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## **FIRE PREVENTION PLAN**

**RON HULL JNR LIMITED**

**8 GRANGE MILL LANE, SHEFFIELD, S9 1HW**

**EAWML 65522**



**Copies to be retained in main office and weighbridge office**

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**November 2021**



Version	Comments
1	New Fire Prevention Plan created for Mettalis Recycling Limited for permit variation application November 2016 by Peak Associates.
2	<p>Reviewed FPP for permit variation application following review by EA in April 2017 by Brad Haystead:</p> <ul style="list-style-type: none"> <li>• Out of hours security.</li> <li>• Management waste piles.</li> <li>• Preventing fires spreading.</li> <li>• Detecting fires</li> <li>• Suppressing fires.</li> <li>• Revisions to drawing 723010 (Plan 1).</li> </ul> <p><b>Review date November 2017.</b></p>
3	Reviewed to tighten some comments, clarify our position and to update infeed areas and cylinder stores for Environment Agency meeting in April 2018. Tables 1 and 4 as well as site plan updated to show current site practice.
4	<p>Clarified sites position regarding:</p> <ul style="list-style-type: none"> <li>• Firefighting stations</li> <li>• Water supply</li> <li>• Waste bay heat resistance</li> <li>• Site maintenance and logging</li> <li>• Exclusion zone around quarantine area</li> </ul> <p>Layout change to allow easy comparison with EA guidance and plans included in PDF file.</p>
5	Change of ownership for 8 Grange Mill Lane from Mettalis to Ron Hull JNR Limited. Purchased on the 20 <sup>th</sup> of August 2021. <b>19<sup>th</sup> November 2021</b>
6	Updated by Wardell Armstrong Feb 2024 to take account of additional waste types.
7	Sentence added by Wardell Armstrong regarding POPs, for clarity. August 2024

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**Plans**

- Plan 1 Fire Prevention Plan – Grange Mill Lane
- Plan 2 Fire Prevention Plan – Sensitive Receptors
- Plan 3 Drainage
- Plan 4 ST20716 Site Layout

**Appendices**

- Maintenance documentation
- Daily/weekly inspection checklist
- Safe system of work procedure for hot works

### Schedule of Improvement for Site Resilience and Response.

<b>Item</b>	<b>Description</b>	<b>Expected completion date</b>
<b>1</b>	Renewal of formal fire assessment of office buildings and fire service walkover to address areas of improvement.	<b>April 2019</b>
<b>2</b>	Review of practicality and effectiveness of bay separation	<b>June 2019</b>
<b>3</b>	Desktop assessment of waste flammability from scientific literature followed by item 4 if necessary.	<b>June 2019</b>
<b>4</b>	Lab/field flammability testing following approved methodology overseen by fire service to assess flammability of wastes identified as flammable during item 3.	<b>September 2019</b>
<b>5</b>	Assessment of fire point locations and positioning of bay deluge system following flammability testing to ensure rapid extinguishing in event of fire.	<b>December 2019</b>
<b>7</b>	Annual review of Fire prevention plan	<b>April 2020</b>
<b>8</b>	Continued monitoring of site compliance and renewal of formal assessments as required	<b>Ongoing</b>

## **1. Fire Prevention Plan Objectives**

Ron Hull JNR Limited (Ron Hull) is located on Grange Mill Lane in the Meadowhall area of Sheffield, near junction 34 of the M1 motorway. The site is adjacent to other industrial and waste management operations, with the nearest residential property being 250 m to the west and 150 m to the east (beyond the M1 motorway).

The Waste Management Licence, EAWML 65522, was awarded by the Environment Agency (EA) on the 27th April 2007 to Van Dalen UK Ltd. This has subsequently become permit EPR/PP3196ZD which has been varied on a number of occasions. The permit was transferred to Ron Hull Jnr Ltd on 21<sup>st</sup> February 2022.

It is the aim of this Fire Prevention Plan (FPP) to minimise the risk of a fire starting and also to ensure that in the event of a fire occurring it is identified as early as possible and effective measures are implemented to extinguish it whilst minimising the environmental impact.

This Fire Prevention Plan has been constructed following the Fire prevention plans: Environmental Permits Guidance (4<sup>th</sup> May 2018). The following operating procedures have been designed to meet the three requirements of an Environment Agency approved fire prevention plan. These are to:

1. Minimise the likelihood of a fire happening
2. Aim for a fire to be extinguished within 4 hours
3. Minimise the spread of fire within the site and to neighbouring sites

All Ron Hull staff are to read this plan, know where it is kept and understand their role in fire prevention and minimising risk of environmental pollution via training provided. Staff will be able to access it easily at all times, including during an incident.

To allow easy identification which section relates to which area of the fire prevention guidance the headings have been labelled to correspond to the relevant section of the Fire Prevention Plan guidance provided by the EA (Fire prevention plans: environmental permits guidance - 4<sup>th</sup> May 2018)

The FPP will be kept in the main office and weighbridge office.

## **2. Need for Fire Prevention Plan**

This site is required to hold an approved Fire Prevention Plan as part of the site's environmental permit as the site stores and processes waste metals.

### 3. Combustible/Hazardous wastes

#### 3.1. Combustible Wastes

The combustible wastes stored on site fall within the following categories of combustible waste:

- scrap metals contaminated or mixed with other waste such as oils or plastics
- de-polluted and un-depolluted ELVs
- Fragmentiser waste
- WEEE
- Plastic
- Wood
- Textiles
- gas bottles
- batteries

The total amount of waste stored on site is no more than 6,300 m<sup>3</sup> at any one time (including the spare waste bay 2 of 750 m<sup>3</sup> as per Table 4). Table 2 highlights the types, volume and storage arrangement of combustible waste at the site.

#### 3.2. Hazardous Wastes

A number of hazardous wastes may be accepted under the varied permit. These will include the following:

**Table 1, Hazardous Wastes Accepted.**

Hazardous substance	Quantity (tonnes)*	Where and how stored
15 01 10* packaging containing residues of or contaminated by hazardous substances	25	Sealed container
15 02 02* absorbents, filter materials (including oil filters not otherwise specified), wiping cloths, protective clothing contaminated by hazardous substances	25	Sealed container
16 01 04* End-of-life vehicles	25	On impermeable surfacing with sealed drainage
16 01 07* Oil filters	25	Sealed container
16 01 08* Components containing mercury	50	Sealed container
16 01 09* Components containing PCBs	50	Sealed container
16 01 13* Brake fluids	10	Drums/ IBCs in bunded area
16 01 14* antifreeze fluids containing hazardous substances	10	Drums/IBCs in bunded area
16 01 21* hazardous components other than those mentioned in 16 01 07 to 16 01 11 and 16 01 13 and 16 01 14 (catalytic convertors)	50	Sealed containers

16 02 10* discarded equipment containing or contaminated by PCBs other than those mentioned in 16 02 09	50	Sealed containers
16 02 11* discarded equipment containing chlorofluorocarbons, HCFC, HFC	50	Sealed containers
16 02 12* discarded equipment containing free asbestos	50	Sealed containers
16 02 13* discarded equipment containing hazardous components other than those mentioned in 16 02 09 to 16 02 12	50	Sealed containers
16 02 15* hazardous components removed from discarded equipment	50	Sealed containers
16 05 04* gases in pressure containers (including halons) containing hazardous substances	25	Stored upright in purpose build gas bottle cage
16 06 02* Ni Cd batteries	10	Sealed battery boxes
17 04 09* metal waste contaminated with hazardous substances	50	Sealed containers
19 10 03* fluff-light fraction and dust containing hazardous substances	50	Sealed containers
20 01 35* Discarded electrical and electronic equipment other than those mentioned in 20 01 21 and 20 01 23 containing hazardous components	50	Sealed containers
* These totals allow for flexibility but all hazardous waste will be tracked so that the total of all hazardous waste on site can be maintained below 50 tonnes.		

Hazardous waste will be stored in fireproof containers.

POPs waste is accepted on site for storage only. All POPs waste is stored in a dedicated container.

