

WARD

FIRE PREVENTION PLAN

Barnsley

Contents

1	INTRODUCTION	3
1.2	Structure of the FPP	3
2	SITE INFORMATION	4
2.2	Site Activities.....	10
3	FIRE PREVENTION PLAN	11
3.2	Potential Sources and Causes of Fire	12
3.3	Managing waste piles & preventing self-combustion	17
3.4	Prevent fire spread.....	19
3.5	Quarantine area	19
3.6	Detecting fires	19
3.7	Suppressing fires	20
3.8	Firefighting techniques.....	20
3.9	Water supplies	20
3.10	Managing fire water	21
3.11	During and after an incident.....	21

Tables

Table 2-1: Receptors within 1km.....	5
Table 3-1 Permitted Waste Types.....	12
Table 3-2 Common causes of fire and site mitigation	14

Figures

Figure 2-1: Site Location (Wider Area).....	7
Figure 2-2: Site Location (Local Area)	8
Figure 2-3: Adjacent Sites.....	9

Appendices

Appendix A.....	Site Layout Plan
Appendix B.	Sensitive Receptors

1 INTRODUCTION

- 1.1.1 This Fire Prevention Plan (FPP) is for the Donald Ward Limited [Ward] Metal Recycling and Waste Facility in Barnsley.
- 1.1.2 This plan has been prepared in accordance with the requirements of the Environment Agency (EA) guidance for fire prevention plans for environmental permits¹ and shows how the following objectives are met:
- minimise the likelihood of a fire happening;
 - aim for a fire to be extinguished within 4 hours; and
 - minimise the spread of fire within the site and to neighbouring sites
- 1.1.3 This plan identifies the site operations that present a risk of fire, the prevention techniques to minimise the potential for a fire, fire suppression techniques in the event of a fire starting and the measures which will be employed to protect the environment in the event of a fire.
- 1.1.4 This plan forms part of the site Environment Management System (EMS). A copy of the FPP shall be kept on site and available for reference by staff and contractors as required.

1.2 Structure of the FPP

- 1.2.1 This plan follows the structure of the EA FPP guidance and is structured as follows:
- Site information and activities;
 - Common causes of fire;
 - Preventing self-combustion;
 - Managing waste piles;
 - Preventing fire spread;
 - Quarantine area;
 - Detecting fires;
 - Suppressing fires;
 - Firefighting techniques;
 - Water supplies;
 - Managing fire water; and
 - During and after an incident
- 1.2.2 This plan is supported by plans and figures in accordance with the requirements identified within the EA FPP guidance.

2 SITE INFORMATION

2.1.1 The site is located at:

Boulder Bridge Lane Off Shaw Lane Carlton

Barnsley

South Yorkshire

S71 3HJ

2.1.2 The site is centred at approximate national grid reference SE 37604 10515.

2.1.3 The approximate location of the site is highlighted by the red 'X' in the maps shown in Figures 2.1 and 2.2 below

2.1.4 The main land use surrounding the area in which the facility is sited is identified as industrial/agricultural. The current surrounding land uses within 500m are:

- North – Industry
- East – Industry
- South – Industry
- West –Railway (occasional use as test track - not used for passenger or cargo) / Agriculture (Fields)

2.1.5 The following companies are identified as being present on the industrial estate adjacent to the Ward facility:

- CK Beckett – Electrical & industrial Dismantlers / Waste Recycling
- Geoff Ripley & Son Ltd – Passenger and Commercial Vehicles Recovery, Dismantlers, Parts and Sales
- Trevor Wigley & Son Bus Ltd – Vehicle Dismantlers and Engine Fitting / Refurbishment
- P.V.S Barnsley Ltd – Dismantling of redundant buses and the exporting of engine units and axles.
- Carlton Car Breakers – Car breaker
- Alan Hardwick – Truck dealer
- Star Autocentre – Car Breaker

2.1.6 Figure 2.3 below shows the sites immediately adjacent to the Ward facility.

2.1.7 The following permitted facilities are identified on the EA public register as being located at Shaw Lane / Boulder Bridge Lane:

- Passenger Vehicle Spares (Barnsley) Ltd – EPR/DP3390ZC (A19: Metal Recycling Site (Vehicle Dismantler))

- A H Hardwick – EPR/ YP3390ZY & EPR/ DP3790ZK (A20: Metal Recycling Site (mixed MRS's))
- Trevor Wigley & Son Bus Ltd. – EPR/ NP3892ZP (A19a: ELV Facility)
- Beckett's Yard – EPR/LP3096ZN (A20: Metal Recycling Site (mixed MRS's))
- Geoff Ripley – EPR/YP3690ZL (A19: Metal Recycling Site (Vehicle Dismantler))
- Carlton Car Breakers – EPR/RP3890ZP (A19: Metal Recycling Site (Vehicle Dismantler))

2.1.8 The following receptors (human and ecological) have been identified within a 1km radius of the facility. Plans showing locations of sensitive receptors can be found in Appendix B.

