Fire Prevention & Response Plan

Prepared to support application to convert SR Permit BB3300GN to

Bespoke Environmental Permit relating to End-of-Life Vehicle depollution and metal recycling operations at the Site

Address

H D White Ltd,

Ford Airfield Industrial Estate,

The Factory,

Ford,

Yapton,

BN18 0HY

Prepared on Behalf of

H.D.WHITE LTD
Scrap Metal Recycling

Prepared By:

Beyond Waste Ltd

Beyond Waste
Making a difference since 2003

Plan version: v1.1

Date of plan: 05.04.2023

Client: **H D White Ltd**

Project: **Bespoke Permit Application**

Job No: **HDWhite/FPP/001**

Title: **Fire Prevention & Response Plan**

Author	**Alan Potter**
	CEnv, MCIWM, UKLA, IEMA qualified auditor
Signed	
Date	
Issued to	Jon White
Authorised	
Signed to confirm acceptance	
To be reviewed	Annually or as necessary

Distribution List
Environment Agency (EA)

Site Details

Site name: The Factory

Site address: Ford Airfield Industrial Estate, Yapton, BN18 0HY

Operator name: H D White Ltd

Grid reference: SU 99006 03132

Key Site Information

Environmental Permit Number: EPR/BB3300GN

Permit Holder: H D White Ltd

Site Contacts: [redacted]

Responsible Person (TCM): [redacted]

Emergency Contacts and Keyholders: [redacted]

Main Contractors: IAS ENVIRO

Emergency/External Contacts

Police, Fire, Ambulance: 999
Environment Agency: 0800807060 (24-hour incident line)
West Sussex Fire and Rescue (Littlehampton Watch)

This plan is to be read by all staff members and contractors working on site

Introduction

This Fire Prevention & Response Plan (FPRP) has been produced in accordance with Environment Agency guidance *Fire prevention plans: environmental permits Updated 11 January 2021 (the FPP guidance).* The plan fulfils the guidance requirements following the FPP guidance headings.

Topics within FPP guidance Updated 11 January 2021	
1.Fire prevention objectives	1) Minimise the likelihood of a fire happening. 2) Aim for the fire to be extinguished within 4 hours. 3) Minimise the spread of fire within the site and to neighbouring sites.
2. Who this guidance applies to	This guidance applies to operators from the waste metals (scrap metal and depolluted ELV shells) sector that store any amount of combustible waste. This FPRP has been produced to support an application for a bespoke permit to regularise activities on an existing site that benefits from a SR2012 No.14 permit. The operations at the site include scrap metal and WEEE recycling, as well as scrap metal swarf storage.

Topics within FPP guidance (Updated 11th January 2021)	Specific Risk Reduction Element	Action/Measure
4. Combustible Material		
4. Combustible waste	Identify combustible wastes at the site.	The primary wastes that present a fire risk at the site are ELVs (un-depolluted and depolluted), lead acid batteries, and tyres. Flammable liquids arising from the ELV depollution operation are stored in DSEAR compliant tanks in the tank farm.
4.2 Combustible non-waste	Consideration and mitigation for combustible liquids	Diesel and flammable liquids used for plant/equipment on site is stored in DSEAR compliant tanks in the tank farm adjacent to the depollution building. There will be 6 tanks in total (brake fluid, engine oil, transmission oil, antifreeze, petrol and diesel). Gas bottles are isolated in a cage.
5. Using your Fire Prevention Plan		
5. Using your fire prevention plan	You must have regular exercises to test how well your plan works and make sure that staff understand how the plan works.	Fire drills are undertaken every 6 months. Fire-fighting equipment is checked/inspected daily.
6. Fire Prevention Plan Contents		
6.1 Activities at your Site	Plan must provide details of the different types of activities you carry out at the site.	The activities at the site are the acceptance, storage and depollution of ELVs, plus the acceptance and processing of WEEE (LDA) and Scrap Metal, including metal swarf. The flow chart in Appendix 1 shows the operations of the site.
6.2 Site plans and maps	Site plan and sensitive receptors within 1km of the site.	See Appendix 2 for the Site Provisions Plan. Appendix 3 shows receptors within 1 km of the site and contact details of the identified receptors. See Appendix 4 for Site Drainage Plan.
7. Limiting Common Causes of Fire		
7.1 Arson	Secure Boundary	The site is secured by a 4.5m high concrete panel wall on the north, east and west rear end of the site, with the front southern, eastern and western sides of the site perimeter

