

Caulmert Limited

Engineering, Environmental & Planning
Consultancy Services

Arpley 2 Waste Transfer Station

FCC Recycling (UK) Limited

Environmental Permit Variation Application

Fire Prevention Plan

Prepared by:

Caulmert Limited

Office: Strelley Hall, Main Street, Strelley, Nottingham, NG8 6PE

Tel: 01773 749 132

Email: andystocks@caulmert.com

Web: www.caulmert.com

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Project Manager: Andy Stocks

Caulmert Limited: Strelley Hall, Main Street, Strelley, Nottingham, NG8 6PE

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27942 /C-001	Proposed Drainage Layout
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6109-CAU-XX-XX-DR-V-1800	Sensitive Receptor Plan

APPENDICES

Appendix 1 Waste Acceptance Procedures

1.0 INTRODUCTION

1.1 Overview

- 1.1.1 Caulmert Limited have been appointed by FCC Recycling (UK) Limited ('the Operator') to prepare an environmental permit variation application to add a "*Household, commercial and industrial waste transfer station*" activity to the existing permit ref. EPR/JB3633RP for their Arpley 2 Site ('the Site') in Huyton, Liverpool. The Site Operator is a wholly owned subsidiary of FCC Environment (UK) Limited.
- 1.1.2 The Site is already permitted to accept up to 120,000 tonnes per year of non-hazardous waste and this will remain as the total annual throughput for both activities. It is proposed that the Site will accept Mixed Dry Recyclables (MDR) and residual Municipal Solid Waste (MSW) and other wastes from household, commercial and industrial sources for bulking up within bays in the building prior to transferring off-site for further recovery and/or recycling. The total amount of MDR and MSW and other wastes including sweepings stored at any one time in the building as part of this new waste transfer activity will be 1,000 tonnes.
- 1.1.3 The proposed waste operation involves the storage of combustible wastes and so in accordance with Environment Agency (EA) guidance, this Fire Prevention Plan (FPP) has been prepared.

1.2 Fire Prevention Plan

- 1.2.1 This Fire Prevention Plan forms parts of the site's management system and sets out the fire prevention measures and procedures in place at site. During an incident the Fire Prevention Plan will be made available to the Fire & Rescue Service.
- 1.2.2 This Fire Prevention Plan (FPP) has been compiled in accordance with:
- Environment Agency (EA) guidance 'Fire prevention plans: environmental permits' (last updated January 2021).
 - Waste Industry Safety & Health Forum (WISH) 'Reducing Fire Risk at Waste Management Site' (February 2020).
- 1.2.3 This FPP has been prepared in order to identify the potential fire risks associated with the temporary storage of combustible non-hazardous wastes at the site within concrete storage bays within the building on Site. Appropriate methods of fire control are employed at the site which emphasise upon fire prevention, detection, suppression, containment and potential fire mitigation techniques. This FPP provides guidance for the prevention and management of potential waste fires at the site and to minimise the impact of a fire on the environment.
- 1.2.4 The fire prevention measures in this FPP have been written to meet the 3 objectives detailed in the EA Guidance:

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

1.3 Fire and Emergency Information Box

1.3.1 A 'Fire and Emergency Information Box' will be placed at the site entrance/main weighbridge building which contain the following key information for FCC staff and the Fire & Rescue Service:

- Copy of the Fire Prevention Plan
- Emergency Management Plan
- Emergency Site Plan
- Contact details of Site Personnel