Table 2-1: Receptors within 1km

Receptor	Distance from Site Boundary (m)	Direction
Human Sensitive Receptors		
Industrial receptors adjacent to Sims site	0	South
Railway Track	30	West
Residential Area (Nearest) – Shaw Lane	220	South East
Residential Area – Cudworth Village	550	East
Outdoor Recreational Facilities (Nearest)	570	West
School - Outwood Academy Carlton	655	West
School - Carlton Primary School	945	West
Listed Building - Manor House	950	West South West
Listed Building - Church of St John	970	South West
Ecological Sensitive Receptors		
Watercourse - Culverted (Nearest)	2	East
Surface Watercourse (Nearest)	2	East
SSSI Dearne Valley Wetlands	40	East
Local Nature Reserve - Carlton Marsh	125	South East

Receptor	Distance from Site Boundary (m)	Direction
Local Nature Reserve - Dearne Valley Nature Reserve	260	South
Lake/Pond (Nearest)	275	South East
Barnsley Canal	390	West
Water Well (Nearest)	720	South

- 2.1.9 No officially designated ecological sites have been identified within a 1 km radius of the site, although there are local nature reserves 125 m south east and 260 m south of the site.
- 2.1.10 There are no source protection zones identified within 1km radius of the site.
- 2.1.11 The site is situated on a ground water vulnerability area which is classified as minor aquifer high. The bedrock aquifer designation is identified as secondary A. The superficial drift aquifer designation is identified as Secondary(undifferentiated) / Secondary A.
- 2.1.12 The site does not lie in a groundwater Source Protection Zone.
- 2.1.13 The geology of the site is Made Ground (impermeable concrete underlain by reworked natural materials with variable proportions of manmade materials) underlain by Alluvium in the eastern and southern parts of the site. Glacial Till has been proven to underlie the Made Ground in the north-western part of the site and underlying the Alluvium in the southern part of the site. Bedrock of the Pennine Middle Coal Measures Formation has been proven to underlie the Glacial Till.
- 2.1.14 Shallow perched groundwater has been encountered within the shallow Made Ground / Alluvium / Glacial Till soils but is not considered to form a continuous shallow groundwater body at the site. The Alluvium is classified as a Secondary A aquifer by the EA and the Glacial Till is classified as a Secondary Undifferentiated aquifer. A deeper groundwater body is anticipated to the present within the underlying Pennine Middle Coal Measures, which is classified as a Secondary A aquifer.
- 2.1.15 The flood map for planning indicates that the site lies entirely within Flood Zone 2 (medium risk) and has between a 0.1% and 1% annual chance of river flooding.
- 2.1.16 The prevailing wind direction is pre-dominantly West South Westerly.
- 2.1.17 The nearest surface water feature lies at a short distance to the south-east of the site, a minor drainage channel that joins Shaw Dike further to the south and potentially joins Cudworth Dike to the south-east of the site.

Figure 2-1: Site Location (Wider Area)

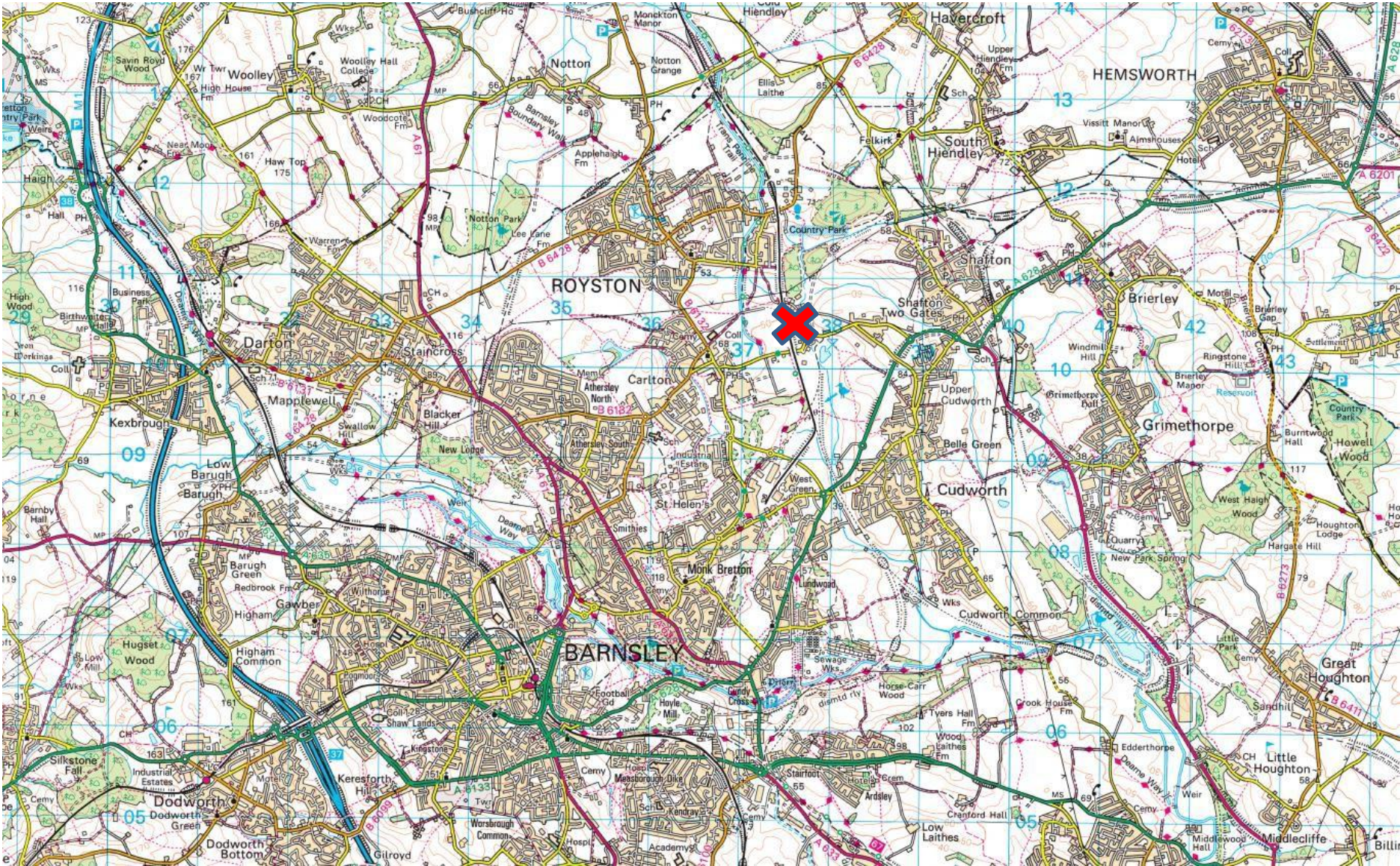


Figure 2-2: Site Location (Local Area)



