

CROW METALS LTD

**FIRE PREVENTION PLAN V1
MARCH 2025**

CROW/FPP/01

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INDEX

Contents

1.	Introduction	3
1.1	Purpose	3
1.2	Scope.....	3
1.3	Objectives.....	3
1.4	Site Location.....	3
2.	Roles and Responsibilities.....	4
2.1	Summary of Operation.....	4
2.2	Causes of Fire	5
2.3	Fire Prevention Plan	5
3.	Material Receipt, Treatment and Storage	6
3.1	Material capacity.....	6
3.2	Material acceptance.....	6
3.4	Quarantine Area.....	7
3.5	Material Storage Times, Stock Management and Rotation.....	7
3.6	Storage Stacks	8
4.	Diesel Tank	9
5.	Training, Awareness and Visitors	10
6.	Security.....	11
7.	Planned Preventative Maintenance.....	11
8.	Contingency.....	12
9.	Control Measures.....	12
9.1	Hot Exhausts.....	12
9.2	Hot Work	12
9.3	Electrics	13
9.4	Leaks and Spillages.....	13
9.5	Build-up of Loose Combustible Waste	13
9.6	Reaction between Wastes	14
10.	Fire Detection and Management.....	15
10.1	Detecting and Suppressing Fires.....	15
10.2	Firefighting Strategy – During Operational Hours	16
10.3	Firefighting Strategy – Out of Hours	17
11.	Fire Fighting Water.....	19
11.1	Table 3 Fire Fighting Water	19
12.	Containment of Fire Fighting Water	20

13. Incident Management.....	20
14. Key Information.....	21
Appendix 1 Receptors within 2km of the Site	22
Appendix 2: Sensitive Receptors within 1km	23
Appendix 3: Sensitive Receptors within 2km	24
Appendix 4: Emergency Contact Numbers	25
Appendix 5: Local Contact Numbers.....	26
Appendix 6: Daily Checks Form.....	27
Appendix 7 Quarantine Procedure	28
Appendix 8 Spillages	30
Appendix 9 Site Plan Ref: CROW/FPP/SP01.....	32

1. Introduction

This document provides details of the fire prevention plan for the metals recycling facility at 71 Ferry Lane, Rainham, Essex, RM13 9DB.

This document is a standalone document but has been produced in line with other operational documents which can be read in conjunction with this FPP:

- FPP Site Plan CROW/FPP/SP01
- Environmental Management Plan CROW/EMS01
- Environmental Risk Assessment (CROW/ERA01)
- Noise Impact Assessment (NIA Ref: PC-25-0024-RP1)
- Noise Management Plan (NMP Ref: PC-25-0024-RP2)

1.1 Purpose

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

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

1.2 Scope

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

1.3 Objectives

The objectives of the Fire Prevention Plan are:

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

1.4 Site Location

The site is located at 71 Ferry Lane, Rainham, Essex, RM13 9DB.

The site is situated within an industrial/commercial estate.

The site has one entrance at the northern end of the site, all vehicles will enter and leave the site from Ferry Lane.

The site is surrounded by other industrial/commercial premises to North, West and South and there is a Site of Special Scientific Interest, Local Nature Reserve and Local Wildlife site to the East.

The Rainham Creek is to the west of the site and it flow to the Thames River, both of the waters are home to protected species and are protected migratory routes.

A list of key receptors are shown in Appendix 1 and maps of key receptors within both 1km and 2km are shown in Appendix 2 and 3 respectively.

2. Roles and Responsibilities

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

- Ensuring the adequate training of staff and contractors working on site regarding the content of these procedures; Toolbox talks are given monthly and inductions carried out for each new starter on site.
- Ensuring the adequate provision of resources such as personal protective equipment (PPE); Hard Hats, safety boots and hi-vis waistcoats, safety gloves.
- Ensuring the provision and maintenance of handheld fire extinguishers and other firefighting equipment at the site is adequate. Fire extinguishers are checked monthly and serviced annually.

The site's Technically Competent Manager (TCM) will provide the required attendance time at the facility as required by guidance periodically issued by the EA. A copy of TCM's Certificate of Technical Competence (COTC) will always be made available in the site office.

2.1 Summary of Operation

The site's main activity is metal recycling consisting mainly of various grades of Non-ferrous and Ferrous materials.

All metal processing is conducted through the shredder. Material is separated physically and mechanically into separate recyclable grades, for onward transportation to suitably authorised sites.

The site has a sealed drainage system with no gullies or drainage outlets to surface water. The holding tank is situated as shown on the FPP Site Plan (CROW/FPPSP01) it is within the building labelled Bay 9 it is regularly maintained and emptied by tanker when necessary. The holding tank can hold 60,000 litres.

2.2 Causes of Fire

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

Table 1 - Causes of Fire and Applicability to the Site

Cause of Fire	Applicability to the site
• Arson or vandalism	Yes – see section 9 Security
• Self-combustion	No – see below
• Plant or equipment	Yes – see 10 Planned Preventative Maintenance
• Electrical Faults	Yes – see 12.3 Electrics
• Naked Lights	No – none on site
• Discarded smoking materials	No – metal is non-combustible source
• Hot works, for example welding.	No – not used as part of regular operations, but maintenance may require welding/flame cutting see 12.2 Hot works
• Industrial heaters, furnaces, incinerators, space heaters	No – none on site
• Hot exhausts	Yes – see 12.1 Hot exhausts
• Open burning	No – no burning will take place
• Damaged or exposed electrical cables	Yes – see 10 Planned Preventative Maintenance
• Reactions between incompatible materials	No – not relevant given the waste types see 12.7
• Leaks and Spillages	Yes – see 12.5 Leaks and Spillages
• Hot loads deposited at the site	No – no hot loads delivered to site
• Build-up of loose combustible waste	No – purchased material is non-combustible

2.3 Fire Prevention Plan

The site will be operated in accordance with an Environmental Management System. Operational Procedures are set out in CROW/EMS/01 Feb 2025.

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

3. Material Receipt, Treatment and Storage

3.1 Material capacity

The annual throughput will be 75,000 tonnes.

The maximum amount of that could be onsite at any one time will be approximately 760 tonnes. The site will store waste at the limits set out in Table 2.

