REGROWING THE PAST

MIDWEST POLYCHEM

FIRE PREVENTION PLAN

August 2022

Version 2.0

Midwest Business Park, Hurn Road, Holbeach PE12 8JB

DOCUMENT CONTROL SHEET

Version reference	Date	Reason for change	Issued by
1.0	29/10/20	Initial draft	PD
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Approved by		Luke Derrick	

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1 INTRODUCTION

1.1 Roles and responsibilities

The Health, Safety and Environmental compliance officer **Luke Derrick** has responsibility for ensuring these procedures are adhered to. The Environmental compliance officer 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 plant, machinery and handheld fire extinguishers and other firefighting equipment at the site is adequate.

1.2 Purpose

The primary purpose of this Fire Prevention Plan (FFP) is to guide staff and contractors in the prevention of fire for Midwest Polychem LTD. This FPP also confirms the actions to be taken in the event of fire in order 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 fire fighting

1.3 Scope

This FPP has been prepared in accordance with Environment Agency guidance, in addition, all fire prevention measures will meet the stringent insurance requirements for the business.
Annex A shows a site layout plan

1.4 Liaison with Fire Rescue Service (FRS)

Holbeach Fire rescue service will be provided a copy of this FPP

1.5 General considerations

The Midwest Polychem LTD site is located on Midwest Business Park, Hurn RD, Holbeach, Spalding Pe12 8JB, on the northern side of the A17 some 1km east of Holbeach. The site is approximately 3.45 hectares in size. At the time of writing this FPP, the site currently consists of a concrete impermeable surface in AND around the warehouse and externally a carf park area in good order. The sites main activity is the granulation and washing of plastic waste.

The surrounding land use is a mix of light industrial, agricultural, and residential housing.

Midwest Polychem LTD operate under an existing Environmental Management System (EMS) which identifies the potential sources of pollution from site activities and controls site operations to eradicate emissions or where that is not possible to minimise their effect on human and environmental health.

The Fire Prevention Plan (FPP) forms part of the EMS

The site has sealed drainage and as the operation is under cover there is no runoff to foul or surface water from the process. (Only clean rainwater) see Annex B site drainage. Trade effluent is pumped into the local sewerage system as per conditions of the Trade effluent discharge consent notice.

2 Causes of Fire

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

Table 1 Causes of Fire and Applicability to the Midwest Polychem LTD site

Causes of Fire	Applicability to the Midwest Polychem site
Arson or Vandalism	Yes – See section 3.5 Security
Self-Combustion	No – See section 3.7 Self Combustion
Naked Lights	No – None on site
Plant or Equipment failure	Yes – See 3.6 plan preventative Maintenance
Electrical Faults	No – All electrical work carried out by trained personnel
Discarded smoking material	No – Smoking not permitted near waste storage or factory
Hot Works	No – See 3.8 Hot works
Hot Exhausts	Yes – See 3.10 Hot exhausts
Industrial heaters	No – None on site
Open Burning (adjacent to site)	No – No likely sources of burning adjacent to site
Damaged or exposed electrical cables	No – No live exposed electrical cables are permitted on site
Reactions between incompatible materials	Not relevant given waste types permitted on site
Neighbouring site activities	No – No likely sources of risk from neighbouring land use
Sparks from loading buckets	No – Bobcat operations not likely to cause sparks from bucket
Hot loads deposited	No – Not a risk given types of materials permitted on site

Mitigation measures in relation to these activities, where under control of Midwest Polychem LTD, are set out in this FPP

3 Fire Prevention Plan

Midwest Polychem LTD recognises that the risk of fire cannot be eliminated. However, the site will be operated in accordance with a robust management system. Operational procedures are listed in the sites Environmental Management System.

In addition to 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 and Receptors

A site plan is given in Annex A showing the key features of the site relevant to the Fire prevention Plan. Including site access, security, vehicle parking, materials storage, drainage, and buildings. Annex C contains fire brigade information detailing hydrant location, entrance, exits and other relevant information.
A map Showing key receptors within 1km of the site is shown in Annex D

3.2 Material Receipt and Storage

Waste will be delivered to site using the companies own fleet or sub contractors' vehicles. Raw material (P.E.T bales/HDPE Bales & granulated flakes) are unloaded and then stored in the fire bays 1 & 2 prior to processing. Finished product is then delivered according to customers.

Waste acceptance and quarantine procedures will be followed as set out in Annex E.

Only the waste types and EWC codes named on the environmental permit will be accepted at the site. Wastes entering the site will be inspected and registered at the site. Non-compliant waste materials will be turned away from site. A record will be made in the site diary.

There is a quarantine area at this site as shown on the Waste Storage Plan

3.2.2 Waste Storage Time

Waste will be stored on site for a period no longer than 3 months. Consideration is given to the likely dry nature of the material and the implications it has for self-combustion. See 3.2l.3 (stock rotation and management) P.E.T bales or flakes are processed almost immediately on arrival at site and no product or waste is stored overnight in the building.

Midwest Polychem LTD has key customers for each material. In addition, a contingency plan is in place in the event material has to be moved off site if the factory is unable to accept it. This ensures waste levels will not build up over permitted amounts.

3.2.3 Stock Rotation and Management

Given the limited storage time on site- max 3 months, stock rotation is deemed unnecessary, however the company will, if necessary, undertake monthly stock checks which will involve moving the waste within each pile. The purpose of the stock check is

- To turn waste in order to ensure risk of self-combustion is mitigated.
- To ensure waste volumes do not exceed those permitted
- To ensure waste is not stored onsite for lo0ngewr than the permit allows

The yard supervisor in charge of stock checking will be vigilant for signs of combustion and digital imaging cameras will be used to check for hotspots. If any are found these will immediately be quenched with water and reported to the management team.