Figure 2-3: Adjacent Sites [Ward Site highlighted by blue boundary]



2.2 Site Activities

- 2.2.1 This FPP forms part of the permit application for Ward for an Installation and Waste Activity Permit to be regulated by the EA.
- 2.2.2 The site primarily receives processes and recovers ferrous and non-ferrous metals from scrap and acts as a source of ferrous and non-ferrous feedstock for the manufacturing industry in the UK and abroad.
- 2.2.3 Granulation equipment is utilised to primarily granulate waste cable. The granulation equipment may also be used to size reduce other metal containing waste streams. A mobile shredder with a capacity of between 40 to 65 tonnes per hour, dependent on waste type is installed at the facility. The primary purpose of the shredder is to size reduce non-ferrous metals, though it may be used for other waste types. Treatment activities on site also include dismantling, grading, shearing, baling, stripping and cutting of ferrous and non ferrous metals. Combined and individually, the granulation equipment and mobile shredder have a treatment capacity exceeding 75 tonnes per day.
- 2.2.4 Other activities include the manual sorting of scrap, separation, grading, shearing, screening, baling, compacting, crushing and hot cutting.
- 2.2.5 The site will store non hazardous wastes including asbestos from municipal, domestic, industrial and construction and demolition sources, pending transfer to an authorised treatment facility.
- 2.2.6 Storage of Small Mixed WEEE pending removal off site to authorised treatment facilities. The site will not accept PCB-containing WEEE, including transformers, capacitors or other discarded equipment containing or contaminated by PCBs which would be coded as 16 02 09* and 16 02 10*. Any suspected PCB-containing items identified during waste acceptance will be quarantined and rejected or removed to a suitably authorised facility. Any asbestos-containing WEEE will not be shredded, granulated, sheared, baled, compacted or otherwise mechanically treated unless and until the asbestos has first been safely removed by a competent specialist and the material has been reassessed as suitable for the intended treatment route.
- 2.2.7 Storage of construction and demolition, industrial, commercial and municipal wastes pending removal off site to authorised treatment facilities.
- 2.2.8 Tyres may be accepted on site for storage prior to removal for processing at a suitably authorised facility.
- 2.2.9 Batteries are accepted on site for storage prior to removal for processing at a suitably authorised facility. Lead acid batteries are stored in leak proof battery boxes.
- 2.2.10 End of Life Vehicles may be accepted on site for storage prior to removal to an ELV ATF. If ELV depollution is to take place, the appropriate equipment and infrastructure will be purchased.
- 2.2.11 No wastes are disposed of at the site.
- 2.2.12 The site will accept a number of EWC waste types, not all of which are combustible wastes that require specific consideration as part of this plan.
- 2.2.13 The total tonnage accepted per annum will be a maximum of 300,000 tonnes.
- 2.2.14 Total storage for site in aggregate (hazardous and non-hazardous) shall not exceed 14,250 tonnes,
- 2.2.15 A site plan showing the layout and drainage is included within Appendix A.
- 2.2.16 The surface of the site is covered in impermeable pavement with a sealed drainage system that drains into a sump via interceptors leading to surface water. Impermeable pavement is present in all areas of waste treatment and storage.
- 2.2.17 A waste pre-acceptance and waste acceptance procedure is in place to prevent the acceptance of unsuitable wastes.

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- 2.2.18 A 10,000-litre diesel (red diesel / gas oil) tank is present on site for the refuelling of mobile plant. The diesel is stored within an integrally bunded fuel tank on concrete hardstanding. All liquid containment is bunded and subject to visual checks daily.
 - 2.2.19 Ad blue, a diesel additive, is stored within an integrally bunded tank of 1,000 litre capacity.
 - 2.2.20 Hydraulic oil is stored in two no. 1,000 litre IBC units on concrete hardstanding. The IBCs are stored in a bund / drip tray area that has a capacity of 110% of the stored volume.
 - 2.2.21 Grease tubes for plant maintenance are stored in boxes of 12 within a cabinet in the site maintenance building.
 - 2.2.22 Lubricants for plant maintenance are stored in plastic containers on a bund / drip tray.
 - 2.2.23 Gas bottles are also present on site for assisting with metal cutting. A small number of oxy propane and propane cylinders are stored within a gas cylinder cage.
 - 2.2.24 The site will undertake waste activities between 07:00hrs to 17:00hrs Monday to Saturday. Waste activities may run to 23:00hrs based on previous operators' use of the site and granulation equipment. Normal planned maintenance takes place routinely from Sunday to Friday 19:00 – 04:00hrs. These waste activity hours may be subject to change dependent on the relevant planning consents.

3 FIRE PREVENTION PLAN

- 3.1.1 This plan identifies the site operations that present a risk of fire, the prevention techniques to minimise the potential for a fire, fire suppression techniques in the event of a fire starting and the measures which will be employed to protect the environment in the event of a fire.
- 3.1.2 This plan forms part of the site Environment Management System (EMS). A copy of the FPP shall be kept on site and available for reference by staff and contractors as required.
- 3.1.3 The plan shall be reviewed annually, and regular tests shall be carried out to test its effectiveness in the event of a fire at the site