3.2 Material acceptance

Material will arrive onsite from several sources, either from other metal recycling merchants, scrap traders or factory scrap collected using our company vehicles.

Material will also be delivered to site from third parties, waste carrier's details are checked prior to tipping.

Only the waste types and EWC codes named on the environmental permit in Schedule 2 will be accepted at the site.

When waste materials have been unloaded, they will be additionally inspected for non-permitted 'rogue' items or waste materials (including flammable substances and ignition sources) that could contravene the permit, including combustible or flammable items and materials or ignition sources (e.g. gas bottles, Li-ion batteries, aerosols).

These loads will be either quarantined (for onward permitted and compliant disposal) or rejected from site (a Rejection Form will be completed). Once any problem with the quality of the load is noted, information will be passed back to the weighbridge or to a responsible person and as soon as the load is checked and passed for acceptance, the load will then be transferred to the appropriate area or stockpile for processing.

Any incidents of non-conformance will be recorded in the Site Diary. The site will not receive wastes that are incompatible and the likelihood of receiving noncompliant waste will be low. However, there may be occasions whereby customers have placed non-compliant waste in the skips or lorries.

The material will be tipped and stacked within bays, the newest waste will be tipped furthest from the rear wall, as it is processed it will be pushed up towards the rear wall, this will ensure that the waste is treated using the first in first out principle (FIFO).

The following procedure will be implemented if non-conforming waste is observed after the initial inspection:

- a) The waste is immediately separated into the quarantine area pending off-site removal
- b) Management Informed of non-permitted waste
- c) The customer will be informed of the breach and charged for the additional handling costs associated with transferring to another authorised facility
- d) Record maintained of non-permitted waste, quantity, source, date and client/source of waste.

3.4 Quarantine Area

The quarantine area / firefighting area is situated to the western side of the site next to Bay 12 and is constructed of leglo blocks. See FPP Site Plan CROW/FPPSP01.

3.5 Material Storage Times, Stock Management and Rotation

No waste metals will be stored any longer than 3 months. Waste metal may sometimes be stored for up to 1 month but will usually be processed and dispatched offsite for further processing within 1 week.

During the daily checks, the site manager will also visually check for any signs of combustion and hotspots within the metal that is considered to be of low combustibility (aluminium shavings, cable and electric motors). In the unlikely event that there is localised warming, it will be dissipated by turning the material in the bay using the grab machine. As the material is only on site for a short time it is not necessary that temperature checks are carried out regularly. However, if there are exceptionally hot spells of weather then temperature guns will be used to monitor the material twice a day, once in the morning and again in the afternoon, the temperature readings will be noted in the site diary.

Should a hot spot be identified (over 60 degrees Celsius) an assessment will be made by the site manager of the relevant stockpile to identify the extent of the hot spot and enable an informed decision as to the remedial actions to be taken to cool the material by the most effective method in as short a time as possible and generating the minimum amount, of residues.

The site has more than one outlet for materials to cover the situation if one were to become unavailable. None of the materials are seasonal so disposal during different time of the year is not an issue. In an emergency the waste will be taken to other nearby appropriately permitted sites.

3.6 Storage Stacks

Table 2 – Storage Limits (Note that actual storage is less than block dimensions).

BAY	MATERIAL	NC/ LC	DIMENSIONS D x W x H	M ³	TONS *	STORAGE TIME **
1	Aluminium	NC	11.6 x 18 x 2.5	522	193	1 Week
2	Ali & Iron Pre-processed	NC	12 x 12 x 2.5	360	133	1 Week
3	Ali & Iron Processed	NC	12 x 5.8 x 2.5	174	64	1 Week
4	Spare	NC	4 x 6 x 2	40	15	1 Week
5	Spare	NC	4 x 6 x 2	40	15	1 Week
6	Cable	LC	4 x 10 x 2	80	30	1 Week
7	UPVC Bin	LC	2.75 x 2.4 x 6.1	40	15	1 Week
8	Aluminium	NC	6 x 6 x 2	72	27	1 Week
9	Ali Shavings	LC	6 x 10 x 2	120	45	1 Week
10	Electric Motors	LC	9.6 x 4.8 x 2	92	34	1 Week
11	Mixed Metals	LC	6.5 x 11.6 x 2	150	56	1 Week
12	Quarantine	LC	6 x 10 x 2	120	45	ASAP
13	Ali Wheels	NC	11 x 10.5 x 2	231	85	1 Week
14	Non-Ferrous	LC	1.2 x 1 x 0.76 per bin Approx 10 to 20 bins	0.91	0.33	1 Week
14	Batteries	C	1.2 x 1 x 0.76 per bin Approx 3 to 4 bins	0.91	0.60	1 Week
14	Catalysts	NC	1.2 x 1 x 0.76 per bin Approx 1 to 2 bins	0.91	0.60	1 Week

*Approx 2,700 kgs per m³ ** Approx although metal generally turned around in a few days.

NC – Non-combustible LC – Low combustibility C - Combustible

Waste metal stored in bays at the site are mainly non-ferrous scrap materials which are non-combustible materials (excepting zinc which is not accepted at site); there is a minimal amount of possible combustible ferrous waste materials in the mixed metal bay.

On occasion there will be aluminium shavings which are deemed to be of low combustibility due to their size and available surface area, there are also electric motors, cable and UPVC frames which are also of low combustibility. Lastly there will be batteries stored within a building which are considered combustible and catalysts which are non-combustible.

The material stored in the external bays to the north of the site will be stored to a height of 2.5m leaving 0.5m freeboard space at the top and sides of the wall to prevent material being pushed over to the adjacent bay. There is no risk of fire spreading over the walls as the materials are non-combustible.

Fire walls will be used as storage bay infrastructure (as shown on site plan) for all metal wastes. Consideration will be given for available 'freeboard' space between the top of the pile and that of the bay walls for low combustible material, to prevent fire spread through flying sparks and hot embers by leaving a serviceable gap at the top of the pile below the height of the bay walls.

The Legato blocks are 1600 x 800 x 800mm thick and have a class A1 fire rating. Category D Fire Extinguishers will be stored by the low combustible wastes.