<table>
<tr><td></td><td></td><td>being secured by a 2.3m high steel palisade fencing. Access can only be gained via a steel palisade gate, which is kept securely locked when the site is not in operation and so access is controlled and only authorised by members of H D White's staff.</td></tr>
<tr><td></td><td>Security Monitoring</td><td>There is 24/7 CCTV monitoring of the site, both of the external yards, and in all of the buildings. This CCTV connects to a mobile device which is accessible and monitored by the Site Manager at all times.</td></tr>
<tr><td>7.2 Plant and Equipment</td><td>Document maintenance and inspection program for static and mobile equipment.</td><td>The plant and equipment used on site is shown in the Table below. Routine maintenance is undertaken on a preventative basis.
<table>
<tr><th>Plant</th><th>Purpose</th><th>Quantity</th></tr>
<tr><td>ELV Depollution Equipment</td><td>To undertake the depollution of ELVs</td><td>1 set</td></tr>
<tr><td>Grab Crane (tracked or wheeled)</td><td>Move depolluted ELV to processing pile</td><td>2</td></tr>
<tr><td>Forklift (Diesel or electric)</td><td>Move undepolluted ELV to depollution area</td><td>2</td></tr>
<tr><td>Hydraulic shear</td><td>Compact depolluted ELV shells for onward recycling</td><td>1</td></tr>
</table></td></tr>
<tr><td></td><td>Vehicles fitted with fire extinguishers.</td><td>Not applicable as no vehicles are used on site.</td></tr>
<tr><td></td><td>Keep mobile plant that isn't being used away from combustible waste.</td><td>Mobile plant is parked overnight away from fire risk waste, as shown in the Site Layout Plan in Appendix 2</td></tr>
<tr><td>7.3 Electrical faults including damages and exposed electrical cables</td><td>Electrics on site must be fully certified by a qualified electrician and written procedures must be in place that set out regular maintenance.</td><td>Checks of the site electrics are undertaken by a qualified electrician on a routine, preventative basis.</td></tr>
<tr><td>7.4 Smoking materials</td><td>You must apply a no smoking policy or have designated smoking areas a safe distance from combustible wastes to prevent accidental ignition.</td><td>Smoking is not permitted at the site.</td></tr>
</table>

7.5 Hot works	You must ensure safe working practices when carrying out hot works and carry out a fire watch for a suitable period after hot works have ended.	Hot works using both an oxy propane cutter and a plasma cutter occur on site subject to a Hot Works prior permit procedure. See Appendix 5 for Procedure checklist.
7.6 Industrial heaters	You must have written procedures that set out the use and regular maintenance of industrial heaters.	No industrial heaters are used at the site.
7.7 Hot exhausts	Carry out a fire watch at regular intervals during the working day.	The exhausts of mobile plant being used will be inspected midway through the day, and at the end of the working day, to ensure no debris, dust, or fluff has built up on the hot exhausts or engine parts. If any has, it will be removed from the exhaust and disposed of safely and appropriately.
	Fire watch procedures in place (minimum 1 per day/shift).	A minimum of 2 fire watches will be conducted throughout the working day. This includes, but is not limited to, halfway through the working day, and at the end of the working day.
7.8 Ignition sources	No source of ignition within 6m of combustible or flammable wastes.	A 'no naked flame' policy will be applied to the site.
7.9 Batteries in ELV's	Batteries left connected in un-depolluted vehicles can short circuit and cause fires. You must disconnect or remove batteries from un-depolluted vehicles before they're stockpiled for de-pollution.	Following an initial inspection, batteries will be disconnected/removed from incoming ELVs,
7.10 Leaks and spillages of oils and fluids	Prevent fuels and combustible liquids leaking or trailing from site vehicles.	See Appendix 6.
7.11 Build-up of loose and combustible waste, dust and fluff	Documented procedure for regular inspection and cleaning of site to prevent build-up of loose combustible debris, dust and fluff.	The checklist in Appendix 7 will be used to ensure regular inspection and cleaning of the site.
7.12 Reactions and waste	Written procedures for waste acceptance check to prevent reactions between incompatible or unstable wasters.	Strict waste acceptance procedures are enforced at the site.
7.13 Deposits of hot loads	You must have the process in place to quarantine hot loads and an appropriate quarantine area.	All swarf accepted is in covered skips, avoiding direct exposure to sunlight and build up of heat. Incoming loads are inspected prior to deposit.