3.2 Potential Sources and Causes of Fire

3.2.1 The following are those permitted waste types, accepted at the site that are potentially combustible wastes.

Table 3-1 Permitted Waste Types

Material Description	EW Code
waste plastics (except packaging)	02 01 04
wastes from forestry	02 01 07
Waste metals from agriculture, horticulture, aquaculture, forestry, hunting and fishing	02 01 10
sawdust, shavings, cuttings, wood, particle board and veneer other than those mentioned in 03 01 04	03 01 05
waste bark and wood	03 03 01
mechanically separated rejects from pulping of waste paper and cardboard	03 03 07
wastes from sorting of paper and cardboard destined for recycling	03 03 08
waste plastic	07 02 13
Ferrous metal filings and turnings	12 01 01
Ferrous metal dust and particles	12 01 02
Non- Ferrous metal filings and turnings	12 01 03
Non Ferrous metal dust and particles	12 01 04
plastics shavings and turnings	12 01 05
mineral-based machining oils containing halogens (except emulsions and solutions) [dual code with turnings if present as free flowing]	12 01 06*
mineral-based machining oils free of halogens (except emulsions and solutions) [dual code with turnings if present as free flowing]	12 01 07*
machining emulsions and solutions containing halogens [dual code with turnings if present as free flowing]	12 01 08*
machining emulsions and solutions free of halogens [dual code with turnings if present as free flowing]	12 01 09*
synthetic machining oils [dual code with turnings if present as free flowing]	12 01 10*
readily biodegradable machining oil [dual code with turnings if present as free flowing]	12 10 19*
paper and cardboard packaging	15 01 01
plastic packaging	15 01 02
wooden packaging	15 01 03
Metallic Packaging	15 01 04
composite packaging	15 01 05
Mixed Packaging	15 01 06
textile packaging	15 01 09
absorbents, filter materials, wiping cloths and protective clothing other than those mentioned in 15 02 02	15 02 03
whole end-of-life-tyres	16 01 03
End of Life Vehicles	16 01 04*
End of Life Vehicles (depolluted)	16 01 06
Ferrous metal from ELV	16 01 17
Non-ferrous metal from ELV	16 01 18
Plastic	16 01 19
Hazardous components from ELV	16 01 21*
Non Hazardous Components from ELV	16 01 22
Waste Refrigeration with ODS/ WEEE containing CFC, HCFC, HFC	16 02 11*
Discarded equipment containing free asbestos	16 02 12*
Hazardous WEEE	16 02 13*
Non Hazardous WEEE	16 02 14

Hazardous components from WEEE [including all hazardous motors]	16 02 15*
Non Hazardous components removed from WEEE	16 02 16
Lead batteries	16 06 01*
ni-cd batteries	16 06 02*
mercury-containing batteries	16 06 03*
alkaline batteries (except 16 06 03)	16 06 04
Other batteries and accumulators	16 06 05
aqueous liquid wastes containing hazardous substances combined with 16 10 02 aqueous liquid wastes other than those mentioned in 16 10 01 [turnings containing rainwater]	16 10 01* [& 16 10 02]
wood	17 02 01
plastic	17 02 03
Cables containing oil, coal tar and other hazardous substances	17 04 10*
Cables	17 04 11
insulation materials containing asbestos	17 06 01*
insulation materials other than those mentioned in 17 06 01 and 17 06 03	17 06 04
construction materials containing asbestos	17 06 05*
Premixed wastes composed of at least one hazardous waste	19 02 04*
combustible wastes other than those mentioned in 19 02 08 and 19 02 09	19 02 10
non-composted fraction of municipal and similar wastes	19 05 01
off-specification compost	19 05 03
Iron and Steel Waste	19 10 01
Non Ferrous Waste	19 10 02
fluff-light fraction and dust containing dangerous substances	19 10 03*
fluff-light fraction and dust other than those mentioned in 19 10 03	19 10 04
other fractions containing dangerous substances	19 10 05*
other fractions other than those mentioned in 19 10 05	19 10 06
paper and cardboard	19 12 01
Ferrous Metal	19 12 02
Non Ferrous Metal	19 12 03
plastic and rubber	19 12 04
wood other than that mentioned in 19 12 06	19 12 07
textiles	19 12 08
Other wastes (including mixtures of materials) from mechanical treatment of waste containing dangerous substances	19 12 11*
other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11	19 12 12
paper and cardboard	20 01 01
Clothes	20 01 10
Textiles	20 01 11
fluorescent tubes and other mercury-containing waste	20 01 21*
Waste refrigeration equipment containing ODS	20 01 23*
batteries included in 16 06 01, 16 06 02 or 16 06 03 and unsorted batteries containing these batteries.	20 01 33*
batteries other than those mentioned in 20 01 33 not including li-ion traction batteries	20 01 34
Hazardous WEEE	20 01 35*
Non Hazardous WEEE – household/ local authority	20 01 36
wood other than that mentioned in 20 01.37	20 01 38
plastics	20 01 39
Metals – household/ local authority	20 01 40

- 3.2.2 Other combustible materials stored at the site include fuels, oils and gas cylinders.
- 3.2.3 Hazardous materials e.g. fuel / oils are stored on impermeable pavement sealed drainage system with additional containment.
- 3.2.4 Any non-permitted combustible wastes identified during waste acceptance checks will be returned immediately or should this not be possible the waste would be moved to the quarantine area for temporary storage prior to removal from site. Quarantine area for non-conforming waste can be seen on the site plan in Appendix A.
- 3.2.5 Table 3.2 below, identifies the common causes of fire and the mitigation measures adopted by Sims to minimise the fire risk at the site.