4. Diesel Tank

The diesel is used to fuel the mobile plant. A 3,000 litre fuel tank is situated in the northern workshop where the holding tank is situated (Bay 9 on the Site Plan). No combustible materials or waste are stored within 6m of this tank. The tank is bunded, meeting the Control of Pollution (Oil Storage (England) Regulations 2016.

The drip trays will be checked daily and emptied as necessary. Spillage kits will be provided on site and kept by the tanks. The tank will be subject to regular inspections as part of the daily site checks. It will also be maintained in accordance with the manufacture's specification. Foam Fire Extinguishers will be available for any diesel or petrol fire.

5. Training, Awareness and Visitors

All staff and contractors working on-site will be aware of this FPP and will understand its contents. Through site inductions and staff awareness and training, we will ensure that all relevant staff and contractors will:

- Understand what they must do during a fire.
- Know where the fire prevention plan is kept.
- Participate in exercises to test how well this FPP plan works and to confirm staff understand what to do. A full drill will take place annually.
- All new staff will receive induction training and be advised on no smoking policy.
- Staff training on H&S and Fire Prevention will take place annually, or after any changes to operational practices.

In addition:

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

For visitors to the site:

- They will be escorted at all times following signing in.
- They will understand the no smoking policy for the site.
- When signing in, information on the fire exits and muster point will be provided. As set out in the Operational Procedures, training and awareness raising will be recorded.

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

6. Security

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

- The site will be secured by lockable gates.
- The facility will always be manned during routine operations.
- CCTV is installed at the site and covers the entire yard.
- The facility is secured with perimeter fencing it has 6ft high palisade fencing to all sides with lockable double palisade gates at the entrances. The boundary is checked daily for defects or any sign of vandalism or non-permitted entry to the site. Any repairs required will be carried out the same day, if possible, if not then the temporary repairs will be carried out to make the site secure until permanent repairs can be carried out. Any issues will be noted in the site diary.
- All functions of security will be checked daily and information recorded on the Checklist.
- All management have access to the CCTV using mobile phones. This allows 24-hour coverage.
- There is also an Estate Management Security Guard who carries out patrols at the site every two hours during out of hours.

7. Planned Preventative Maintenance

A programme of routine planned maintenance is in place for each item of plant and machinery, as well as the processing equipment to prevent breakdown and faults which may pose a fire risk. All faults which require corrective action will be reported to the Site Manager to be implemented.

Plant and equipment will be maintained in line with the manufacturer's recommendations. All vehicles are covered by Service Agreements which also cover breakdown, where appropriate and/or possible, these agreements will include a 24 hour call out facility.

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

All plant is checked prior to use daily. In the event of any defects being recorded, the Site Manager will be informed immediately to arrange for repairs.

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

8. Contingency

To ensure all permitted material quantities are adhered to and no amenity issues or increased fire risks are caused, we will ensure there is:

- Service Agreement Plans in place on vehicles.
- Contracted maintenance fitter to maintain all plant and equipment.
- Contacts for relevant plant hire companies to source alternative equipment if required.

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

A record of neighbouring business contact details will be maintained for use in case of an emergency.

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

9. Control Measures

9.1 Hot Exhausts

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

When vehicles are not being used, they will be switched off and parked at least 6m from any material storage bay. This procedure will form part of the daily site checks – end of day. The forklift is parked in the workshop overnight and the material handler is parked outside at least 6m from any combustible waste.

9.2 Hot Work

As part of our operations, hot works will not be needed. However, if hot works such as welding is required as part of building or equipment repair or maintenance, a suitably qualified person will be used, a permit to work will be completed, and a fire marshal shall be appointed to oversee the works.

Following completion of the works, the fire marshal will check to ensure everything is cooled and there is no fire risk as a result of the works. A fire check will be maintained for at least 30 minutes after the hot works has been completed.

9.3 Electrics

Any electrical work will be carried out by a qualified electrician. PAT testing every 12 months on all the electrical appliances on site, this includes electrics in the offices and staff welfare room.

9.4 Leaks and Spillages

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

- Absorbent granules; fast acting and highly absorbent granules they generally only need to be left down for a few minutes and are able to soak up 12 litres of oil per 30g bag.
- Chemical/oil resistant gloves.
- Chemical/oil resistant goggles; and a broom and shovel.

The spillage procedure is summarised in Appendix 8.

9.5 Build-up of Loose Combustible Waste

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

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

- Routine Checks – Throughout the day the Site Manager/Supervisor will carry out inspections of all areas to ensure safe storage, access and egress. Particular attention will be required to identify any potential fire hazards when opening the site in the morning and prior to securing the site at the end of each shift. Any cleaning requirements will be implemented. These inspections will be recorded in the Site Diary.
- Close – At the end of each working day, site operatives will clean the working areas. The Site Manager will carry out an end of day inspection. This will include checking plant is parked in the correct area and all machinery is switched off. If the Site Manager records any build of litter, the areas will be cleaned before leaving the site.

9.6 Reaction between Wastes

The site will not receive wastes that are incompatible and the likelihood of receiving noncompliant waste will be low. However, there may be occasions whereby customers have placed non-compliant waste in the lorries these items will be separated and placed in the quarantine area.

Additional Actions

- Further actions to mitigate fire risk on site include:
- Overnight parking of vehicles away from combustible waste.
- The access route into the site is always kept clear and will therefore provide access for emergency vehicles.
- Site walkovers taken each day will identify any accumulations of combustible litter or material which may pose a risk in the areas used by vehicles.
- Sources of ignition including, lit cigarettes, naked flames and storage heaters will not be allowed on site.
- At the end of each operational day, the Site Manager will conduct a site walk over to check all equipment is off and parked away from combustible materials.
- Fire extinguishers will be provided around the site.
- No smoking signage will be clearly displayed and maintained. Smoking is not allowed on site only outside at the entrance by the muster point.

10. Fire Detection and Management

10.1 Detecting and Suppressing Fires

All staff are trained to be vigilant in terms of fire detection. For out of hours, there is CCTV which monitors the site and the Management get notifications on their mobile phones of any occurrence at the site.

There is also an Estate Management Security Guard that patrols the site every two hours during out of hours.

