented.

The plant and equipment will be subject to service agreements with the manufacturer and/or supplier. Where appropriate, these agreements will include a 24 hour call out facility.

A list of essential items will be maintained to ensure that an adequate supply of spare parts can be provided on site. This will include items such as fuses, switches and bearings. This will enable efficient repairs to be made on site to avoid process delays.



Fire Prevention Plan

Document Reference: EMS OP 03

Issue Number: 5

Issue Date 19.6.2024

All plant is checked prior to use daily. A sample form is provided in Annex D. In the event of any defects being recorded, the Site Manager will be informed immediately to arrange for repairs. There is a vehicle workshop on site and all vehicle repairs can be carried out on site.

The vehicles are subject to daily defect checks and a 6 weekly Planned Maintenance Inspection programme. Plant and machinery will be maintained in accordance with the manufacturer's specifications.

There is no process equipment on site. In the event that the loading machine breaks down, another plant will be hired to ensure business continuity. The operator can use machines from other sites if required.

3.7.1 Contingency

To ensure all permitted waste quantities are adhered to and no amenity issues or increased fire risks are caused, Waste A-Way will ensure that it has:

- Service Agreement Plans in place.
- Contacted relevant plant hire companies to source alternative equipment if required.
- Maintained a list of alternative facilities to take the waste.

The waste managed by Waste A-Way is not subject to seasonality.

In the event of a fire at the site, the Site Manager will notify all drivers to divert to another waste facility. The Site Manager will maintain a register of alternative sites, including telephone numbers and contact details.

A record of neighbouring business contact details will be maintained for each premise in case of an emergency. See Annex C.

There are no residential areas in the vicinity of the site.

3.8 Hot Exhausts

During operations, banksmen and site operatives will be vigilant for signs of ignition from operational hot exhausts such as those on vehicles used for transport and waste movement. Visual checks will occur every hour to ensure that dust on has not settled on hot exhausts.

When vehicles are not being used, they will be switched off and parked in the dedicated parking area, which is at least 6m from the waste storage bay. This procedure will form part of the daily site checks – end of day.

3.9 Hot Works

As part of waste operations, hot works will not be needed. However, if hot works such as welding is required as part of building or equipment repair or maintenance, a suitably qualified person will be used, and a fire marshal shall be appointed to oversee the works. Following completion of the works, the fire marshal will check to ensure everything is cooled and there is no fire risk as a result of the works.

3.10 Electrics

Any electrical work will be certified by an electrical contractor.



Fire Prevention Plan

Document Reference: EMS OP 03

Issue Number: 5

Issue Date 19.6.2024

3.11 Industrial Heaters

No industrial heaters are used at the site.

3.12 Hot Loads

The following actions are taken to prevent fire arising from a hot load:

- All drivers will be required to stop at the weighbridge when entering the site.
- If the vehicle is observed to be smouldering, the vehicle will not be allowed to deposit its load. Instead, it will be directed to the wash down area.
- Extinguishers and/or water will be used and if necessary, the fire service will be contacted.
- If a load is found to be smouldering once it has been deposited within any reception bay, if deemed safe to do so, a load machine will be used to move the smouldering material to the quarantine area. If it is not safe to do so, the material will be tackled using an extinguisher.
- No more waste will be deposited, and all deliveries will stop until the smouldering waste has been dealt with and the Site Manager has confirmed it is cooled and no longer a fire risk.

All staff will be trained to be vigilant for hot loads. All incidents of hot loads will be recorded on the EMS Form EMS/FR/04 Incident Form.

3.13 Leaks and Spillages

The spillage procedure will be implemented in the event of a leak or spillage from site vehicles or waste delivery/collection vehicles. A spill kit will be kept in the site office. All staff will be trained in the use of the spill kit. The spill kit will contain:

- absorbent granules;
- chemical/oil resistant gloves;
- chemical/oil resistant goggles; and
- a broom and shovel.

Further information on the spillage procedure is provided in EMS-OP-02. This is summarised in Annex E.

3.14 Build-up of Loose Combustible Waste, Dust and Fluff

Good housekeeping will always be maintained to ensure dust and litter are prevented from accumulating on site.

As part of the daily checks, signs for litter and debris around the site will be recorded and action taken to remove such materials. The general cleanliness of the site will be checked throughout the working day. The following specific inspections will be carried out:



Fire Prevention Plan

Document Reference: EMS OP 03

Issue Number: 5

Issue Date 19.6.2024

- Routine Checks - The Site Manager/Supervisor will carry out an inspection of all areas to ensure safe storage, access and egress. This will take place five times per day and will be recorded on the Daily Record Sheet. Particular attention will be required to identify any potential fire hazards when opening the site in the morning and prior to securing the site at the end of each shift. Any cleaning requirements will be implemented.
- Close – When the mobile plant is switched off at the end of each working day, site operatives will clean the working areas including the storage bay and loading bay. The Site Manager will carry out an end of day inspection. This will include checking the vehicles are parked in the correct area and all machinery is switched off. If the Site Manager records any build of litter or dusts, the areas will be cleaned before leaving the site.
- Weekly – Detailed clean of the site including all bays and working area.

3.15 Reaction between Wastes

The site does not store wastes which are incompatible.