Waste will follow the first in/ first out principle as detailed in Annex F points 10/11/12

3.2.4 **Waste Storage**

Waste will be stored in designated fire bays in the yard, externally on an impermeable surface. Processed waste will be returned to the yard and loaded on curtain sider trailers ready for dispatch. Combustible waste will be stored in 3-sided fire resistance bays.

- Waste PET bales and flakes to be stored in bays 1 &2. Each bay is approximately 11m wide.
- Fire bays- These will be constructed of precast interlocking concrete. Fire bays will be inspected and maintained to be always kept in good order. A free board of 1m will be kept between the top of the waste pile and contained within the waste walls. Fire walls will be 5 blocks high and waste will be stored no higher than 3m
- The fire bay/floor interface will be sealed and will be water impermeable

To keep the bays in good order, stock rotation will be followed as per 3.2.3 above. In addition, digital thermal imaging temperature checks will be conducted as detailed in section 3.7.

Fire bays and free board height space will ensure that in the event of a fire flame and height and radiative heat will not ignite other waste piles.

3.3 **Signage**

Safety signage will be positioned throughout the facility showing fire exits, extinguisher positions and other emergency procedures.

Waste storage areas will be clearly marked to ensure waste throughput timescales are adhered to.

Midwest Polychem LTD will reinforce fire prevention messages using signage, health and safety bulletins, staff inductions and safety notice boards.

3.4 **Training, Awareness and Visitors**

All staff and contactors working on site will be aware and understand the contents of this FPP and the Fire response plan. Through Permits to work, site induction and ongoing staff awareness and training, Midwest Polychem LTD will ensure that all relevant staff and contractors will

- Understand what to do during a fire

- Know where the fire prevention plan is kept
- Participate in regular exercises and drills to test how well this FPP-0 plan works and or confirm all staff understand what to do.

For visitors to the site

- They will be signed in on arrival and escorted at all times
- Understand the companies' smoking policies
- Provided with fire safety information

Training

Training records are maintained and kept as required by the site EMS

All staff will be required to undergo regular fire training as part of the WAMITAB competency requirements. In addition, regular fire drills and call point tests will be undertaken in accordance with HSE legislation. Staff will be required to become familiar with this FPP as Part of their ongoing competence. Luke Derrick will be responsible for implementing this plan and recording annual test and drills.

3.5 **Security**

The following security features have been implemented to reduce fire risks from vandalism and arson through preventing access to the site by unauthorised people.

- Warehouse and doors are closed and locked outside of office hours to prevent unwanted access; roller shutter doors have been installed in the main factory.
- Regular checks of the perimeter fencing and gates to be conducted
- Only one entrance and one exit point to and from the site is in place. These gates are to be secured with padlocks and are to be locked if site is unattended.
- CCTV which can be viewed remotely by the management team covers the whole of the permitted area where waste is stored.
- A security guard is employed and is present on site throughout the night.
- The permitted area is fenced off with palisade fencing

3.6 **Planned Preventative Maintenance**

Midwest Polychem LTD have a planned preventative maintenance program to ensure all machinery and components continue to remain in safe working order. There is a program of routine planned maintenance for each item of plant, machinery, and processing equipment as per manufacturers recommendations. This is in m order to prevent breakdowns and faults which may pose a risk of fire. Details of this is kept I n the site safety office on the asset management and routine maintenance spreadsheet.

All electrical equipment will be tested, and PAT testing carried out onsite annually to demonstrate this equipment is safe and checked by trained and certified person. A PPM schedule and maintenance contract will be in place to ensure electrical equi0-ment and plant is fit for purpose thus minimising the risk of fire

All faults needing corrective action will be reported immediately to a supervisor, Health and Safety officer or manager.

For contingency, Midwest Polychem LTD recognises that if needed to ensure a continued Material throughput, required machinery will be hired from specialists if a significant -plant breakdown occurs in the factory or yard. This is to ensure continued effective operations and prevent excessive storage of materials which could be likely to build up
and exceed permitted waste quantities.

3.7 Self Combustion

Given the stock rotation throughput times and material type there is limited potential for self-combustion EA guidance states that the risk increases when waste stored over 3 months and that combustible materials must not be stored for more than 6 months. Wastes on site are not likely to be stored practically for longer than 48 hours.

Daily walk around checks are made on the site as part of the fire risk daily checks form documented In annex F. this includes checking for signs of self-combustion and housekeeping issues which may impact on fire risk.

The risk of combustion is low, as the materials which will be managed on site are not anticipated to be volatile or contaminated with flammable materials, however they will be dry. As a result, a regime of turning the waste materials during a stock take will be in place and used if required. For details see 3.2.3 stock rotation and management.

The company has considered the risk of self-combustion and consider that given the storage times, management procedures in place and types of materials used the waste is unlikely to generate hot spots. However during operation, if the site records show that hot s[pots do occur regularly the site management team will consider further measure such as installing temperature probes.

In warmer weather waste piles will be sheeted dampened and temperature checked as required to minimise the effects of external heating. Hot spot monitoring with thermal imaging cameras will be performed and the results will be recorded. Cover and shade will be used where possible and regular checks will be made of the waste piles and any abnormalities will be recorded in the site diary and hot days monitoring folder.

3.8 Hot Works

Hot works will only be undertaken by trained and certified personnel and will be monitored using strict permit to work procedures.

3.9 Mechanical Treatment

Mechanical treatment means the use of mobile plant. The plant used on site will be as follows.