Table 2 below lists any other hazardous substances present on site which could cause adverse environmental effects or dangers in the event of a fire. These materials are used or produced on site.

*Table 2: Hazardous substances present at Ron Hull JNR, Sheffield.*

Hazardous substance	Quantity (m <sup>3</sup> )	Where and how stored
Diesel fuel for plant equipment.	12	Diesel is held in a double lined and bunded tank.
Lubricating oil	2	Oil storage units in marked containers.
Waste oil from plant maintenance	0.5	Designated waste oil storage unit in marked containers.
Propane/butane cylinders	0.5	Gas flame proof cabinets. Cylinders.
Oxygen	0.2	Gas flame proof cabinets. Cylinders.
Battery acid and alkaline	<0.1	Chemical store in marked containers.



ODS 20 Odour Neutraliser	<0.1	Chemical store in marked containers.
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Table 3: Combustible waste types, quantities and management at Ron Hull JNR, Sheffield (see Table 4 for stockpile sizing).

Type of material	Form	Max. stored (m <sup>3</sup> ) * [tonne]	Max. received daily (m <sup>3</sup> ) * [tonne]	Max. storage time (Days)	Method of storage and location	Internal combustibility rating	Management arrangements and other information
Mixed MRF Can Infeed Material	Loose pile	(4200) [1250]	(850) [250]	5	Stockpile Infeed 1	Amber/Green*	Will enter site as EWC 19 12 12 or 19 12 02 from suppliers. Sprayed for odour treatment. Pest nuisance policy in place.
Scrap Metal including depolluted end of life vehicles (ELVs)	Sorted and stacked stockpile	(2200-3300) [1000]	(330-500) [150]	6	Stockpile Infeed 2	Amber	Will enter site as EWC 19 12 02 or 16 01 06
Fragmentiser waste (none metal frags)	Loose stockpile	(1100) [300]	(180) [55]	6	Stockpile Bay 3A/B	Red	High risk and is therefore split between bay 3A and 3B. Sent to permitted site for heat recovery using registered carrier

Type of material	Form	Max. stored (m <sup>3</sup> ) * [tonne]	Max. received daily (m <sup>3</sup> ) * [tonne]	Max. storage time (Days)	Method of storage and location	Internal combustibility rating	Management arrangements and other information
ARS Infeed for metal recovery	Loose pile Residue from infeed 2	(1100) [300]	(180) [50]	6	Stockpile Bay 4	Amber	
ASR "plastics" Residue with 10% metals removed	Loose sorted pile	(approximately 1000) [270]	(approximately 160) [45]	6	Stockpile Bay 1	Amber	
Combustible liquids: waste oil	Liquid	(10) [11]	(0.25) [0.26]	60	Sealed containers and flame store.	Red	
Combustible liquid: brake fluid	Liquid	(10) [10.5]	(0.25) [0.263]	30	Sealed container in bund	red	
Textiles	solid	(440) [102]	(100) [43]	14	Separate bay	amber	

Type of material	Form	Max. stored (m <sup>3</sup> ) * [tonne]	Max. received daily (m <sup>3</sup> ) * [tonne]	Max. storage time (Days)	Method of storage and location	Internal combustibility rating	Management arrangements and other information
Plastics	solid	(440) [308]	(100) [70]	14	Separate bay	amber	
Wood	Solid	(440) [308]	(100) [70]	30	Separate bay	amber	
Paper/card	Solid	(440) [264]	(100) [60]	14	Separate bay	amber	
Gas bottles	Gas in pressurised container	(50) [25]	(10) [5.1]	14	Gas bottle cage	red	
Batteries	solid	(7.4) [10]	(2) [2.7]	14	Battery boxes	Amber (may cause spark via short circuit)	
Oil filters	Solid	(270) [25]	(10) [1.85]	14	Sealed container/s	red	

Type of material	Form	Max. stored (m <sup>3</sup> ) * [tonne]	Max. received daily (m <sup>3</sup> ) * [tonne]	Max. storage time (Days)	Method of storage and location	Internal combustibility rating	Management arrangements and other information
contaminated packaging and contaminated cleaning cloths	solid	(4) [1.6]	(1) [0.4]	14	Sealed container	amber	
Discarded equipment	Solid	(165) [50]	(33) [10]	30	Sealed container/s	amber	

\*Waste densities based on information from WRAP (2014), [Conversion factors for calculation of weight to volume for use when completing Template 3 | Sustainability Exchange](#) or "UK Conversion Factors for Waste" (SEPA).

\*\* This waste will be tested in 2019 to confirm flammability.

All other stockpiles, including Bay 2 (dirt inert), Bay 5 (ISS Metal), Bay 6 10mm Fines), Bay 7 (processed non-ferrous) and Bay 8 (processed ferrous), soil, stone, sludges and slags are considered to have low flammability.

## **4. Implementing the Fire Prevention Plan**

### **4.1. Storage and Management of the Fire Prevention Plan**

A copy of the sites Fire Prevention Plan shall be kept at both the Weigh bridge and in the main site offices at all times for easy access in the event of a site fire. Additionally, a digital copy shall be stored off site that can be accessed out of hours in the event of an emergency outside of normal working hours.

All staff shall read and understand the fire prevention plan, and visitors to site shall be told what to do in the event of a site fire during site induction.

### **4.2. Improvement of the Fire Prevention Plan**

As part of Ron Hull's commitment to ensuring suitable management of fire risks on site, it is planned that liaison with fire services shall be sought to gain relevant action plans that are tailored to the site and to seek a fire strategy that compliments the likely response from the attending fire crews.

If any Major Change to the operation of the site is made, or following a major fire on site, the Fire Prevention Plan shall be reviewed, and appropriate changes made to account to the changes on site.

### **4.3. Training**

All new employees are issued with what we refer to as a starter pack which includes fire prevention, emergencies and monitoring. The respective Site Supervisor will go around with the employee and explain each procedure/safe system of work relevant to the respective new employee, each employee is issued with their own folder containing all the relevant documentation and the supervisor/supervisors signs off on this when they are satisfied the employees fully understand the system.

Periodic tool box talks are undertaken with employees to either re-iterate the requirements of specific procedures and safe systems of work or when changes have been made to the systems, again the employees sign off on this and records are retained in the weighbridge office.

### **4.4. Site Maintenance**

Appendix B shows the daily and weekly inspections that take place on site. This includes general site condition, storage conditions, controls, temperatures and more.

An example of the documentation of maintenance of both mobile and static plant and equipment is shown in Appendix A. All plant and equipment are inspected daily to ensure that it is in good working condition. This is recorded in the site diary and any additional maintenance scheduled is also recorded. If there are any problems found, they are noted and the actions needs are recorded, the person to complete these actions and a timeframe in which to complete each one.

## **5. Site Activities and Plans**

### **5.1. Activities on site**

Ron Hull JNR Limited operates a scrap metal recovery facility to separate ferrous and non-ferrous materials from non-metallic materials. The site will also act as a transfer station for a wider range of wastes.

The site uses the following plant and equipment to process waste materials:

- Shredder – housed in a large building on the main yard.
- Non-ferrous metal processing unit for automotive shredder residue (ASR).
- Shear
- Cutting and grinding facilities.
- Various vehicles including bucket loaders, grabbers, cranes and forklifts.

### **5.2. Site Plans**

A site plan showing the following key fire prevention requirements is shown in Plan 1:

- Layout of buildings and fixed plant.
- Location of hazardous materials.
- Main access routes for the emergency services onto site and around the sites north and south boundaries.
- Location of the Grange Mill Lane fire hydrant.
- Main drainage channel (Manifold).
- Storage areas and their dimensions (includes maximum stockpile dimensions).
- Two emergency/quarantine areas.
- Designated storage areas for compressed gas cylinders.