3.16 Ignition Sources

There will be no naked flames, space heaters, furnaces, incinerators or any other sources of ignition on the site.

3.17 Batteries

Batteries will not be accepted at the site.

If any batteries are encountered in the waste, they will be removed and kept in a battery box. This will be a covered, leak proof container. More than one container will be provided for different batteries. Any damaged batteries will be isolated and stored separately.

Arrangements will be made to remove the batteries from the site to a specialist contractor.

The site will not accept batteries from End of Life Vehicles.

3.18 Hot and Dry Weather

All waste will be received and stored inside the building. This will prevent any direct sunlight. The waste is also removed daily, or at least during the next working day to prevent any accumulation.

3.19 Additional Actions

Further actions to mitigate fire risk on site include:

- Overnight parking of vehicles away from the reception area.
- The access route into the waste site is always kept clear and will therefore provide access for emergency vehicles.



Fire Prevention Plan

Document Reference: EMS OP 03

Issue Number: 5

Issue Date 19.6.2024

- Site walkovers taken each day will identify any accumulations of combustible litter or material which may pose a risk in the areas used by vehicles.
- At the end of each operational day, the Site Manager will conduct a site walk over to check all equipment is off and parked away from combustible materials.
- Fire extinguishers will be provided in each mobile plant and around the site.



Fire Prevention Plan

Document Reference: EMS OP 03

Issue Number: 5

Issue Date 19.6.2024

4 Fire Detection and Management

4.1 Detecting and Suppressing Fires

All staff are trained to be vigilant in terms of fire detection. For out of hours, the site has a security guard that will carry out regular patrols of the site. This is primarily to deter unauthorised access but will also be able to respond to any fire incidents on the site.

The security guards will be employed by Waste-A-Way and will receive full training. This will include checking for signs of fire during their routine walks of the site. They will be required to carry out walkover checks every hour. They will also monitor the CCTV for the rest of the time. In the event of a fire, they will be able to manually trigger the suppression system using the break glass fire points and/or contact the emergency services and site management.

Fire extinguishers are available around the site. Extinguishers will be provided at key points as shown on the drawing FPP-01. Extinguishers will be used to tackle small, localised fires.

During operational hours, the site operates a 2-way radio system which keeps the site office and site based staff in regular contact. On detection of a fire this means of communication and alarm will be used to notify all staff. The site office also has CCTV monitors which are displayed on a large TV screen. On detection of a fire during the working hours, the alarm system will be activated use the break glass fire point. The position of which is shown on drawing WAWL-SR-FFP-01.

The transfer station building is fitted with heat detectors and manual call points.

The detection system is Apollo XP95 range and includes the heat detectors, sounders and manual call points. The specification for the heat detector is provided in Appendix I.

The main building has fire suppression system in place. The system includes sprinklers with a 3m spray radius. The system is using a 30,000 litre water storage tank. This is a deluge type system. This system is activated by ceiling mounted heat sensors as well as a manual activation to ensure 24/7 response coverage. The nozzle heads will be based on the Bete solutions or similar. Details provided in Annex H. These release water at a rate of 100 litres/minute.

The design, installation and maintenance is carried out by the Skill Group. The fire alarm installations are accredited to NICEIC accreditation scheme, in accordance with BS5839.

The tank is mains fed and will be replenished as it empties.

The water tank will be kept full and used only for fire suppression.

4.2 Firefighting strategy – During Operational Hours

In the event of a fire being detected, the following steps will be taken:

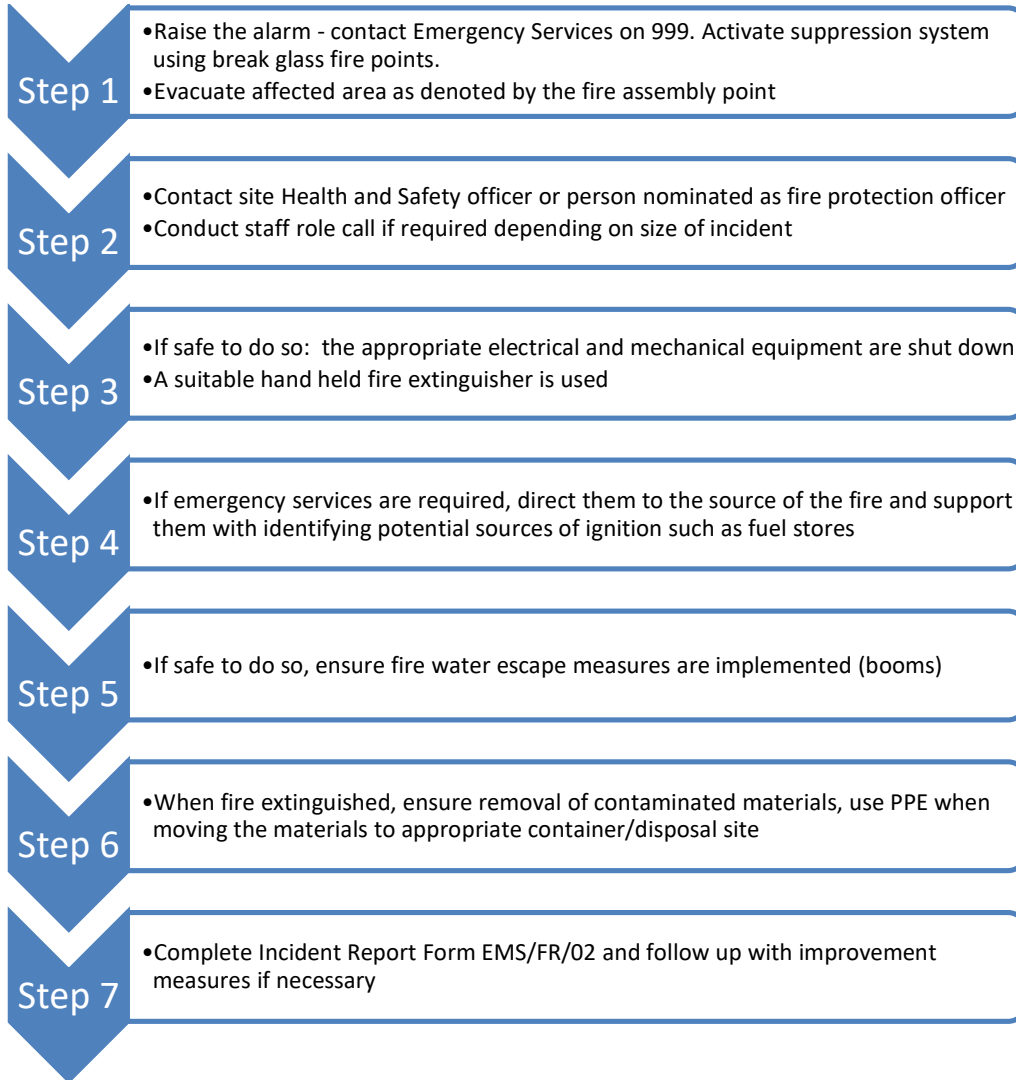


Fire Prevention Plan

Document Reference: EMS OP 03

Issue Number: 5

Issue Date 19.6.2024



All staff are trained in these procedures.

The contact list of emergency numbers in Annex C will be retained in the Site Office and updated as required by the Site Manager.

4.1 Firefighting strategy – Out of Hours

The site has 24 hour security. The night guard will be responsible for carrying out hourly checks of the site as well as monitoring site wide CCTV. During normal operations, the waste reception bay will be empty at the end of each working day. There may only be small volumes stored overnight. If a fire is detected, the night guard will activate the suppression system.

In the event of a fire being detected during out of hours, the following steps will be taken:



Fire Prevention Plan

Document Reference: EMS OP 03

Issue Number: 5

Issue Date 19.6.2024

Step 1

- Activate suppression system using the break glass fire points.
- Raise the alarm - contact Emergency Services on 999

Step 2

- Notify First Respondents and Site Manager
- Site Manager to contact nearest businesses

Step 3

- If safe to do so, ensure fire water escape measures are implemented (booms)

Step 4

- Direct emergency services to the source of the fire and support them with identifying potential sources of ignition such as fuel stores

Step 5

- Once on site, First Respondents to make decision on the need to notify residents (based on scale of incident). If instructed by Fire Officer to notify residents, Site Manager will use mobile phone app to alert residents.

Step 6

- When fire extinguished, ensure removal of contaminated materials, use PPE when moving the materials to appropriate container/disposal site

Step 7

- Complete Incident Report Form EMS/FR/02 and follow up with improvement measures if necessary



Fire Prevention Plan

Document Reference: EMS OP 03

Issue Number: 5

Issue Date 19.6.2024

4.2 Managing Fire Water

The entire operational area within the building and external yard is concreted.

Fire water would be generated from within the building. This could contain approximately 293,400 litres of water. A boom² can be placed across the building entrances to provide a contained area. The waste storage part of the building is approximately 1,400m². With a 0.16m boom across the entrance, this would provide a storage volume of 230,400 litres.

In addition, the sunken loading bay will also be used to store fire water. This could hold 63,000 litres.

The combined storage is therefore 293,400 litres.

The polyboom will be stored in the workshop. This is separate from the main waste operational area and is therefore likely to remain accessible. The boom would be placed in the area as indicated on the plan.

All staff will be trained on the deployment of polybooms and will be aware of when to deploy them, if safe to do so i.e. if human life will not be put at risk. This will allow an individual member to respond on their own if required. Training will take place as part of the induction and will be tested during an annual fire drill. It is anticipated that it will take 10 minutes to deploy the booms.

The polybooms will be stored and handled in accordance with the manufacture's specification. Their shelf life is unlimited if stored away from direct sunlight. If the booms are deployed, they will be disposed and replaced.

Assuming a scenario in which a full reception bay of combustible waste was on fire, the following fire water management would be required:

Litre/min/1m ³ of waste (l) ^a	6.6
Largest combustible pile (m ³)	230
Litre per minute required (l)	1,533
Litres over three hours (l)	276,000
Storage volume (l)	293,400

^a Based on EA guidance that 2000l /minute of water is required for a 300m³ stockpile for three hours

Water supplies for firefighting can come from:

- **Mains water supply.** Mains water is available on site. This will be used to replenish the fire water tank.