- 9 x Gas forklifts
- 1 x 360 loader
- 1 x Bobcat

- 1 x Reach truck
- 1 Telehandler
- 1 x Hymer 7.0 forklift
- 1 x Power-shredder

All equipment and plant inspected and maintained under PUWER requirements and daily walk around and start up checks documented
Mobile plant is parked at least 6m from waste storage or flammable products. (See fire risk daily checks form annex F and annex A)
Only trained and authorised staff permitted to operate equipment.
All plant to be fitted with fire extinguishers. Keys are to be removed from ignition when vehicles are not in use.

3.10 **Hot Exhausts**

During operations, designated fire marshals (7 trained on site) and site operatives will be vigilant for signs of ignition from operational hot exhausts.

At the end of the working day, vehicles will be parked away from waste or combustible materials as indicated on the site plan. Several full-time employees are trained as fire wardens. And a daily site fire watch and check will be made at the end of the shift. See fire risk daily check form annex F.

3.11 **Additional Actions**

Further actions to mitigate fire risks on site include:

- Any overnight parking of vehicles away from processing and storage areas.
- Access and egress to the site is always to be kept clear proving clear access for emergency service vehicles.
- Daily site walk rounds to be undertaken each day to identify any accumulations of combustible dust, litter or material which may pose a fire risk.
- Litter monitored and restricted by the warehouse. Visible litter to be picked up and site swept daily with forklift brush.
- Good housekeeping will be maintained at all times to ensure dust and waste is prevented from accumulating on site.
- Operational vehicles to be fitted with fire extinguishers.
- Bulk fuel storage tanks to be bunded.
- Any fuel oil spills from plant or machinery to be cleaned up immediately using spill kits containing absorbent materials which are then correctly disposed of.
- Sources of ignition including non-energy efficient (heat emitting) light bulbs, lit cigarettes, naked flames and storage heaters will not be permitted on site.
- Any other sources of ignition identified will be kept at least 6m from any flammable and combustible waste.

Cleaning

The site will be cleaned daily at the end of the operational shift and before starting up in the morning to prevent build up of dust, fluff and combustible waste. This will be focused on areas

and machinery where dust may build up e.g., flat surfaces on the top of machinery or electrical panels. Mobile plant, under conveyors or metal detectors. The outside yard will be swept at the end of every shift and any waste left in the intake area sheeted down. The companies clean as you go policy will be relayed to all employees when being inducted.

Daily walk round checks will monitor site cleanliness

4 Fire Detection and Management

4.1 Fire Detection

Midwest Polychem LTD will

- Provide portable fire extinguishers around the site and inside the factory
- Carry regular inspection, including at the start and end of every shift.
- Provide fire warden training for several members of staff
- Make sure all staff are aware of the FPP

Midwest Polychem LTD will fit manual call points and an automatic fire detection system in the building. This will be tested and maintained according to HSE legislation. An automatic suppression system was considered but deemed uneconomical and unnecessary, due to the fact waste is not stored inside the building. A CCTV monitoring room is manned when the plant is operational to monitor for any fire hazards and remote CCTV monitoring is available to managers and directors.

Fire suppression

The site hydrant location and fire fighting equipment plan can be found in the site Fire brigade information pack and fire extinguisher locations can be found on the site map.
A fire hydrant is located at the junction with the A17 90m from the site entrance with an estimated flow rate of 2100ltrs/minute (35l/s) flow rate as per annex C

Fire extinguishers are provided at strategic points around the factory and are marked on the site safety map. Extinguishers will be maintained in accordance with HSE legislation and monthly visual checks will be recorded. Extinguishers provided are

- 4 x Foam
- 6 x Co2
- 12 x Dry powder
- 2 x water
- 2 fire blankets

All vehicles are fitted with powder extinguishers and a number of handheld extinguishers are available on-site.

4.1.1 **Water Supplies**

Table 2 shows the available water on site which can be delivered from hydrants. See annex C for the water supply site plan

Table 2: Volume of Water available for fire fighting	
Hydrant Delivery (Ltrs/min)	2,100
Number of Hydrants	1
Total Hydrant Delivery	2,100

4.2 **Fire Fighting Strategy**

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

- Step 1 – Raise the Alarm – Contact emergency services on 999, evacuate the factory and all staff to report to fire assembly point and await headcount.
- Step 2 – Contact Health and Safety officer. Conduct staff role call depending on size of incident.
- Step 3 – If safe to do so, the appropriate electrical and mechanical equipment is to be shut down, this includes main generators and processing plant.
- Step 4 – If emergency services are required, direct them to the source of the fire and support them in identifying any other potential sources of ignition such as fuel storage. A copy of the fire brigade information pack should be presented to the fire brigade upon arrival.
- Step 5 – If safe to do so ensure fire water containment is intact and deploy any mobile fire water containment berms.
- Step 6 – When the fire has been extinguished, ensure safe removal of any contaminated materials and fire water. Use PPE when handling materials.
- Step 7 – Complete incident report and follow up with improvement measures if necessary.

Management will liaise with the emergency services on their arrival. The designated fire marshal will clearly identify him/herself to the Emergency services on their arrival and u7pdate the FRS on the situation ensuring they are made aware of the location of any compressed gases or flammable liquids on site.

Prior to arrival of the FRS onsite there are several measures that Midwest Polychem LTD can take to help fight fire, assuming there is no risk to life.