1.4 Staff Training

- 1.4.1 All staff and contractors on site will undergo thorough site inductions and training to understand the contents of the Fire Prevention Plan so they are aware of what they must do to prevent a fire happening and during a fire if one breaks out on site.
- 1.4.2 There are regular exercises to test how well the Fire Prevention Plan works and ensure site staff know what to do. The exercises will cover different scenarios to ensure all elements of the plan work and are up to date. This will be done at a minimum 6 monthly interval. The exercise when conducted on site will incorporate all emergency procedures e.g. fire drills and the emergency management plan.
- 1.4.3 Fire Marshall training will be provided to the appropriate staff to include safe use and deployment of fire extinguishers on small fires and procedures to call for assistance from the Fire & Rescue Service.
- 1.4.4 The documented management systems will include training requirements for all relevant staff which cover awareness of the Fire Prevention Plan for the activity and their work activities. Training will also cover awareness of all potential effects from operation under normal and abnormal circumstances with respect to fire, the awareness of the need to report deviation from the Fire Prevention Plan, and prevention of accidents and actions to be taken when accidents occur. The potential risks posed by the work of contractors should also be assessed and instructions provided to contractors about fire prevention while working on site, including the use of work permits. Where industry standards or codes of practice for training exist, they should be complied with.
- 1.4.5 Records of fire drills and fire training will be made as per the site's online Environmental Management System training schedules and records. A record will also be made of any comments including suitability of the Fire Prevention Plan and actions required to improve the Fire Prevention Plan to suit the operations of the site.

1.5 Reviewing the Fire Prevention Plan

- 1.5.1 This FPP will be kept under regular review and will be treated as a working document. It will be updated when there are changes such as (but not limited to): new mobile plant & equipment, new waste streams added to the permit, an increase in waste annual throughput, following a fire incident, changes in operations and changes in management systems or procedures.

2.0 SITE LOCATION & SURROUNDINGS

2.1 Site Location

- 2.1.1 The Site is located in an industrial estate off Stretton Way in Huyton, Liverpool, at postcode L36 6JF and is centred on National Grid Reference SJ 45870 90085.
- 2.1.2 The Site is situated 620m north-northwest of Junction 6 of the M62, approximately 2.5km to the southwest of Prescott. The site is in an industrial area, with other industrial units and warehouses surrounding the site to the northwest, west and south. The M57 motorway is 100m to the east of the Site boundary and the Liverpool to Manchester railway is located 690m to the north. The River Mersey is located over 7.2km to the southeast at its closest point and leads to the Mersey Estuary over 15km to the west. The site location is shown below in Figure 1:



Figure 1 – Site Location (map source: Google Earth 2024)

2.2 Sensitive Receptors

- 2.2.1 A sensitive receptor search was conducted of the surrounding area within a 1km radius of the site boundary using Defra's Magic Maps website¹ and the sensitive receptors identified are

¹ DEFRA Magic Maps 2022: <https://magic.defra.gov.uk/MagicMap.aspx>

listed below in Table 1 and also shown on the Sensitive Receptor Plan drawing ref. 6109-CAU-XX-XX-DR-V-1800. The distance to each receptor is measured from the site permit boundary.

- 2.2.2 In addition, as part of the Pre-Application Advice stage, the Environment Agency (EA) conducted a Nature and Heritage Conservation Screening Report, which identified a fish migratory route in the adjacent brook (see Sensitive Receptor Plan ref. 6109-CAU-XX-XX-DR-V-1800).
- 2.2.3 The closest human receptors to the Site are workers and visitors of the surrounding industrial units located <10m north-northeast (Pine Precision Engineering), 20m east (Knowsley Council Depot and a Cemex Site), 20m south (Knowsley MBC Depot), 25m southwest (Caravan Storage/John Mason International Ltd) and 40m northwest (Veolia Depot). The Site is in an industrial area, with numerous other industrial and commercial units and warehouses to the northwest, west and south. These premises are likely to be less sensitive to noise, vibration, dust and odour emissions due to the nature of the activities carried out on their own sites.
- 2.2.4 The nearest residential receptors to the Site are houses located within the residential area around Logwood Road 395m west-southwest from Site. Numerous other residential areas are located further to the east, north, west and south (see Table 1 below).
- 2.2.5 St. Gabriel's Primary School is located 780m northwest of the Site and Sylvester Primary School is located 980m west. There are no hospitals within 1km of the Site, but there is a medical facility, Tarbock Medical Centre, located 980m west of the site.
- 2.2.6 There are no public rights of way (footpaths, bridleways, byways) crossing the site or immediately adjacent to the site. The closest public right of way is located 200m northeast, associated with numerous other interconnecting paths crossing Stadt Moers Park (West View).
- 2.2.1 Below the Site the bedrock is the Pennine Middle Coal Measures, with the bedrock designated as a Secondary A Aquifer.
- 2.2.2 There is a Source Protection Zone (SPZ) III located 365m to the south, 1km to the west and 1.5km to the east of the Site boundary at its closest point, likely associated with the Principal Aquifer to the south. A Zone II SPZ is also located 1.7km to the south and southwest.