8. Prevent Self-combustion		
8.1 Manage storage times	You must make sure that any combustible wastes are stored for less than 6 months. If you are storing combustible wastes in the maximum pile sizes for longer than 3 months, you must show what extra measures you will use to prevent self-combustion.	Combustible waste will not be kept for longer than 3 months under normal operation.
	You must have good stock rotation for all stored material. Your fire prevention plan must show that you have a clear method to record and manage the storage of all waste on site. You must show how you will follow the 'first in, first out' principle.	Three separate types of swarf are accepted, each kept within their own covered bay. Swarf is received on site in quantities of 1 ton (small bins) and 6 tonnes (skips). As soon as a lorry load is reached, (10-15 tonnes), the stock is removed from the site. Provision for an additional 5 tonnes per bay is made to allow for possible delay in outgoing loads.
8.2 Monitor and control temperature	Monitor sub-surface temperatures and routinely turn piles to ensure the waste remains cold.	Swarf stored in covered bays which shield from direct sunlight. Other waste piles will be monitored for indications of heat build up by visual inspection – heath haze, steam and vis touch (if necessary)
	Take into account external heating during hot weather and consider shading waste from direct sunlight or using other techniques to enable heat generated within the pile to be released.	As above
8.3 Waste bale storage	If stored longer than 3 months, you must outline the sampling and testing protocol you will use to make sure you assess a representative number of bales (minimum 10%) during monitoring.	No more than 40 baled ELVs will be stored on site at any one time. Stacked 3 deep by 4 wide up to 3 high. Giving 3x12 layers. Bales will not be stored for longer than 3 months.