- Trained fire marshals can use handheld fire extinguishers to help contain fire where possible

- Water bowsers can be deployed to damp down areas to stop the spread of fire
- Access to fire hydrant may be used by Midwest Polychem LTD staff

- Fire blankets can be used to smother smaller isolated fires.
- In the event of a fire or observed self-combustion, burning waste, if safe to doso will be moved to the Fire quarantine area.
- Should it be necessary to move or divert wastes to an alternative site then an alternative permitted location will be used (Nene Haulage) Vehicles will be directed to this site (Note the only vehicles coming to site will be Midwest Polychem LTD owned operated vehicles or sub-contractors or suppliers and not the general public so all drivers will be notified to divert tov this location.
- Neighbours and local businesses downwind will be notified of any potential fire incident by the site operator as soon as possible from the local contact list. This will be completed by telephone and will be completed as soon as it is safe to do so. Local receptors will be notified in order of proximity to the site prevailing wind direction. Local receptors will be kept updated as to the progress of firefighting as new information comes to light and fully debriefed at the end of the event.
- Once the fire is being dealt with, post fire decontamination arrangements will be agreed with the local EA officer.
- The site has an impermeable surface and will be scraped clean.
- Drains and runoffs will be scraped out and cleaned by tankers.
- Waste will be removed from site if necessary and stored at Nene Haulage.
- If necessary, soil and groundwater monitoring will be undertaken as agreed with the EA.
- Once the local EA officer has agreed that the site is ready to become operational again then operations will re commence.

4.3 Managing Fire Water

Table 3 shows the potential volume of fire water which may need to be managed on site should the largest waste pile require quenching

Table 3: Volume of water Required	
l/min/1m3 of waste*	6.6
Largest combustible pile (m3)	255.15m3
Water required (l/min)	1683 l/min
Total requirement form 3 hours	306180 ltrs

*Based on EA guidance: 2000ltrs of water per minute required for 300m3 stockpile for 3 hours

Table 4 shows the volume of fire water which can be contained within the site. The waste storage bays are sealed and the hard concrete surface ism surround by a fire water containment bund. The concrete blocks are 21.5cm high.

Table 4: Volume of firewater containable within site	
Fire water containment area length (m)	70m
Fire water containment area width (m)	40m
Fire water containment block height	0.215m
Fire water containment area volume (m3)	602m3
Fire water containment area volume (ltrs)	602000ltrs

These tables show that in a worst case scenario the site would be able to contain all contaminated fire water need to extinguish a fire. Therefor, the key receptors shown in Annex D which could be affected by contaminated fire water will be protected. Mobile booms will be deployed across the warehouse exits and entrances if a fire occurs inside the factory. The highest fire risk is inside the yard which is surrounded by 21.5cm high containment blocks.

Midwest Polychem LTD has a contact for emergency spillage response with a waste carrier provider who will supply tankers to remove contaminated fire water. The fire brigade also may re-use water stored in the fire water containment area to assist with fire fighting.

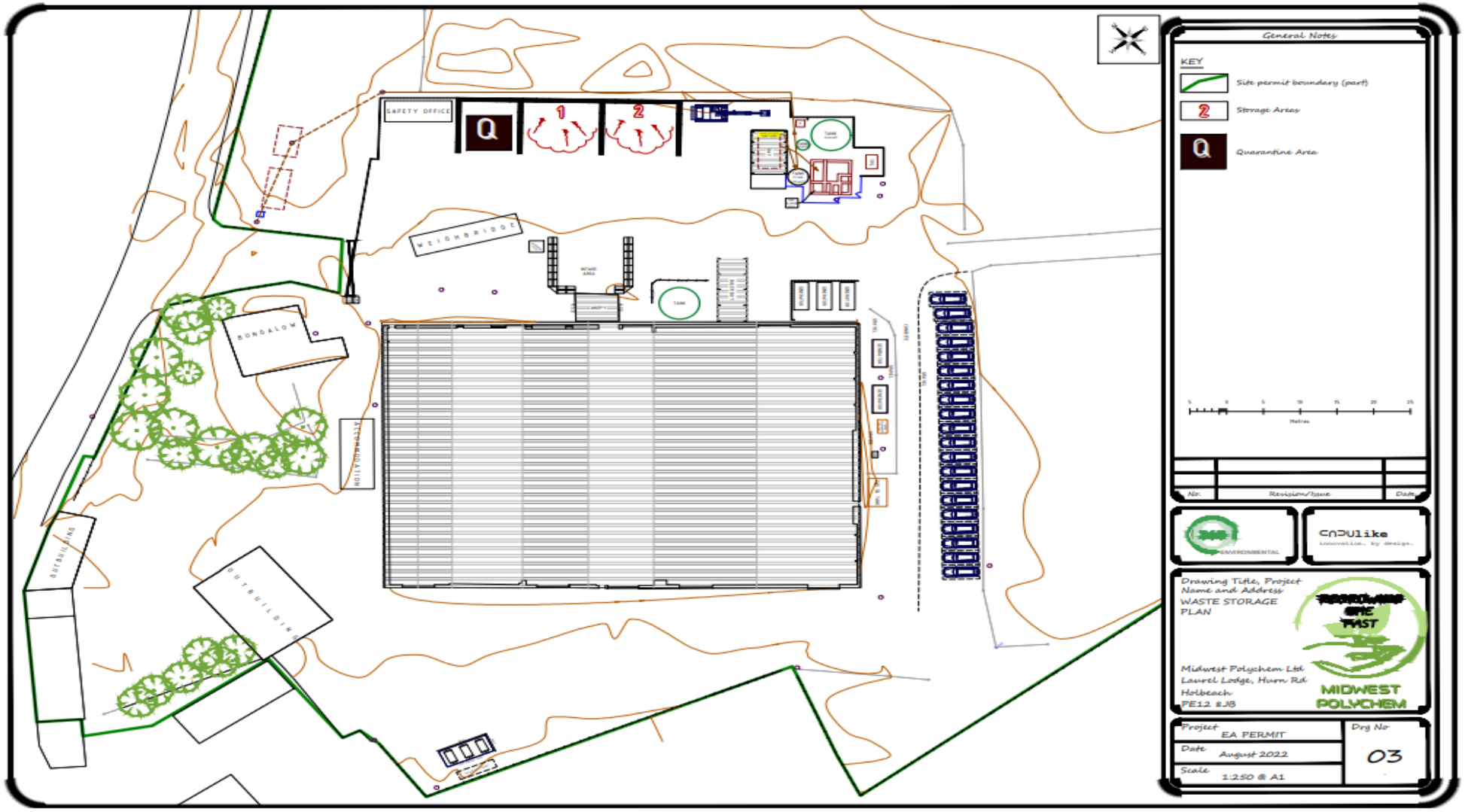
The site is manned 24/7 so there is always a member of staff available to deploy fire containment berms. All fire wardens are trained on how to correctly deploy berms and directions for use are found kept with mobile berms and info has been provided to the local fire brigade. This plan is based on current operations. Midwest Polychem LTD understand that it is important this FPP is maintained and kept up to date and relevant to the business. Therefore, it will be updated accordingly, in collaboration with the Environment Agency as required, should business operations change in the future.