Table 3-2 Common causes of fire and site mitigation

Cause of Fire	Risk management techniques
Arson	The site perimeter comprises a combination of secure fencing and brick / concrete walls. The entrance is gated and secure when the site is closed. Security measures are inspected on a regular basis and maintained in sound condition. Site security prevents unauthorised access and minimise risk of arson. Site has 24-hour security and CCTV. All visitors are required to report to the site office and sign the visitor's book.
Plant and equipment	All equipment is maintained in good working order. A planned programme of maintenance and inspection for all infrastructure, plant and equipment is specified in the management system. All plant is inspected and maintained in line with the manufacturer's instructions. There is a programme of routine inspection and maintenance for static and mobile plant and machinery. All plant and equipment are inspected before use. This inspection includes checking fuel, oil, water & coolant levels and looking for visual evidence of oil leaks, checking hoses and rams for visual evidence of leaks or damage. Records are kept and provided to site manager or designated employee to implement any actions from the inspections. Records are kept of all plant/equipment failure, breakdowns and any maintenance/inspections completed. Maintenance is carried out by qualified and trained personnel. Records of repairs are kept. This will prevent faults that could cause fire and also prevent leaks and spills of combustible fuel and oil. All employees who operate mobile plant are suitably trained. Refresher training is undertaken routinely and records are kept. Only specialist plant and equipment widely used in the waste industry is used to handle wastes (for example JCB, Linde, CAT, Sennebogen, Liebherr or Terex MSH). The FPP would be reviewed should there be any significant changes to plant / equipment on site however it is noted that it would not be practicable / effective to fit all bucket loaders with rubber strips to prevent sparks when the bucket comes into contact with hard-standing. In general, the primary waste materials handled, being scrap metal, are not readily combustible. Nonetheless, employees are appropriately trained and are made aware of the potential risk and to be vigilant during any operation where there is potential for sparks to be generated e.g. bucket of loader making contact with ground. Mobile plant that is not being used is parked away from combustible waste. This area is a minimum of 6m from combustible waste and buildings and ensures separation distances are observed between plant and waste when the site is not operational. Ward employees are trained to respond to spills. Spill response procedures are tested and spill kits are available at strategic locations and all spills re responded to. This prevents spilled combustible fuel or oil trailing or being tracked around site. Only appropriate absorbents are used to absorb combustible liquids and once used, these absorbents are stored in drums to reduce the risk of a potential fire situation and correctly disposed of to a suitably authorised facility. Fire extinguishers are available at strategic locations. Fire extinguishers are fitted in mobile plant and in or by static plant and machinery.

Cause of Fire	Risk management techniques
	Visual inspections are carried out at regular intervals during the working day and plant operators regularly inspect their plant to detect the potential for fire caused by dust settling on hot exhausts and engine parts. This takes place at regular intervals throughout operations (a minimum of twice per day) and at the end of the operators shift. Daily routine visual inspections of the site include a fire watch at least twice per day and at the end of the shift. Mobile and static plant and equipment is subject to routine cleaning to prevent accumulation of debris that could settle on hot exhausts and engine parts and potentially cause fire. If daily routine inspections identify an accumulation, additional cleaning takes place before recommencing use. Fixed plant and machinery used to process the waste are designed specifically for the purpose and constructed to minimise the risk of fire. The plant is maintained on a regular basis, which includes a qualified engineer, qualified electrician and other suitably qualified employees. Pre-inspection checks are carried out daily when the plant is in use. In addition, regular maintenance is undertaken nightly, the schedule of maintenance is determined by type and volume of material treated. Mobile Plant routine maintenance / servicing scheduling is completed by the manufacturers of the plant or their service providers. Six monthly/ annual LOLER inspections are undertaken as per statutory requirements. Housekeeping and cleaning activities are carried out daily by suitably trained employees throughout the day. The housekeeping / cleaning includes removal of loose dust / fluff from plant and equipment.
Electrical faults including damaged or exposed electrical cables	A planned programme of maintenance for all infrastructure, plant and equipment is completed. All plant is inspected and maintained in line with the manufacturer's instructions. This includes electrical checks. Electrical systems will be certified by a qualified electrician and there will be procedures in place that set out the regular maintenance. Fixed Electrical installations are tested in accordance with statutory requirements by certified electrical inspectors.
Discarded smoking materials	A no smoking policy is in place in operational areas and designated smoking areas are located a safe distance from combustible wastes to prevent accidental ignition. This is communicated to all employees, contractors, visitors as part of site induction. Employees and contractors are inducted and monitored to ensure they follow safe working practices and are aware of the fire prevention and mitigation plan and emergency contingency and accident plan.
Hot Works	Should hot works be carried out on site, so far as is reasonably practicable, any readily accessible plastic and rubber is removed prior to oxy/ propane processing of the scrap to minimise the potential for smoke emissions. Water suppression in form of hose/ buckets is available during the oxy/propane cutting process in order that any accidental combustion may be doused/ suppressed immediately. Oxy propane operations cease prior to the end of daily operations and the area/ wastes are inspected again after the operations have ceased. Employees are suitably trained. Fire prevention measures are adopted. Oxy/propane cylinders will be required for oxy/propane hot cutting works. Any welding required in operational areas is subject to additional controls e.g. cordoning off area, cleaning to remove combustible materials and damping down if required. Hot work is carried out in a designated safe area at least 6m away from combustible stockpiles and with sufficient fire-fighting equipment available. This will include a fire watch by a nominated employee for a suitable period after hot works have ended. Any welding required in operational areas are subject to additional controls e.g. cordoning off area, cleaning to remove combustible materials and damping down if required.