On detection of a fire all staff will be made aware. The site is small enough that staff can be made aware using visual signs and vocal alerts. The site office also has CCTV monitors which are displayed on a large TV screen. On detection of a fire during the working hours all staff will be alerted.

Fire extinguishers are available around the site. Extinguishers will be provided at key points as shown on the drawing CROW/FPP/SP01. Extinguishers will be used to tackle small, localised fires.

10.2 Firefighting Strategy – During Operational Hours

In the event of a fire being detected that cannot be easily extinguished, the following steps will be taken:

- ALERT ALL STAFF (CALL EMERGENCY SERVICES ON 999 IF REQUIRED)
- EVACUATE AFFECTED AREA
- CONDUCT ROLE CALL IF REQUIRED
- IF SAFE TO DO SO SHUT DOWN ELECTRICS, MOVE MECHANICAL EQUIPMENT AWAY AND SHUT DOWN
- IF SAFE TO DO SO USE A SUITABLE EXTINGUISHER OR WATER
- IF EMERGENCY SERVICES ARE USED DIRECT THEM TO THE FIRE AND SUPPORT THEM WITH IDENTIFYING POTENTIAL SOURCES OF IGNITION SUCH AS FUEL STORES
- WHEN FIRE IS EXTINGUISHED ENSURE REMOVAL OF CONTAMINATED MATERIAL AND RUN-OFF
- COMPLETE INCIDENT REPORT AND IMPLEMENT IMPROVEMENT MEASURES WHERE POSSIBLE, UPDATE FIRE PLAN WHERE NECESSARY
- INSPECT INFRASTRUCTURE OF SITE FOR ANY DAMAGE CAUSED BY THE FIRE
- COMPLETE INCIDENT REPORT, MAKE NOTE IN SITE DIARY
- IMPLEMENT IMPROVEMENT MEASURES WHERE POSSIBLE AND UPDATE FIRE PLAN IF NECESSARY

10.3 Firefighting Strategy – Out of Hours

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

- IF NOTIFICATION IS RECEIVED FROM CCTV ON MOBILE PHONES BY MANAGEMENT THEY WILL CONTACT THE EMERGENCY SERVICES AND ATTEND SITE THEMSELVES.
- ESTATE MANAGEMENT SECURITY PATROL THE ESTATE EVERY TWO HOURS AND WILL ALSO ALERT A DIRECTOR OF CROWS AND / OR THE EMERGENCY SERVICES.
- IF SAFE TO DO SO USE A SUITABLE EXTINGUISHER AND/OR WATER/SAND.
- IF EMERGENCY SERVICES ARE USED DIRECT THEM TO THE FIRE AND SUPPORT THEM WITH IDENTIFYING POTENTIAL SOURCES OF IGNITION SUCH AS FUEL STORES.
- WHEN FIRE IS EXTINGUISHED ENSURE REMOVAL OF CONTAMINATED MATERIAL AND RUN-OFF.
- COMPLETE INCIDENT REPORT AND IMPLEMENT IMPROVEMENT MEASURES WHERE POSSIBLE, UPDATE FIRE PLAN WHERE NECESSARY.
- INSPECT INFRASTRUCTURE OF SITE FOR ANY DAMAGE CAUSED BY THE FIRE
- COMPLETE INCIDENT REPORT, MAKE NOTE IN SITE DIARY.
- IMPLEMENT IMPROVEMENT MEASURES WHERE POSSIBLE AND UPDATE FIRE PLAN IF NECESSARY.
- ALL STAFF ARE TRAINED IN THESE PROCEDURES.

The contact list of emergency numbers in Appendix 4 will be retained in the Site Office and will be updated as required by the Site Manager.

The Site Manager will clearly identify himself to the Emergency Services on their arrival on site and update the FRS on the situation ensuring they are made aware of the location of any compressed gases or flammable liquids on site.

Prior to arrival of the FRS on-site there are several measures that can be taken to help fight fire, assuming there is no risk to life.

- Handheld hoses can be used over the material to damp down small areas of fire.
- Hand held fire extinguishers can be deployed to contain fires where possible.
- Access to the public hydrants located in Ferry Lane may be used by staff if required and permission is given by the FRS.
- The available quarantine area can accommodate at least 50% of the largest waste pile. The largest combustible pile is 150m³ 50% is 75m³. The area available is a minimum of 10m x 6m x 2m = 120m³
- In the event of a fire or observed self-combustion, if safe to do so, burning waste will be moved to the Fire Quarantine Area or dealt with in situ.
- The quarantine area, when made safe, will be emptied immediately. If necessary material will be moved or diverted to an alternative site.
- Neighbours and local businesses downwind will be notified of any potential fire incident by the site operator as soon as possible from the local contact list. This will be completed by telephone and will be completed as soon as it is safe to do so. Local receptors will be notified in order of proximity to the site and prevailing wind direction. Local receptors will be kept updated as to the progress of firefighting.
- The site is an impermeable surface and will be scraped clean and checked for any damage.
- Material / waste will be removed from site to an approved, licenced waste facility if necessary.

11. Fire Fighting Water

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

11.1 Table 3 Fire Fighting Water

	Litres
Largest combustible pile (m ³)	150
Litre per minute required (l)	990
Litres required over three hours (l)	178,200
Litres available via 1 hydrant and 3 hoses	815,400

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

It should be born in mind that while most solid metal forms are not considered combustible under normal conditions, certain metals, especially when finely divided into dust or shavings, can be combustible, meaning they can burn under specific circumstances; therefore, depending on the form and specific metal, it can be considered a combustible material. So although the largest pile on site is 522m³ of aluminium this pile is considered non-combustible, therefore the largest combustible pile is 150m³.

Water supplies for firefighting can come from the mains water supply and the two hydrants one located on the opposite side of Ferry Lane at the northern end of the site, and the other is located at the southern end of the site by the weighbridge entrance used by Keeble Paper Recycling as shown on the FPP Site Plan (CROW/FPP/SP01).

Three water hoses from the mains water supply are located around the yard and are ready for immediate use at all times. The hoses are all ½ inch diameter with a flow rate of approximately 10 litres per minute equating to 30 litres per minute/ 5400 litres over 3 hours between the three hoses. Fire extinguishers are located strategically around the yard (as shown on the Site Fire Plan).

