Section 7

REMONDIS®

WORKING FOR THE FUTURE

ENVIRONMENTAL MANAGEMENT SYSTEM

BIRTLEY EMS 004 | Fire Prevention Plan

Document Control

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1.0	1st June 2020	12 Months	EA approval and inception
1.1	1st June 2021	12 Months	Annual review | changes to document control only
1.2	1ST June 2022	12 Months	Annual review | no changes
1.3	1st June 2023	12 Months	Annual review | updates to fire marshal training and mobile plant competency

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1. Introduction

1.1 Background

1.1.1 This Fire Prevention Plan (FPP) has been prepared in order to identify the potential fire risks associated with the import, processing, segregation, storage and bulking of controlled wastes and potentially combustible materials. Appropriate methods of fire control are employed at the site which will emphasise upon fire prevention, detection, suppression, containment and potential mitigation techniques.

1.1.2 The FPP has been compiled in accordance with the Environmental permitting Regulations 'Fire Prevention Plans: Environmental Permits' (Updated May 2018) and with reference to the Waste Industry Safety and Health Forum (WISH) document 'Waste 28 – Reducing Fire Risk at Waste Management Sites, Issue 1' (first published in October 2014).

1.1.3 This FPP provides guidance for the prevention and management of potential waste fires at the site and to minimise the impact of a fire on the environment.

1.2 Site Detail

1.2.1 Remondis operates a Non-Hazardous Waste Management facility at West Line Industrial Estate based in Birtley, which covers the import, storage and treatment of construction and demolition wastes as well as the transfer of local authority green waste.

1.2.2 The site primarily hires various sized skips to households, construction and demolition businesses with the aim to recycle their contents which generally include non-hazardous wastes, brick, rubble, metals, wood, plastics and cardboard.

1.2.3 The site is permitted under Waste Management Licence: (EAWML64154 (variation ERP/EP3495LQ)) to treat 74,999 tonnes per annum of permitted wastes. No wastes that are in the form of dusts, powders, liquid or sludge shall be accepted onto site.

1.2.4 Site specific operations include the segregation, storage and bulking of non-hazardous wastes, and processing including; screening, magnets, air separation and quality control. The site also carries out an inert crushing operation whereby segregated aggregates are crushed to a saleable specification.

2. Waste Activities

2.1 Site location and layout

2.1.1 The site is accessed via Station Road and onto West Line Industrial Estate, where wastes are brought into site by either company owned or client owned waste vehicles. The site shares the industrial estate with other smaller businesses / sites, including a metal recycling business.

2.1.2 The township of Birtley is located at 700m (closest point) to the North East, East and South East of the site and the village of Ouston is located at 600m to the West of the site.

2.1.3 There are no rivers located in close proximity to the site, however Rowletch Burn is located just outside of the eastern perimeter (30m) and a small lake is located 500m to the southeast.

2.1.4 Part of the Network Rail Eastern Railway line runs adjacent to the site at 30m outside of the eastern perimeter.

2.1.5 The entirety of the site is bounded with high-quality palisade fence at 2.4m high. The site entrance and exits are secured with lockable palisade gates which are closed and locked during non-operational times. The condition of the palisade fencing will be inspected daily to identify any signs of damage and remedial works required will be actioned as soon as practically possible to prevent any unwanted intruders.

2.1.6 A CCTV system is operational across the full site, cameras are surveying both internal and external activities which monitor the site 24 hours per day, 365 days per year and operate towards motion sensors which are located across the site.

2.1.7 There are no surface water courses within the site boundary, any surface / foul waters which are discharged are managed within the site drainage system, where no polluting matter shall be allowed to enter any watercourse or pollute any underground resources.

2.1.8 The main part of the site is surfaced with an impermeable concrete surface, both externally and within the main processing building. The site surfaces are inspected daily and subject to regular cleaning and maintenance, any remedial action will be fully documented within the site diary.

2.1.9 There is no surface water drainage within the main processing building and the external areas of the impermeable surface drain through an underground attenuation system and subsequent full retention oil interceptor which is regularly inspected and maintained.

2.2 Sensitive Receptors

2.2.1 A list of potentially sensitive receptors within a 1km radius of the site boundary are detailed in ***Table 1*** below;

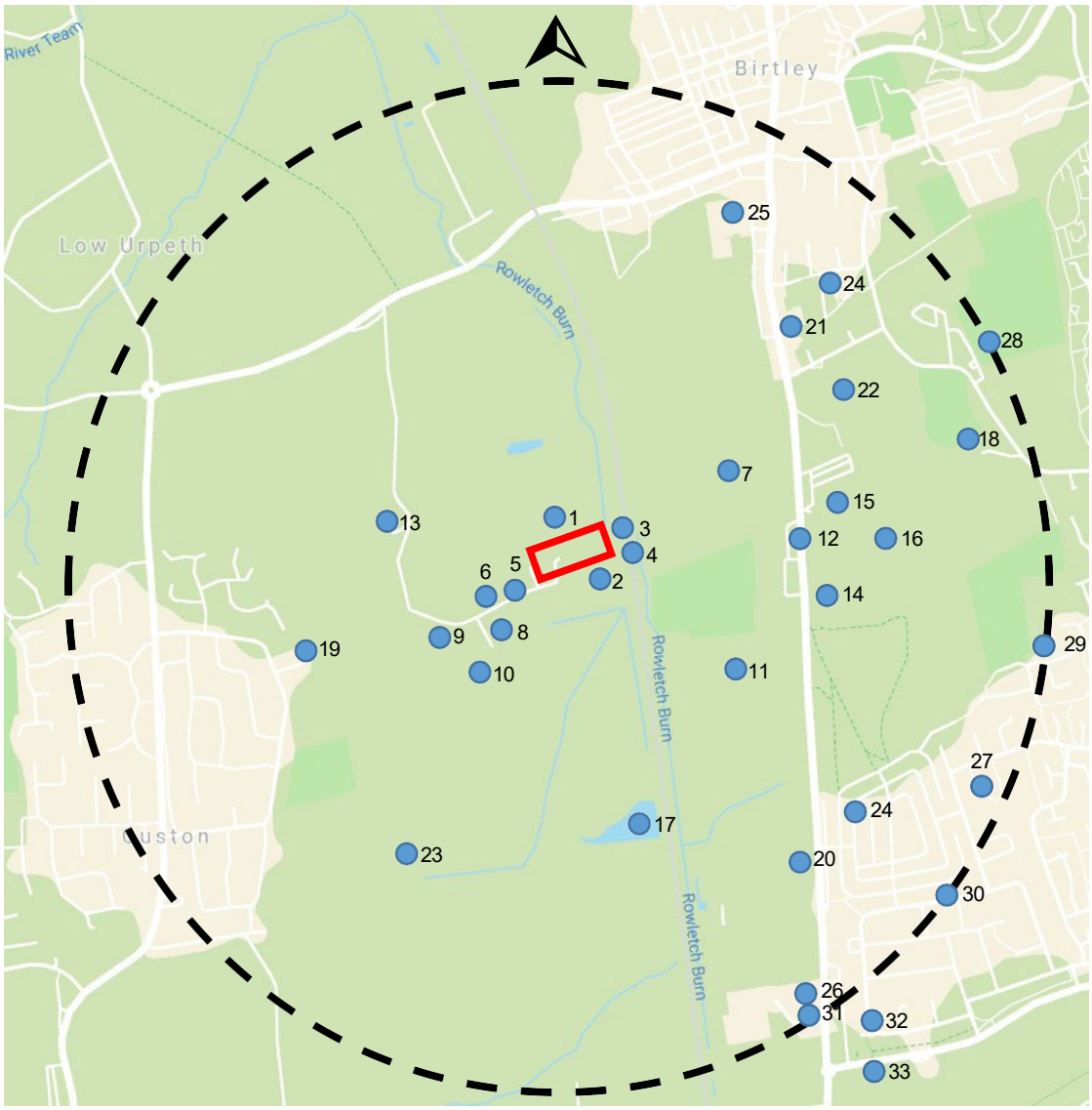
Table 1 – Potential Sensitive Receptors within 1km of the site boundary

Ref:	Receptor	Receptor Type	Distance / Direction
1	Closed Landfill Site	Landfill (Closed)	0 – 625m N, NW
2	Zoemic Commercials	Vehicle Hire / Dealer	10m S
3	Rowletch Burn	Watercourse	10m E, NE, SE
4	Network Rail	Railway Line	30m E, NE, SE
5	Pallet Earth	Wood Crafter	30m W
6	Westline Distributors	Building Supplier	50m W
7	Komatsu	Manufacturers	75m E
8	Askern UK	Manufacturers	100m SW
9	Kerr Metals	Scrap Metal Recycling	150m SW
10	Tommy Wardle	Roofing Business	175m SW
11	O'Brien Demolition	Demolition Business	175m SE
12	Durham Road	Public Highway	400m E
13	Blue Barns Farm	Farm	400m NW
14	Marquis Motorhomes	Caravan Sales	450m E
15	Parker Hannifin	Manufacturers	450m E
16	Jewsons	Building Supplier	500m E
17	Lake	Watercourse	500m S
18	Birtley Golf Club	Leisure Activity	600m E
19	Ouston Village	Residential Properties	600 – 1000m W, NW, SW
20	Motorpoint Birtley	Car Sales	650m SE
21	Jet Garage (Birtley)	Petrol Station	700m NE
22	Birtley Swimming Centre	Leisure Centre	700m NE
23	Ouston Springs Farm	Farm	700m S
24	Birtley Township	Residential Properties	730 – 1000m E, NE, SE
25	Morrisons Birtley	Supermarket	800m NE
26	Sapa Profiles	Manufacturers	880m SE
27	Barley Mow Primary School	Primary School	900m SE
28	Lord of Beamish Academy	School	1000m NE
29	Portobello Primary School	Primary School	1000m E
30	Sure Start Children Care Centre	Day Care	1000m SE
31	Shell Garage	Petrol Station	1000m SE
32	Heather House Care Home	Care Home	1100m SE
33	Appletree Grange Care Home	Care Home	1200m SE

2.2.2 There are no hospitals within 1km of the site boundary, the nearest is Spire Washington Hospital located 2km South East of the site.