Cause of Fire	Risk management techniques
Industrial heaters	Industrial heaters will not be used on site, however should they be used, procedures will be in place that set out the use and regular maintenance of industrial heaters.
Hot exhausts	All plant and machinery will be stored away from any combustible wastes at the end of the working day and checks will be carried out to ensure that there is no combustible waste/dust etc. build up on plant/machinery which could lead to a fire
Ignition sources	All hot works are undertaken under an authorisation permit for work. No wastes are burnt on site and no fires are allowed on site. Staff smoking areas are designated in areas away from waste activities and off the permitted area. Sources of ignition (e.g. if there were hot works required on site) will be kept >6 metres away from combustible and flammable waste. There are no space heaters, furnaces, incinerators and other sources of ignition on site. Waste acceptance procedures will ensure that every effort is made to identify and remove any non-conforming items within accepted waste and remove them from within the waste prior to processing.
Batteries	Batteries will be stored according to type and in suitable containers.
Leaks and spillages of oils and fuels	Procedures are in place to ensure fuels, oils and combustible liquids are appropriately stored to prevent leaks and spills. Storage is at least 6m away from stockpiles of combustible wastes. Fluids will be stored in containers with appropriate secondary containment measures capable of holding at least 110% of the volume of the primary containment vessel. Fixed Tanks and drums or other containers containing potentially polluting liquids shall be filled / emptied in accordance with procedures. Fixed Tanks and drums or other containers containing potentially polluting liquids shall be labelled regarding their contents. Tanks will have a means of checking the quantity of material in the container / void space. Fixed Tanks and drums or other containers containing potentially polluting liquids shall be regularly inspected and maintained. In event a fixed tank becomes damaged or deteriorates to point where a spill or leak is likely, it will be taken out of use and repaired / replaced. Ward employees are trained to respond to spills. Spill kits are available at strategic locations and all spills are responded to. This prevents spilled combustible fuel or oil trailing or being tracked around site. Only appropriate absorbents are used to absorb combustible liquids and once used, these absorbents are stored in drums to reduce the risk of a potential fire situation and correctly disposed of to a suitably authorised facility. Site personnel will be trained in spill response and the Emergency Contingency Plan. Spill kits will be readily available and maintained. See also Plant and Equipment section, which details daily visual inspections of plant for leaks and also visual checks of hoses etc. for damage / leaks. All vehicles, plant and equipment used on site in connection with specified waste management operations, shall be operated and maintained to prevent potentially polluting leaks of waste. Waste oil drained from on-site machinery or site vehicles shall be immediately transferred to an appropriate labelled container and stored as per the requirements specified above.
Build-up of loose combustible waste, dust and fluff	Inspections take place daily and housekeeping is regularly undertaken to prevent the build-up of loose combustible waste, dust and fluff on plant, equipment, within buildings and around the site. Manual sweeping is employed on plant and equipment to minimise build-up of dust and debris. Visual monitoring by the site manager or appointed representative in their absence is undertaken throughout the day to determine the frequency such sweeping.

Cause of Fire	Risk management techniques
Reactions between wastes	Waste acceptance and control procedures are in place. Every load is inspected upon receipt and subsequently during handling for the presence of non-conforming items and as detailed in the Operating Techniques and Waste Acceptance Procedures. Suppliers are informed of the waste acceptance criteria and the main material types prohibited are displayed at the site entrance. Non-conforming waste types are rejected or quarantined. Waste handled easily identifiable and with solid properties that mean they are generally compatible with other waste types handled. Emergency Contingency Plan in place, which includes documented procedures for dealing with non-conforming wastes to minimise impacts. Employees have training on emergency contingency plan and environmental awareness. Segregation of materials will be ensured by storing in designated areas, bays or containers. This will be checked by daily site inspections.
Deposited hot loads	Waste acceptance procedures minimise risk of acceptance of wastes likely to accidentally combust. Inspection of loads at weighbridge and unloading area and subsequently during handling facilitates segregation of wastes with combustion potential such as unidentified closed or sealed containers, gas cylinders and other wastes as appropriate. Scrap is inspected to ensure no signs of combustion or heating. Non-conforming wastes are quarantined and dealt with appropriately. The site quarantine area is shown in the site plan (Appendix A) In the event that a suspected hot load arrives on site, this is taken to the hot load quarantine area for further inspection / action as required. An area on site is maintained as a hot load quarantine area. i.e. somewhere a suspected hot load could be deposited or where unburnt wastes could be moved to isolate and prevent them catching fire. The area is within the site boundary, is capable of holding 50% of the largest stockpile of waste and is shown on the site plan. A separation distance of at least 6m is maintained around the hot load quarantine area.

3.3 Managing waste piles & preventing self-combustion

- 3.3.1 Waste stockpiles for the granulation process will be managed to the storage times as identified below.
- Plastic granulate – typically 2 weeks production, will not exceed 3 months;
 - <6mm light fraction – typically 1 week, will not exceed 3 months;
 - Shaker fines (plastic and copper granulate) – typically 1 week, will not exceed 3 months.
- 3.3.2 No temperature monitoring of waste stockpiles is carried out. Although some of the waste types will be small fraction once processed, they do not self-heat. Consequently, monitoring of sub-surface temperature is not considered necessary and daily site inspections including visual checks of waste stockpiles will be used for any signs that they are starting to heat up.
- 3.3.3 Stock rotation / management procedures will ensure timescales specified are not exceeded.
- 3.3.4 The bays are regularly emptied entirely which ensures stocks are not kept for longer than the maximum periods specified above.
- 3.3.5 Daily site inspections monitor waste storage and check it is in line with the plan. Contingencies are in place in the event that stockpiles near the limits imposed by the plan.
- 3.3.6 Outside waste storage is in concrete waste bays as identified in the site plan in Appendix A.
- 3.3.7 Fine fraction / cover material is stored in containers that can hold more than 1,100 litres (roll on, roll off skips). These containers can be moved easily and in the event of a fire shall be moved to a safe area should they be in an area at risk or where fire has broken out.
- 3.3.8 Granulate output is stored in 1 cubic metre dumpy bags.
- 3.3.9 Inspection of loads at weighbridge and unloading area and subsequently during handling facilitates segregation of wastes with combustion potential such as unidentified closed or sealed containers,

gas cylinders and other wastes as appropriate. Scrap is inspected to ensure no signs of combustion or heating. Non-conforming wastes are quarantined and dealt with appropriately.

- 3.3.10 Staff are trained to ensure that there is a regular turnaround of combustible wastes on site to ensure storage times will be kept to a minimum and maximum storage times and stockpile limits are adhered to.
- 3.3.11 All wastes are subject to daily inspections and these will ensure that all combustible wastes are stored in stockpiles at no more than the quantities stated below. Tyres, wood, compost and green waste, paper and cardboard, textiles, will be typically no more than the separate volume combined.