The fire hydrants are supplied for an industrial area and meet BS Flow requirements and they both have an actual flow of 75 litres per second*, 4,500 per minute, 270,000 per hour equating to 810,000 litres per three hours. A 100m long hose would be used with the hydrant. The distance from the Hydrant to the furthest point of the site with combustible waste is approximately 100m and the hose is 100m long so is adequate in length to cover the whole site.

*National Guidance on water for Fire Fighting.

12. Containment of Fire Fighting Water

The surface is designed for run off to flow in the direction of the drains that flow to the holding tank in the northern part of the site.

The site has raised curb and or sealed walls on all sides so there is no possibility of any runoff of firefighting water from the site and the area would be able to hold approximately 354,690 litres of water. Table 3 above shows that 190,080 litres of water would be required for a fire over three hours, the available containment is therefore adequate.

13. Incident Management

In the event of an incident, all material will be either stopped at source or diverted to another metal recycling facility.

Appendix 5 contains a template for maintaining a list of local contacts. This will be kept up to date and in the site office. In the event of a fire, the contact list will be used to ensure local businesses are notified immediately by either the Site Manager or a member of the Office Staff.

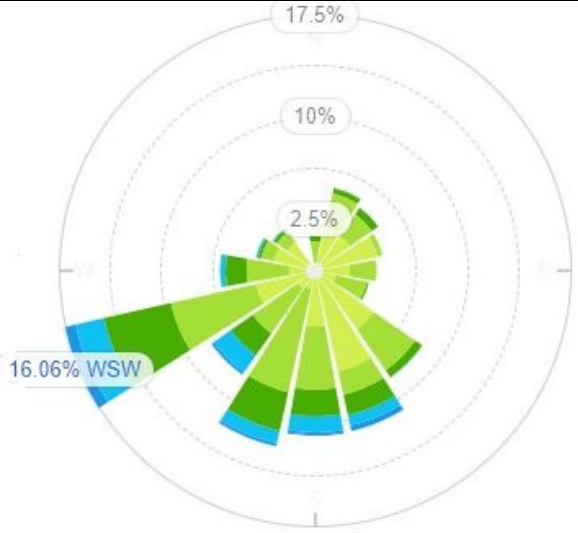
Once the fire has been extinguished and the site has been deemed safe to enter, an assessment of the fire damage will be made. Arrangements will be made to tanker away the fire water to allow access.

The Contractor will be a local company based in Rainham less than 3km away, called Lanes for Drains who have advised that their tankers can vacuum up approximately 15,000 litres every 20 minutes, therefore firefighting run off water of 190,080 litres will take approximately four hours to clear. Any fire residues will be loaded into containers and removed from the site for disposal.

Any equipment effected by the fire will be checked prior to use to ensure that it remains fit for purpose.

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

14. Key Information

Info	Comment
Address	Crow Metals, 71 Ferry Lane (South), Rainham, Essex, RM13 9DB
Permitted Area Size	c.8,200 m ²
Grid Reference	TQ 51299 81204
What Three Words	pocket.flips.exile
Easting & Northing	551299, 181204
Wind Rose Dagenham, c.3.5 km NW	

The receptors shown below in Appendix 1 are all within 2km of the site.

The maps of the receptors are shown in Appendix 2 1km and Appendix 3 2km

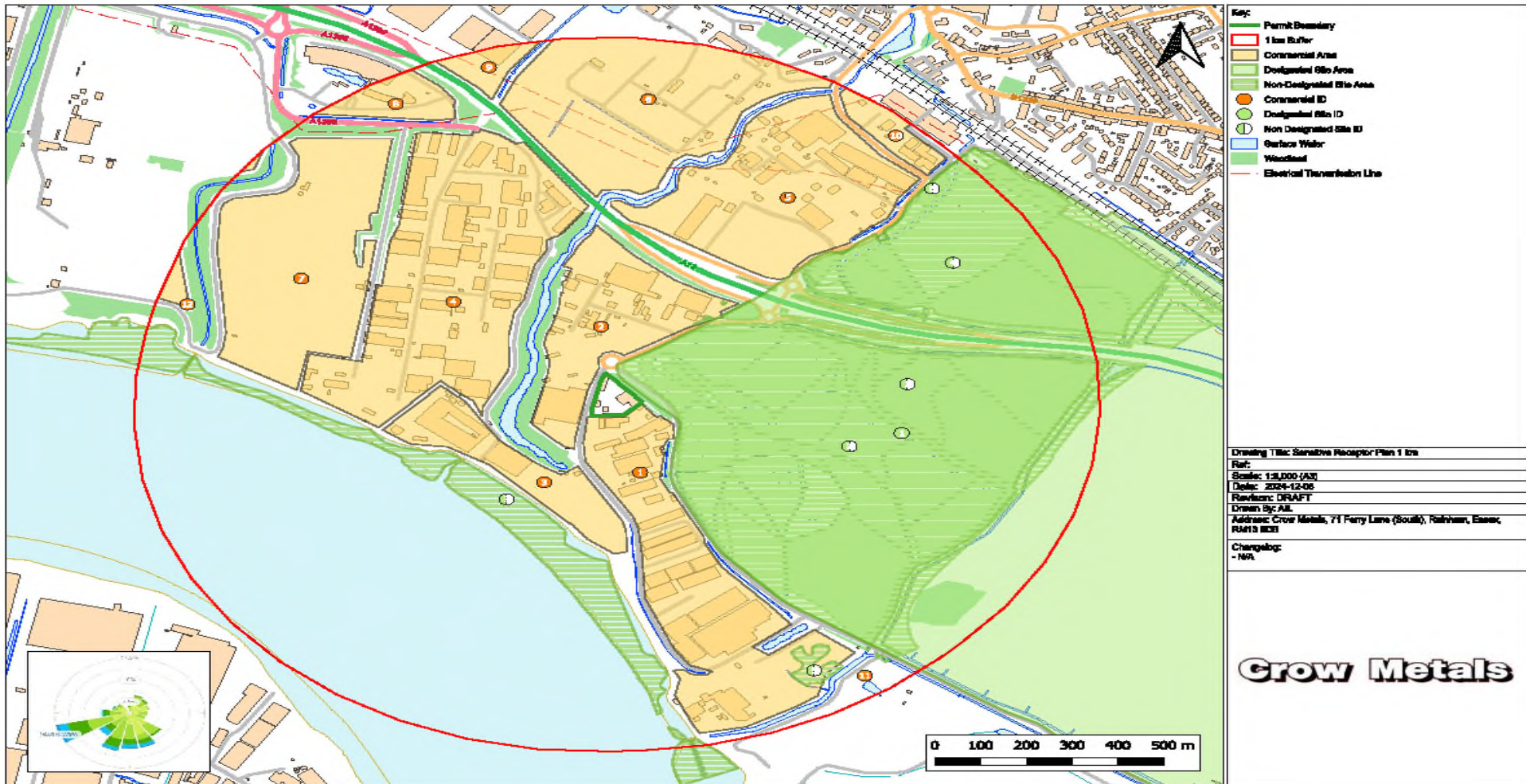
The site is in on a small industrial/commercial estate which is in a larger industrial area, surrounded by other commercial and industrial enterprises.