2.2.3 Sensitive receptors within 1000m of the site boundary are detailed in *Figure 1* below;

Figure 1 – Sensitive Receptor Plan

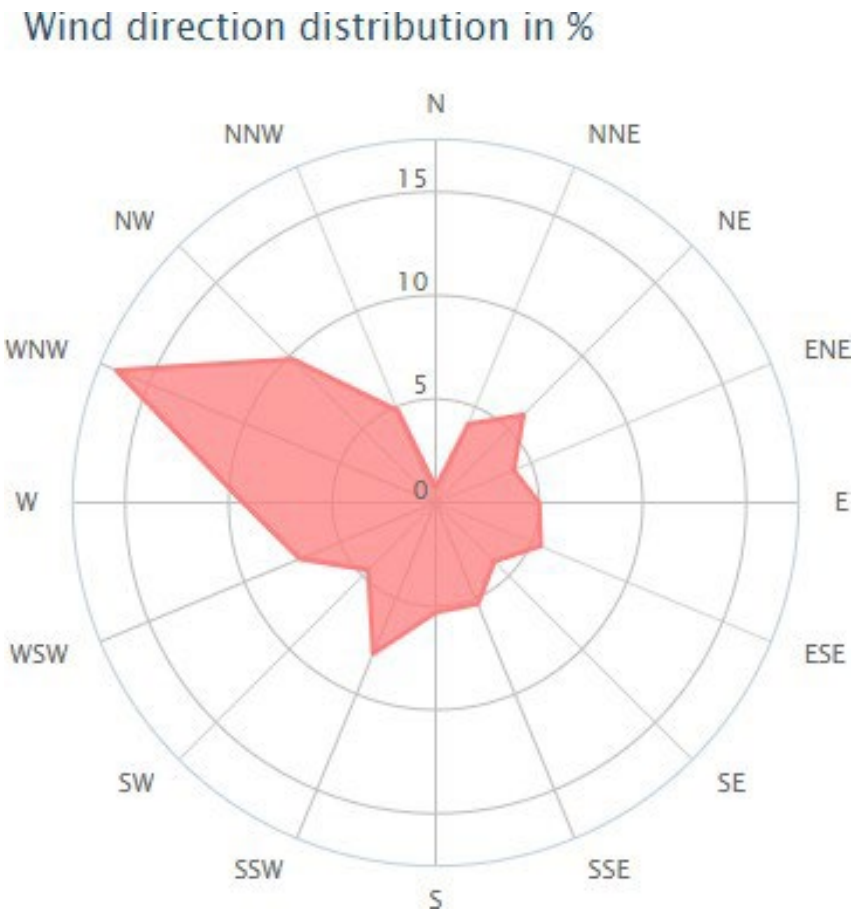


2.3 Meteorological Conditions

2.3.1 The closest meteorological station to the site is Walkergate Riverside Academy, which is located circa 10km north of the site. Due to its proximity the weather station is considered the most suitable in terms of reflecting weather patterns and characteristics most likely to be experienced at the site.

2.3.2 Data and the wind rose *(Figure 2)* from the windfinder.com website is based on real-time observations taken between March 2013 and August 2019. The wind rose below shows the percentage of wind vector that could be generated in each of the 16 points of the compass, reflecting dominant wind direction from the site boundary.

Figure 2 – Newcastle Walkergate / Riverside Academy Wind Rose



2.3.3 The wind rose (above) shows that the predominant wind direction is from the west-north-west (16.7%).

2.3.4 It can be observed from *Figure 2* (above) that the wind will be blowing principally towards receptors such as Rowletch Burn, Network Rail Eastern Railway Line, Komatsu, Marquis Motorhomes, O'Brien Demolition, The Residential area of Birtley, Portobello Primary School, Sure Start Children Care Centre,

Barley Mow Primary School, Sapa Profiles, Shell Garage, Heather House Care Home, Appletree are Home, Motorpoint Birtley, Etc.

2.4 Waste Acceptance

2.4.1 All waste acceptance will be carried out in accordance with Site Waste Acceptance Procedure as detailed within the site Environmental Management System (EMS).

2.4.2 All waste receptacles collected by our own internal transport department are visually inspected prior to collection and subsequent transportation to the site.

2.4.3 Upon entering the site, all vehicles (internal and external) delivering waste are required to report to the weighbridge prior to entering the facility. Wastes are then inspected and checked against the waste transfer note. The weighbridge operator directs the vehicle to the relevant tipping reception area / bay where the waste will be deposited and further inspected.

2.4.4 Radio communications are in place with all key staff on the site and any notable concerns or non-conformances can be quickly communicated and acted upon.

2.5 Waste Processing and Storage

2.5.1 All mixed waste is directed and deposited inside the waste processing building and within the 'waste input area'. Oversized items of waste deemed too large to be processed via the mechanical processing plant are removed by an item of mobile plant and placed on the opposite side of a fire wall and into the 'oversized stockpile'. They are then loaded onto articulated vehicles and removed from site.

2.5.2 The remainder of the mixed waste is then moved, again to the opposite side of a fire wall via mobile plant, to the 'plant feed stockpile' where it is fed into the processing plant by another item of mobile plant.

2.5.3 The mechanical process segregates the mixed waste into various fractions including, wood, scrap metal, inert materials (hardcore and <8mm fines), <50mm residual waste and >50mm residual waste.

2.5.4 Analysis of the average composition of the mixed construction and demolition waste input over the summer 2019 period (July, August and September) identified that 45.90% of the material made up part of an inert waste stream (i.e. hardcore or inert fines).

2.5.5 The Site Layout Plan ***(Drawing 1)*** shows the location of each waste stream and ***Table 2***, below, details the storage arrangements of waste materials on site (the volumes stated are maximum based on the available storage area).

Table 2 – Waste Storage Arrangements (Ref. Drawing 1 – Site Layout Plan)

Combustible / Flammable Material	Form	Storage Dimensions (H x L x W = m^3)	Max. Storage Time (Days)	Location and Bay Type	Arrangements
Internal Storage					
Unsorted Mixed Waste – (Input)	Loose	3.5 x 10 x 5 = 175m^3	3	Inside processing building. L-shaped segregation with concrete blocks and concrete wall panels.	Concrete block fire wall used between the mixed waste input area and the mixed waste oversize area. **Dimensions of fire wall (Height x Length x Thickness)** H 4.8m (6 blocks) x L 5.6m (4 blocks) x T 0.8m (1 block) A >1m 'freeboard' distance will be maintained from the top of the fire wall to the top of the waste stockpile. The block thickness of the fire wall (0.8m x 2 = 1.6m) ensures a sufficient 'freeboard' to prevent waste spreading around the side of the fire wall. An intumescent mastic has been used to seal gaps between the concrete blocks. A separation distance of 6 metres will be maintained between any unprotected part of the stockpile and other waste stockpiles. Housekeeping standards will be maintained in / around fire walls to prevent fire spread. Site inspection document ***(Appendix 1)*** will ensure that precautions are maintained before shift end.
Pre-Sorted Mixed Waste (Oversized)	Loose	3.5 x 10 x 5 = 175m^3	3	Inside processing building. L-shaped segregation with concrete blocks and concrete wall panels.	

Pre-Sorted Mixed Waste (Plant Feed) (Internal collection from processing plant)	Loose	3.2 x 15 x 4.5 = 216m^3	3	Inside processing building. U-shaped segregation with concrete legioblocks.	Concrete blocks have been used to divide this storage area from the processing plant area and a separate block fire wall has been built between this stockpile and the waste input stockpile area. The height of the block wall dividing the stockpile from the processing plant is 3.2 metres (4 blocks high) providing an effective fire break from this stockpile and the fixed processing plant. The height of the block wall dividing this stockpile from the adjacent waste input stockpile is 2.4 metres (3 blocks high) providing an effective fire wall between the plant feed stockpile and the waste input stockpile. A >1m 'freeboard' distance will be maintained from the top of any fire wall to the top of the waste. The block thickness of the fire wall (0.8m x 2 = 1.6m) ensures a sufficient 'freeboard' to prevent waste spreading around the side of the fire wall. An intumescent mastic has been used to seal gaps between the concrete blocks when used in a fire wall. A separation distance of 6 metres will be maintained between any unprotected part of the stockpile and other waste stockpiles. Housekeeping standards will be maintained in / around fire walls to prevent fire spread. Site inspection document ***(Appendix 1)*** will ensure that precautions are maintained before shift end.

Process Residual Waste (>50mm)	Loose	2 x 6 x 6 = 72m³	3	Inside processing building. U-shape concrete panel bay.	Concrete panels have been used to divide these storage areas into 'U shaped' bays which share segregation walls. Concrete panels are interlocked with a male / female 'Vee' shaped horizontal joint which ensures structural integrity and prevents fire spread through the joints. There are no vertical joints. The height of the bay wall is 3 metres (3 panels high). Bays are regularly emptied throughout the day. A >1 metre 'freeboard' will be maintained at the top of each bay. Concrete (half) blocks (800mm x 800mm x 800mm) have been added to the inside of each bay wall to ensure a freeboard area and prevent waste overflowing and connecting between bays. Site inspection document ***(Appendix 1)*** will ensure that precautions are maintained before shift end.
Process Residual Waste (<50mm) (Internal collection from processing plant)	Loose	2 x 6 x 6 = 72m³	3	Inside processing building. U-shape concrete panel bay.	
UPVC (Internal collection from processing plant)	Loose	2 x 6 x 3 = 36m³	<1 Bay emptied each night	Inside processing building. U-shape concrete panel bay.	
Wood (Internal collection from processing plant)	Loose	2 x 6 x 3 = 36m³	<1 Bay emptied each night	Inside processing building. U-shape concrete panel bay.	
External Storage					
<8mm Fines – **Inert** (External collection from processing plant)	Loose	3.5 x 5 x 5 = 87.5m³	<1 Bay emptied each night	External to processing building. U-shape legioblock bay.	Inert materials only within this storage area. Bay is continuously emptied throughout the during operational times.
Aggregate – **Inert** (External collection from processing plant)	Loose	3.5 x 5 x 5 = 87.5m³	<1 Bay emptied each night	External to processing building. U-shape legioblock bay.	Inert materials only within this storage area. Bay is continuously emptied throughout the during operational times.

Scrap Metal (External collection from processing plant)	Loose	30-yard container	3	2 x 30-yard waste containers.	Scrap metals stored within a waste container which is removed from site and emptied on a daily basis.
Rigid Plastic / Green Waste (External collection from processing plant)	Loose	1 x 4 x 3 = 12m^3	<1 Bay emptied each night	External to processing building. U-shape legioblock bay.	Concrete block bay used to contain external storage of rigid plastic or green waste (whichever is relevant) over short periods. The bay is emptied numerous times throughout each operational day and left empty during non-operational times. The height of the bay wall is 2.4 metres at the lowest point (3 blocks high). Thickness of concrete block (800mm) ensures a freeboard around the top of the bay and at the side of the bay wall.
Wood (External collection from processing plant)	Loose	2 x 4 x 3 = 24m^3	<1 Bay emptied each night	External to processing building. U-shape legioblock bay.	Concrete block bay used to contain external storage of wood over short periods. The bay is emptied numerous times throughout each operational day and left empty during non-operational times. The height of the bay wall is 2.4 metres at the lowest point (3 blocks high). Thickness of concrete block (800mm) ensures a freeboard around the top of the bay and at the side of the bay wall. Site inspection document ***(Appendix 1)*** will ensure that precautions are maintained before shift end.

Green Waste (Bulk Storage Bay)	Loose	3.5 x 8 x 7.5 = 210m^3	7	External to processing building. U-shape legioblock bay.	Concrete block bays used to contain bulked up green waste and bulked up wood waste. The two bays are separated by a centre bay wall, the height of which is 4 metres (5 concrete blocks). An intumescent mastic has been used to seal gaps between the concrete blocks and prevent fire spread into the adjoining bay(s). Thickness of concrete block (800mm) ensures a freeboard around the top and at the site of the bay centre wall. Site inspection document ***(Appendix 1)*** will ensure that precautions are maintained before shift end.
Wood (Bulk Storage Bay)	Loose	3.5 x 8 x 7.5 = 210m^3	7	External to processing building. U-shape legioblock bay.	
UPVC (Bulk Storage Area)	Loose	2 x 6 x 6 = 72m^3	7	External to processing building. U-shape concrete block area.	Separation distance of >6 metres maintained on all sides of this bay to any other waste material storage area or building. Site inspection document ***(Appendix 1)*** will ensure that precautions are maintained before shift end.
WEEE (Fridges)	Loose	2 x 2 x 2 = 8m^3	7	External to processing building. U-shape concrete block area.	Fridges and tyres are kept within a demarcated area with a concrete block wall dividing the area from any waste storage areas. The height of the bay wall is 3.2 metres (4 blocks) ensuring that a freeboard distance is maintained between the top of the wall and the storage area. An intumescent mastic has been used to seal gaps between the concrete blocks and prevent fire spread into the adjoining bay(s). Site inspection document ***(Appendix 1)*** will ensure that precautions are maintained before shift end.
Tyres	Loose	2 x 2 x 2 = 8m^3	7	External to processing building. U-shape concrete block area.	