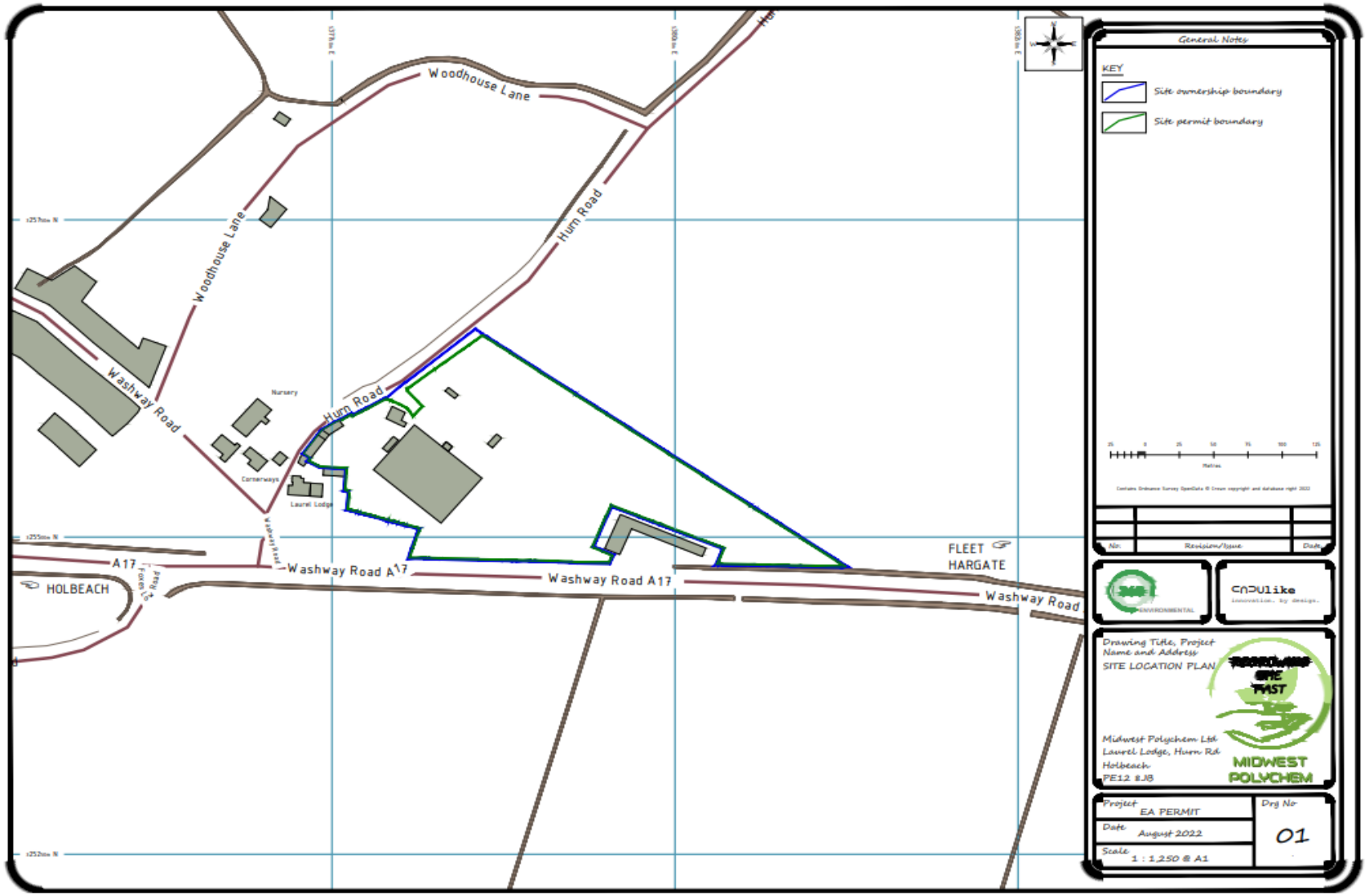
Drainage

Waste is stored externally, on an impermeable surface in sealed fire bays, within a firewater containment area.