Sensitive locations are those where the public may be exposed to dust from the site. Locations with a high sensitivity to dust include hospitals and clinics, hi-tech industries, painting and furnishing and food processing. Locations classed as being moderately sensitive include schools, offices, residential areas and food retailers.

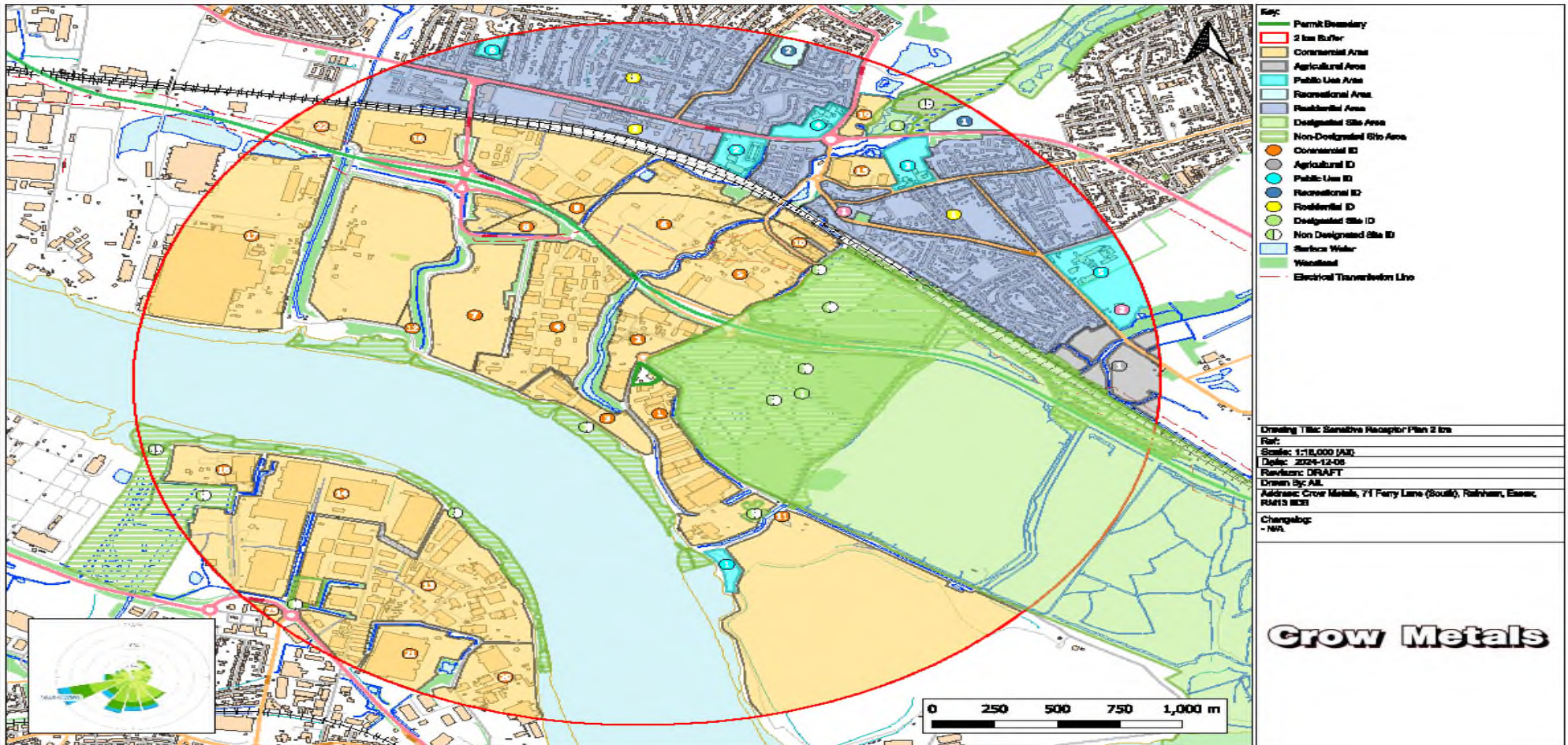
Appendix 1 Receptors within 2km of the Site