Combustible Dusts (Dust Extraction / Cleaning Unit).	Contained	4 x 100 litre containers = 400 litres MAX	3	External to processing building. Contained within sealed galvanized steel bins.	The dust extraction units are located externally to the main processing building. They are sealed units, inclusive of a fire dampers and subsequent bursting disks. The extraction units are located >6 metres from any form of combustible waste storage areas and are protected by any other ignition source. Appropriate signage is in place. In the event of an ignition within one of the units the damper will prevent fire spread back into the processing building and the bursting discs will expel the fire away from the processing building and all forms of combustible material storage. A declaration of conformity is in place for the extraction system which details conformance to the below standards; • EN 12100-1: 2003 (general designs part 1) • EN 12100-2: 2003 (general designs part 2) • NEN-EN 953:1998 (protective devices) • EN 60204 -1:2005 (electrical safety). There are 4 x 100 litre dust collection bins that are emptied as often as required (every 1 – 3 days). The contents of the bins are immediately disposed of and is not stored on site. A statutory inspection schedule of the system is in place and will not exceed a 14-month period.

3. Managing Common Causes of Fire

3.1.1 The potential sources of ignition are those relevant to the storage of waste at the site. EA guidance 'Fire Prevention Plans' (May 2018) identifies a number of sources and possible risks which can cause fire at the site. Each risk has been considered below along with their appropriate controls and prevention.

3.2 Arson or vandalism

3.2.1 Security measures are in place to prevent unauthorised access to the site. The site boundary is surrounded by a 2.4m high palisade fence, where all entrances and exits are lockable palisade gates which are secured outside of operational hours.

3.2.2 The integrity of the security fencing and gates is inspected on a daily basis using the Site Inspection Document ***(Appendix 1)***, any defective locks or damaged fencing or gates will be repaired as soon as practically possible.

3.2.3 The site is manned throughout the following times;

Monday – Friday	0730 to 1730
Saturday	0730 to 1200
Sunday	Closed

3.2.4 The site operates a CCTV system across the whole facility, cameras monitoring both internal and external activities 24 hours per day, 365 days per year.

3.2.5 During non-operational times the site makes use of a 3rd party security company who monitor the CCTV with a direct line of communication to key site representatives. The CCTV does work on a motion detector basis meaning that any form of movement or fire on the site will be immediately highlighted.

3.2.6 The CCTV measures are also readily displayed on all perimeter walls around the site to act as a deterrent to any potential intruder.

3.2.7 The site lighting works on a timer between the periods of 4pm and 8am, ensuring that site is well lit up during darker times (both operational and non-operational).

3.3 Plant or mobile equipment

3.3.1 The following items of mobile plant are present on site, giving enough operational cover at all times, including any plant breakdowns:

2 x Loading Shovels

3 x 360 Excavators (Grab Attachment)

1 x 360 Excavator (Bucket Attachment)

3.3.2 All static and mobile plant are operated by staff who have been trained to identify any leaks or damages.

3.3.3 All items of mobile plant are checked daily, before use and will have any faults reported immediately using their daily inspection checksheet. The Site Inspection Document ***(Appendix 1)*** also includes an end of day check on all mobile plant and equipment.

3.3.4 All plant and mobile plant are serviced by our in-house maintenance department on a schedule which follows manufacturers' recommendation and any statutory examinations are carried out by a 3rd party contractor on a schedule dictated by the relevant statute.

3.3.5 All plant and mobile plant are fitted with fire extinguishers and any items of mobile plant that are not being used will be parked safely away from any combustible materials as shown in the Site Layout Plan ***(Drawing 1)***.

3.4 Electrical faults

3.4.1 To prevent and reduce the risk of fire as a result of electrical faults, underground electrical cables have been used to supply the various sections of the site including the site offices, processing building and weighbridge area. There are no overhead-cables spanning any part of this site which could become damaged and cause ignition.

3.4.2 Electrical cables which provide power to static plant are heavily armoured, located suitably and regularly checked for integrity. Any defects will be reported immediately and any remedial actions will be prioritised. The site has an approved and competent electrical contractor who is available to respond at all times.

3.4.3 The entire electrical infrastructure of the site will be thoroughly inspected and tested in line with the Electricity at Work Regulations 1989 on a period not exceeding 5 years.

3.4.4 As per 'Section 3.3 – Plant or Mobile Equipment' detailed above, all site mobile plant and equipment undergo regular daily inspection and scheduled servicing to ensure that any electrical faults are identified and remedial actions carried out.

3.5 Discarded smoking materials

3.5.1 To prevent and reduce the risk of fire as a result of discarded smoking materials the site will operate a strict 'no smoking' policy. Signs will be displayed around operating areas of the site and as part of the site induction all staff, visitors and contractors will be advised of the policy.

3.5.2 A designated smoking area is available adjacent to the site welfare area where sealed containers have been provided to ensure appropriate disposal of smoking materials.

3.6 Hot works

3.6.1 Any hot works, such as welding and cutting, will be carried out by fully trained and certified staff and will be subject to a permit-to-work procedure. Such procedure will enforce a minimum stand-off distance of 6 metres away from any combustible materials.

3.6.2 A visual fire watch will take place during any hot works and a subsequent sign-off check will be carried out 1 hour after the completion the works.

3.6.3 A fire extinguisher will be on standby during any hot work activity. Additionally, subsequent fire extinguishers have been located around the site should they be required; their location is shown in the Site Layout Plan ***(Drawing 1)***.

3.7 Industrial heaters

3.7.1 Not applicable – Industrial heaters are not utilised on this site.

3.8 Hot exhausts and surfaces

3.8.1 Mobile plant exhausts, engine surfaces and electric motors can become hot and dust settling on such surfaces can cause a fire risk.

3.8.2 All electric motors on the waste processing plant are monitored from the plant control room and have all been fitted with a steel cover to prevent dust build-up.

3.8.3 Visual checks of mobile plant will be carried out at regular intervals (during operational times and at the end of each day) to identify any signs of smouldering caused by dust settling on hot exhausts or engine parts.

3.8.4 Daily inspections of the mobile plant will ensure that waste build-up on potential hot surfaces is cleaned and that no litter or debris is caught on or near a hot surface on the mobile plant.

3.8.5 All items of mobile plant are parked safely away from any form of combustible waste during non-operational times and an end of shift inspection is carried out ***(Appendix 1)*** before site shut-down.

3.9 Ignition sources

3.9.1 Naked flames, such as those from hot works will be kept at least 6m away from any combustible materials or flammable wastes. No industrial heaters, incinerators or furnaces are utilised on this site.

3.9.2 The site operates a 'no smoking' policy throughout the premises which ensures that no naked flames will arise from smoking.

3.9.3 All wastes are inspected upon delivery to site and any potential ignition sources are removed from the waste stream, quarantined and disposed of appropriately.

3.10 Batteries in ELVs

3.10.1 No end-of-life vehicles (ELVs) are accepted or processed on this site.

3.11 Leaks and spillages of oils and fuels

3.11.1 As part of the site EMS and in the event of a potentially polluting leak or spill taking place, immediate remedial works will be carried out. This will be in the form of deployment of a suitable spill kit and full decontamination of the area.

3.11.2 All vehicles used on site will undergo regular inspection, servicing and maintenance to ensure that they are in good working order and to prevent any fuel leaks.

3.11.3 Oils and lubricant storage will be kept to minimum quantities where applicable.

3.11.4 Any containers used to store oils or lubricants shall be:

- Clearly labelled and detailing the contents (unless the contents are clearly identifiable);
- Inspected and maintained in accordance with maintenance schedules and procedures;
- In the event of damage or deterioration to a container, this shall be repaired or replaced immediately.
- Stored on top of a suitable bund with enough capacity to hold 110% of the largest container.

3.11.5 The fuel tank used to store gasoil has a bund located within itself (double skinned), is stored on an impermeable surface and sited away from any combustible materials or potential ignition sources by a distance in excess of 6m. The fuel tank is checked for condition and integrity on an annual basis. The location is shown in the Site Layout Plan ***(Drawing 1)***.

3.11.6 Spill kits have been located in any high-risk spillage areas, such as; alongside the fuel tank, within the waste tipping area and to the rear of the site. Their locations are shown on the Site Layout Plan ***(Drawing 1)***.

3.11.7 The Site Inspection Document and end of day checks ***(Appendix 1)*** will confirm that the site is clear of any leaks or spillages or that remedial actions are taken for any identified non-conformance.

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

3.12.1 The site has installed a dust suppression system to the main processing building which prevents the ability for dust and fluff to become airborne and separate from the waste fraction during tipping, loading and separation of the waste stream.

3.12.2 In addition, a dust extraction system is also in use on the exit points to the 3 'windsifter' screens which make-up part of the fixed processing plant.

3.12.3 The purpose of the extraction system is to prevent any dust contaminated air which may be generated as part of the 'windsifter' process from entering the working atmosphere. The extraction system is an environmental / health and safety control rather than an item of recycling equipment.

3.12.4 Any dust contaminated air that is drawn into the extraction system is transported through the ductwork to one of two air cleaner units which are located outside of the main processing building. Their location is shown in the Site Layout Plan ***(Drawing 1)*** and is away from any form of combustible materials or waste storage.

3.12.5 The air cleaner units are fully sealed to prevent the inclusion of any possible ignition sources into an area of high dust concentration. Adequate signage has been implemented to inform of such control.

3.12.6 The air cleaner units are both inclusive of a 'return air fire damper' which will prevent any ignition within the unit from spreading back down the ducts and into the processing shed.

3.12.7 Bursting disks are also in place on the units which will relieve any ignition within the unit and direct any subsequent explosion away from the processing building and any form of combustible waste storage area.

3.12.8 The units use a series of filter hoses to remove dust from the contaminated air. Dust is then deposited within sealed 100 litre collection bins, of which there are a total of 4 located at the bottom of the air cleaner units.

3.12.9 The collection bins are inspected on a daily basis and emptied as regularly as required. The dust collected within the collection bins is immediately disposed of and not stored on site.

3.12.10 The dust extraction system is accompanied by a relevant declaration of conformance and is subject to statutory inspections on a 14-month period.

3.12.11 Statutory inspections will ensure continued functionality and prevent the build-up of dusts within the system itself. Such inspections which will be carried out by a specialist contractor.

3.12.12 Good housekeeping, cleaning and maintenance of the site, processing plant and mobile plant will also prevent the build-up of loose combustible waste, dust and fluff.

3.12.13 The Site Inspection Document ***(Appendix 1)*** will ensure that any build-up or accumulation of dust is identified and a documented rectification is taken.

3.13 Reactions between wastes

3.13.1 The site EMS *(waste acceptance procedure)* will ensure that all wastes are inspected to identify non-conforming, unstable or incompatible wastes, such as car batteries, which can cause reactions within the wastes are removed and quarantined.