Midwest Polychem LTD PE12 8JB
Document Reference: FFP/v2.0/August 2022

Annex A Site diagrams

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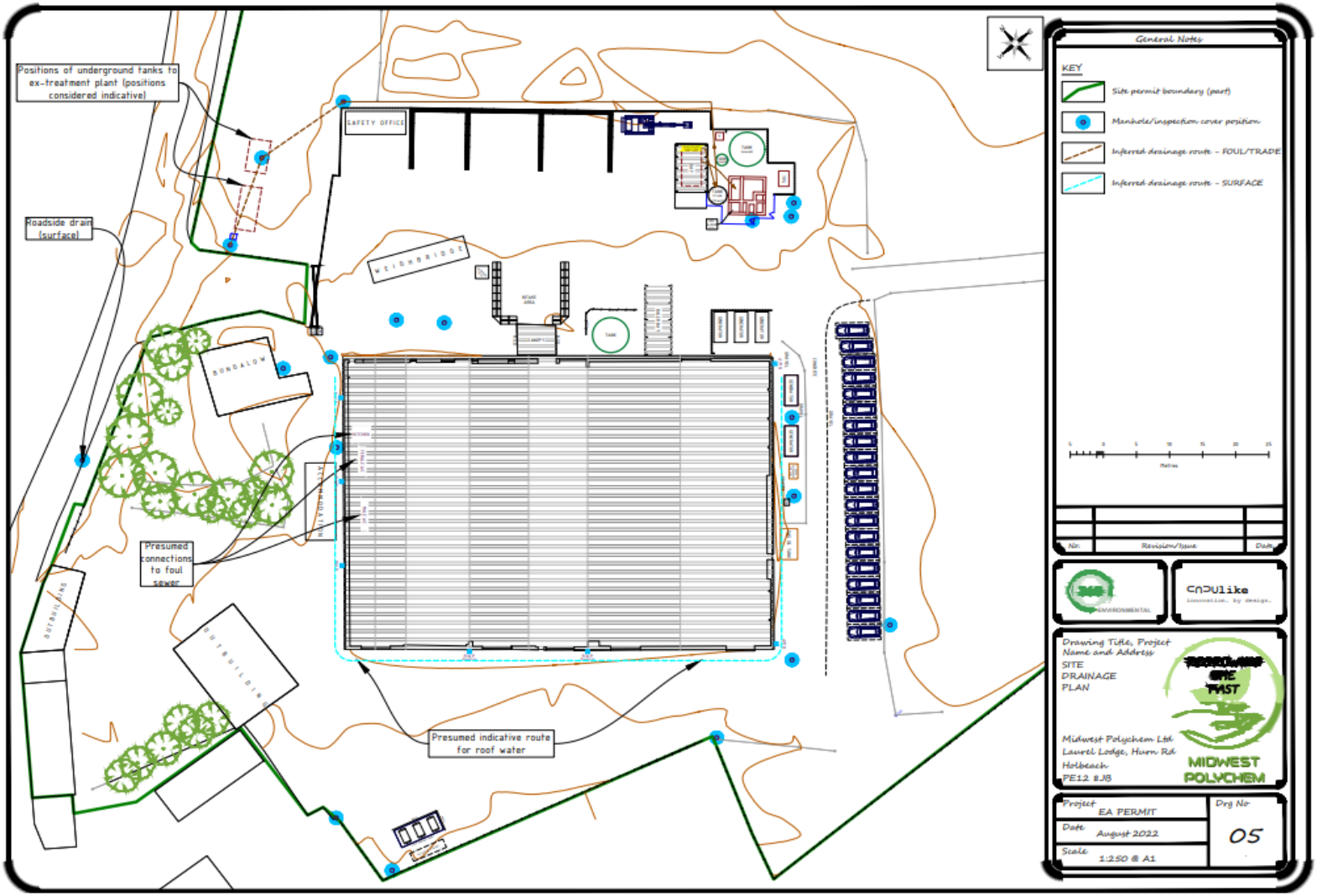
Woodhouse Lane
Hurn Road
Hurn Road
Washway Road
Nursery
Cornerways
Laurel Lodge
A17
Washway Road A17
Washway Road A17
Washway Road
HOLBEACH
FLEET
HARGATE
General Notes
KEY
Site ownership boundary
Site permit boundary
Drawing Title, Project Name and Address
SITE LOCATION PLAN
Midwest Polychem Ltd
Laurel Lodge, Hurn Rd
Holbeach
PE12 8JB
MIDWEST POLYCHEM
Project
EA PERMIT
Date
August 2022
Scale
1 : 1,250 @ A1
Drg No
01

ANNEX B Site Drainage



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Annex C Fire brigade information.

8/22/22, 2:20 PM Google Maps

Google Maps Midwest Polychem LTD

Front gate entrance

Imagery ©2022 CNES / Airbus, Getmapping plc, Infoterra Ltd & Bluesky, Maxar Technologies, Map data ©2022 20 m

Hydrant location

Rear gate entrance

Midwest Polychem LTD PE12 8JB
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Annex D Key Receptors within 1 km radius

Key Receptors

The receptors shown are within 1km of the site (white circle) Sensitive human receptors include areas containing residential properties to the southwest.

The site is on a small rural plot which is an agricultural area and predominantly surrounded by farmland. There are no designated SSSIs within 1 km. There are no surface water features within 300m of the site. The site is not in a SPZ or floodplain.

Key infrastructures include the A17 running west to east which s the main road to Wisbech SE and Donnington NW. The nearest Fire Response Servi8ce operation is in Holbeach 1.5km south west from the site at Station Road Holbeach Lincs PE127HG

Wind Direction

According to the UK met office, the prevailing wind direction in the area is south-westerly. This means the prevailing wind blows over the site to the NE, which is away from any residential areas.