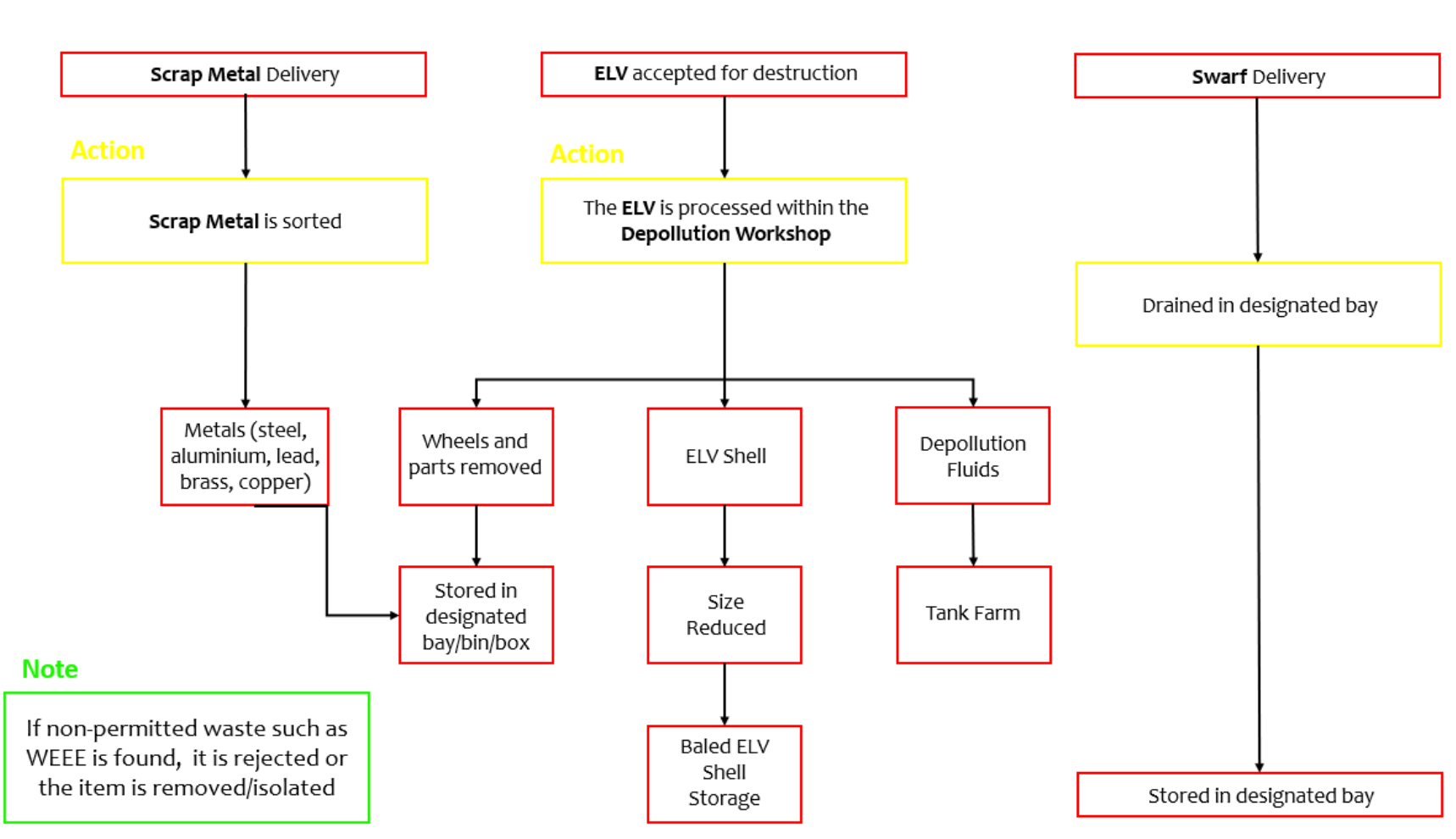
<table>
<tr><th colspan="3">9. Manage Waste Piles</th></tr>
<tr><td>9. Manage waste piles</td><td>Store the waste materials in their largest form.</td><td>Yes waste will be stored in the largest form.</td></tr>
<tr><td>9.1 Maximum pile sizes</td><td>For all waste piles, the maximum height allowed is 4 metres. For all waste piles, the maximum length or width allowed (whichever is longest) is 20 metres. The table in 9.1 outlines the maximum volumes for each type of waste.
You will need to consider the design, access and layout of a building when storing waste so a fire can be extinguished easily.</td><td>
<table>
<tr><th>Waste Type</th><th>Maximum Quantity</th><th>Storage Arrangement</th></tr>
<tr><td>UNDEPOLLUTED ELV</td><td>10</td><td>Stacked x2.5 wide in front of ELV depollution workshop</td></tr>
<tr><td>DEPOLLUTED ELV SHELLS</td><td>10</td><td>Stacked x2.5 wide in Oversize/ELV bay (Bay 8)</td></tr>
<tr><td>BALED DEPOLLUTED ELV SHELLS</td><td>30-40 (bale 1xx1x1.5)</td><td>Stacked 3 deep by 4 wide up to 3x12 layers in front of steel cuts (Bay 10)</td></tr>
<tr><td>BATTERIES</td><td>50 box fulls (c50t)</td><td>Battery boxes inside non-ferrous building (roughly 1 tonne per box x30)</td></tr>
<tr><td>TYRES</td><td>28.33 (28.3)m^3</td><td>Loose in bay in depollution workshop</td></tr>
<tr><td>SWARF</td><td>73.65 (73.7)m^3</td><td>Loose in bays under zapp shelter (Bays 1-3) (currently transferred to bins)</td></tr>
<tr><td>Baler Feedstock</td><td>566.5 (567)m^3</td><td>Loose pile - max 4m high (Bay 9), 30m x 34 m floor measurement</td></tr>
</table>
</td></tr>
<tr><th colspan="3">10. Where Maximum Pile Sizes Don’t Apply</th></tr>
<tr><td>10.2 Waste stored in containers</td><td>If you store waste in containers that can hold more than 1,100 litres, each one must be accessible so any fire inside can be put out. If you have a fire, you must be able to move containers as soon as it is reasonably practicable.</td><td>Any containers holding combustible waste will be kept to ensure access from at least one side is maintained at all times (to allow rapid access to extinguish fire in contents)</td></tr>
</table>