3.13.2 Smoke detector cameras and a fire suppression system covers the three main internal mixed waste stockpiles as well as the residual waste bays. The smoke detector cameras will trigger the suppression system in the event of smoke becoming apparent. More detail on this system is given in *Sections 6.5 Fire Detection and 6.6 Fire Suppression.*

3.13.3 The mixed waste stockpiles are also under constant monitoring and supervision during site activities and operational times. During non-operational times, site CCTV and thermal imaging cameras are supervised by a 3rd party Security Company.

3.13.4 A quarantine area is in place for the suitable quarantine of incompatible wastes that could cause ignition or reaction. A fire watch is carried out on this area as part of the site end of shift inspection and documented on the Site Inspection Document ***(Appendix 1)***.

3.14 Deposited hot loads

3.14.1 To prevent incoming deposited hot loads a strict waste acceptance procedure is in place as part of the site EMS. In addition to this, staff are trained to be vigilant and identify any incompatible and non-conforming wastes including any hot loads.

3.14.2 If, on deposition, wastes are identified as a hot load, they will be segregated by mobile plant and taken to the quarantine area as defined in the Site Layout Plan ***(Drawing 1)***. The quarantine area is designed to hold 50% of the maximum stockpile size and dimensions are shown in the 'quarantine area' section of this FPP.

3.14.3 If required, waste will be cooled and dampened using a nearby fire hose and / or appropriate use of a fire extinguisher.

3.14.4 The site also has provision of inert material which can be used to smother a hot load.

3.14.5 Arrangements will then be made to have the load taken to a suitable disposal facility and the non-conforming load logged and reported to the local Environment Agency Office, if needed.

3.14.6 Site staff are trained to watch for and identify any potential fires e.g. smoke coming from wastes and daily visual checks will be regularly carried out on the waste loads.

3.15 Fire watch

3.15.1 A fire watch will be undertaken prior to the end of each working day to ensure that fire controls have been adhered to and that the risk of ignition or fire spread during the night is minimal. The observation will be recorded on the Site Inspection Document ***(Appendix 1)*** along with any actions that were required to be taken i.e. housekeeping.

4. Prevention of Self-Combustion

4.1.1 Self-combustion is the result of an exothermic reaction within the waste stream followed by thermal runaway (self-heating which accelerates to high temperatures) which results in ignition of the surrounding waste. Prevention and ultimately negating the ability of the waste to produce such a reaction is therefore given the highest priority in terms of the control of fire.

4.1.2 Wastes will not be stored in excess of the maximum quantities detailed in ***Table 2*** and all waste storage areas will be routinely inspected for any indications of self-heating and / or smouldering. Inspections will be recorded on the Site Inspection Document ***(Appendix 1)***.

4.1.3 All waste streams will be treated, processed and removed from site on a first-in-first out basis ensuring effective turnaround and minimising the time each element of waste is stored on the site to that detailed in ***Table 2*** of this FPP.

4.1.4 Should there be any indication of self-heating the following actions will be taken to prevent further reaction;

- Wastes will be further rotated as necessary using an item of mobile plant;
- Wastes can be transferred and spread out within the quarantine area;
- Cooled utilising an appropriate source of water; and
- Continually monitored.

4.1.5 The site also has a fire detection and suppression system installed within the waste processing building. More information is given in *Section 6.6 'Fire Suppression'*

4.2 Manage storage time

4.2.1 To prevent self-combustion all wastes will be treated, processed and removed from site on a 'first-in, first-out' basis ensuring that the time each waste element spends on site does not exceed the durations summarised in ***Table 2*** of this FPP. These durations are significantly lower than the stipulated Fire Prevention Guidance on maximum storage durations of 3 months for combustible wastes.

4.2.2 As per Section 2.2.3 of the Site EMS, all loads deposited at the site shall have the following information recorded at the weighbridge:

- Date and time of receipt of waste;
- Vehicle registration number;
- Name and address of customer / haulier;
- Waste type and weight;

- Waste carrier registration number.

4.2.3 The above procedure will similarly be followed for any outgoing loads containing bulk or recycled materials. This monitoring of waste will allow the site to track material flow through the site and ensure that storage times are not exceeded.

4.2.4 Incoming wastes are directed to the relevant tipping areas where they are then segregated or stored according to waste type.

4.2.5 Once mixed wastes have been through the separation process they are then stored into the relevant waste stream storage area i.e. concrete legioblock bays, concrete panel bays, containers/skips or relevant stockpile area.

4.2.6 Should it be required mobile plant can be used to rotate waste which is stored in bays and each bay is fully emptied on a regular basis during site loading-out activities.

4.2.7 The Site Manager, or a deputy, will carry out a site inspection throughout the day (including before site closure) which will be recorded on the Site Inspection Document ***(Appendix 1)*** and will cover management of stock rotation and waste inspection.

4.3 Monitor and control of temperature

4.3.1 The Gov.uk Guidance Document on Fire Prevention Plans details *"If you're storing combustible wastes in the maximum pile sizes for longer than 3 months you must show what extra measures you'll use to prevent self-combustion"*. Monitoring to control the temperature is therefore not required on this site because combustible material is not held on site for more than 3 months as shown in ***Table 2***.

4.3.2 The Site Inspection Document ***(Appendix 1)*** will ensure that all waste stockpiles are monitored for any signs of fire throughout operational times.

4.3.3 Internally the site is fitted with 3 x thermal network bullet cameras and 6 smoke detection cameras which target the internal waste stockpiles, residual waste bays and surrounding areas.

4.3.4 Any temperatures reaching above 40^{o}C within view of the thermal cameras will set an alarm to a 3rd party security control room who will immediately inform key site contacts.

4.3.5 Additionally any signs of smoke detected by the smoke detection cameras will trigger the internal fire suppression system which will act in accordance with that detailed in *Section 6.6 Fire Suppression*.

5. Managing Waste Piles

5.1 Maximum pile sizes

5.1.1 Waste piles will be managed so that pile sizes are minimised and waste materials are regularly processed or removed from site in order to ensure that only minimum quantities are allowed to accumulate or are bulked up.

5.1.2 All wastes piles will comply with the dimensions as stipulated in ***Table 2*** and will not exceed the recommended maximum width or length allowed.

5.1.3 As per the Environmental Agency 'Fire Prevention Plan' guidance, a separation distance of 6m will be maintained between all storage piles on at all times, unless protected by way of fire wall.

5.2 Where maximum pile sizes do not apply

5.2.1 Whole end of life vehicles (ELVs) – No ELVs will be accepted on site, therefore maximum pile sizes for this waste stream does not apply.

5.2.2 Waste stored in containers – The site has a number of skips and containers on which are used to collect scrap metal. Their locations are shown on the Site Layout Plan ***(Drawing 1)***.

5.2.3 Compost production – No composing activities are carried out at the site, therefore maximum pile sizes for this waste stream does not apply.

6. Fire Prevention

6.1 Separation distances

6.1.1 As per the Environment Agency Guidance, the separation distance between the stockpiles / storage areas is recommended at 6m apart. The EA guidance advises that separation distances can be reduced by using fire walls and bays so long as they are designed to resist fire (radiative heat and flaming) for a minimum of 4 hours.

6.1.2 Where possible, all combustible materials on this site have been stored within concrete bays or divided by way of a concrete block fire-wall.

6.1.3 This includes the main waste processing building where concrete block fire walls have been used to ensure that fire breaks are in place between the waste input area, the oversized materials stockpile and the plant feed stockpile. The layout of this area has been defined in the Site Layout Plan ***(Drawing 1)***.

6.1.4 Where waste stockpiles or bays (open end) are not protected by way of a concrete block fire wall, the site will ensure a minimum 6m separation distance from all other forms of unprotected waste storage.

6.1.5 During operational times a strict housekeeping regime is followed to ensure that wastes that are moved between each waste stockpile by do not provide a possible 'fire connection'.

6.1.6 In addition, a fire detection and suppression system is in place covering the main internal areas of stockpiles as well as the two residual waste bays.

6.2 Overheating of stored wastes

6.2.1 Waste piles will not exceed those stipulated in the EA guidance limits nor those in section 4.4 'Maximum pile sizes'. To minimise any spontaneous combustions, all combustible materials will be stored in accordance with the storage arrangements outlined in ***Table 2***.

6.2.2 Wastes and stockpiles will be worked on a 'first-in, first-out' principle and stored wastes will not exceed the periods as stipulated in ***Table 2***.

6.2.3 A clear record will be kept on the regular monitoring of wastes stored on sites ***(Appendix 1)***. All wastes will be checked for signs of smouldering, smoking or self-heating on a daily basis and before end of shift.

6.3 Fire walls and bays

6.3.1 Where applicable, waste bays and fire walls are constructed using either concrete blocks or pre-cast concrete panels.

6.3.2 Concrete has been used as it has a major inherent benefit with regards to its fire-resistant properties and its material performance in a fire. It is non-combustible and has a slow rate of heat transfer, making it a highly effective barrier to fire spread.

6.3.3 The dimensions (height, length and thickness) of each individual block / panel used as a fire wall are shown below;

- Concrete blocks (H) 0.8m x (L) 1.6m x (T) 0.8m
- Concrete panels (H) 1.0m x (L) 6.0m x (T) 0.18m

6.3.4 Where fire spread through joints in concrete blocks / walls has been identified as a risk, an intumescent mastic sealant will be used to fill such gaps.

6.3.5 *Figure 3* below details practical representation of how concrete blocks react in a fire situation. The tests were conducted at the National Fire Service College, Gloucestershire in association with the Institute of Fire Consultants Group and concluded that; *"Concrete walls and concrete blocks including, for example Legioblock® are an effective means of providing compartmentation provided the joints are sealed".*

Figure 3 – IFC Burn Trial Summary

Fire resisting block work

The fire resisting block work was formed using blocks provided by Legioblock® although, walls formed of concrete blocks supplied through another supplier may be as effective, as would walls constructed of concrete or other fire-resistant material.

Bay	Material	Duration of test	Maximum temperature recorded	Comments
Bay 1	RDF piles	50 hours	400-500^{0}C	Slight heating through the block but still able to hold a bare hand on the outside edge of the blocks. Flame penetration through gaps in the blocks down wind of the fire.
Bay 2	RDF piles	50 hours	400-500^{0}C	Slight heating through the block but still able to hold a bare hand on the outside edge of the blocks. Flame penetration through gaps in the blocks down wind of the fire.
Bay 3	Plastic semi-piled	2 hours	1,100^{0}C	Slight heating through the block but still able to hold a bare hand on the outside edge of the blocks
Bay 3	Pre-crushed wood piled	20 hours	955^{0}C	Post fire spalling of the inner face of the block but remained stable.

6.3.6 As per *Figure 3* above it has been proven that concrete blocks and walls can provide a fire resistance in excess of that required by EA Fire Prevention Plan Guidance of 120 minutes.

6.3.7 As identified in WISH WASTE Guidance 28 *"Fire walls need to extend at least 1 metre above stored waste height to take account of flame height, and wastes should not spill beyond fire walls".* Therefore, the site will ensure to manage waste storage heights to below the height of any fire walls by a minimum 1 metre distance. More information on such controls has been detailed in ***Table 2***.

6.3.8 Additionally, a 'freeboard' distance will also be created at the side of any fire wall by the inherent thickness of the concrete blocks (0.8m).

6.3.9 As such, in terms of construction, flame height and radiation, the walls and bays at the facility are designed to resist fire and complies with section 11.2 of The Fire Prevention Plan Guidance; environmental permits – gov.uk document.