Designated Sites of Ecological Importance & Other Habitats

- 2.2.3 The Environment Agency (EA) Pre-Application Conservation Screen identified a fish migratory route adjacent to the Site (<10m to the west) in the Logwood Mill Brook as a European Eel Migratory Route.
- 2.2.4 There is one Ancient and Semi-Natural Woodland within 1km of the Site, The Old Wood (North and South) located 980m and 1km southeast of the Site, bordering the M62 motorway.

- 2.2.5 There are no Sites of Special Scientific Interest (SSSI), Special Areas of Conservation (SACs), Special Protection Areas (SPAs), Local Nature Reserves (LNR), National Nature Reserves (NNRs), Ramsar sites or Areas of Outstanding Natural Beauty (AONBs) within 2km of the site.
- 2.2.6 The closest designated habitat to Site is a Local Nature Reserve (LNR) located over 4.2km southwest from the Site, named Childwall Woods & Fields LNR. The next closest designated sites are a SSSI and SPA located over 7km to the south-southeast and southwest of the Site associated with the Mersey Estuary.

Summary of Sensitive Receptors

- 2.2.7 The sensitive receptors identified within 1km of the site boundary are presented in Table 1 below:

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

Receptor	Type	Distance/Direction
Secondary A Aquifer in bedrock	Groundwater	Below Site
Pine Precision Engineering	Commercial/Industrial	<10m NNE
Logwood Mill Brook/ European Eel Migratory Route	Surface Water	<10m W
Knowsley Council Depot	Commercial/Industrial	20m E
Knowsley MBC Depot	Commercial/Industrial	20m S
Cemex Site	Commercial/Industrial	20m E
Caravan Storage/John Mason International Ltd.	Commercial/Industrial	25m SW
Veolia Depot	Commercial/Industrial	40m NW
Tarmac Huyton	Commercial/Industrial	70m NE
Commercial Units inc. Dulux Centre	Commercial/Industrial	85m NW
Commercial/Industrial Units along Ellis Ashton Street and Wilson Road	Commercial/Industrial	Between 20m and 545m to SSE Between 85m and 925m to NW
Users of M57 motorway	Public Road	100m E
Huyton HWRC	Commercial/Industrial	130m SSW
Industrial Units on Fallows Way/Windy Arbor area	Commercial/Industrial	Between 170m and 500m to E
Stadt Moers Country Park and associated public footpaths/rights of way	Recreational	200m NE, 210m N
Tushingham's Lake	Surface Water	230m NE
SPZ Zone III	Groundwater	365m S
Residential area around Logwood Rd	Residential	395m WSW
Residential area off Hale View Rd	Residential	435m NW

Receptor	Type	Distance/Direction
Residential area around Bridgewater Way	Residential	450m SW
Residential area off Cronton Rd and Bishop Drive	Residential	505m E
Playing Fields	Recreational	580m NW, 585m W, 830m NW, 860m E
Residential area off Juniper Avenue	Residential	625m SE
Residential area south of Cronton Rd	Residential	675m SW
Liverpool to Manchester railway	Commercial/Industrial	690m N
Residential area off Wood Lane	Residential	695m NNW
Users of M62 Jnc. 6 and Coppice Lane Services (inc. hotels, food outlets etc.)	Public Road	705m SSE
St. Gabriel's Primary School	Residential	780m NW
St. Nicholas Church	Recreational	805m NE
Residential area off Pottery Lane	Residential	885m NE
Allotments	Recreational	900m NE, 920m N
St. John's Millenium Green	Residential	950m W
Sylvester Primary School	Residential	980m W
Tarbock Medical Centre	Residential	980m W
The Old Wood North and South	Ancient Woodland	980m and 1km SE