Plan 2 highlights the main sensitive receptors in the event of a fire within 1 km radius of the Ron Hull site on Grange Mill Lane. The main sensitive receptors are:

- Schools
- Residential areas
- Neighbouring businesses

- Local footpaths and open access areas
- Nature Reserve
- Transport routes – local roads, the M1 motorway and railway

Plan 3 illustrates the drainage of the site showing:

- All site drainage drains to a contained manifold with 228m<sup>3</sup> storage capacity
- Site drainage then enters a silt trap and passes into one of 2 oil interceptors
- During normal site conditions, all drainage is pumped to sewer (via an oil interceptor).
- During heavy rainfall any volume in excess of the permitted 100m<sup>3</sup>/day to sewer is discharged to the adjacent river (via an oil interceptor)

Plan 4 shows the layout of the new storage bays for additional waste types.

## **6. Managing common causes of fire**

Table 3 below lists ignition sources on site and any parts of the site which are vulnerable to each ignition source.



Table 3 Potential ignition sources at Ron Hull, Sheffield with reference to Environment Agency guidance (2017).

Ignition source	EA reference	Which areas and why?	Preventative measures
Arson or vandalism	7.1	<ul style="list-style-type: none"> <li>• <b>Administrative buildings</b> – these areas have potential to be broken in to and fires started.</li> <li>• <b>Fuel storage</b> – residual fuel can ignite and therefore the tank is at risk.</li> <li>• <b>Plant and vehicles</b> – engine and fuel sections can be ignited.</li> </ul>	<ul style="list-style-type: none"> <li>• CCTV and 24-hour security cover various areas of the yard, crucially the entrance and plant; this can be operated internally and remotely.</li> </ul>
Plant or equipment failure	7.2	<ul style="list-style-type: none"> <li>• <b>Plant and vehicles</b> – if stored in proximity then fire can spread between plant/equipment.</li> <li>• <b>Buildings</b> – fires inside buildings can spread to the structure.</li> <li>• <b>Fuel storage</b> – if failure occurs near fuel tank.</li> <li>• <b>Residual MRF waste</b> – should failure in plant/equipment occur near this waste then fire can spread.</li> </ul>	<ul style="list-style-type: none"> <li>• All vehicles are fitted with portable fire extinguishers as per daily checks and monthly vehicle checks.</li> <li>• Site vehicles will be maintained on a regular basis, currently on an hours worked based system to manufacturer’s recommendations and carried out by competent persons.</li> <li>• Mobile plant not being used are to be positioned/parked away from combustible waste stockpiles.</li> <li>• LOLER inspections of lifting equipment and lifting accessories will be undertaken by competent persons and audited by Zurich (Information is available by the 'Crimson System').</li> <li>• Inspection and defect reporting are undertaken by site personnel as they are required to undertake a daily pre-start inspection of plant and equipment before use.</li> </ul>

			Trained personnel are only allowed to operate plant and equipment.
Damaged or exposed electrical cables	7.3	<ul style="list-style-type: none"> <li>• <b>Shredder</b> – sparks can ignite fuel vapours from ELV and lubricated areas .</li> <li>• <b>Fuel store</b> – if cables are nearby then arcing can occur and ignite residual fuel or vapours during fuelling.</li> <li>• <b>Oxygen, propane and other gas bottles</b> – if damaged/exposed cables are allowed to contact cylinders and/or gas lines.</li> </ul>	<ul style="list-style-type: none"> <li>• Intake system is designed to suppresses such incidents.</li> <li>• Regular equipment checks identify faulty electrics and ensuring tidy fuel stores allows easy identification of potential hazards.</li> <li>• Following of hot works procedure (appendix C) reduces risk of ignition when using flammable gasses.</li> <li>• Electrical installations and all electrical equipment are regularly tested by qualified persons only and records maintained in the site office, made available on request.</li> <li>• Safe storage of flammable materials, e.g. cage for gas bottles, away from electrical installations.</li> </ul>
Electrical faults	7.3	<ul style="list-style-type: none"> <li>• <b>Shredder</b> – large motors and heavy electrical cabling could cause electrical fires in this area.</li> </ul>	<ul style="list-style-type: none"> <li>• Electrical installations and all electrical equipment are regularly tested by qualified persons only and records maintained in the site office, made available on request.</li> <li>• Main electrical installations have regular maintenance in accordance with procedures on site and manufacturer’s specifications.</li> <li>• Emergency lighting is installed to BS 5266.</li> </ul>
Smoking	7.4	<ul style="list-style-type: none"> <li>• <b>Cigarette butts</b> can ignite flammable materials if not disposed of appropriately.</li> </ul>	<ul style="list-style-type: none"> <li>• Staff only permitted to smoke in designated open areas with ashtrays provided (see Plan 1).</li> </ul>

Hot works	7.5	<ul style="list-style-type: none"> <li>• <b>Gas cylinders</b> – improper practice can result in gas cylinders getting hot or damaged.</li> <li>• <b>Fuel storage</b> – sparks can contact fuel tank or fuel lines of vehicles.</li> <li>• <b>Stored waste</b>- spark could ignite combustible material.</li> </ul>	<ul style="list-style-type: none"> <li>• Improved handling and storage procedures introduced in 2018. Hot works procedure in Appendix C to be used with permit to work.</li> <li>• Area around hot works to be cleared of combustible materials before work commences.</li> <li>• Firewatch undertaken for 1 hour following hot works.</li> </ul>
Industrial Heaters	7.6	<ul style="list-style-type: none"> <li>• <b>Industrial Heaters</b> - There are no portable heaters, heaters with naked flames or radiant bars, oil fuelled heaters or boilers, gas boilers, incinerators or furnaces installed on site.</li> </ul>	All other identified ignition sources including naked flames shall be kept at a minimum of 6m from any combustible waste.

Hot Exhausts	7.7	<ul style="list-style-type: none"> <li>• <b>Hot Exhausts</b> – hot exhausts have potential to ignite flammable materials even after the plant has been shut down. If left unsupervised and in close proximity to flammable materials the hot exhaust can cause fires that may go unnoticed.</li> </ul>	<ul style="list-style-type: none"> <li>• A fire watch is in place during the working day with 24-hour security present onsite out of working hours. This includes personnel manning the weigh bridge office throughout the working day.</li> <li>• Operators of mobile plant are trained in observing potential fires from hot exhausts and engines as part of the watch.</li> <li>• Vehicles are not left idling next to combustible waste.</li> <li>• Waste, dust and fluff swept out of exhaust area and engine compartments routinely during the working day.</li> <li>• Radio Communication required to raise alarm to all areas if needed.</li> <li>• At the end of the working day the site supervisor provides a fire watch, including as the hammer mill in the shredder plant winds down.</li> </ul>
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Waste with self-heat potential	7.8	<ul style="list-style-type: none"> <li>• <b>Residual MRF 'fluff'</b> – if stored for too long or during warm conditions then there is potential for this waste to ignite.</li> <li>• <b>Combustible wastes-</b> if stored for too long or during warm conditions then there is potential for this waste to ignite as degradation sets in.</li> </ul>	<ul style="list-style-type: none"> <li>• Internal temperatures of waste piles are recorded and noted in site diary.</li> <li>• If necessary, bays are mixed to allow internal heat to dissipate to the atmosphere.</li> <li>• The site operates a first in first out policy to limit the time a product is stored on site.</li> <li>• Card, paper, cloths, plastic, etc stored for maximum of 14 days, wood may be stored for 30 days..</li> </ul>
Open burning (on site or adjacent sites)	7.8	<ul style="list-style-type: none"> <li>• <b>Cutting area</b> – accidental dropping of cylinders in the burning area.</li> <li>• <b>Inbound MRF stockpile</b> – uncontrolled burning puts this stockpile at risk due to intensity of fire and fire lick.</li> </ul>	<ul style="list-style-type: none"> <li>• All waste bays are constructed from fire resistant concrete blocks.</li> <li>• Burning of waste on site is not permitted and is not carried out on site.</li> <li>• Cutting carried out 6m away from combustible waste stockpiles.</li> </ul>
Sparks from loading buckets	7.8	<ul style="list-style-type: none"> <li>• <b>Residual MRF stockpile</b> – if dry, then sparks could catch light to paper and plastic materials.</li> </ul>	<ul style="list-style-type: none"> <li>• Temperatures of the stock piles are monitored and if necessary, piles are sprayed with water to prevent dust and ignition from sparks.</li> <li>• Card, paper, cloths, plastic, etc stored for maximum of 2 weeks and wood a maximum of 1 month.</li> </ul>
Batteries in ELVs	7.9	<ul style="list-style-type: none"> <li>• <b>Car Batteries</b> – Batteries can short circuit and ignite fires.</li> </ul>	<ul style="list-style-type: none"> <li>• Cars to be depolluted as soon as possible after arrival on site and undepolluted cars will be stored separately until this has occurred. Battery shall be disconnected and removed and stored in appropriate battery container.</li> </ul>