6.3.10 Regular housekeeping inspections as per the Site Inspection Document ***(Appendix 1)*** will ensure that all stockpiles are being managed correctly and in line with the fire prevention plan.

6.4 Quarantine area

6.4.1 The site has a quarantine area which measures 20m x 10m and is capable of holding at least 50% of the volume of the largest waste pile. The location of the quarantine area is shown in the Site Layout Plan ***(Drawing 1)*** and is located 6m away from any building, combustible material or site boundary.

6.4.2 The quarantine area provides a temporary space where the site can place burning wastes into to extinguish them, unburnt wastes can also be placed here to isolate and prevent them from catching fire.

6.4.3 Mobile plant will be used to move and deposit waste within the quarantine area and once waste is cooled / extinguished it will be moved from site to a licenced waste disposal facility.

6.5 Fire detection

6.5.1 **Externally**, the site operates a CCTV monitoring and detection system which was installed across the full site by a UKAS-accredited organisation (Reay Security).

6.5.2 In addition to the design and installation of the system, Reay Security are also responsible for system monitoring during out-of-hour periods. In such instances the Site has a notification procedure in place which will initiate an alert from the security company to the Site Manager and nominated deputies in the event of a specified incident. More information on this procedure is given in **Section 6.7 - Out of Hours.**

6.5.3 A copy of a BSI ISO 9001 Quality Management System certificate confirming that Reay Security are a UKAS-accredited organisation has been added to ***Appendix 3*** of this document.

6.5.4 The **external** detection and monitoring system is made-up of 8 visual detection CCTV cameras covering all externals areas of the site. Such areas include all external combustible waste stockpiles, bays and / or storage areas as well as plant parking, site offices and carparking areas.

6.5.5 During operational times the CCTV cameras are displayed and monitored via TV screen which is located within the Site Managers office. They are then further monitored during non-operational times by Reay Security from a central location.

6.5.6 The system is inclusive of motion detector technology, meaning that when activated (i.e. during non-operational times) the relevant CCTV camera will be drawn to any movement on site, including smoke and / or fire. Identification of which will trigger the notification procedure **(Section 6.7 - Out of Hours)**.

6.5.7 **Internally**, within the main processing building there are two separate forms of fire detection.

- Thermal Imaging Cameras – Linked to a temperature trigger point;
- Smoke Detection Cameras – Linked to an internal fire suppression system.

6.5.8 **Thermal Imaging Cameras**

3 thermal detection cameras have been located at strategic points within the main processing building, covering the waste input area, the main process and internal stockpiles, all internal waste collection bays (including the 2 RDF bays) and all associated waste movements.

6.5.9 The thermal imaging cameras display temperatures on a monitor located within the Site Managers office at all times. They are then further monitored during non-operational times by Reay Security from a central location.

6.5.10 During non-operational times, a trigger temperature of 40°C has been set which will initiate the notification procedure **(Section 6.7 - Out of Hours)** and trigger a telephone call from the security company to the Site Manager and any nominated deputies.

6.5.11 **Smoke Detection Cameras**

Also within the main processing building there are 6 smoke detection (smokecatcher) cameras focused on all areas of internal waste stockpiles (i.e. plant feed stockpile, waste input stockpile and oversize stockpile) and the residual waste bays.

6.5.12 The smoke detection system is linked to an automatic suppression system which also covers the three main internal stockpiles as well as the two residual waste bays. More information on the suppression system has been given in **Section 6.6 Fire Suppression**.

6.5.13 The system combined was designed, installed and will be maintained by Helios Fire Systems who are also a UKAS-accredited organisation. A copy of their BSI ISO 9001 certificate has been added to ***Appendix 4*** of this document.

6.5.14 The application of the smokecatcher cameras allow advanced early warning of potential fire incidents. They detect smoke, not heat, and therefore can identify the inception of a fire where little heat is generated. Equally, the technology is able to differentiate between smoke and fume.

6.5.15 Upon identification of smoke the cameras will automatically activate the suppression system. An alert is then sent to the mobile phone and email inbox of the Site Manager and any nominated deputies. This ensures that in the event of an activation outside of operational hours the relevant persons will be remotely informed as well as receiving a call from the out-of-hours security company.

6.5.16 The processing building has also been fitted with a category M fire alarm system on the factory floor and processing plant with automatic smoke detection located within the picking cabins and control room.

6.5.17 The fire alarm system and subsequent smoke detectors are checked and maintained at set frequencies both internally, in the form of weekly call point operations, and annually in the form of thorough testing and examination of the system by a BAFE registered fire safety contractor.

6.5.18 All weekly and annual examinations and tests are recorded in the site Fire Log Book and any findings or non-compliances are escalated for repair or further inspection by our approved Fire Safety Contractor.

6.5.19 The manual fire alarm system is not linked to an autodial for the emergency services. Instead the site internal Fire Evacuation Procedure addresses the requirement for calling the Fire and Rescue Services in the event that a manual alarm has been activated elsewhere on site.

6.5.20 Any alarm activation will prompt all site personnel to start the evacuation process as detailed in the Site Evacuation Plan ***(Appendix 2)***. In summary, this will involve the stopping of the processing plant via the emergency stop function, ensuring that all personnel are evacuated and accounted for and escalation of the incident to the Fire and Rescue Services if needed.

6.6 Fire suppression

6.6.1 The fixed processing plant located within the main processing building has been fitted with a number of relevant fire extinguishers across its entire span. In the event of a fire on the processing plant during operational times the plant will be stopped to prevent fire spread and staff will have the means to extinguish it using one of the many fire extinguishers available.

6.6.2 The plant shut-down sequence ensures that all materials are removed from the conveyors and screens into relevant bays before the plant comes to a stop. As such, no combustible materials will be present in this area overnight or during non-operational times, such as breaks.

6.6.3 A fire suppression system, inclusive of further automatic detection **(Section 6.5 Fire Detection)** and manual activation points, is located within the main waste processing building covering *(in reference to* ***Drawing 1 – Site Layout Plan****)* the waste input area, the plant feed stockpile, the oversize material stockpile and the two residual waste bays.

6.6.4 The other internal waste storage bays used to collect processed waste materials such as wood and UPVC are emptied each evening before site closure.

6.6.5 The system has been designed and installed in conformance of the below British Standards by a UKAS-accredited organisation, Helios Fire Systems ***(Appendix 4)***, who will also be responsible for the system maintenance;

- BS 8663-1:2019 Fixed fire protection systems. Components for watermist systems. Specification and test methods for watermist nozzles; and
- BS 12845:2015 – Fixed firefighting systems. Automatic sprinkler systems. Design, installation and maintenance.

6.6.6 The sprinkler system is made up of fire suppression sprinklers which will be located above the three stockpile areas and two residual waste bays in a 4-zone format.

6.6.7 Each sprinkler zone will have an individual discharge rate of 500 litres per minute and a total run period of 60 minutes on a singular basis.

6.6.8 As part of the suppression system a primary and secondary pump (self-testing), a 25,000-litre water storage tank (self-filling) and 500 litres of a 'coldfire' wetting agent have been located outside of the processing building.

6.6.9 When triggered by the smokecatcher cameras **(Section 6.5 Fire Detection)**, or manually, the fire suppression system will pump a mixture of water and a 'coldfire' wetting agent to the relevant sprinkler zone.

6.6.10 The 'coldfire' wetting agent works by ceasing the chain propagation of the free radical reaction of fire. It does this by removing heat from the fire triangle and immediately bringing the fire below its flash point. Simultaneously, it encapsulates the surrounding fuel source which prevents the risk of re-ignition and fire spread across waste stockpiles.

6.6.11 The application of a water / wetting agent mix was proven to be a more effective fire-fighting media than water alone *(ref. WISH INFO 05 – Waste fire burn trials summery report).* It was found that a much lower volume of media was used to penetrate far deeper into waste stockpiles with a better cooling and extinguishing effect than water.

6.6.12 The 'coldfire' wetting agent is a plant based substance that is environmentally friendly, non-toxic and completely biodegradable. It also has an unlimited shelf-life.

6.6.13 The primary pump is self-testing to ensure that it remains in working order. It will start itself and run for 10 minutes each week before going back into standby mode, providing all is working as it should. If the primary pump fails during a fire incident then the secondary pump will activate and ensure operation of the system.

6.6.14 In line with the objectives of the EA FPP guidance this suppression system will achieve early identification of a potential fire and begin to suppress it before it becomes fully established, thus minimising the likelihood of fire occurrence.

6.6.15 In the unlikely event of an established fire, the sprinklers of the triggered zone can continue to suppress the fire with the water / wetting agent mix for a 60-minute period. This will ensure that if a fire is not fully extinguished it will be prevented from spreading for a period significant enough to allow emergency response to arrive and carry out further extinguishing methods.

6.6.16 This mitigating factor, along with the other extinguishing techniques used by the site and the FRS will ensure that any fire within this area can be extinguished within a 4-hour period as required by FPP guidance.

6.7 Out of hours

6.7.1 The site and the UKAS-accredited security monitoring organisation (Reay Security) have agreed contact procedures following the identification of the below incidents during non-operational times;

- A thermal trigger (40^{o}C) within the waste processing building;
- The visual identification of possible fire or trigger of the fire suppression system within the main processing building;
- The visual identification (via motion detection CCTV) of a possible fire in an external waste storage area;
- The visual identification (via motion detection CCTV) of a site trespasser.

6.7.2 In the event of the above, the monitoring organisation will immediately call the Site Manager, in the first instance, before following a further list of nominated keyholders to the site. The list of nominated keyholders is inclusive of both Site Supervisors and the Director of Operations.

6.7.3 The monitoring organisation will also directly contact the FRS and other emergency services if initial identification of an incident is high in risk.

6.7.4 Following alert, arrangements will then be made for the Site Manager and any other nominated keyholder to attend site and further investigate the reported incident.

6.7.5 The incident will continue to be monitored by the monitoring organisation and contact with the attending representative will be maintained during the investigation period.

6.7.6 If the incident escalates in severity during this time or is identified as beyond the control of the attending representative then the emergency procedures will be followed and the FRS informed.

6.7.7 The attending person will assist the FRS in any way necessary and will provide the FRS with copies of critical information found within this FPP and associated appendices.

6.7.8 In the event that the FRS arrives at the site prior to site management and / or the nominated keyholder, the FRS will access the site using bolt cutters to cut any padlocks.

7. Water Supplies

7.1.1 In reference to this section of the EA's Fire Prevention Plan guidance document we have consulted with County Durham and Darlington Fire and Rescue Services' (FRS) Fire Safety Officer; Jonathan Smith.

7.1.2 The guidance document requires Operators to demonstrate that they have sufficient water supplies available on site to manage a worst-case scenario incident 'largest waste pile catching fire'. The guidance states that a 300m^3 pile of combustible material will normally require a water supply of at least 2,000 litres per minute for a minimum of three hours.

7.1.3 At Birtley Recycling Centre the worst-case scenario being a fire in the largest stockpile is most likely to be the plant feed stockpile due to the size (216m^3) and risk level (mixed waste).

7.1.4 As per the GOV.UK Guidance on Fire Prevention Plans, a flow of 1,440 litres of water per minute (24 litres per second) will be required in order to extinguish the 216m^3 of burning waste within 3 hours. This equates to a total water supply of 259,200 litres.

7.1.5 As already identified in **Section 6.6 Fire Suppression**, a fire suppression system designed to extinguish and prevent the spread of fire has been installed across all areas of internal combustible waste storage, including the 'worst-case' stockpile.