² <https://www.darcy.co.uk/product/spill-booms-and-bunds/poly-land-boom/>



Fire Prevention Plan

Document Reference: EMS OP 03

Issue Number: 5

Issue Date 19.6.2024

- **Hydrant.** There is a hydrant on Swinborne Road (approximately 70m from site entrance). There is another hydrant on Rydley Road, which is about 55m from the site entrance. Both are 100mm diameter pipes. Photographic evidence is provided in Annex G.
- **Water Tanks and Sprinklers.** One 30,000 litres water storage tank will feed the fire suppression units. Each unit will provide 100l/minute. The water tank will be kept full of water and only be used for fire suppression.

For information only, Basildon Fire Station is 3 miles from the site, with a driving time of 9 minutes.

4.3 Incident Management

In the event of an incident, all waste will be diverted to a third party operator. The operator maintains a list of potential sites that are permitted to receive the waste.

Annex C contains a template for maintaining a list of local contacts. This will be kept up to date and in the site office. In the event of a fire, the contact list will be used to ensure local businesses are notified immediately.

Once the fire has been extinguished and the site has been deemed safe to enter, an assessment of the fire damage will be made. Arrangements will be made to tanker away the fire water to allow access to the building. Any fire residues will be loaded into containers and removed from the site for disposal.

All equipment will be checked by the manufacturer to ensure that it remains fit for purpose. Any repairs will be made by the manufacturer and the commissioning phase will need to be signed off by the manufacturer before waste processing recommences.

The detection and suppression system will also be checked by the installers to ensure that they are fit for purpose. Any repairs will be made in accordance with the manufacturer's recommendations. The fire water tank will be fully replenished before any operations commence.

The cause of the fire will be investigated to understand what occurred and what measures need to be in place to prevent a recurrence. Advice will be sought from the Fire Service and this Fire Prevention Plan updated accordingly.

Annex A: Location of Key Receptors

The receptors shown below are within 1 km of the site.

Wind Direction

According to the UK Met Office, the prevailing wind direction in the area is South-Westerly³.

Receptors

The receptors are identified in Table 3 and in Figure3.

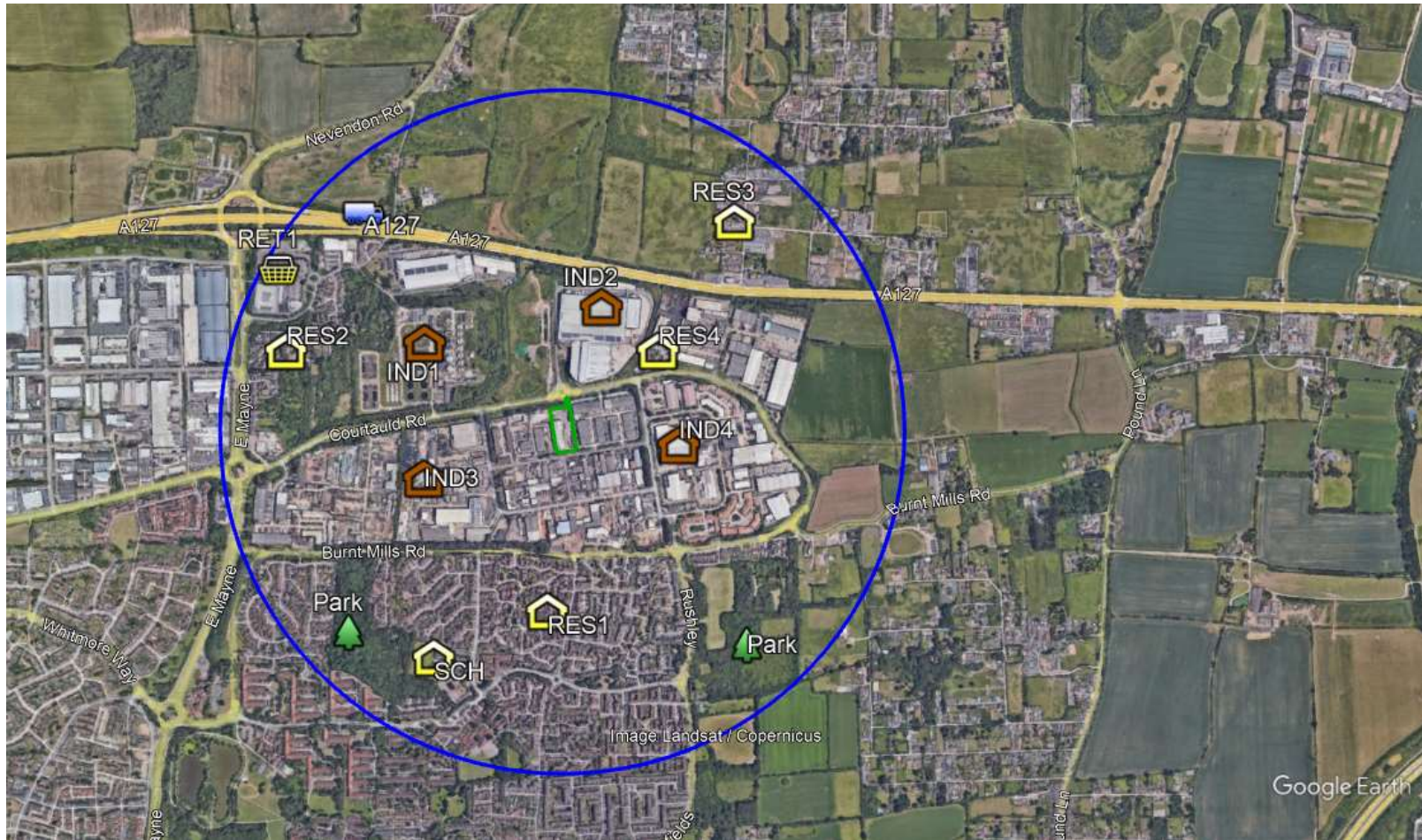
Table 3 – Receptors within 1km of the Site