Other batteries		<ul style="list-style-type: none"> <li>• <b>Batteries</b> can short circuit and ignite fires.</li> </ul>	<ul style="list-style-type: none"> <li>• Suitable battery boxes provided for storage of all batteries to segregate them from other wastes.</li> </ul>
Leaks and spillages of oils and fuels	7.10	<ul style="list-style-type: none"> <li>• <b>Leaks and spillages of oils and fuels</b> – leaking flammable liquids can cause fire risks that may be ignited by one of the sources mentioned in this table. A leak can present the additional issue that a flammable liquid may (unintentionally) be in close proximity to an</li> </ul>	<ul style="list-style-type: none"> <li>• Small leaks/spills can be effectively contained within the site concrete hardstanding.</li> <li>• Mobile plant is inspected daily for leaks of fuel, engine oil and hydraulic oil.</li> </ul>

		<p>ignition source and may therefore not be covered by the usual risk mitigation methods for a given ignition source.</p>	<ul style="list-style-type: none"> <li>• The site fuel and oil stores (see Plan 1) are checked daily for any fuel leaks or potential for fuel leaks.</li> <li>• The site will be operated with a sealed drainage system to sewer (Trade Effluent consent with Yorkshire Water).</li> <li>• Daily inspection of all incoming waste materials and storage areas for leaks and spills. This includes inspections on de-polluted ELVs that may contain/leak significant quantities of flammable liquids.</li> <li>• Staff will have training on how to clean up site spills before commencing work on site.</li> <li>• All staff shall follow refuelling procedure for mobile plant.</li> </ul>
Build-up of loose combustible waste, dust and fluff	7.11	<ul style="list-style-type: none"> <li>• <b>Fluff</b> – The build up off loose fluff or litter can act as kindling and ignite fires.</li> </ul>	<ul style="list-style-type: none"> <li>• The main yard hard standing is swept daily to prevent the build-up of loose combustible waste, dust and fluff.</li> <li>• Daily checks are carried out for the build-up of loose combustible waste, dust and fluff, indoors and outdoors.</li> <li>• Litter collected daily and placed in appropriate bay or container</li> <li>• Dust build-up on beams, etc. is removed monthly.</li> </ul>
Reactions between wastes	7.12	<ul style="list-style-type: none"> <li>• <b>Reactions between wastes</b> - some reactions such as oxidisation reactions can generate heat that is sufficient to ignite flammable materials.</li> </ul>	<ul style="list-style-type: none"> <li>• All materials are inspected, weighed and passed through the radiation detection equipment before off-loading.</li> <li>• The main yard has two quarantine areas (see Plan 7) for wastes deemed by the site</li> </ul>

			<p>supervisor to pose an unacceptable fire risk due to potential reactions with other waste.</p> <ul style="list-style-type: none"> <li>• Documentation required by drivers to identify themselves, the vehicles and the type of materials being brought to site, together with transfer note.</li> <li>• Daily inspection of all incoming waste materials and storage areas for leaks and spills of flammable liquids.</li> <li>• Lithium batteries are not accepted on site.</li> </ul>
Deposited hot loads	7.13	<ul style="list-style-type: none"> <li>• <b>Incoming hot waste</b> – external waste brought onto site can, if at sufficient temperature, ignite flammable materials.</li> </ul>	<ul style="list-style-type: none"> <li>• The main yard has two general quarantine areas as well as dedicated areas for compressed gas cylinders (see Plan 1) for the deposit of hot loads</li> <li>• The site supervisor will determine the risk posed by hot loads and may choose not to accept waste materials which pose an unacceptable risk.</li> </ul>



## **7. Preventing Combustion of Waste Materials with Potential to Self-heat at Ron Hull**

### **7.1. Storage Time**

Waste is processed in the 'first in, first out' principle to avoid the build-up of waste materials on site which have the potential to self-heat.

Fragmentiser fluff is held in bays for the shortest time possible (e.g. 48 hours) and is transferred off site by a licensed third-party waste operator. As per normal site operations stockpiles will not accumulate for more than 48 hours.

As per normal site operations, waste stockpiles of potential combustible materials are kept below 4 m height, 11 m length and 10 m width limits.

Recyclable materials such as plastic, card etc will be stored for a maximum of 14 days and wood will be stored for no more than one month before transferring off site for recycling.

### **7.2. Temperature control and monitoring**

The processing plant separates metals from fluff which minimises contact with oxidizable metals.

External heating during hot weather will be minimised by regular turning of waste stockpiles (mainly residual MRF waste) using a grab crane or by bucket loaders operated by trained staff. This will release heat within the stockpiles.

The surface and sub-surface of the stockpiles is monitored by a handheld infrared temperature meter (Fluke 61). The sub-surface measurements are done by a grabber crane accessing the internal waste. This is recorded in the site diary inspection list daily.

During extreme hot weather, as determined by the site supervisor, waste stockpiles most at risk from combustion will be protected from direct sunlight with suitable screens (e.g. tarpaulin sheets). Additional measures to prevent combustion from over-heating will then be in place for these stockpiles (e.g. fire risk assessment, waste turning and fire watches).

The fitting of a deluge gun over the bays that hold fragmentiser fluff bays shall allow the bays to be sprayed with water during hot weather to reduce the risk of self-combustion

A bowser is available on site to damp down other wastes if required.

### **7.3. Baled waste**

Baled waste is not accepted onto site and shall be rejected on arrival.

## **8. Management of Waste Piles at Ron Hull**

### **8.1 Stockpile Plan**

A stockpile plan is as shown in Table 4 for the site as per normal procedure and all staff will be briefed on how the plan is to be implemented and on any changes to the plan/stockpile locations. When stockpiles are to be moved/relocated, this will be recorded in the site weekly diary. Locations of the waste bays are shown in drawing ST20716-001.

Stockpiles will be arranged so that flammable materials (e.g. fragmentiser waste) are divided between non-flammable materials (e.g. ferrous and non-ferrous metals).

A minimum freeboard of 1m is required along the top and sides of bay walls to prevent fire spreading over walls (Section 11, Environment Agency 2017). This will be marked on the bay wall for ease of compliance.

In waste bays for fragmentiser waste and other combustible materials, walls are made from steel and concrete 1m thick which will prevent the spread of fire and reduce transfer of radiated heat. It is normal practice to move/relocate the fire breaks as part of the site's operations. Any fire break change will be recorded in the site weekly diary.

All material shall be stored in the largest form as far as is practically possible to reduce risk of fire. Additionally, pile size shall be minimised where possible while still allowing profitable use of the site.

No high-risk ignition source activity (e.g. welding and cutting) will be conducted near (within 6m) stockpiles.

Table 4: Waste bays and waste stockpile plan for Ron Hull Recycling, Sheffield (refer to Plan 1).