11. Prevent Fire Spreading		
11.1 Separation distances	Store your combustible waste piles with a separation distance of at least 6 metres. Have a separation distance of at least 6 metres between waste piles and the site perimeter, any buildings, or other combustible or flammable materials.	Perimeter and internal walls formed of fire proof concrete panels.
11.2 Fire walls and bays	Firewalls and bays must be designed to resist fire (both radioactive heat and flaming) and have a fire resistance period of at least 120 minutes to allow waste to be isolated and to enable a fire to be extinguished within 4 hours. Firewalls must show compliance with all factors outlined in 11.2.	Pre-formed concrete is accepted as being fireproof and hence, panel walls meet the required performance standard.
12. Quarantine Area		
12. Quarantine area	The quarantine area must be within the boundary of the site for which a permit applies. You must have a quarantine area which is large enough to: Hold at least 50% of the volume of the largest pile. Have a separation distance of at least 6 metres around the quarantined waste.	See Appendix 2 Site Layout Plan
13. Detecting Fires		
13. UKAS accredited detection system	Your detection system should be proportionate to the nature and scale of waste management activities you carry out and the associated risks.	Not UKAS accredited but considered to be excessive for the size of operation.
14. Suppressing Fires		
14. UKAS accredited in building suppression system	You must make sure the design, installation and maintenance of all your automated suppression equipment is covered by an appropriate UKAS-accredited third-party certificate scheme.	There are two pressure washers and a number IBCs that could be used to extinguish a fire in buildings.

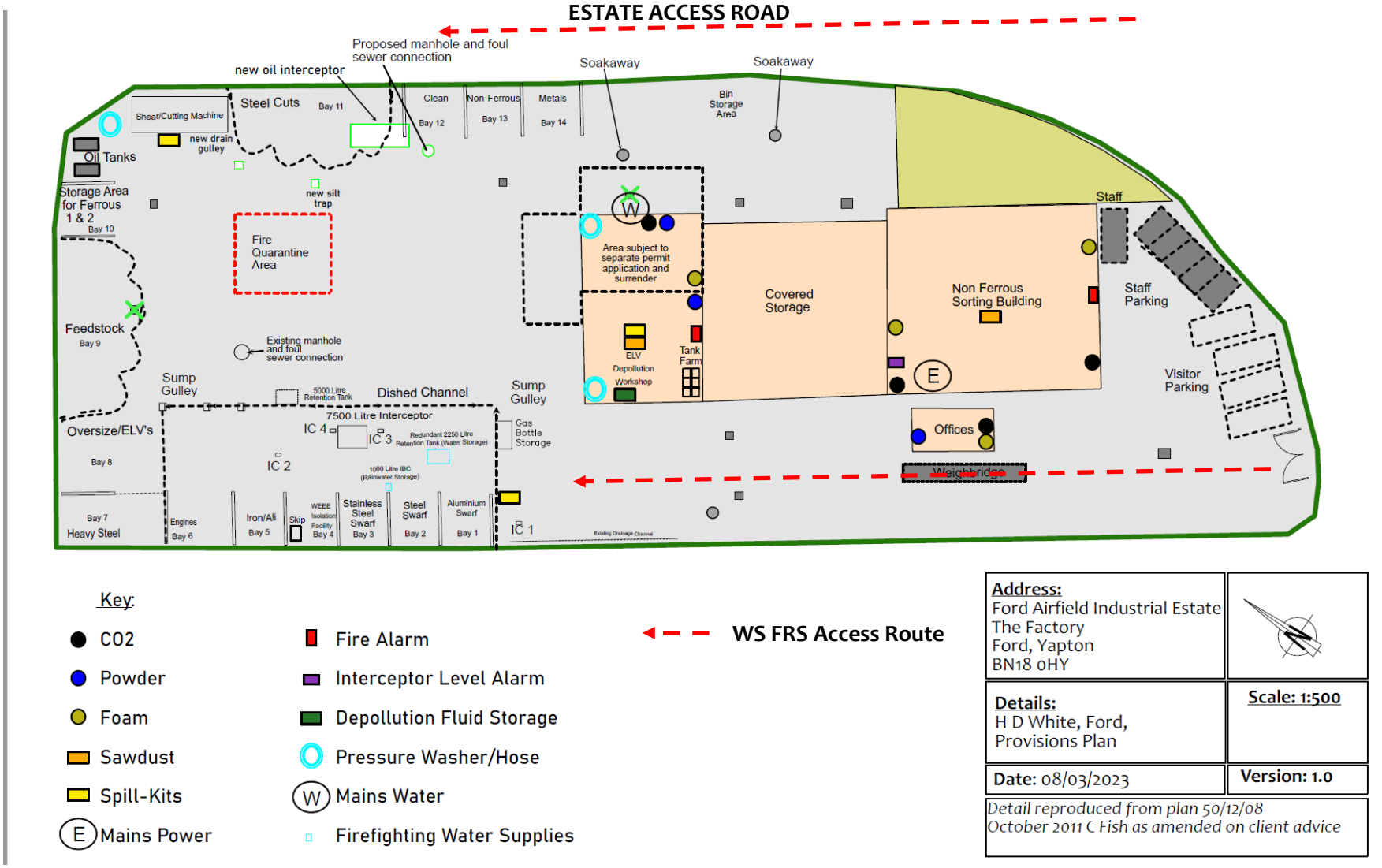
15. Firefighting Techniques		
15. Fire fighting	You must design your site to allow for active firefighting, procedures must be in place in the event of a fire.	Wastes stored within the site will be readily accessible.
16. Water Supplies		