Annex E: Waste Acceptance Procedures

In order to identify non-compliant wastes including any hot loads, the following waste acceptance procedure has been implemented by Midwest Polychem LTD.

Waste Acceptance

The procedure in place at the site is documented below.

1. Waste arrives on site.
2. Transport co-ordinator checks vehicle documentation.
3. Vehicle contents are examined during unloading and samples crosschecked with documentation provided.
4. Transport co-ordinator will check that the type of waste delivered is acceptable in terms of EA permit.
5. If the waste is deemed unacceptable the delivery will be turned around and made to leave site. If un permitted waste has been unloaded it will be segregated in the designated quarantine bay until it can be removed.
6. If the transport co-ordinator is suspicious of any inbound loads a full inspection will take place. All samples will be photographed and documented. In any event compliance testing will be carried out at regular intervals.
7. Assuming the on-site verification at the office is satisfactory, the load is weighed on the weighbridge. Load is then tipped and placed in designated bays.

Annex F: Fire risk Checks form for Fire Prevention

The following regular checks are completed daily

Checks to be made
1.Security – All security fencing and security equipment e.g. CCTV is intact
2.Signs of self-combustion. No visible smoke or potential hot spots identified
3.Storage bays – Housekeeping checks of storage bays
4.Storage area – Pile size within permitted limits
5.Hot Exhaust – Vehicles checked for hot exhausts, vehicles not parked by combustible materials
6.Firefighting equipment – All firefighting equipment in good working order.
8.Fire quarantine area – Clear of waste and visual checks on signage
9.Waste rotation – Any waste that needs rotation recorded in site diary
10. Waste in – Recorded on waste inventory spreadsheet in site safety office
11.Waste out – Recorded on waste inventory spreadsheet in site safety office

ANNEX G: Emergency Contact list

Name and Address		Telephone number
Environment agency	General enquiries Incident reporting	03708506506 0800 807060
Gas supplier	Emergency reporting	0345 7444999
Local authority Emergency services	Lincs fire and rescue	01522 555777
Nearest Hospital	Boston Pilgrim	01205 364801
Insurance company	Recyclesure	0203 713 4631
Emergency spillage response	J.S Kirkham's waste management	07703289979
Water and trade effluent	Anglian Water	0345 791 9155
Machinery breakdowns and routine maintenance	Alpha materials handling	01406 540600
Local Council	SHDC	01775 761161

Annex H: EMS Documents

DRAINAGE AND BUND CHECKS

A current site drainage plan can be found in document Annex A. This details all the site drainage and discharge to local sewage system.

The integrity of impermeable surfaces, fire containment blocks and storage areas will be visually inspected by the environmental compliance officer on a weekly basis. Any defects will be repaired immediately by onsite, maintenance employees.

Site Vehicle and Machinery Maintenance.

- All site vehicles will have daily documented start up checks, any defects will be immediately reported and documented. Any defects to exhausts causing extra noise or defects that may result in leaks will result in the vehicles being taken out of use until defect has been repaired.
- All vehicles and machinery operated on the site will undergo regular planned preventative maintenance/ servicing and inspections, at the frequency recommended by the manufacturer or required by legislation. As a minimum there will be statutory annual inspections of lifting (LOLER) and work (PUWER) equipment. Maintenance/inspection records will be kept onsite for reference.
- Where the necessary Maintenance and repair skill do not exist within the company, a outside contractor will be brought in. Details of this can be found in the emergency contacts section Annex G.
- If mobile plant maintenance/repair will involve the removal/ loss of potentially polluting fluids from the vehicle, if possible, the vehicles will be moved to an impermeable surface and worked on there. Where any spills will land on an impermeable surface, all fluids or drained oils will be cleaned with spill kits and excess fluids removed safely.
- Where mobile plant must be repaired in the location that it breaks down, if this is on hard standing, drip trays and absorbent mats will be put in place under the vehicle before work begins, to capture any spills of potentially polluting substances and prevent contamination.

Plant and Vehicle inspection schedules can be found on the "Routine maintenance spreadsheet" in the Site Safety office.

Dealing with Spills

Scope: To detail how spills during normal and abnormal operations are dealt with to minimise impact on the environment.

Responsibility: Environmental compliance officer

Background: Spillage of oils and chemicals can have an impact on the soil and groundwater beneath the site, the vehicles mainly operate on an impermeable concrete surface.

The site carries spill kits and absorbent granules and absorbent booms to mop up spills. If used these are stored in a hazardous waste container until they can be removed from site by a licenced contractor in a reasonably practicable time.

- During normal operations all staff have been made aware of the requirements to minimise fuel and liquid spills on site.
- All staff have had appropriate training on how to deal with fuel spills in the event of an incident occurring.
- Spell kits and absorbent materials are used to clean up the spill at source. If it's the largest bill and it is safe to do so then the source of this bill is curtailed if possible
- The location of spill kits can be found on the site plan
- Store of general absorbent material will be kept on site in an easily accessible central location known to all site staff. The absorbent material will be hydrocarbon absorbent, as this is the most likely material to be spilt.
- Any fuel storage tanks on site will be double bunded and will have portable spill kits in close proximity.
- Any spills or leaks will be investigated by the Environmental compliance officer and recorded as a site incident. In addition to that it will be noted in the site diary as well as any remedial action taken.
- The source of the leak will be investigated, located and stopped to mitigate risk of the spill re-occurring.
- If any leaks or spills of substances occur, which have the potential to harm the environment or pose a risk to human health or escape the site boundary, management will inform the environment agency immediately. Any remedial actions specified by the Environment Agency will be undertaken immediately, a record of which will be made in the site diary.