Combustible Waste Type	Loose and more than 150mm	30mm to 150mm or baled	Less than 30mm
Tyres and rubber	450 cubic metres	300 cubic metres	300 cubic metres
Wood	750 cubic metres	450 cubic metres	300 cubic metres
Compost and Green Waste	750 cubic metres	450 cubic metres	450 cubic metres
Plastics	750 cubic metres	450 cubic metres	300 cubic metres
Paper and cardboard	750 cubic metres	750 cubic metres	450 cubic metres
Textiles	750 cubic metres	750 cubic metres	400 cubic metres
WEEE Containing plastics – SDA, LDA, Fridges, components	450 cubic metres	450 cubic metres	450 cubic metres
Metals	750 cubic metres	450 cubic metres	450 cubic metres
Process residues	450 cubic metres	450 cubic metres	450 cubic metres

- 3.3.12 For all combustible waste piles, the maximum height is 4 metres. For all combustible waste piles, the maximum length or width allowed (whichever is the longest) is 20 metres. Waste storage bays will be designed and managed to meet these requirements. External stockpiles will be managed to meet these requirements.
- 3.3.13 All combustible wastes are stored in concrete bays [where a ‘freeboard’ space of 1m minimum at the top and sides of the walls will be in place] or in external stockpiles that are stored so that they have no less than 6 metres separation distance from other waste stockpiles, buildings or site perimeter. The exception to this is a stockpile of the plastic output from the granulation plant which is adjacent to the southern boundary, however, the site boundary is a concrete wall which will provide fire resistance and minimise the potential for fire spread from the site.
- 3.3.14 For whole ELVs, each ELV will be accessible from at least one side and will be stored at no more than 2 vehicles deep. ELVs will not be stored more than 3 high.
- 3.3.15 Due to the constantly changing operational and commercial pressures of the metal and waste industry, a degree of flexibility with regard to the storage locations is required. Depending on operational demands at any one time, it may be necessary to relocate specified activities within the

overall permitted area. However, in the event of such demand, the overriding principle will always be that the operation will be carried out in such a manner to prevent any harm or risk to the environment and in accordance with the permit. In general, waste storage areas as detailed in the site plan in Appendix A will be adhered to unless specific circumstances prevent otherwise.

- 3.3.16 The site perimeter is a combination of secure fencing and brick / concrete walls. The entrance is gated and secure when the site is closed. Security measures are inspected on a regular basis and maintained in sound condition.
- 3.3.17 Outside of working hours, the site is covered by CCTV and monitored by 24 hr security. The security team are trained on the requirements of the FPP and will be undertaking fire checks are part of security inspections. There are employees or security personnel on site 24hrs.

3.4 Prevent fire spread

- 3.4.1 Site employees will be trained in the site's Fire Prevention Plan and the Emergency Contingency Plan. Firefighting equipment will be readily available and maintained as per legal requirements. Additionally, an Environment, Fugitive Emissions & Accidents Risk Assessment and Management Plan has been completed.
- 3.4.2 The Emergency Contingency Plan identifies procedures that staff will take at the time of an incident. All staff are trained to be vigilant in identifying potential fire risks and alerting site management should any issues be identified.
- 3.4.3 Combustible wastes are stored outside in concrete bays or loose in stockpiles no less than 6 metres from other waste piles, buildings and the site boundary to minimise the risk of fire spreading.
- 3.4.4 If a fire is identified, staff are trained to undertake a risk assessment at the time for the most suitable form of action i.e. tackle the fire if small, escalate the incident, move waste to quarantine area and douse with water etc. IBC's of water are located on site and these will be crushed on top of waste piles using the 360° grab to douse the waste pile if this is assessed as a suitable response by the staff member.
- 3.4.5 Regular fire drills and tests of the fire incident response procedure will be carried out.
- 3.4.6 Outside of working hours, the site is covered by CCTV and monitored by 24 hr security. The security team are trained on the requirements of the FPP and will be undertaking fire checks are part of security inspections. There are employees or security personnel on site 24hrs.

3.5 Quarantine area

- 3.5.1 A quarantine area for use during an incident has been allocated and is shown on the plan in Appendix A. During an incident, all plant shall be moved to ensure that this area is kept clear and available for use to store waste piles are required.
- 3.5.2 The quarantine area is located so that a 6-metre separation distance / fire break is achieved, see site plan included in Appendix A. The area is large enough to hold at least 50% of the largest combustible waste pile (375m³).

3.6 Detecting fires

- 3.6.1 There will be detection and response equipment on the SDA bay. Other combustible waste piles will be monitored through visual inspection / monitoring of CCTV, security out of hours etc.
- 3.6.2 Daily inspections will identify any wastes that show signs of self-combustion and waste storage times are kept to a minimum to as to reduce the risk of self-combustion.
- 3.6.3 Outside of working hours, the site is covered by CCTV and monitored by 24 hr security. The

security team are trained on the requirements of the FPP and will be undertaking fire checks are part of security inspections.

- 3.6.4 The majority of combustible wastes are stored outside to provide ease of visual inspection and identification of fire. Some plastic granulate is stored in dumpy bags in the building following treatment of the cable. There are no ignition sources within this building and the storage times are minimised therefore this is considered low risk.
- 3.6.5 Operational buildings have roller shutter doors which can be opened as a means of access for firefighting and as a means of clearing smoke from the building.