Receptor	Type	Sensitivity	Distance and Direction from Permitted site
A127	Road	Low	460m North
Courtauld Road	Road	Low	Immediately North
Swinborne Road	Road	Low	Immediately South
IND1	Sewage Treatment Works	Low	230m North West
IND2	MBT	Low	120m North East
IND3	Industrial	Medium	Immediately West
IND4	Industrial	Medium	Immediately East
RES1	Residential	High	315m South
RES2	Residential	High	680m North West
RES3	Residential	High	660m North East
RES4	Residential	High	225m North East
Park	Local Nature Reserve	Medium	630m South West
Park	Recreational	Medium	510m South East
SCH	School	High	660 South West
RET1	Supermarket	Medium	790m North West

There are no public rights of way near to the site.

³<http://www.metoffice.gov.uk/climate/uk/regional-climates/so>

Figure 3 – Map showing receptors within 1km of the site



Annex C: Emergency Contact Numbers

Name & Address		Telephone Number
Environment Agency	General Enquiries:	03708 506 506
	Incident Hotline Reporting:	0800 80 70 60
Electricity Supplier	National Power Cut Helpline	105
	UK Power Networks	0800 028 0247
Gas supplier	National Gas Emergency Service	0800 111 999
Essex and Suffolk Water	Water Leaks	0800 526 337
HSE	Incident Contact Centre	0345 300 9923
	Incident Hotline	0151 922 9235
Emergency Services (Fire/Police/Ambulance)	Emergency	999
	Non-Emergency	101
Nearest Hospital	Basildon University Hospital (24 Hours A&E)	01268 524900

Annex C: Local Contact Numbers (immediate surrounding properties)

Name & Address		Telephone Number
Hope Construction Materials	Swinbourne Rd, Burnt Mills Industrial Estate, Basildon SS13 1EZ	0845 520 1745
GB Plating	23-25 Nobel Square, Burnt Mills Industrial Estate, Basildon SS13 1LP	01268 727504
S6 Autocare	28 Nobel Square, Burnt Mills Industrial Estate, Basildon SS13 1LP	01268 590 724
Newbridge Accident Repair	Magnum House, Swinbourne Rd, Burnt Mills Industrial Estate, Basildon SS13 1AX	01268 590 722

Annex D Daily Checks Form (from EMS-FR-03)

Date:

Checked by (Initials)		ACTIONS					
Compliance (Y/N)							
External:							
Gates and Fences							
Signage condition							
Litter							
Check external condition of site buildings							
CCTV Operational							
Diesel tank and bund							
Integrity of concrete surface							
Internal:							
Integrity of concrete floor							
Integrity of storage bays							
Capacity of Waste Quarantine Area (% full)							
Signage clear and intact							
Evidence of leaks or seeps							
Capacity of Storage Bay							
Pests							
Site Cleanliness		Start	10.00	12.00	2.00	Close	
Parked vehicles over 6m from combustible materials at the end of the day.							
Fire Watch check – storage capacities, Fire Quarantine Area							
Fire Fighting Equipment							
Actions:							

Sample Form – Daily Checks Plant (To be completed for each item of plant)

Details

Week Commencing:		Completed by: (Name/ Job Title)	
-------------------------	--	--	--

Check List (tick for compliant, cross for non-compliant and complete comments)

	Plant:	M	T	W	T	F	S	Comments
Item	Check for							
Tyres, wheels, tracks	Wear/damage/security							
Engine, Water	Correct levels, leaks							
Lights and warning devices	Correct operation							
Hydraulic System/ All pipes	Correct operation							
Service/Parking Brake	Correct operation							
Assess & Body work	Damage							
Guards / Glass	Damage/breakage							
Air conditioning / heater	Correct operation							
Greasing points	Cleaned and greased							
Radiator blown out / air filter	Free from debris							

Any defects must be reported to the site office immediately and recorded in the comments

Annex E – Spillage Procedure

Spillage

Potential causes of a spill

Minor spillages may be caused by:

- Machinery and fuel/oil leaks from vehicles
- Spillages or leaks from the diesel tank