Bay	Waste	Max storage (days)	Bay dimensions (m)			Max waste volume (m <sup>3</sup> ) [tonne]	Comments
			Length	Width	Free board		
1	ARS "Plastics" Post ARS residues	6	20	10	1	(approximately 1000) [270]	
2	Dirt/ Inerts or Spare	N/A	20	10	1	N/A	Used as a fire break for 3A/B and bays 1 and 4
3A	Post fragmenter waste (Shred)	6	20	8	1	(1100) [300]	Bay has mid bay metal separation plates.
3B	Post fragmenter waste (Shred)	6	20	8	1		
4	ASR infeed	6	20	10	1	(1100) [300]	Store by nature, is next to ARS plant
5	ISS metals Mixed metals None combustible	60	20	10	1	N/A	Takes 60 days to accumulate saleable load
6	10mm Fragmentiser waste	14	20	10	1	N/A	Has high inert dirt content.
7	Metals (non-ferrous)	14	20	5	1	N/A	Smaller width bay Metal material
8	Processed ferrous metal	7	30	15	NA		Main output from site stored at end of Fragmentiser
Infeed 1	MRF Can	5	See plan 1 (Appox 25m)	See plan 1 (Appox 12.5m)	N/A	(4200) [1250]	
Infeed 2	Scrap metal and ELVs	6	See plan 1 (Appox 25m)	See plan 1 (Appox 12.5m)	N/A	(2200-3300) [1000]	Maximum depth of 2 vehicles and height of 3 vehicles.
	Flammable liquids: waste oil	60				(0.25) [0.26]	Sealed container within bund

	Flammable liquid: brake fluid	30			na	(0.25) [0.263]	Sealed container within bund
	Textiles	14	20	10	1	(100) [43]	
	Plastics	14	20	10	1	(440) [308]	
	Wood	30	20	10	1	(440) [308]	
	Paper/card	14	20	10	1	(440) [264]	
	Gas bottles	14			na	(50) [25]	Suitable cage/cages provided 6m from other combustible waste
	Batteries	14			na	(7.4) [10]	Covered container
	Oil filters	14			na	(270) [25]	Covered containers

	contaminated packaging and contaminated cleaning cloths	14			na	(4) [1.6]	Covered container
	Discarded equipment	14			na	(165) [50]	Covered container

## **9. Additional Pile Size Limitations**

### **9.1. End of life Vehicles (ELVs)**

If large numbers of ELVs are present on site and need to be stacked, ELVs shall be stored in a manner that shall enable access in the event of a fire. This shall be in rows of no more than 2 deep and a maximum height of 3 ELVs.

Depolluted vehicles and vehicles awaiting depollution will be stored in separate, clearly designated areas on impermeable surfacing within the sealed drainage system.

During the process of feeding the ELVs into the shredder, the ELVs may be present outside the described (above) arrangement but this is an interim measure as the feedstock is fed into the shredder. During this process a grabber crane shall be present in the unlikely event that the ELV needs to be removed from the pile.

### **9.2. Waste stored in containers**

All waste stored in containers shall be accessible, allowing access for firefighting from at least one side. In the event of a fire and there shall be sufficient plant on site (grabber cranes) to allow the separation of skips in the event of a fire to prevent the spreading of the fire.

### **9.3. Compost**

No composting shall take place on site. In the event that off specification compost is received it will be stored separately and will be removed from site for disposal or recovery within 14 days.

## **10. Preventing Fire from Spreading**

### **10.1. Separation Distances**

A six-metre separation shall be kept between the two main infeed piles for the shredder as well as around quarantine/emergency areas. The gas bottle cage will also be located 6m from any combustible materials. All other stock piles are separated by fire resistant bay walls or other suitable fire break (eg inert/metal waste).

At the end of the day site plant will be stored at least 6m from any combustible wastes.

### **10.2. Waste Bays**

Fire breaks between all waste bays are made of concrete blocks and steel. Ron Hull use *Legato* interlocking concrete blocks from Elite Precast Concrete which are Class A1 fire

resistant. This includes waste bays 1-4 (combustible material) and infeed bay 1 (MRF can). Bays 5, 7, infeed 1 and 2, and storage area 3 have thinner concrete/steel walls but contain non-combustible waste (i.e. ferrous and non-ferrous metals). All Legato walls provide the highest class of thermal barrier (Concrete is Class A1 Fire Resistant in accordance with clause 4.3.4.4 of EN 13369) and the industry standard in waste bay construction. Joins in the concrete walls are appropriately sealed.

Infeed Bays 1 and 2 will be separated from each other and other waste piles by a minimum of 6 m at the end of each working day.

Bay 6 consists of fragmentiser waste and is separated by Bays 5 and 7 which consist of very low combustible metal waste (ferrous and non-ferrous respectively). Fire breaks between these bays are constructed of steel which will provide 120 minutes of fire resistance for between stockpiles.

Each bay is inspected daily.

Bays are emptied in line with the maximum storage times set out above. The aim is to transfer materials to a licenced third-party waste operator for recycling, recovery or disposal as soon as possible.

### **10.3. Stockpile Locations to Reduce Fire Risk**

All waste stockpiles are located away from main heat sources (e.g. plant machinery and vehicle bays). Hot works are located in an area away from waste stockpiles.

Waste stockpiles are at least 6 m from buildings except for the shedder building where waste is adjacent to the loading hopper.

Access routes are maintained around the front of all stockpiles in the main yard of the site.

Prevailing winds for Sheffield are south-south-west ([www.windfinder.com](http://www.windfinder.com)). The site is protected from the wind by 10 m high trees and the site fence. The site is set in a valley and protected to the southwest by Concord Park. The shredder building structure protects a large proportion of the main metal and fragmentiser fluff stockpiles.

All stockpiles can be accessed by a grabber crane and bucket loader for spreading/removal/separation of burning or non-burning material in an emergency.

### **10.4. Additional Methods to Reduce Fire Spread**

The normal site process is to separate moderately combustible waste material piles (e.g. fragmentiser fluff) between material piles of low combustibility (e.g. ferrous and non-ferrous metal). In the event of a fire this would reduce flame lick and transfer of fire.

6m separation between stockpiles not separated by bay walls will be maintained and assessed at the end of each day by the site supervisor and noted in the daily diary.

Litter shall be kept to a minimum across the site.

Waste piles near the back wall (which is in part constructed of wooden railway sleepers) will be kept a minimum of 6m distance from the wall. Skips will also be used as a screen between wall and waste to prevent fire spread. The location of the stockpiles and skips as fire breaks are a usual procedure on site but any changes in locations to assist site operations will be recorded.

Flammable liquids and gas cylinders used for site operations are kept over 20m from all waste stockpiles. Otherwise they will be stored at least 6m away from other materials with appropriate containment.

Two fire hose reels (30 m length) to BS EN 671 are located on site at FP3 and FP4 on Plan 1. Water is from a mains hydrant, so the supply is adequate for tackling small to moderate fires.

Each hose can deliver 500 litres/minute of water.

Portable fire extinguishers, located at fire points FP 1-2 and 5-12, will be used for small fires.

Fire spreading to neighbouring land/property is minimised by over 5m high and secure concrete walls surrounding the site. No moderate or highly combustible waste materials are stored on boundaries directly opposite neighbouring properties. 6m fire breaks are also used. Neighbouring properties generally do not store or operate combustible/flammable materials/equipment on the boundaries to the site.

### **13. Emergency Areas**

Two areas on site are always to be kept clear for the provision of emergency/quarantine areas for waste, and one area for cylinders. These are located as follows and shown on Plan 1:

1. Between the shredder building and waste bays 1-7.
2. Adjacent the shredder feed stockpiles and west of the weighbridge office.

These emergency areas each measure 20 x 10 m.

As space on site is limited the exact location of the emergency areas is not fixed. However, Ron Hull can put 50% of the largest stockpile volume in one emergency area and provide 6m clearance around it. Only one emergency area is expected to be used at any one time – two locations means that in the event of an emergency/incident waste can be transported the least distance in shortest possible time.

### **14. Detecting Fires**

The site employs continuous vigilance while active on site with radio communication used in all site staff and processing areas for main fire detection. Fire drills are conducted monthly under the supervision of the site supervisor and whenever new staff are inducted



on site and recorded in the site diary.

Waste acceptance procedures are in place (EMS November 2021, Section 12.3, document QA16069d) to reduce the risk of fire from reactions between waste. The site supervisor and operatives are to check each load for reactions between wastes, appropriate storage locations (e.g. emergency areas), and, if necessary, reject loads of unacceptable risk.