3.7 Suppressing fires

- 3.7.1 As previously stated, the majority of combustible waste is stored outside. The combustible waste stored within the building is in small quantities and undergoes regular inspection/minimum storage times therefore this is considered low risk and fire suppression systems are not required within buildings.
- 3.7.2 The site has fire extinguishers for use during an incident situated at key locations around the site. Locations can be seen in the site layout drawing in Appendix A.
- 3.7.3 Evacuation drills will be undertaken in order to test the effectiveness of the plan, and to ensure that all employees understand the action to take in the event of an emergency situation requiring site evacuation. Records of evacuation drills will be maintained.
- 3.7.4 Mobile plant has fire extinguishers fitted which can be utilised in the event of a fire.
- 3.7.5 If a fire is identified, staff are trained to undertake a risk assessment at the time for the most suitable form of action i.e. tackle the fire if small, escalate the incident, move waste to quarantine area and douse with water etc. IBC's of water are located on site and these will be crushed on top of waste piles using the 360° grab to douse the waste pile if this is assessed as a suitable response by the staff member.
- 3.7.6 There are two 30,000 litre tanks which are filled with water to provide additional in house / onsite firefighting capabilities.
- 3.7.7 Ward will enter into discussions with the local fire and rescue service (South Yorkshire SYFRS) who had visited site under the previous operators occupancy, to familiarise themselves with the site. Ward will update the SYFRS of any significant changes on site.

3.8 Firefighting techniques

- 3.8.1 Employees have training on emergency contingency plan and environmental awareness. Firefighting equipment is held in key locations as identified in the site plan in Appendix A.
- 3.8.2 If a fire is identified, staff are trained to undertake a risk assessment at the time for the most suitable form of action i.e. tackle the fire if small, escalate the incident, move waste to quarantine area and douse with water etc. IBC's of water are located on site and these will be crushed on top of waste piles using the 360° grab to douse the waste pile if this is assessed as a suitable response by the staff member.
- 3.8.3 There are two 30,000 litre tanks which are filled with water to provide additional in house / onsite firefighting capabilities.

3.9 Water supplies

- 3.9.1 There are two hydrants nearby on the Shaw lane within 500 metres of the site. These would be used by SYFRS during an incident at the site. SYFRS had advised the previous operator of the site that the nearest responders are based at Cudworth fire station on Tumbling Lane, Barnsley, S71 5SA which

is approximately 2.2 miles and <5 minutes' drive from the site. SYFRS have a further station nearby at Barnsley, which would have a response time of <10 minutes. If required, West Yorkshire FRS have pumps available at South Kirby station which is also <10 minutes response time.

- 3.9.2 Site staff will respond and tackle a fire as identified above using a combination of water from the IBC's stored on site, and the mains water supply or from the water tanks that will be located as proposed in the layout plan in Appendix A.
- 3.9.3 Two 30,000 litre capacity water tanks at the site will provide water for use during the initial response while awaiting attendance by SYFRS.

3.10 Managing fire water

- 3.10.1 Surface water drainage from the site passes through a sealed drainage system that includes interceptors, into a sealed sump prior to discharge to surface water.
- 3.10.2 All treatment activities take place on impermeable surface with sealed drainage system. The integrity of the surfacing and drainage system is monitored and maintained minimising the risk of contaminated run off escaping the containment of site.
- 3.10.3 Drainage system is regularly inspected and maintained where appropriate. Interceptor is periodically cleaned out.
- 3.10.4 Fire water will be contained on site and prevented from entering controlled waters. Site staff are trained in the use of the emergency equipment during an incident to contain firewater on site. The bungs and manhole cover keys are kept in the maintenance shed. The bung for the surface water system will be deployed in the discharge pipe for the interceptor located in the site front car park near the NF building located at point W1 as shown on the plan. The sites two 30,000 litre water tanks that will be filled with water and available for firefighting resource, once empty will be available for containment of firewater. These tanks will provide additional storage capacity / time in order to get tankers mobilised. Appropriate arrangements are in place with a company who can source tankers and tankers will be mobilised to remove firewater and free up capacity for additional containment.
- 3.10.5 SYFRS had previously advised that it is possible to recirculate contained firewater for use in tackling the fire.
- 3.10.6 Firewater shall be tankered off-site when appropriate and if required and safe to do so to an authorised facility.

3.11 During and after an incident

- 3.11.1 In the event of a fire incident, waste will be held at feeder yards in order to prevent it from being delivered to site. Other Ward permitted sites will be used to divert any incoming waste from external customers. Site management will contact senior management/ commercial teams and central planning to redirect incoming loads to other internal or external facilities as necessary.
- 3.11.2 After a fire, it may remain necessary to continue to divert waste to alternative sites whilst the site is inspected to ensure it is satisfactory to start operating again, or whilst any necessary repairs are affected. This will take place as per contingency during a fire. No site inspections shall be undertaken until it is confirmed by SYFRS that the respective areas are safe to access.
- 3.11.3 Any residues/waste from the fire will be recovered/ disposed at a suitably authorised facilities as appropriate. Contaminated firewater will be pumped out and removed by road tanker if necessary.
- 3.11.4 The infrastructure and drainage will be inspected. If necessary, the interceptor shall be emptied, and the drainage system cleared of any accumulated firewater or debris. The concrete surface will be inspected for signs of fire damage that could affect the integrity and repairs undertaken if the integrity has been compromised and before the area is returned to active waste storage/ treatment.

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- 3.11.5 Key infrastructure such as electrics/ telecommunications/CCTV etc. will be checked to ensure they are functioning.
 - 3.11.6 A full investigation will take place including route cause, corrective actions to prevent reoccurrence, effectiveness of response shall be undertaken to identify any lessons learnt and the fire prevention plan and Emergency Contingency and Accident Management Plans will be reviewed and shall be updated if required
 - 3.11.7 Any fire-fighting resources or pollution prevention equipment that has been utilized will be replaced without delay.

Appendices A & B

Separate to this document

Appendix A: Site Layout Plan

Appendix Ba: Sensitive Receptor Plan – Human

Appendix Bb: Sensitive Receptor Plan - Ecological