Waste Acceptance, Storage and Inspection

Standard operating procedures for the acceptance, storage and inspection of waste on-site.

Introduction

The company implements a storage system on-site that gives special thought to minimising the potential for cross contamination and/or potential run off from wastes whilst stored on site.

Waste Types

Only the waste types and EWC codes named on the Environmental permit will be accepted at the site. Wastes entering the site will be inspected, weighed and registered upon arrival. Non-compliant non permitted materials will be turned away from site after inspection and a record made in the site diary. In the event of non-compliant waste being tipped from its delivery lorry, it will be moved to the quarantine bay, recorded in the site diary. If the accidental unloading of non-compliant hazardous waste could cause harm to health or the environment then the Environmental manager (Luke Derrick) has a responsibility to contact the Environment agency and then arrange a certified hazardous waste company to safely remove.

Working Hours

0600-1800 (Plant operations to start at 0700) Monday – Saturday

Responsibility

The Environmental manager (Luke Derrick) is responsible for identifying and highlighting non-conforming waste. The Environmental manager is responsible for inspecting, documenting and safe removal of any non-conforming waste.

Waste Storage

Fire bays constructed of interlocking concrete blocks are nominated for waste storage. These are clearly labelled and identified on the site plan. A quarantine bay is also labelled on the site plan. The site plan will be updated on a regular basis. The Environmental manager keeps a live spreadsheet that details waste stored on site, waste processed, waste removed, and waste stored. This information is kept in the site safety office.

Waste Acceptance

The standard operating procedure for the acceptance of waste is detailed below.

1. Waste arrives on-site, transport is guided through gated entrance onto weighbridge inspection area
2. Documentation is checked in the weighbridge office by one of the transport co-ordinators.
3. Photographs are taken of vehicle, registration plate, inbound load and vehicle contents examined. Contents are crosschecked with documentation.
4. Transport co-ordinator then checks the type of waste is acceptable and permitted on site.
5. Non-compliant waste will be turned away or isolated in the quarantine bay. Environmental manager will then ensure safe removal of waste.
6. If the person checking the waste is suspicious of its contents, no waste is to be removed from the lorry. The Environmental manager is called to inspect the load, take samples and verify the contents before unloading can commence.
7. Assuming the onsite verification is satisfactory, the waste is unloaded, photographed, then moved into the fire bay area by trained forklift operatives.

Waste Area inspection

As part of the EMS waste areas are inspected routinely, any deviations from normal operating conditions will result in a formal investigation. Records of this will be kept in the site diary.

Records

Midwest Polychem LTD shall keep records of all waste loads rejected, these records are to include.

- The date
- Name of carrier
- Source of waste
- Vehicle Registration
- Description and photograph of waste
- EWC code
- Quantity of waste
- Name of person carrying out inspection
- Destination of load prior to rejection

ANNEX J: Fire detection/Specifications

Fire Detection in factory – Smoke detector models.

XP95
Heat Detector

Product overview

Product	Heat Detector - A2S
Part No.	55000-400
Product	Heat Detector - A2S
Part No.	55000-420
Product	Heat Detector - CS
Part No.	55000-401
Digital communication	XP95, Discovery and CoreProtocol® compatible

Compliance*

*Note: **
55000-400; CPR, LPCB only
55000-420; CPR, LPCB, VdS, BOSEC, SBSC, CCMG, FG
55000-401; CPR, LPCB, BOSEC, CCMG, SBSC, only

Product information

The XP95 Heat Detector monitors temperature by using a single thermistor which provides a count output proportional to the external air temperature.

- Ideal for environments that are dirty or smoky under normal circumstances
- Unaffected by wind or atmospheric pressure

Technical data

All data is supplied subject to change without notice. Specifications are typical at 24 V, 25°C and 50% RH unless otherwise stated.

Detection principle	*Linear approximation over temperature range 25°C to 90°C*	
Sensor	*Single NTC thermistor*	
Sampling frequency	*Continuous*	
Sensitivity	*90 °C: 55 counts*	
Supply Wiring	*Two wire supply, polarity insensitive*	
Terminal functions	*L1 & L2*	*Loop in & out positive*
	+R	*Remote indicator positive connection (internal 2.2 kΩ resistance to supply +ve)*
	–R	*Remote indicator negative connection (internal 2.2 kΩ resistance to supply -ve)*
Supply voltage	*17 V to 28 V dc*	
Digital communication	*XP95, Discovery and CoreProtocol compatible*	
Modulation voltage	*5 V - 9 V peak to peak*	
Quiescent current	*300 µA*	
Power-up surge current	*1mA*	
Duration of power-up surge current	*0.3 seconds*	
Max power-up time	*4 seconds*	
Analogue value at 25°C	*25 ± 5 counts*	
Alarm indicator	*Red light emitting diode (LED)*	
Alarm LED current	*4 mA*	
Remote LED current	*Internal 4.5 k to +ve line (5 mA max)*	
Storage temperature	*-30°C to +80°C*	
Operating temperature	*-20°C to +70°C*	
Humidity (no condensation or icing	*0% to 95% RH)*	
Effect of atmospheric pressure	*None*	
Effect of wind speed	*None in fixed temperature use*	
Vibration, impact and shock	*To EN 54 - 5*	
IP Rating	*IP54*	
*Standards and approvals**	*EN54, CPR, LPCB, VdS, BOSEC, SBSC, CCMG, FG*	
Dimensions	*100mm diameter x 42 mm height*	
Weight	*105 g*	
Material	*Housing: White flame retardant polycarbonate* *Terminals: Nickel plated stainless steel*	

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