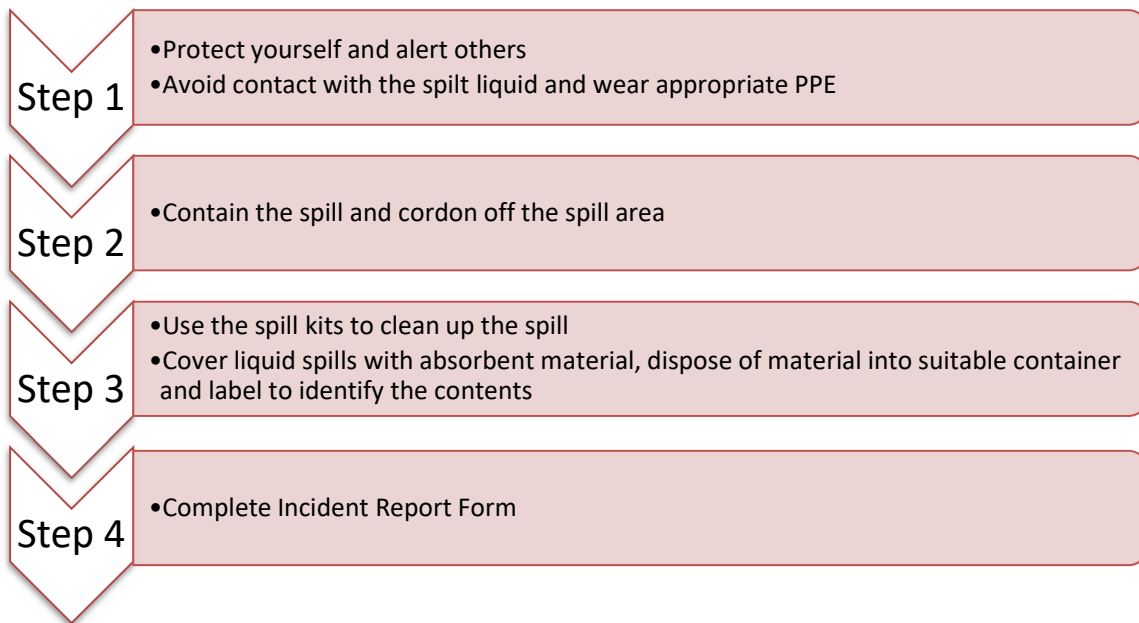
Prevention of Spillages

Spillages and impacts from spillages will be prevented by:

- Controlling vehicle manoeuvring will be controlled
- Regular maintenance of plant and machinery
- Diesel tank to be double skinned and banded
- Spill kits maintained in site office

Minor Spillage Procedure

A minor spillage is one that usually presents little or no risk to person or property and is small enough to be safely cleaned up using the emergency spill kit. The procedure is:



Spill Kits

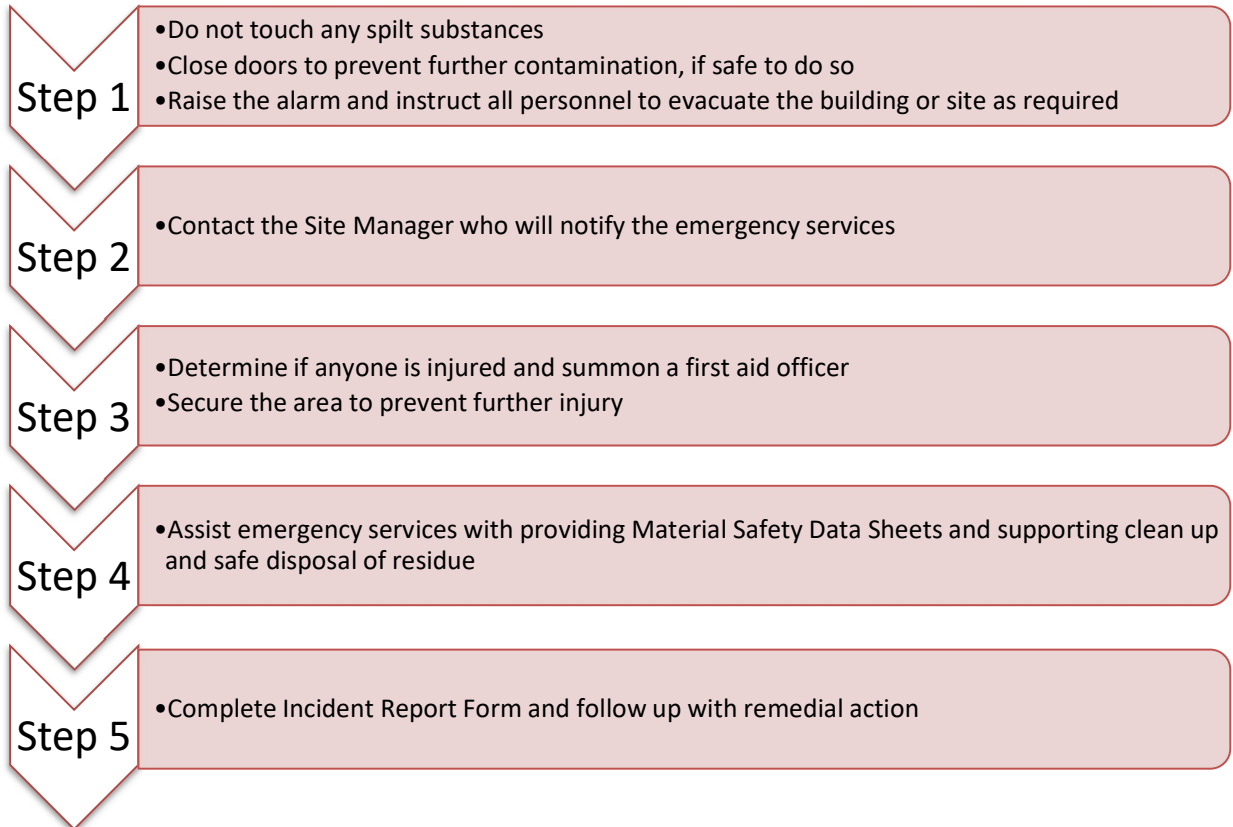
Spill kits will be maintained at the facility to respond to any spill incident. The spill kits will include:

- absorbent material;
- protective overalls;
- chemical/oil resistant gloves;

- chemical/oil resistant goggles; and
- a broom and shovel.

Major Spillage Procedure

A major spill is one that cannot be contained safely with the material on site and threatens safety to life and or the environment. The procedure is:



Annex F – Bay Walls



Consulting engineers in:
– Acoustics
– Building physics

Kees Rijk BV
Watertorenweg 24
6571 CB Berg en Dal
The Netherlands
info@keesrijk.nl

Fire resistance REI 240 Legioblock



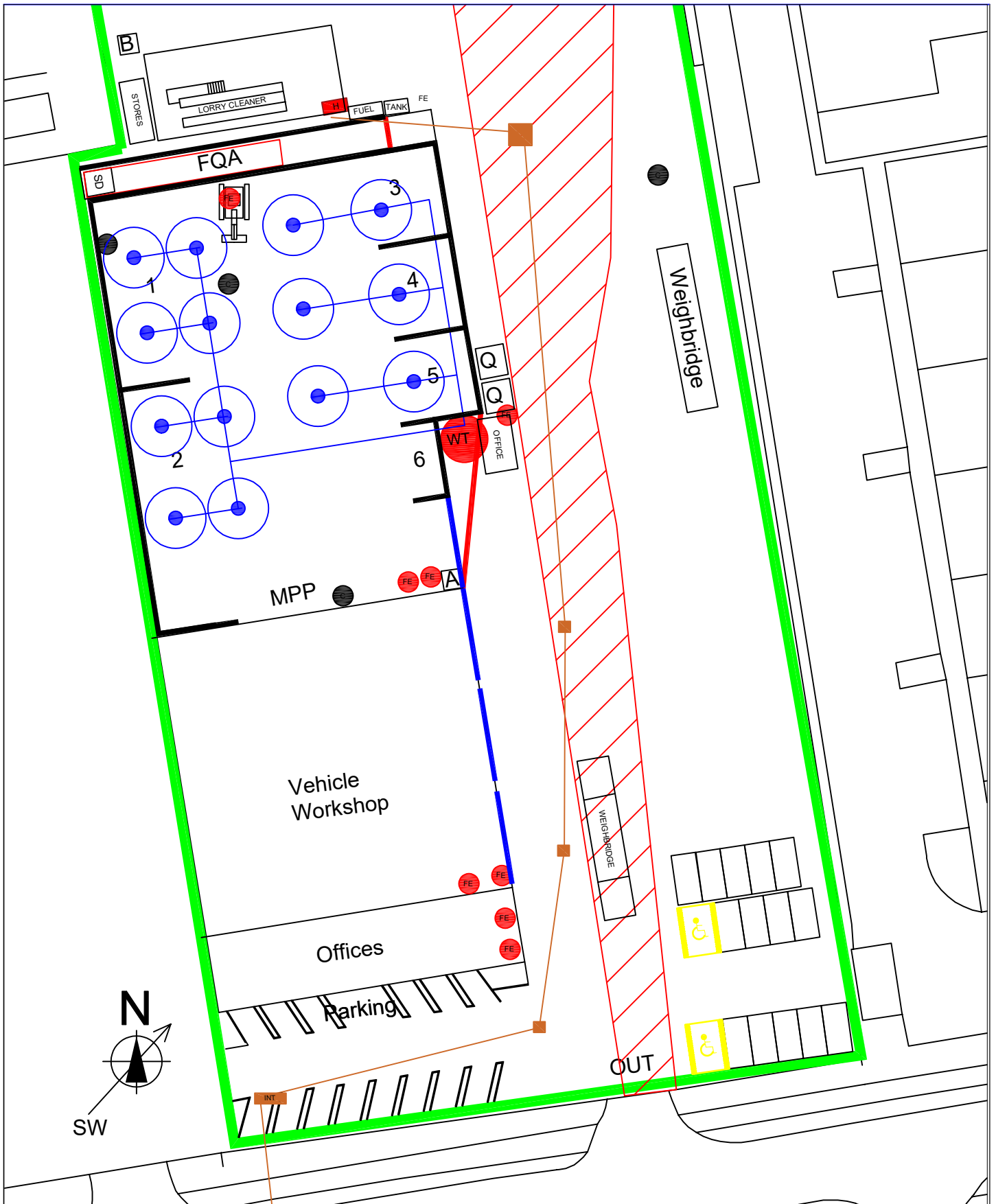
Kees Rijk BV confirms that Legioblock walls with a separating function have a fire resistance of 240 minutes, in accordance with the standards NEN 6069:2011 and EN 13501-2:2016.