Fire detection systems are fitted to the shredder control room, HV room, LV room and are checked during the weekly fire checks and assessed externally annually as part of the fire assessment.

Daily routine checks on the fire alarm panel/s are made to ensure normal operation. This includes a daily fire watch conducted by the site supervisor or their appointed persons, and at the close of the working day. Particular attention is given to any watch at the end of the working day to ensure a fire won't result from soldering embers of hot metal fragments after the site has shut down. In the unlikely event of a fire outside of normal working hours, 24-hour security is available to react in the event of a fire.

Records are maintained of all testing, maintenance and actuations of fire alarms and detectors on site and equipment repaired or replaced at the soonest practical instance to ensure all detection systems are maintained at the same standard as when installed to manufacturer's specification.

The daily diary for the site must note stockpile volumes and waste types for operational and non-operational hours. Potential fire risks for stockpiles are to be noted by the site supervisor and actions to reduce such risks noted.

Out of hours on site security is now provided by a third-party security contractor. This includes the operation of fire alarms on site and reports of fire.

## **15. Suppressing fires and Firefighting Techniques**

A fire in the operational area is a possibility and should be dealt with in a similar fashion to a fire in a building. The site supervisor should be informed immediately and take steps to inform the local fire brigade who will take the decision on whether to attend or not.

Generally, no significant quantities of combustible waste are stored inside buildings for greater than 2 hours and therefore a fire suppression system is not considered necessary. This includes the non-ferrous shed shown in Plan 1 which is always manned during operational hours and has three fire points within the building. Ron Hull will review fire suppression within site buildings annually or when significant changes occur in operations.

No automated suppression systems are deployed on site with the dousing system within the fragmenter operated manually in the event of a fire. The dousing unit acts to suppress any fire that occurs within the fragmenter processing area but is only used if the multiple fire points situated throughout the fragmenter are insufficient to extinguish the fire.

Under Section 15 of Environment Agency 2017 guidance the site can be considered designed for active firefighting. This includes the site operating bucket loaders and grab cranes to move waste materials if needed. There is ample space on the main yard area for two emergency bays and access for emergency services. Staff have appropriate equipment and training in fire detection, fire drills, emergency communications and evacuation. Under supervision from the site supervisor and other experienced team members, staff may be able to suppress minor fires.

A fire hydrant is located in the north corner of the site and twelve fire points which include portable fire extinguishers and fire hoses (FP3 and 4) are located on site (see Plan 1).

All tipping operations must be suspended and any vehicles or plant in the vicinity of the fire evacuated, if it is safe to do so.

Immediate action will include:

1. The site supervisor must be informed immediately.
2. Suspend all tipping operations and evacuate all personnel.
3. Site supervisor must appoint a member or members of staff to assist any known disabled persons during the evacuation to the fire assembly point wherever this is necessary, providing the risk to those involved is low.
4. Remove any mobile plant in the vicinity of the fire if it is safe to do so.
5. Using available mobile plant (bucket or blade) the fire should be smothered with inert material, if available, working from the outside edge of the fire towards the centre. On site hoses and water would be mobilised at this point.
6. Another machine should be standing by with a second operator in case the first gets into difficulty.
7. In no circumstances should a machine be driven into the centre of the fire, as this will endanger both driver and machine.
8. If the fire is not completely extinguished and continues to burn below the surface, then digging out and spreading on top of inert material should isolate the burning material, after which it should again be smothered. (If safe to do so)
9. In certain circumstances it may be necessary to call the emergency services if there is a risk of the fire spreading.
10. The site supervisor or next senior person will make a check of all visitors, contractors and staff to make sure everybody is accounted for.
11. The site supervisor or next senior person will direct the emergency services to any casualties/incident areas.
12. The site supervisor will send a report of the incident to the Ron Hull directors, and, if necessary, to the Environment Agency.
13. A careful watch should be kept ensuring all burning material has been fully and permanently extinguished. This would be done in conjunction with south Yorkshire fire and rescue and their thermal imaging camera.

### **15.1. Emergency access**

During normal working hours, access to the site will be via the main entrance on Grange Mill Lane. A site representative will meet the emergency services at the main entrance to help

coordinate the incident.

Out of hours access can be obtained by contacting the site supervisor.

As per Plan 1, Emergency services can access the main waste storage yard by either going northward at the weighbridge or past the weighbridge and turn south to access the remainder of the yard. In summer 2015, South Yorkshire Fire and Rescue found site access to be adequate in the event of an emergency. The site is assessed by South Yorkshire Fire and Rescue each year.

Emergency access to the site is from the main entrance on Grange Mill lane, the Eastern border of the site. Firefighting vehicles will be able to enter through this entrance enabling access to the whole site. Importantly, it is possible for fire engines and their hoses to reach all sides of the shredder in the event of a fire.

## **16. Water supplies**

The worst-case scenario is for a 300 m<sup>3</sup> stockpile of fragmentiser waste (fluff) catching fire. This will require more than 2,000 litres/minute for 3 hours to suppress, according to the Environment Agency 2017 guidance (i.e. a 300m<sup>3</sup> stockpile). In this instance, all best measures will be employed by site staff to limit the spread of fire, utilising mobile plant to move away materials, use the emergency areas and alert the emergency services. In the initial stages of any fire the hose reels at site-based fire points would be used to either extinguish a fire or “hold the line” and stop the fire spreading until the fire and rescue service arrive.

In the event of a fire the site has access to a 100mm fire hydrant at the entrance of the site. This is thought to be enough for use by fire crews to control any fire. However, if greater volumes of water are needed it would be possible to either run hose from larger hydrants to the site, or to utilise the river water as a source of fire firefighting water. At this stage, command would be passed to the fire service who would assess the most appropriate way of sourcing fire water to best tackle the fire.

As part of ongoing site improvements, firefighting equipment will be reviewed by Ron Hull management and qualified fire professionals consulted on appropriate measures/improvements and the FPP amended accordingly should any changes be deemed appropriate.

## **17. Impact Reduction**

### **17.1. Air Emissions**

Likely emissions to air will be in the form of smoke during the emergency response. Due to the proximity of the M1 motorway 50 m to the east of the site (Plan 2), there is a highways safety risk due to the prevailing wind direction (SSW). The smoke will be minimised by any fires being tackled as early as possible by plant separating out burning material to the

emergency area and/or the burning material smothered with any inert waste available on site. Smaller areas of any burning material can then be doused with water.

## **17.2 Water Emissions**

The site has a Trade Effluent consent with Yorkshire Water for pumping contaminated surface water from a 228 m<sup>3</sup> drain manifold along the western edge of the site (Plan 1) to a public foul sewer on Grange Mill Lane. The works that is served by the sewer is Blackburn Meadows STW, one of the largest in the UK.

The 228 m<sup>3</sup> drainage channel can be used to retain water on site and can be used in the event of a fire emergency. Up to 360m<sup>3</sup> of water might be used over three hours, if following the Environment Agency's guidance. If the volume of fire water was exceeded, water can be held on the site surface. From the trench >150 mm of freeboard exists to the site boundary.

Therefore, it is likely that all fire water used on site will be contained by the site's drainage channel and the boundary wall. At least, fire water to tackle a 300 m<sup>3</sup> stockpile over 3 hours or extinguish a fire in 4 hours (Environment Agency 2017 guidance) can be accommodated in the drainage channel and on the impermeable site surfacing. If continuing for longer, tankering of effluent or discharge to sewer would be possible.

Following a fire the water can be tested before releasing it to sewer or, if necessary due to the levels of contamination, sending it to a permitted site by tanker.

## **17.3 Land Emissions**

There are no likely emissions to land as the site is contained by boundary walls and an impermeable surface across the site. Following a site fire, any residual material/ash shall be contained and tested at an accredited lab to clarify whether the material must be disposed of as hazardous waste. If necessary, the waste shall be disposed of responsibly by means of a licenced waste carrier to a permitted site. If it is thought that there is any possible pathway for hazardous wastes to have entered the soils, samples shall be taken, analysed, and appropriate measures taken to remediate.