7.1.6 Additionally, a water hydrant is located outside of the facility gates at a distance of 100m, location indicated on the Site Layout Plan ***(Drawing 1)***.

7.1.7 The FRS have confirmed that the location of the fire hydrant and distance from site is in compliance with building regulations and it is entirely feasible that they will make use of this fire hydrant in an emergency situation, if required.

7.1.8 The FRS have also confirmed that each fire hydrant within their authority (including the one local to the site) is tested by themselves on a rotational basis to ensure that they are functioning as required.

7.1.9 In relation to a fire emergency response that requires the attendance of the FRS, the FRS have confirmed they will initially send 2 x fire appliances, each of which will be pre-filled with 1800 litres of water, which will enable an initial attack on any fire.

7.1.10 During the 'initial attack' the FRS will assess the situation as well as attempt to connect to the nearby fire hydrant in order to continually refill their appliances, if needed.

7.1.11 The fire engines themselves are fitted with jet hoses which can deliver 250 gallons (1,137 litres) per minute of water flow per individual appliance.

7.1.12 Whilst this flow rate is slightly under the 1,440-litre requirement for a 216m^3 stockpile, at a continual flow rate of 1,137 litres per minute it is calculated that a 216m^3 stockpile will be extinguished within 3 hours and 48 minutes, using a single fire appliance This time-frame for a fire to be extinguished is still within the Environment Agency guidance of "aim for a fire to be extinguished within four hours".

7.1.13 The use of a second fire appliance would increase the overall flow rate to 2,274 litres per minute, which exceeds the 1,440 requirement for a 216m^3 stockpile.

7.1.14 In addition, the 216m^3 stockpile is the maximum amount of volume of waste stored in a cubic metre area of the storage location, therefore stockpiles are highly likely to be significantly lower than this specific volume due to the shape and nature of loose waste stockpiles.

7.1.15 The FRS have also confirmed that, as per their usual operating procedures, they have contingency plans in place which include actions to take in the event that they identify issue with a fire hydrant that may result in an inability to re-fill their appliances.

7.1.16 In such instances, they have confirmed that an additional 2 x fire appliances (each with an additional 1800 litres of water) will be deployed to the incident and a 'relay method' adopted from the next available fire hydrant as per their own hydrant plans.

7.1.17 The FRS also have the ability to deploy a large water bowser vehicle to the site if additional water supply / storage is needed.

7.1.18 In addition to a fire suppression system the site also has made provision for its own fire hoses with points located at the weighbridge area, within the processing building and alongside the emergency quarantine area. Each fire hose can deliver a further 25 litres of water per minute over a radius of 40 metres.

7.1.19 It is considered that, given the water flow rate, the fire suppression system and site fire hoses / extinguishers, there is sufficient water available to contain and extinguish any waste fire on site within the Environment Agency guidelines of 4 hours.

8. Managing Fire Water

8.1.1 All areas of combustible material storage across the site are surfaced with impermeable concrete and have been designed so that waters on the surface will flow towards the site surface water drainage system.

8.1.2 A curb-line surrounds the concrete surfaces on all sides of the site except the eastern side (rear of the site) and the emergency access gate, whereby a design fall will channel any waters back towards the surface water drainage system and away from any permeable grounds.

8.1.3 The site surface water drainage system ***(Drawing 2)*** collects and directs waters via building downpipes, surface gullies and underground pipework. Waters are then channelled through an underground attenuation storage system which is designed to retain and discharge waters at a controlled rate of flow.

8.1.4 The underground attenuation storage system is a series of modular crates covering an underground area of 24.8m x 11.2m x 1.09m (302.75m^3). The modular crates are wrapped and sealed within an impermeable geomembrane and encased in a protective geotextile layer, gravel base and subsequent concrete surrounding.

8.1.5 The nett available volume of the attenuation storage area is at 96% allowing for the infrastructure of the modular crates. This gives a total storage volume of 290,648 litres of surface water, exceeding the 259,200 litres of water required to extinguish our 'worst case' fire.

8.1.6 The attenuation storage system has three inlet points, from various areas of the site surface water drainage system, all located at top level in the system. A single outlet point is then located at the lowest level in the system to which waters are channelled towards.

8.1.7 Waters which enter the attenuation storage system are slowed by the modular crate infrastructure before being discharged via the outlet point and into a settlement trap at a controlled rate.

8.1.8 The settlement trap has a further 2,000 litre settlement capacity before water is discharged into a vortex flow control valve which feeds the full retention oil interceptor.

8.1.9 The vortex control valve is inclusive of an orifice plate which, when closed, effectively seals the site drainage system at this point (before waters enter the oil interceptor).

8.1.10 Upon being sealed, waters will be retained within the settlement trap (2,000 litres), the attenuation storage system (290,648 litres) and the remainder of the site surface water drainage system before backing up onto the impermeable site surface.

8.1.11 In a fire situation it is possible, subject to their own risk assessment, for the Fire and Rescue Services to submerse a pump into the settlement tank and use it as a point of re-circulation for fire waters.

8.1.12 County Durham and Darlington Fire and Rescue Services' (FRS) Fire Safety Officer (Jonathan Smith) has confirmed that the site drainage mechanism and ability to bund and re-circulate the fire water is a positive feature of the site. However, the re-circulation of fire water would only be used as a method of reducing the total accumulated amount of fire water created during a long-term incident.

8.1.13 Waters allowed to proceed from the settlement tank will enter the vortex flow valve and be discharged, at a rate of 35 litres per second, into the full retention oil interceptor.

8.1.14 The full retention oil interceptor has a capacity to retain 4,000 litres of silt and 400 litres of oil. It has been fitted with a level alarm which will signal in the event that the interceptor begins to become full.

8.1.15 After the full retention oil interceptor waters will flow through a sampling chamber before being combined with the site foul water drainage system and then discharged to a combined sewer at an authorised discharge point.

8.1.16 During a fire incident the orifice plate can be accessed from ground level by following the Site Emergency / Evacuation procedure ***(Appendix 2)***. The valve access point is located at a 10-metre distance from any building / combustible waste storage area and will not become obstructed or too dangerous to reach in a fire situation. Therefore, the site does not propose to divert any firewater run-off into the combined sewer system and all fire water will be disposed of at a licenced treatment facility.

8.1.17 Following a fire incident, the site drainage system will remain sealed at the vortex flow control valve preventing any fire waters from entering the full retention oil interceptor.

8.1.18 The fire water will be pumped, using an approved removal company, from the settlement tank which will drain the attenuation storage area, the surface water drainage system and any site flooding.

8.1.19 Maintenance of the site drainage system will be carried out on an annual inspection and cleaning regime. The full retention oil interceptor, although not used as any form of fire water containment, will also be maintained as per this frequency.

9. During and After an Incident

9.1.1 Should a fire occur on site, it will be treated as an emergency event and the Fire Emergency / Evacuation Procedure ***(Appendix 2)*** will be followed. No further waste vehicles will be permitted to enter the facility. Management will re-direct vehicles to an alternative Remondis or third-party facility.

9.1.2 Once the fire emergency plan has been initiated and the required steps have been followed to ensure that the emergency services are attending the site and appropriate assistance is provided where possible, then Remondis Senior Management will be notified (if they are not already aware).

9.1.3 On the advice of Remondis Senior Management and the Emergency Services, the relevant authorities will be notified. A business contingency plan will then be implemented.

9.1.4 The nearest Fire Station to the site is located 1.2 miles by road, station address;

Birtley Fire Station
Durham Road
Chester-Le-Street
DH3 1LU

9.1.5 It is the responsibility of the Site Manager / nominated deputy or fire marshals to ensure that all personnel, visitors, sub-contractors are all accounted for, and to give that information to the Emergency Services upon their arrival.

9.1.6 Site access for the FRS and Emergency Services will be via the site emergency entrance as detailed on the Site Layout Plan ***(Drawing 1)***. This entrance will be opened as per the Fire Emergency / Evacuation Plan ***(Appendix 2)*** and will remain unobstructed at all times.

9.1.7 The site will cease to operate until the EA and / or FRS confirm that it is safe to recommence and all emergency contacts, procedures and plans are readily available in the event of a fire.

9.2 Small fire

9.2.1 If a fire is deemed small, safe and controllable it will be dealt with by the suppression system, staff via the use of fire extinguishers and / or fire hoses.

9.2.2 Mobile plant can be utilised to pull the burning waste out into the open and away from any other wastes or nearby materials that could potentially catch fire. Mobile plant can also pull unburnt / unaffected waste away from the burning material to reduce the impact and spread of fire.

9.2.3 The fire will then either:

- Be extinguished at source with use of the fire suppression system, fire extinguishers, fire hoses or inert materials;
- Moved to the designated quarantine area and extinguished using fire extinguishers, fire hoses or inert materials.

9.2.4 Once the fire has been extinguished, the remaining area will be inspected by site staff to identify any signs of smouldering before the decontamination process begins to take place.

9.2.5 Site Management will make a record of the incident and the procedures carried out to manage the fire. An investigation and review of the site fire risk assessment will be carried out to determine whether further mitigation measures could have prevented the fire, with an update to the FPP and EMS as required.

9.2.6 If a small fire cannot be extinguished, it will be classed as a 'large / uncontrollable fire' and the Fire and Rescue Services will be notified immediately.

9.3 Large / uncontrollable fire

9.3.1 In the event of a major fire, whereby the fire is too large to control safely on site by site staff, the following procedures will be carried out:

- Site Management / nominated deputy will contact the Fire and Rescue Services immediately by dialling '999' (as soon as practicably possible, the regulatory bodies will also be contacted);
- Evacuation of all site staff and persons to the fire assembly point as per the Fire Emergency / Evacuation Procedure ***(Appendix 2)***;
- Ensure all access areas to waste fire and site entrance is clear for the arrival of the Emergency Services.

9.3.2 In addition, Site Management will undertake the following to ensure that a large / uncontrollable fire is contained and suppressed:

- Activation of the fire suppression system (automatically or manually);
- Instruct mobile plant to move the fire to the quarantine area or move unaffected waste away from the fire and to the quarantine area;
- Ensure that the site drainage system is isolated as per the Fire Emergency / Evacuation Plan ***(Appendix 2)***;
- Identify the type of fire and use the appropriate extinguisher (located around site as shown in the Site Layout Plan ***(Drawing 1)***;

- Follow the instructions on the extinguisher, attempt to control the fire if safe to do so and prevent the fire spreading to other wastes.
- On arrival of the FRS, the Site Manager will provide details of the waste fire including;
    - A copy of the Site Layout Plan;
    - Type of waste;
    - Location of waste and storage arrangements;
    - Actions already carried out to control the fire and if wastes have been moved or further segregated;
    - Implementation of pollution control measure, if required.

9.3.3 The County Durham and Darlington Fire and Rescue Services (FRS) have confirmed that a reported waste fire will summon 2 x fire engines and a crew of between 8 – 10 fire-fighters. They will access the site via the emergency access gates off West Line Industrial Estate and have direct access to the waste processing building.

9.3.4 Following the arrival of the FRS and Emergency Services, all site staff will take instructions to assist with any procedures required, including;

- Moving unburnt / unaffected wastes away from the fire using mobile equipment;
- Dampening down of unburnt / unaffected waste;
- Isolating the area around burning wastes;
- Halting any entrance of customers or vehicles to the site.