This summary is based on the report 171404 “Legioblock concrete retaining walls; Fire resistance study”. In the report, the application area and the limiting conditions are described.

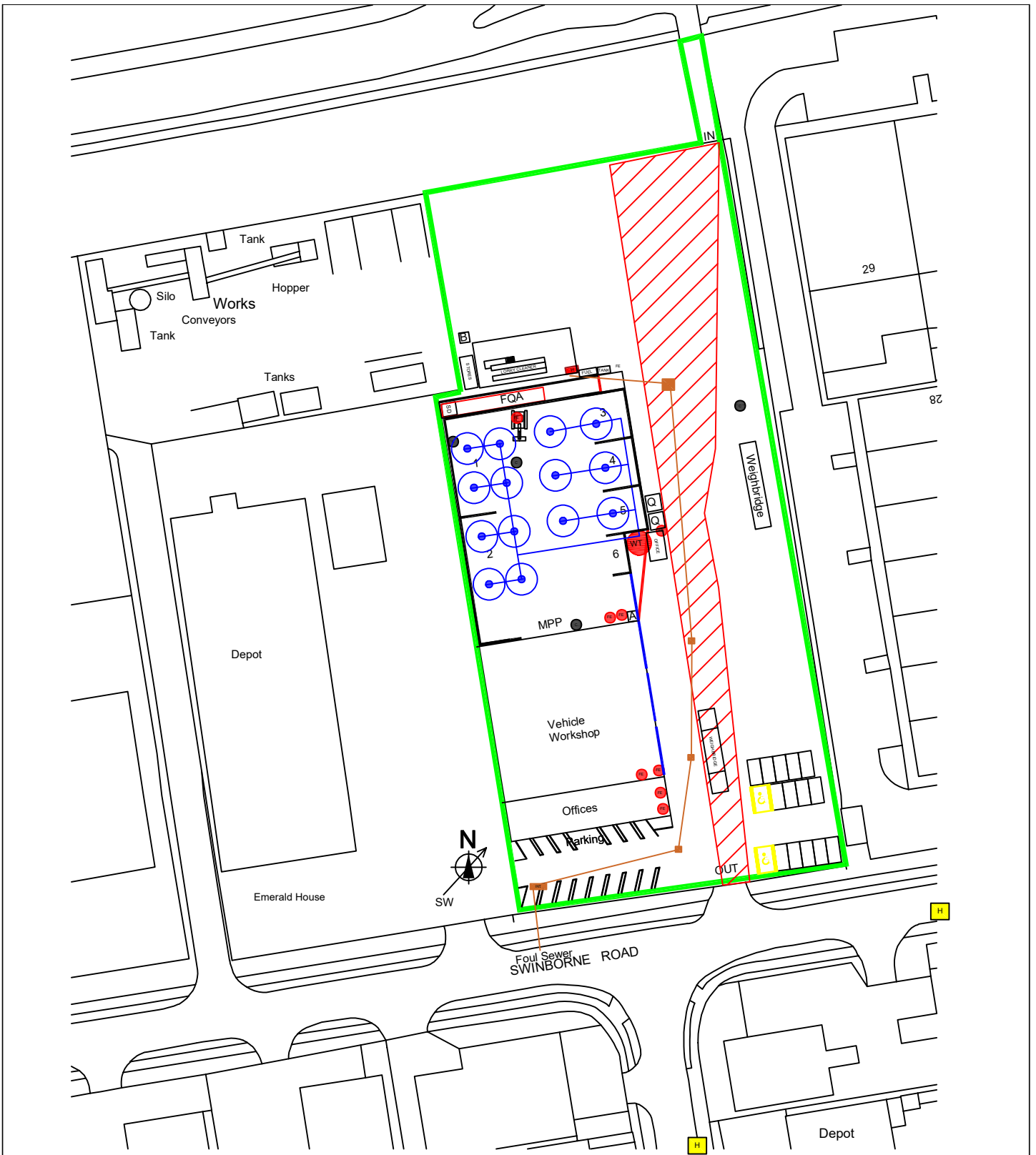
Ir. C.A.E. (Kees) Rijk
17 April 2017

Annex G – Photograph of Fire Hydrant







	Access Route for Fire Brigade		Hose (30m reach)		Alarm Point		Fire Boom
	Fire Quarantine Area		Water Tank (30,000)		Camera		Roller Shutter Door
	Sealed Drainage		Fire Extinguisher		Fire Suppression Point		Fire Wall
	Waste Quarantine Area		Battery Box		Manhole	Entire Site is Concrete	
	Mobile Plant Parking		Interceptor	Prevailing Wind from South West			



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<ul style="list-style-type: none"> 1 Residual Waste 2 Residual Waste 3 Mixed Dry Recycling 4 Garden Waste 5 POPs 6 Spare - overflow <p>Bays will be interchangeable depending on market needs, but all controls will remain the same.</p>		Hydrant	
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Prevailing Wind from South West