16. Water supply	A worst-case scenario would be your largest waste pile catching fire. You'll need a water supply of at least 2,000 litres a minute for a minimum of 3 hours for a 300 cubic metre pile of combustible material. Site-specific calculations should be included.	The West Sussex Fire & Rescue service confirm there are hydrants in proximity to the site which would be utilised in the event of a fire. The closest hydrant is located on Rollaston Park Road, approximately 120m away from the site entrance. As well as the use of hydrants, there are 5 CO_2 fire extinguishers, 7 foam fire extinguishers, 3 buckets that contain dry powder, 2 pressure washers and a separate hose that would initially be used to suppress a fire.
	If you are storing ELVs, you will need to have 1800 litres of water to extinguish each vehicle	No more than 10 undepolluted ELVs will be stored onsite at any one time giving a fire fighting water requirement of 18,000 litres. The redundant sub surface retention tank holds up to 2,250 litres of rainwater. Additionally, IBCs will be used to collect rainwater from the roofs of the workshop and zapp shelters. Up to 16 full IBCs will be held in storage beside Bay 14 where the forklift is normally parked. Giving sufficient water to meet the minimum requirement.
17. Containment		
17. Managing fire water	Contain the run-off from firewater to prevent pollution of the environment. Containment volumes should be shown to be in accordance with water supply calculations. Include secondary and tertiary containment facilities for firewater run-off. If run-off to divert to sewers? If yes, an agreement in principle from the sewerage company is required.	The concrete pad was installed after the concrete panel perimeter walls, meaning the site surface meets the concrete face of the panel wall creating a seal. An upgraded site drainage system is in the process of being installed including an additional interceptor. Both interceptors can be isolated if required. Plus the swarf storage bays drain to a 5,000l retention tank. See Site Drainage Plan for detail, Appendix 4.