TYPE OF RECEPTOR	ID #	DESCRIPTION	DISTANCE FROM BOUNDARY (M)	DIRECTION
HUMANS AND PROPERTY	-	Site Workers	On site	-
	-	Site Visitors	On site	-
	COMMERCIAL			
	1	Multiple Industrial Units off Coldharbour Lane	0 m	S
	2	Multiple Industrial Units off Ferry Lane	26 m	W
	3	Depot off Creek Way (Renewi)	183 m	SW
	4	Multiple Industrial Units off Marsh Way	212 m	W
	5	Multiple Depots & Industrial Units off Lansom Road	432 m	NNE
	6	Sewage Works off A13	531 m	N
	7	Vehicle Compound off Creek Way	558 m	W
	8	Science Park off Marsh Way	836 m	NNW
	9	Multiple Industrial Units	867 m	NNW
	10	Multiple Commercial Units at Rainham Railway Station	875 m	NE
	11	Rainham Landfill	945 m	SSE
	12	Vehicle Compound off A13 (Ford Motors)	963 m	WNW
	13	Multiple Industrial Units south of the River Thames	1048 m	SW
	14	Multiple Distribution Centres south of the River Thames	1108 m	WSW
	15	Multiple Retail Units off Viking Way	1334 m	NE
	16	Depot off Consul Way (Tesco)	1376 m	NW
	17	Car Factory off A13 (Ford Dagenham Engine Plant)	1462 m	WNW
	18	Energy Recovery Facility off Norman Road	1545 m	WSW
	19	Public House off Rainham Road (The Albion)	1570 m	NE
	20	Erith Oil Works	1587 m	SSW
	21	Distribution Centre off Mulberry Way (Ocado)	1691 m	SSW
	22	Depot off Lake Road (Ford Motors)	1733 m	NW
	23	Multiple Retail Units off Cyldeedale Way	1939 m	SW
	AGRICULTURAL			
	1	Multiple Packets of Arable Land between A13 & B1335)	1671 m	E
	RESIDENTIAL			
	1	Residents of Rainham	1171 m	NE
2	Residents of Dagenham south of A1306	1330 m	N	
3	Residents of Dagenham north of A1306	1490 m	N	
ROADS & RAILWAYS				
-	Ferry Lane	0 m	W	
-	A13	378 m	NE	
-	A1306	793 m	NNW	
-	London, Tilbury & Southend Railway Line	1079 m	NE	
-	A125	1556 m	NNE	
-	A2016	1923 m	SW	
PUBLIC USE				
1	Riverside Car Park	1018 m	ENE	
2	Havering College Rainham	1191 m	SSE	
3	Rainham Village Primary School & Nursery	1437 m	NNE	
4	Our Lady of La Salette Roman Catholic Church School	1465 m	NE	
5	Brady Primary School & Harris Academy (Rainham)	1774 m	NNE	
6	Newtons Primary School	1862 m	NNW	
RECREATIONAL				
1	Ingrebourne Hill Country Park	1839 m	NE	
2	Lessa Park	1844 m	NNE	
WATER	SURFACE WATER			
	-	Multiple Streams, Ponds & Features within the Rainham Marshes	93 m	ESE
	-	River Ingrebourne	148 m	W
	-	River Thames	298 m	SW
	-	Rainham Creek	497 m	NNE
	-	Beam River	1397 m	WNW
	-	Multiple Lakes at Ingrebourne Hill Country Park	1649 m	NNE
	-	Lagoon off Church Manor Way	1765 m	SSW
	-	Lagoon at Ford Dagenham Engine Plant	1823 m	NW
	GROUNDWATER			
	-	Bedrock Aquifer - Unproductive	On site	-
	-	Superficial Layer - Secondary Aquifer	On site	-
ENVIRONMENTALLY SENSITIVE	DESIGNATED SITES			
	-	Air Quality Management Area - London Borough of Havering	On site	-
	1	SSSI - Inner Thames Marshes	9 m	NE
	-	Air Quality Management Area - London Borough of Bexley	813 m	SW
	-	Air Quality Management Area - London Borough of Barking & Dagenham	1635 m	WNW
	2	SSSI - Ingrebourne Marshes	1667 m	NE
	NON-DESIGNATED SITES			
	1	Local Nature Reserve - Rainham Marshes south of A13	46 m	ENE
	2	BAP - Coastal & Floodplain Grazing Marshes north and south of A13	52 m	E
	3	BAP - Mudflats on northern shore of the River Thames	274 m	SW
	4	Local Nature Reserve - Rainham Marshes north of A13	558 m	ENE
	5	BAP - Deciduous Woodland off Coldharbour Lane	817 m	SSE
	6	BAP - Good Quality Semi-Improved Grassland off Ferry Lane	855 m	NE
	7	BAP - Mudflats on southern shore of the River Thames	1001 m	SW
	8	BAP - Deciduous Woodland off Anderson Way	1693 m	SW
	9	Local Nature Reserve - Crossness	1702 m	WSW
	10	Local Nature Reserve - Ingrebourne Valley	1757 m	NE
11	BAP - Coastal Saltmarsh off Thames Path	1879 m	WSW	
HERITAGE SITES				
1	Multiple Grade II Listed Buildings & Features at Rainham Hall Estate	1227 m	NE	
2	Grade II Listed Building - South Hall Farmhouse	1887 m	ENE	

Appendix 2: Sensitive Receptors within 1km



Appendix 3: Sensitive Receptors within 2km



Appendix 4: Emergency Contact Numbers

Name & Address		Telephone Number
Environment Agency	General Enquiries:	03708 506 506
	Incident Hotline Reporting:	0800 80 70 60
Electricity Supplier	National Power Cut Helpline	105
	UK Power Networks	0800 028 0247
Gas supplier	National Gas Emergency Service	0800 111 999
Essex and Suffolk Water	Water Leaks	0800 526 337
HSE	Incident Contact Centre	0345 300 9923
	Incident Hotline	0151 922 9235
Emergency Services (Fire/Police/Ambulance)	Emergency	999
	Non-Emergency	101
Nearest Hospital	Queens Hospital (24 Hours A&E)	0330 400 4333

Appendix 5: Local Contact Numbers

Name & Address		Telephone Number
Wanis International Foods	Global House, Ferry Lane RM13 9DB	020 8988 1100
Essex MOT	K8 Estate, Coldharbour Ln, Rainham RM13 9YH	01708559001
BMW Engine Services	Unit 1, K9 Estate, Coldharbour Lane, Rainham RM13 9YB	01708555185
BM Engine Works	Unit 6 K9 Estate, Ferry Lane, Rainham, RM13 9YH	01708556721
NZ Engines	Unit 2 & 3 K9 Estate Coldharbour Lane, Rainham RM13 9YH	01708607071
Hornett Bros & Co	Ferry Lane, Rainham, RM13 9YH.	01708556041
D B M Chemicals Ltd	73 Ferry Ln, Rainham RM13 9YH	01708522151
Renewi	Frog Island, Creek Way, Rainham RM13 8EN	01708634540
Butterfly Tissues	Unit 8, K9 Industrial Estate, Ferry Ln, Rainham RM13 9YH	07783778477
Able Archiving	Unit 5 K9 Industrial Estate, Ferry Ln, Rainham RM13 9YH	01708555665
Beauty Fix	Unit 6, K9 Industrial Estate, Rainham RM13 9YH	01708525411
Roadtechs Group	Unit 1-2 Bridge Connection, Ferry Ln, Rainham RM13 9YH	01708863390
Wow Glass Ltd	Unit 3 Bridge Connections, Coldharbour Ln, Rainham RM13 9YB	01708555133
SG Technologies	85 Ferry Ln, Rainham RM13 9YH	01708558411