9.4 Out of hours fire

9.4.1 In the event of an out-of-hours fire occurring in any **external** area of the site during non-operational hours, the motion detector CCTV system will identify the incident and alert the UKAS-Accredited security monitoring organisation (Reay Security).

9.4.2 A fire identified **internally** by the 'smokecatcher cameras' will automatically activate the fire suppression system and an alert will be sent via text message and email to the Site Manager and any nominated deputies.

9.4.3 The internal CCTV and thermal imaging system will also identify any temperatures above 40^{o}C and alert the security monitoring organisation (Reay Security).

9.4.4 Following notification of an incident on site, Reay Security are instructed to immediately call the nominated keyholder, the Site Manager and, if necessary, the Fire and Rescue Services.

9.4.5 On the arrival of the nominated keyholder and / or Site Manager to site, they will carry out the following procedure to ensure that the fire is controlled prior to FRS arrival:

- Ensure that the site drainage system is isolated;
- Ensure that the emergency access gates are open pending FRS arrival;
- Identify the type of fire and, if safe to do so, use the appropriate extinguisher to suppress and contain the fire;
- On arrival of the FRS, provide details of the waste fire including;
  - A copy of the Site Layout Plan;
  - Type of waste;
  - Location of waste and storage arrangements;
  - Actions already carried out to control the fire and if wastes have been moved or further segregated;
  - Implementation of pollution control measure, if required.

9.4.6 The site maintains an emergency contact list which is displayed within the main site office and includes out-of-hours contact numbers for both of the Site Supervisors. In the event of an out-of-hours fire one, or both, of the Supervisors will be contacted and their attendance at site will be requested if needed.

9.4.7 Both of the Supervisors are trained and competent operators of all mobile plant items that may be needed to help the fire brigade manage a fire situation. Copies of their mobile plant competence certificates have been added as ***Appendix 8***.

9.4.8 All key persons as identified in the Site Fire Emergency / Evacuation Procedure ***(Appendix 2)*** (including both Supervisors) have been fully trained in the requirements of the procedure, such as site isolations, specific responsibilities, greeting the fire brigade, etc. and a copy of the procedure is available for reference at all times within the Site Emergency Box, which has been located on the wall within the site office reception area.

9.4.9 The site also manages its staff holidays and absences to ensure that both Supervisors will not be unavailable at the same time unless further arrangements have been made.

9.4.10 Attending site persons will also assist the FRS in any way required, if safe to do so.

9.4.11 In the event of the FRS arriving prior to site personnel, the FRS will access the site by using bolt cutters to cut any padlocks to enter the site.

9.5 Engagement with neighbours and receptors

9.5.1 The closest neighbouring properties and sensitive receptors as shown in ***Table 4*** below will be notified immediately of a fire at the site, where this is proportionate to the scale and relevant to the specific receptors that may be affected. Site Management (or their nominated persons) will either visit or call the nearest neighbours and advise of a fire emergency at the site and any required actions to be taken (i.e. closing windows and staying away from the site).

9.5.2 Contact with other properties located further afield will be undertaken under the direction of the FRS and / or Emergency Services attending site.

Table 4 – Neighbouring receptors to be contacted during a fire emergency

Receptor	Type	Contact	Proximity to site
Zoemic Commercials	Vehicle Hire / Dealer	0191 4111 499 07711 735 231	10m S
Network Rail	Railway Line	24 Hour Emergency 03457 11 41 41	20m E, NE, SE
Pallet Earth	Wood Crafter	0191 410 6630	30m W
Westline Distributors	Building Supplier	0191 410 2636 07736 437 120	50m W
Komatsu	Manufacturers	0191 410 3155	75m W
Askern UK	Manufacturers	0191 492 0806	100m SW
Kerr Metals	Scrap Metal Recycling	0191 492 0015	150m SW
Tommy Wardle	Roofing Business	0191 410 9549	175m SW
O'Brien Demolition	Demolition Business	0191 537 4332	175m SW

10. Incident Management

10.1.1 The Site Manager will liaise with the Emergency Services, Environment Agency and all other receptors throughout an incident.

10.1.2 Upon the detection of any fire during operating hours the site will be closed to all (non-essential) vehicles and persons. A member of staff will be positioned at the entrance of the site to direct emergency vehicles and to re-direct non-essential vehicles to the nearest alternative facility (as per the Fire Emergency / Evacuation Procedure ***(Appendix 2)***).

10.1.3 A long burning / smouldering fire is likely to have greater impact on people, neighbours, infrastructure, nearby railways lines and roads. Other factors to be considered during such an incident are wind direction, volume of smoke, weather conditions, nearby residents and businesses, impact on the road network and local eastern railway line. The Emergency Services will be notified of such considerations as necessary.

10.1.4 This FPP includes contact telephone number for all direct or immediately nearby receptors likely to be affected by a fire incident. All neighbours will be contacted on initial discovery of a fire and will be continually updated throughout an incident. Any clean-up measures will also consider the neighbours to assess any potential further clean-up needs that they may have as a result of a fire incident on our site.

10.1.5 Any fire damaged waste will be characterised to enable determination of a suitable facility for recovery or disposal, which may include the following:

- Waste characterised by visual sorting;
- Compositional analysis of the waste material;
- Waste acceptance criteria testing for landfill.

10.2 Post fire actions, clearing and decontamination

10.2.1 After any fire or hot load event the waste, following extinguishing, will be segregated and monitored for a minimum of 24 hours. After this period, it will be forwarded onto landfill. Under no circumstances will this waste be mixed and / or placed back within the main waste streams of the site.

10.2.2 All site infrastructure, mobile plant and equipment will be checked by the Site Manager to ensure that they are free from fire damage, safe for entry / use and functioning correctly. The Site Manager will carry out a thorough inspection of the site to ensure that it is in satisfactory condition before the site can re-open.

10.2.3 Following a significant fire incident and damage, once the site is deemed safe by the FRS and a clean-up has taken place, a technically competent manager or third-party structural engineer will assess the degree of damage caused by the fire, and the residual fire damaged waste, emissions and equipment.

10.2.4 Checks will ensure the integrity of the building, roofs, gutters, drainage and electricity to identify any underlying damage that may have been caused by the fire and heat. The site will re-open following their approval and after and remediation / repair work has been made.

10.2.5 The quarantine area (and any affected waste bays) will undergo a deep clean, where surface waters used for cleaning will be discharged into the interceptor.

10.2.6 In the event of smoke / soot deposits, a thorough deep clean of the site facility will be carried out. The Site Manager will then conduct an inspection to ensure that the site is returned to a pre-incident condition. The Site Inspection Document ***(Appendix 1)*** will monitor any dust or soot settlement that may occur following an incident and any remediations will be rectified as appropriately.

11. Staff Training and Competence

11.1.1 The Manager of this site has undertaken a level 3 qualification in fire safety and risk management as well as having significant experience in fire safety legislation and fire risk assessment including; measures used to minimise the risk of fire, prevent the spread of fire, suppress fire, ensure the safe evacuation of personnel and contingency measures. Qualification evidence has been included in ***Appendix 5***.

11.1.2 All staff, visitors and contractors shall be made aware of key elements of this FPP during site induction, which will be refreshed on a 12-monthly basis.

11.1.3 During induction, site personnel will be advised on the location of the FPP, all firefighting equipment and measures needed to comply with fire safety legislation and the reduction of fire risk.

11.1.4 All personnel are required to give an authorisation signature, following induction, to confirm that they understand a summary of the contents of the FPP. Any discrepancies will be raised immediately to the Site Manager.

11.1.5 In addition to the FPP, the site induction will also cover designated smoking areas, general health and safety information and instruction on what to do in an emergency.

11.1.6 The site currently has 5 members of staff trained specifically in Fire Marshal Duties, which covered the below topics;

- Fire Safety Legislation;
- The correct use of extinguishers (live demonstration);
- Fire prevention and good housekeeping;
- The theory and chemistry of fire and how it spreads;
- Evacuation procedures;
- Home fire safety.

Copies of their certificates are detailed in ***Appendix 6***. Fire marshal training will be refreshed on a minimum 3-yearly basis.

11.1.7 All relevant staff, such as fire marshals, supervisors, weighbridge staff and plant operators have been trained in the Site Fire Emergency / Evacuation Plan ***(Appendix 2)***. Signatures confirming understanding can be found alongside the procedure which has been located within the Site Emergency Document Box within the reception area of the site offices.

11.1.8 Scenario based practices of the Site Fire Emergency / Evacuation Plan ***(Appendix 2)*** will be carried out on a 6-monthly basis. These will be recorded in the site Fire Logbook, specifically using the Fire Drill Document ***(Appendix 7)***, and will routinely ensure that staff are familiar with all sections of the Fire Emergency / Evacuation Plan ***(Appendix 2)***.

11.1.9 The day-to-day operation of the site fire arrangements, such as stockpile management, maintenance of separation distances, mobile plant inspections and general housekeeping will be documented in written operating procedures. Relevant staff will be trained in such procedures in line with their day-to-day activities.

12. Review of Fire Prevention Plan

12.1.1 Following any significant event at the site, an investigation of the incident will be undertaken, and all procedures and plans will be reviewed.

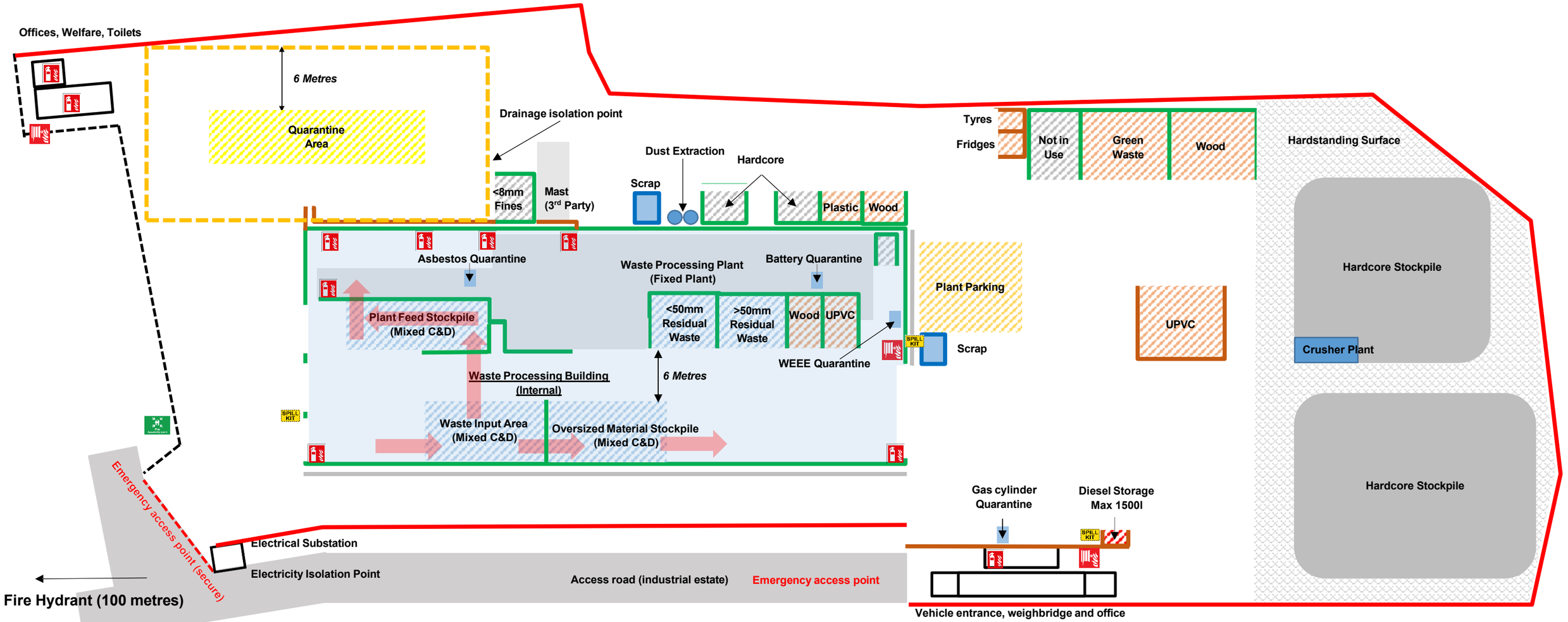
12.1.2 Taking into consideration the findings of the investigation, these procedures and plans may be amended to improve fire preventative measures and fire response measures in the future.