## **18. During and after an incident**

During and after a fire at the Ron Hull site on Grange Mill Lane, the following actions will be put in place. These actions will depend on the severity of the fire and its impact on site capability, infrastructure and legal constraints.

### **Emergency Contact:**

**Martin Booth – 077257 92679**

**Nigel Hull – 07957 377232**

1. All tipping operations must be suspended and any vehicles or plant in the vicinity of the fire evacuated. Waste acceptance on site will be halted. This may include diverting waste to alternative sites if appropriate to do so.

2. Ron Hull site directors, if directed to do so, will notify local residents and businesses of the following:
  - a. Date and time of the fire.
  - b. The likely impacts the fire caused to those affected.
  - c. Nature of the fire, including the combustible materials, and likely health impacts.
  - d. Emergency actions taken.
  - e. Contact details.
  
3. Clearing and decontaminating the site will include the following:
  - a. The site must first be declared safe by Ron Hull director and/or the site supervisor.
  - b. The site supervisor will send a report of the incident to the director and, if necessary, the Environment Agency.
  - c. Appropriately trained staff, under direction, will clear the yard hardstanding of fire damaged waste.
  - d. Fire damaged waste is to be held in the emergency areas awaiting disposal under an appropriate waste code and transfer note.
  - e. Water in the main drainage channel will be visually inspected by the site supervisor. If suspected of elevated contamination, the site supervisor is to contact **Yorkshire Water on 03451242424** with regards to the Trade Effluent consent. A liquid waste carrier may need to be considered for disposal of contaminated surface water.
  - f. The surface water drain should be protected from excessive solids entering.
  
4. For the site to become operational again the following steps must be taken:
  - a. A full inspection of any fire damaged infrastructure by the site supervisor is required. Where necessary, a qualified engineer will be brought onto site to make the inspections and provide a safety report.
  - b. Any mobile or fixed plant affected by a fire will need to be fully operational to manufacturer's specifications and Ron Hull procedures.
  - c. All site staff briefed on the incident as an educational tool to prevent reoccurrence. Lessons learned review of work and fire procedures conducted to ensure any changes necessary for operation procedures are implemented prior to operations commencing and record this in site records.
  - d. Fire alarms tested.
  - e. Used or damaged firefighting equipment replaced and certified serviceable.
  - f. Main operational areas cleared of fire damaged waste to emergency areas.

## **19. Continued Improvement**

As part of Ron Hull's commitment to reducing risk of fire on site, work shall continue to address the areas of concern outlined in the Schedule of Improvement for Site Resilience and Response, shown at the beginning of the Fire Prevention Plan.

Additionally, Ron Hull shall run fire drills in which all staff shall practice the fire responses outlined within this document twice a year. Following the completion of such drills areas of weakness shall be discussed and any necessary improvements made to the Fire Prevention Plan.

# Plans

Plan 1– Grange Mill Lane Fire Prevention Plan

Plan 2– Sensitive Receptors

Plan 3 – Drainage

Plan 4 – Site Layout

**NOTES**

- DO NOT SCALE.
- This drawing is to be read in conjunction with all other relevant drawings.
- All boundaries are approximate.

**KEY**

- Fire Point
- Flammable Store
- Waste Store Bay
- Emergency Area
- Waste reception area
- Quarantine area
- Legato Fire Break
- Emergency Route
- ▲ Sensitive Receptors (see Plan 2)
- Site Boundary
- Fire hydrant

DESCRIPTION	REV	DATE	CHKD	APPR
Fire point revisions	c	20/03/19	CS	CS
Infeed, cylinder and quarantine area update	b	12/4/18	MM	MM
FPP report revision	a	3/5/17	AP	PS

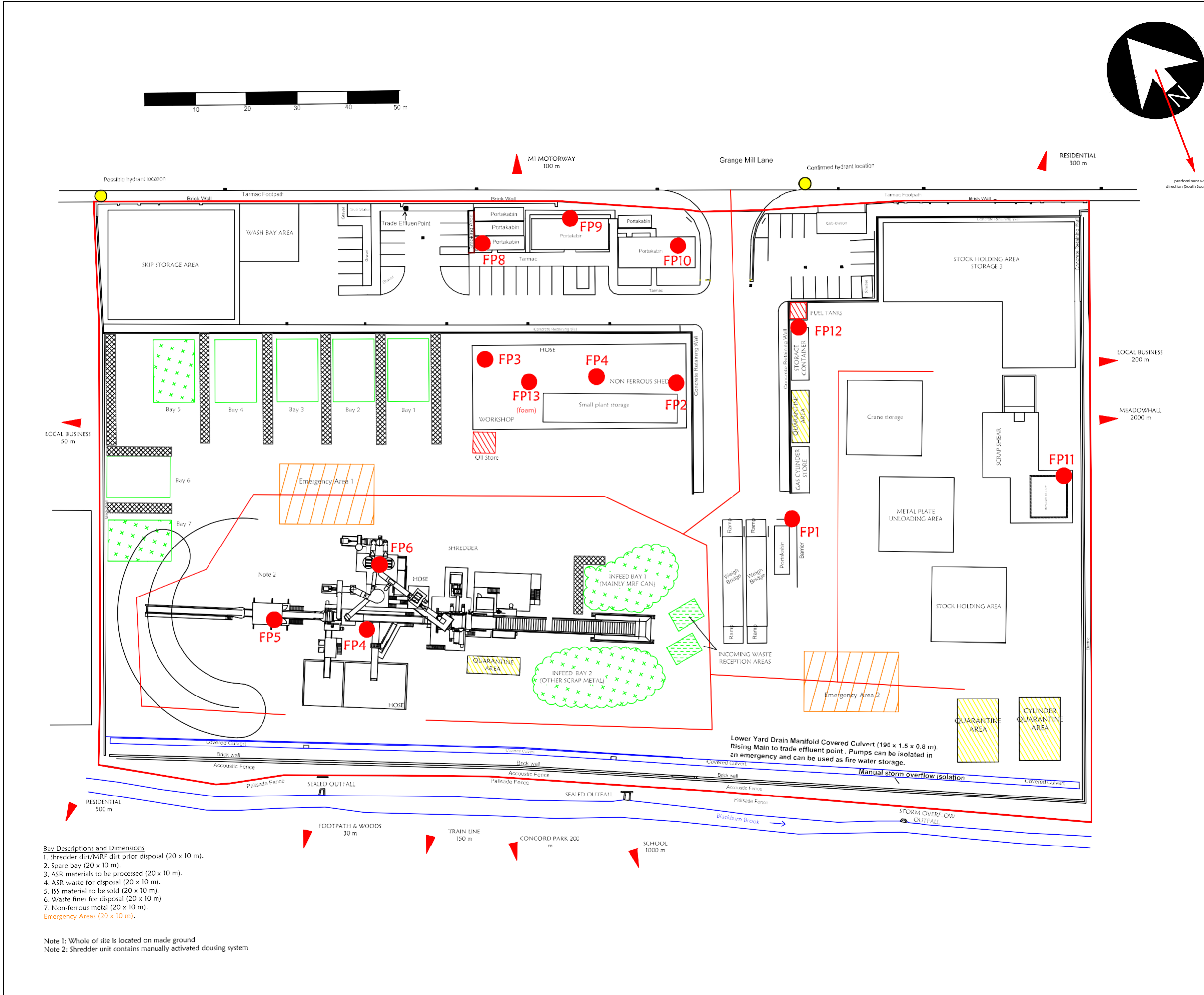


CLIENT  
**Mettalis Recycling Ltd**

PLAN NO.  
**Plan 1**

PLAN TITLE  
**Fire Prevention Plan - Site Plan**

DRAWN	PS/CS	PROJECT ENGINEER	CS
CHECKED	CS	APPROVED	MM
DATE	20 / 03 / 2019	SCALE	1:750@A3
DRAWING NUMBER	723010	REVISION	C