Appendix 6: Daily Checks Form

Week ending	Monday	Tuesday	Wednesday	Thursday	Friday
Checked By (Initials)					
Paperwork (transfer notes)					
Gates /Fences – trespass, vandalism					
Signage condition					
Drainage system					
Plant – general maintenance					
Check condition of site buildings					
Diesel tank and bund integrity					
Is Quarantine Area clear?					
Fire Fighting Equipment					
Integrity of concrete surfacing					
Integrity of bay walls					
Dust Suppression (functioning)					
Is waste within bays?					
Are all liquids banded?					
Evidence of spillages/leaks					
Spill Kits available					
Any loose litter on site / off site					
Is there a build up of debris/dust?					
Is there any visible dust being produced?					
Any bad odour on site					
Any pests on site (rats, flies etc)					
Any loud noise / vibration on site					
Site diary entries					
Any mud on access road / entry to site					
NOTES					

Appendix 7 Quarantine Procedure

Quarantine Procedures

Type/Description of work:

How to properly quarantine a rejected or hazardous load

Authorised Persons:

Trained operatives who are authorised by the site manager.

Hazards:

Hazards may vary depending on the items / material that are being quarantined; advice from the TCM or Health and Safety must be sort regarding the type of material / items in question and the recommended precautions to be taken.

Safety equipment required:

- Hard hats
- Steel toe capped boots
- High visibility clothing
- Gloves (Suitable for the Task)

SITE PROCEDURE.

All waste brought into the yard is checked whilst on the weighbridge and after being deposited at the site. Should any load or part load delivered to the site prove to be unsatisfactory and will have no impact on the environment, the load or part load may be refused entry whilst on the weighbridge or if already deposited the unpermitted waste may be reloaded onto the vehicle and returned to the sender if it safe to do so.

Should non-permitted hazardous items be identified, they will be quarantined pending removal from site to an appropriately authorised facility. The cost of arranging the removal of such materials will be passed onto the supplier of the materials.

In the event of any unknown chemicals or other hazardous material being delivered to the site, employees are instructed to report such findings immediately to the Yard Manager or another employee with management responsibilities for the site. The material would then be kept in isolation whilst investigations to determine the supplier of the waste and the waste type are completed.

The material would be dealt with accordingly and removed from site to an appropriately authorised facility.

Should the substance not be identified, a specialist contractor may be called upon to give advice and arrange for the removal of the materials in question.

All incoming materials shall be sorted, processed, stored and quarantined in the locations shown in the Site Plan RES/1242A. Please note that operations on site may be relocated at any time to any suitably prepared part of the site in order to meet operational requirements at a particular time.

Employee procedure for unidentified hazardous material.

- Any suspect item(s) must **NOT** be touched or handled.
- Any suspect item(s) is to be reported immediately to the Site Manager.
- The Site Manager **MUST** report the situation to the person responsible for Health and Safety.
- If item is considered highly hazardous then the area where the item(s) is located **MUST** be cordoned off and any personnel in the vicinity evacuated.
- Comply with any instructions given by the Health and Safety Manager.
- **DO NOT** return to the affected area until instructed to do so by the management.

DON'Ts

- Smoke; use naked lights or use mobile phones in the vicinity.
- Move or handle the suspect material / item.

DO's

- Keep mobile phones switched **OFF** if entering the location.
- Extinguish all naked lights **IMMEDIATELY**.
- Remain clear of affected area it is safe to return.

SAFE WORKING PROCEDURES ARE TO ENSURE YOUR SAFETY AND THAT OF OTHERS

IF IN DOUBT ASK! – DO NOT TAKE RISKS

THINK SAFE, WORK SAFE, PLAY SAFE

Appendix 8 Spillages

Oil / Fuel Spillages on Site

Type/Description of work:

Cleaning up of oil or/and fuel spillages on site

Authorised Persons:

Trained operatives who are authorised by the site manager.

Hazards:

- Slip, Trip or Fall – Pedestrians falling over due to the spillage.
- Collisions – Vehicles/Plant skidding on spillage and striking a pedestrian.
- Collisions – Vehicles/Plant skidding on spillage and striking other vehicles.
- Collisions – Vehicles/Plant skidding on spillage and striking static plant, buildings or stockpiles.
- Fire/Explosion – Caused by liquid spillage, vapours.
- COSHH – Chance of skin irritation from initial spill or during clean up.
- Manual Handling – Chance of injury during clean up; moving bags of granules etc.

Safety equipment required:

- Wellington boots
- Rubber Gloves
- Disposable overalls

DESCRIPTION OF TASK;

1. If it is a **MINOR SPILLAGE** then follow this procedure;
 - Cover immediately with sawdust, granules or sand.
 - Allow 5-10 mins to absorb and then sweep up once the spillage has soaked into absorbent materials.
 - Dispose of used granules and spill kit equipment in specifically marked drums. **DO NOT** place in General Waste bins or into stock piles.
 - Inform management if necessary.

2. If it is a **MAJOR SPILLAGE** then follow this procedure;

- Contain by building bunds to help prevent it flowing anywhere by using sawdust, granules or sand, and then cover the rest immediately using the absorbent materials supplied.
- Inform management immediately, they can call a specialist environmental company to assist in the clear up if required.
- Proceed with clear up as described above.
- Dispose of used granules and spill kit equipment in specifically marked drums. **DO NOT** place in General Waste bins or into stock piles.
- Record the incident on Oil Spillage Record or in the Site Diary.

Additional information:

- If the spillage is on a machine and you need to use rags to soak up the oil these need to be disposed of correctly by placing them into double black bags for collection.
- **DO NOT** mix used rags with the absorbent granules!

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