DRAWINGS

Drawing 1 – Site Layout Plan

Drawing 2 – Site Drainage Plan

Site Layout Plan

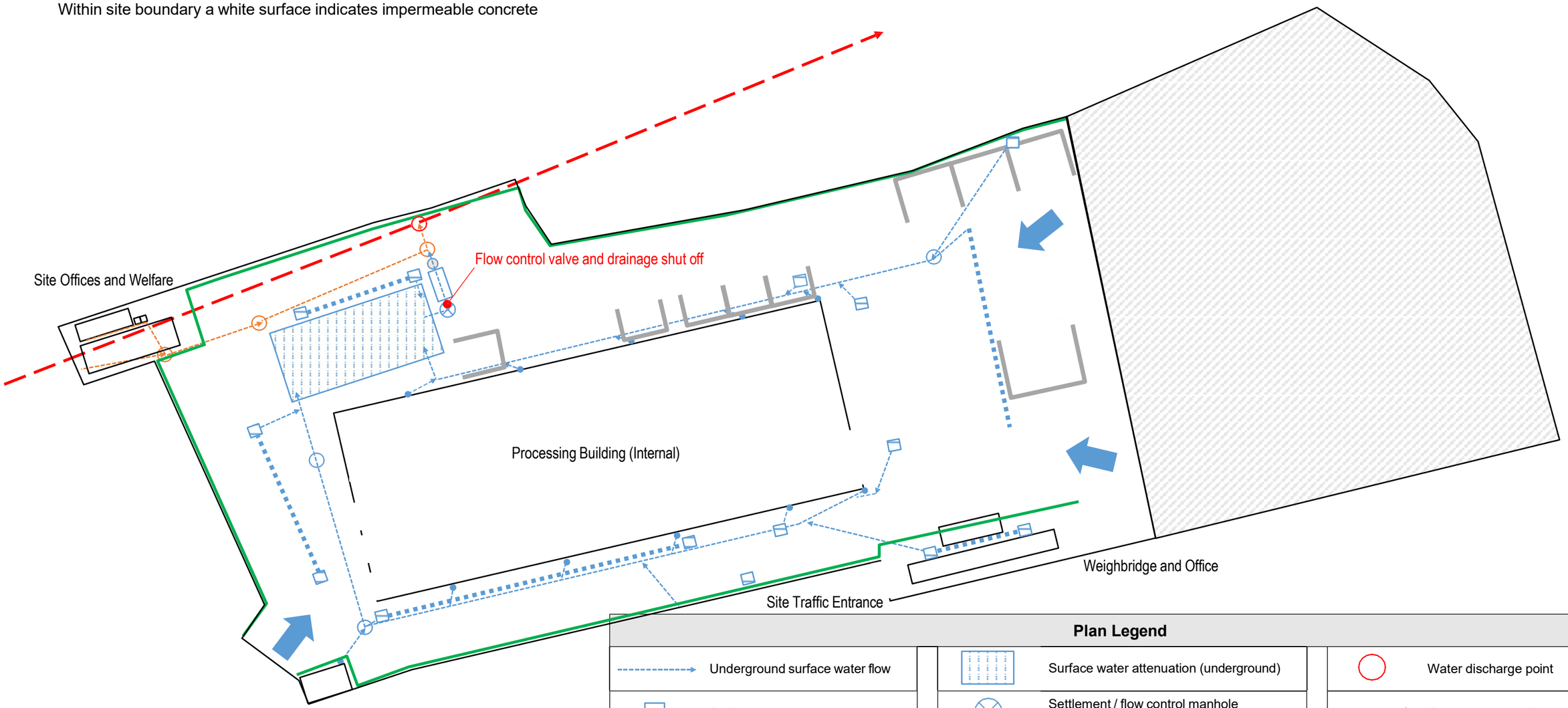


Site Layout Plan - KEY

Site Perimeter	Mixed Waste	Spill Kit Location
Concrete panel / block wall or bay	Segregated Waste	Fire Assembly Point Location
Concrete block / barrier demarcation	Inert Waste	
Impermeable concrete surface	Gasoil Storage	
Hard standing Surface	Fire Extinguisher Location	
Internal Area	Fire Hose Location	

Drainage / Containment Plan

Within site boundary a white surface indicates impermeable concrete



Plan Legend

Underground surface water flow	Surface water attenuation (underground)	Water discharge point
Surface water gulley	Settlement / flow control manhole (drainage shut-off)	Combined sewer flow
Surface water hauraton gulley	Full retention oil interceptor	External bay / waste storage
Surface water manhole	Sampling chamber	Curb line retention
Surface water building downpipe	Foul water flow	Building / structure
Direction of slope / fall	Foul water manhole	Permeable hard standing surface

FPP APPENDIX 1

BIRTLEY ENV-D1 Site Inspection Document

FPP APPENDIX 2

Fire Emergency / Evacuation Plan

FPP APPENDIX 3

Reay Security BSI ISO 9001 Quality Management Certificate

bsi.

By Royal Charter

Certificate of Registration

QUAUTY MANAGEMENT SYSTEM - ISO 9001:2015

This is to ceitify that:

Reay Security Limited
Arms Evertyne House
Quay Road
Dun Cow Quay
Blyth
NE24 2AS
United Kingdom

Holds Certificate Number: FS33253

and **operates a** Q ity Management System which complies with the requirements of ISO 9001:2015 for the foltowing scope:

Tlie provision of security servioes in accordance with the requirements of Codes of Practice BS 7499 2013 Static Site guarding and mobile patrol servioe, BS 8418 2015 Installation and ren ote monitoring of detector-activated COV systems, 85 8591 2014 Remote centres receiving signals from alam1 systems and BS 7958 2015 Closed ciraiit television (CCTV) Management and operation. BS 7358 2012 Security screening of individuals employed in **a security environment- limited to clients own employees only.**

For **and** on behalf of BSI:

Andrew Launn, EMfA 5¥stems Certification Director

Original Registration Date: 1996-01-18
Latest Revision Date: 2.018-05-29

Effective Date: 2017-12-18
Expiry Date: 2020-12-17

..making excellence a habit

FPP APPENDIX 4

Helios Fire Systems BSI ISO 9001 Quality Management Certificate

FPP APPENDIX 5

Site Manager – NEBOSH Fire Safety and Risk Management Certificates

nebosh

NEBOSH National Certificate in Fi:re Safety and Risk Management

This is to certify that

Neil Alan Cook

was awarded this qualification on

14 August 2017

with Credit

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Chief Executive

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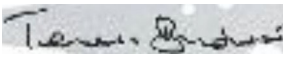

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THE INSTITUTION OF FIRE ENGINEERS

FOUNDED 1918 • INCORPORATED 1924

CERTIFICATE OF ATTENDANCE

This is to certify

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has attended an approved
Continuing Professional Development Activity

IFC & GMFRS Fire Protection Conference

Date: 25 September 2017
Venue: GMFRS Training Centre, Manchester

This event has been approved by the Institution of Engineers as providing hours of Continuing Professional Development

Endorsed.- *Date: 19 October 2017*

Mr Martin Shipp* BSc *(Physics) CEng FIFireE CPhys MInstf'
IFE International President 2017/2018

THE INSTITUTION OF FIRE ENGINEERS

FPP APPENDIX 6

Fire Marshal Training Certificates

Expert Fire Solutions

Your Fire & Security Experts

FIRE WARDEN TRAINING COURSE

This is to certify that

Bogdan Popa

Has attended a course in

Fire Training and Fire Marshall Duties

Brian Hogg

Brian Hogg
Expert Fire Solutions
Date: 28 November 2022

Expert Fire Solutions

Your Fire & Security Experts

FIRE WARDEN TRAINING COURSE

This is to certify that

James Turnbull

Has attended a course in

Fire Training and Fire Marshall Duties

Brian Hogg

Brian Hogg
Expert Fire Solutions
Date: 28 November 2022

Expert Fire Solutions
Your Fire Safety in our Hands

FIRE WARDEN TRAINING COURSE

This is to certify that

Sean McBurnie

has attended a course
in

Fire Training and Fire Warden Duties

Alan Raine

Expert Fire Solutions
Date: 19th October 2019

Expert Fire Solutions

YcxrFn & Seamy Experts

FIRE WARDEN TRAINING COURSE

This is to certify that

Nicolae S. Gradinariu

Has attended a course

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Fire Training and Fire Marshall Duties

Brian Hogg
Expert Fire Solutions
Date: 28 November 2022

FPP APPENDIX 7

Fire Drill Document (Fire Logbook)

Fire Drill Document

To be completed for each fire drill. Fire drills to include scenario based practices taken from the Site Evacuation Procedure.

Date of drill:_____ **Time of drill:**_____ **Evacuation time:**_____

Names of Fire Marshals:_____

Premises or area of site included:_____

1. **Was the alarm sounded promptly?** **Yes | No**
2. **Could the alarm be heard throughout the premises?** **Yes | No**
3. **Did all staff understand the routine and act effectively?** **Yes | No**
4. **Is there a need for further staff training or instruction?** **Yes | No**
5. **Was a random activation point chosen?** **Yes | No**
6. **Were there any particular issues identified with the evacuation?** **Yes | No**
7. **Was a roll call conducted at the assembly point?** **Yes | No**
8. **Were all employees and visitors accounted for?** **Yes | No**
9. **Would the fire brigade have been able to safely access the site?** **Yes | No**

Number of persons involved (circle)**:** <10 | 10-20 | 20-50 | 50-100 | 100+

Section of the Evacuation Plan included (tick below)**:**

☐ Evacuation / roll call	☐ Control of traffic	☐ Mobile plant parking
☐ Electricity Isolation	☐ Drainage isolation	☐ Emergency gate procedure
☐ Secondary Evacuation	☐ Use of quarantine	☐ Movement of waste

State actions necessary as a result of this evacuation:

_____

_____

_____

_____

_____

_____

Individual document should be printed as required

FPP APPENDIX 8

Mobile Plant Training (Supervisors)

James Turnbull

Bogdan Popa

NPORS"
Operator

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Bogdan Popa

Has successfully completed training & **a&S8$Sment** In

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Barry Errington

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Certificate

Of Basic Training

Bogdan Popa

Has successfully completed training & asses.smen! in

360 Excavator Tracked

Make/Model: Texex TWH 220. Capacity: 2200ku. Attachment: Grab

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DATE OFIESTING
26--05•2021

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Certificate

OBasic Training

Bogdan Popa

Has successfully completed training & **assessment** in

350 excavator Wheeled

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26-05-2021

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