18. Contingency Planning		
18. During and after an incident	Diverting incoming wastes to alternative sites during a fire. Having a plan for how you will notify those who may be affected by fire, such as nearby resident and businesses. How you will clear and decontaminate the site. The steps you must take before the site can become operational again.	Waste material will be stopped from coming into the site and will be diverted to a suitably permitted site as necessary. A plan listing those who may be notified in the event of a fire is shown in Appendix 8. Contractors will clear and decontaminate the site, prior to the site resuming operation.

Appendix 1: Operational Flowchart of Activities on Site

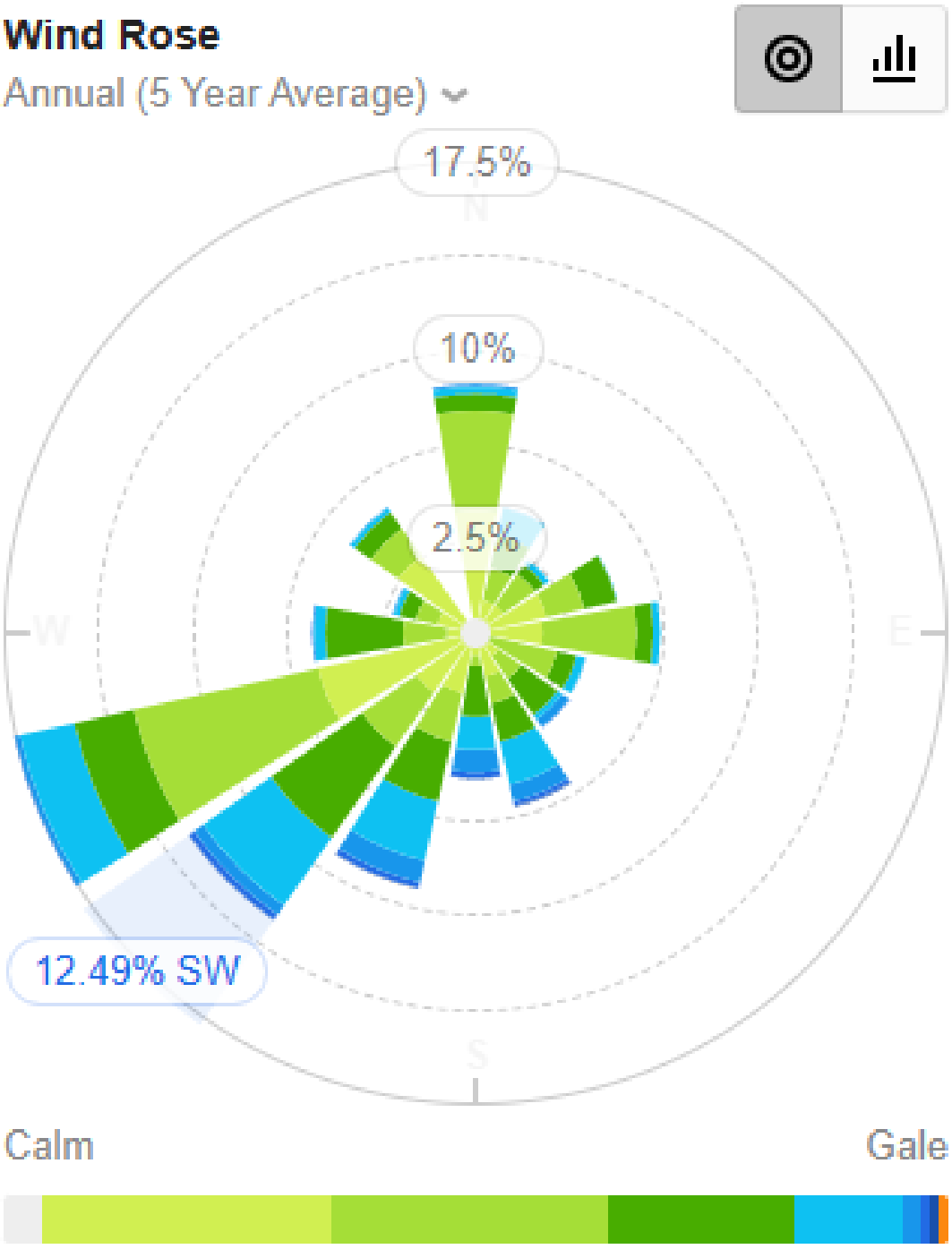


Appendix 2: Site Provisions Plan



Appendix 3: Receptors Within 1 km of the Site, a Wind Rose, and Contact Details of the Identified Receptors

Burndell Wind Rose



Source: [Burndell Wind Forecast, West Sussex BN18 0 - WillyWeather]

In the event of a fire that required attendance by the Fire Service, premises on this list will be contacted by phone in the first instance. The responsible person at the Site will delegate this duty to someone based on what other firefighting activities need to take place at the Site.

Receptor Number	Receptor Name	Receptor Type	Contact Number
1	Sunbelt Rentals Plant & Tools	Contractor	01903 717431
2	Dando Drilling International	Drilling Equipment Supplier	01903 731312
3	Flying Fortress	Kids Play Area	01903 733550
4	Arun Sports Arena	Sport Venue	01903 255155
5	Ford Wastewater Treatment Works	Treatment Facility	
6	Biffa Arundel Vehicle Park	Waste Management Service	0800 307307
7	Grundon Waste Management	Waste Management Site	01903 715256
8	Regnum Blinds & Shutters	Blinds Shop	01243 545976
9	Sussex Catering Equipment (SCE) Limited	Catering Supplier	01243 553691
10	Edgcumbes Coffee Roasters & Tea Merchants	Coffee Roasters	01243 555775
11	AIR4U Limited	Air Compressor Repair Service	01903 257117
12	St Mary's Church	Place of Worship	01243 552962
13	King George's Field	Recreation Ground	
14	Yapton and Ford Village Hall	Village Hall	07940 325844
15	The Co-operative Yapton	Convenience Store	01243 554286
16	Meadowcroft Surgery	Public Medical Centre	01243 551118
17	Arundelicious	Restaurant	07748 843997
18	T J Waste & Recycling	Waste Management Service	01329 226170
19	Sussex Home of Target Shooting (SHOTS)	Recreational	01903 726476
20	Hammonds Commercial Ltd	Vehicle Repair	01903 719128

Appendix 5 – Hot Works Checklist

A written Safe System of Work will be developed and maintained for all hot work activities unless the risk assessment has identified that it is not necessary.