- Bay Descriptions and Dimensions**
- Shredder dirt/MRF dirt prior disposal (20 x 10 m).
  - Spare bay (20 x 10 m).
  - ASR materials to be processed (20 x 10 m).
  - ASR waste for disposal (20 x 10 m).
  - ISS material to be sold (20 x 10 m).
  - Waste fines for disposal (20 x 10 m).
  - Non-ferrous metal (20 x 10 m).
- Emergency Areas (20 x 10 m).**

Note 1: Whole of site is located on made ground  
 Note 2: Shredder unit contains manually activated dousing system







# Appendices

A -Maintenance documentation

B - Daily/weekly inspection checklist

C - Safe system of work procedure for hot works



# DAILY/WEEKLY INSPECTION CHECKLIST



Week Commencing: 5/12/19  
 Silo Manape s Name: d./

Inspected Items	Frequency	Mon	Tue	Wed	Thur	Fri	Sat	Sun	TCM Weekly Audit	Date CAR raised/ Exception Report Ref	
											Initials
Person Completing the Checklist	Daily	Mh	Mh	Mh	Mh	Mh					
<b>All Facilities</b>											
1 Condition of Site ID Board & Signs	Weekly	-									
2 Condition of Access, Site Road & Hardstanding	Weekly	-									
3 Condition of Impermeable Pavement	Weekly	-									
4 Site Building & Welfare	Weekly	-									
5 Condition of Interceptors	Weekly	-	External Checked/Emplied - Yes / No								
6 Waste Type, Quantities & Storage	Daily	-	-	-	-	-					
7 Waste Acceptance / Inspection & Duty of Care	Daily	-	-	-	-	-					
8 Condition of Fencing, Gates & Security	Daily	-	-	-	-	-					
9 Condition of ALL Waste Containers (General / Oil /etc)	Daily	-	-	-	-	-					
10 Condition of Yard Lighting System	Daily	-	-	-	-	-					
11 Condition of fuel & storage tanks, inc containment systems	Daily	-	-	-	-	-					
12 Other liquid storage: Availability of spillage kit	Daily	-	-	-	-	-					
13 Fire; Availability of emergency equipment (inc vehicles)	Daily	-	-	-	-	-					
14 Surface Water Management e.g. Drainage System	Daily	-	-	-	-	-					
15 Control of Litter inc. fly tipping	Daily	-	-	-	-	-					
16 Control of Odour	Daily	-	-	-	-	-					
17 Control of Dust	Daily	-	-	-	-	-					
18 Control of Noise	Daily	-	-	-	-	-					
19 Control of Pests / Vermins	Daily	-	-	-	-	-					
20 Control of Mud / Debris on Road	Daily	-	-	-	-	-					
21 Are Fire Exits Clear and Operational	Daily	-	-	-	-	-					
22 Technically Competant Person Hours on Site											
23											
24											
25											
26											
27											
28											
29											
30											

@ = satisfactory; X - UnaaMsfactory; Ni • Not Inspectedi MA = Hot Appl1cable

Note:

1) Checklis\ should be conpleted at the end of each day la record he awucrd and exceptJws et lhat days operations.

2) If the unsatisfactory condition is minor and resolved the same day, remedial action/ comments to be recorded over page. Otherwise Manual Corrective Action Report (CAR) should be raised with Date CAR raised/ Exception Report reference number recorded on right hand column.

TCM Signature: A Davies

Date: 4.2.19



ETTALIS RECYCLING

DAILY/WEEKLY INSPECTION CHECKLIST

Site:

SHEFFIELD

Week Commencino:

4/2/19

Monday  
 SUREDOOR  
 CAN PILE TEMP 2.9°C DIRT PILE TEMP 3.1°C

Tuesday  
 SUREDOOR  
 CAN

Wednesday  
 SUREDOOR  
 TU  
 CAN PILE TEMP 2.3°C DIRT PILE TEMP 3.7°C

Thursday  
 SUREDOOR / SUREDOOR  
 CAN PILE TEMP 3.1°C DIRT

Friday  
 SUREDOOR  
 CAN PILE TEMP 4.1°C DIRT PILE TEMP 5.0°C

Saturday  
 2<sup>nd</sup>

Sunday

Other Comments:



## Safe System of Work – 09

### Hot Work

<b>DESCRIPTION</b>	Alterations and repairs involving welding, brazing, cutting or similar operations using the application of heat, are often known as “ <b>hot work</b> ”. There are special risks associated with this work when undertaken on plant, tanks, vessels, or pipelines that contain explosive or flammable substances but those risks are not covered in detail in this safe working guidance.
<b>MAIN HAZARDS</b>	Fire / Explosion / Ignition Slips, Trips and Falls Traffic / Plant Movements Work Equipment / Tools Manual Handling Weather Conditions



<b>CONTROL MEASURES</b>	<p>This work should be preferably undertaken in a properly arranged workshop. Where this is not practical the following precautions should be observed.</p> <p><b>PRECAUTIONS</b></p> <p>Combustible materials within range of the sparks should be removed. Keep your cutting equipment and work area clean and tidy.</p> <p>Floors should be cleared of waste and storage, and be swept. Any combustible materials which cannot be moved should be protected by non-combustible screens, for example, metal or glass fibre.</p> <p>Combustible flooring should be protected by covering it with sand or overlapping non-combustible sheets. It is particularly desirable to protect or clean thoroughly floors impregnated with paint, oil or grease which can spread fires rapidly.</p> <p>Floors and walls should be checked for any gaps through which molten metal or sparks could pass. These should be filled with non-combustible materials.</p> <p>Combustible materials which could be ignited by conduction should be removed from the work-piece, metal walls or partitions.</p> <p>When not being used, hot tools should be placed in their correct holders or containers.</p> <p>The area should be well ventilated to prevent the build up of toxic or noxious fumes.</p> <p>Oxygen should never be released into the air, either deliberately, to sweeten the air or inadvertently when using incorrect ignition procedures. The danger of fire and explosion is increased if there is excess oxygen in confined working spaces.</p>
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The area should be re-inspected 1 hour after stopping work and thoroughly checked for signs of heat which could lead to combustion and fires.

If required during cutting and welding operations, a fire watchperson should be nearby equipped with fire-fighting appliances, this should consist of either a hose reel or a 9-litre water-type fire extinguisher. They are not required to wear dark safety eyewear as this will restrict their vision.

Fires in or near electrical arc-welding equipment can be extinguished with carbon dioxide or dry powder extinguishers.

**Hot Work Permits** - A hot work permit system should be operated to reduce associated risks. Under this system no employee or outside contractor may start any hot work operation until he has obtained a permit, valid for a limited period of time, to carry out the work. Persons responsible should have a knowledge of the correct precautions and ensure that the work area is made as safe as possible before work starts; that precautions are taken while work is in progress and the area is checked for heat sources 1 hour after the work is completed.

**Hot Work on Plant or Vessels that have contained either Explosive or Flammable Substances.**

All traces of flammable or explosive substances must be removed from any plant, tank or vessel that has contained flammable or explosive substances to prevent explosion/ fire and injury to personnel.

This is usually undertaken by steaming or boiling out and is a specialised process (carried out by contractor before we get the item). If facilities are not available for ensuring the removal of flammable materials, hot work should not be undertaken.

A no smoking policy is in place for all workshops and strictly adhered to.

Keep gas bottles in an upright position for correct operation and report any damaged equipment to your supervisor.

Wear suitable protective clothing, gloves, apron etc. Keep clothing buttoned to the neck and ensure arms are covered.

### **TRAINING**

All persons involved in hot work should be fully trained in the plant/ equipment and procedure to carry out these works and be fully aware of the risks involved in the task.

They should understand the precautions that need to be taken and the reasons for them. They should also know how to operate fire fighting equipment effectively and know which type of extinguisher to use for a particular type of fire.

Where work is undertaken on pipes, tanks, drums or similar vessels, that have contained flammable or explosive substances, they should be free from these before works commence.