The Safe System of Work has been formulated with consideration of the following (as a minimum):

a. work equipment selected is suitable for the activity, is properly maintained and where appropriate, adequately secured;
b. visual inspection that equipment is safe to use before commencing work;
c. all fixed services that may be affected by the activity (oil, gas, electricity, etc.) are located and protected (isolated, locked, vented, etc.);
d. all combustible and flammable material in vicinity to be moved or protected;
e. actions required to minimise the possibility of explosive atmospheres;
f. area secured (access control, etc.);
g. appropriate fire prevention measures and fire-fighting equipment in proximity and available;
h. monitoring the work area after works to ensure that a fire does not start after the activity is complete;
i. if the area is adequately ventilated or personal and respiratory protective equipment (PPE and RPE) issued and used;
j. precautions have been taken to minimise the release of sparks, hazardous emissions, etc.;
k. additional emergency procedures: and
l. there is no doubt as to who has overall control of the work.

Appendix 6 – Emergency Procedures

Type A Emergency: Leakage or Spillages

Small Leakage or Spillage

1. If safe to do so, isolate source of leak or spillage to prevent further losses.
2. Use spills kits/ sawdust available from onsite stores to contain spread of spillage as identified in the Pollution Prevention Equipment and Procedure Table on page 2 of this EIRP.
3. Transfer any residual contents and contaminated absorbents to suitable storage containers or place leaking container into overcontainer.
4. Record details of the incident in the Site Diary.

Leakage or Spillage (such as catastrophic failure of a fuel tank), which have the potential to harm the environment or pose a risk to human health if it escapes the site boundary.

1. Isolate the affected area to prevent unauthorised access.
2. If necessary initiate controlled evacuation of the site.
3. If safe to do so, isolate source of leak or spillage to prevent further losses.
4. Deploy drain covers to prevent pollution escape into the environment.
5. Use spills kits/ sawdust available from onsite stores to contain spread of spillage as identified in the Pollution Prevention Equipment and Procedure Table on page 2 of this EIRP.
6. Transfer any residual contents and contaminated absorbents to suitable storage containers.
7. Notify the Environment Agency by phone and provide written confirmation within 24 hours.
8. Obtain specialist advice on decontamination of surfaces and drains if necessary.
9. Any remedial action specified will be undertaken and a record of what was undertaken recorded in a Non-Conformance Record Form (EMS Appendix 6).
10. Confirm site cleanup with the Environment Agency.
11. Record details of the incident in the Site Diary.

Appendix 7: Operational Inspection Checklist

Daily Monitoring (Ongoing)	M (AM/PM)		T (AM/PM)		W (AM/PM)		T (AM/PM)		F (AM/PM)		S (AM/PM)		Comments (detail remedial action taken)
	Tick for yes, cross for no.												
Minimum staffing levels met? (1x TCM, 1x Machine Operator, 1x Site Operative).													
Site diary in use inc TCM sign in?													
CCTV operational?													
Fire extinguishers located correctly - any sign of corrosion or damage (pressure bar within the green area of gauge).													
Fire Quarantine Area accessible & clear?													
Check interceptor levels alarm., and if needed, contact a contractor to empty?													
All critical plant and equipment operational? Any signs of defects/leaks?													
Spill kits accessible and replenished? Any spills cleared, and residues cleared?													
All bays in order with correct storage and drains clear (as on drainage plan)?													
All waste in its correct containment stored in bins and in good condition?													
All gullies, drains and manholes on site clear of debris/mud?													
Waste isolation facility empty and accessible? Has removal been scheduled?													
Gas bottles stored in the cage?													
Any dust arising on site? If so suppression deployed?													
Site and perimeter clear of litter/ debris?													
Count full lead acid battery stillages. If 20+ arrange removal.													
Are combustible waste piles getting hot e.g.													

steam, smoke or shimmer?													
Any ELVs for depollution? Check equipment and personnel													
Check for any potentially loose debris or dust on vehicles leave the site.													

Appendix 8: Fire Hydrant Location

(provided by West Sussex Fire & Rescue Service database) (Site is outlined in green, building in yellow, blue arrow indicates hydrant they have confirmed access to. Hydrants shown in red may have restricted access e.g., fencing)