Meteorological Conditions

- 2.2.8 Fire, smoke and vapours from a fire incident are likely to be affected by local weather conditions, in particular by wind direction and strength.
- 2.2.9 Wind statistics observed from Widnes weather station, the closest weather station actively recording wind statistics, are considered to be representative of the typical conditions at the site (Figure 2 below). Erith Kent weather station is located over 7km to the southeast of the site.
- 2.2.10 A review of the data recorded daily between February 2012 and January 2024 on the Windfinder.com² website indicates that the most dominant wind direction is from the east-southeast to the west-northwest, but with variations throughout the year. With reference to Table 1 above, predominant annual wind conditions are likely to blow towards the industrial/commercial units to the west-northwest along Ellis Ashton Street and Wilson Road but could also blow towards the residential area to the west.

² <https://www.windfinder.com/windstatistics/widnes>

Monthly wind direction and strength distribution

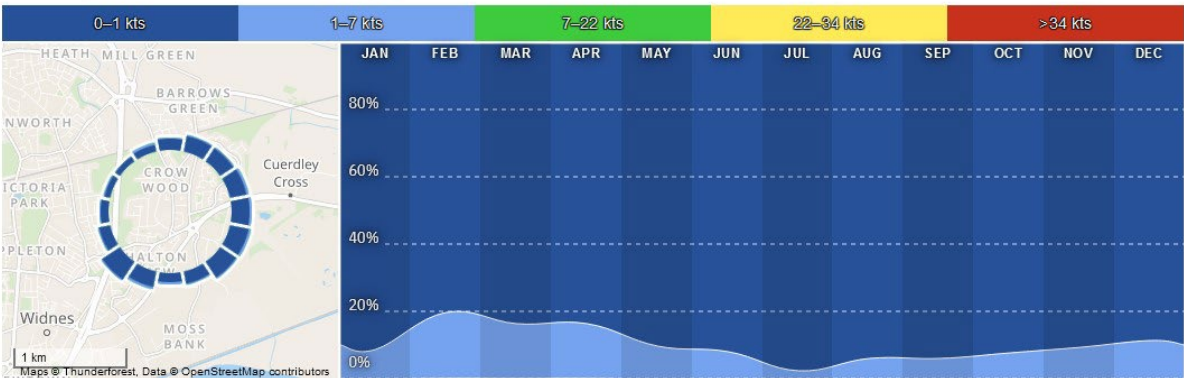


Figure 2 – Widnes wind statistics – average wind direction & strength 2012-2024

3.0 SITE ACTIVITIES

3.1 Overview

- 3.1.1 This permit variation application is to add a *“Household, commercial and industrial waste transfer station”* activity to the existing permit ref. EPR/JB3633RP and retain the existing listed activity. The proposed activity involves accepting Mixed Dry Recyclables (MDR) and residual Municipal Solid Waste (MSW) and other wastes from household, commercial and industrial sources for bulking up 3m high within 4m high concrete bays in the building prior to transferring off-site for further recovery and/or recycling. This FPP has been written to cover the proposed new waste transfer station activity.
- 3.1.2 The Arpley 2 Site is currently permitted as an installation, specifically for a Section 5.4A(1)(b)(ii) activity for the *“Recovery of non-hazardous waste with a capacity exceeding 75 tonnes per day involving pre-treatment of waste for incineration or co-incineration”*. The facility when operational pre-treats up to 120,000 tonnes per year of waste primarily to produce a Refuse Derived Fuel (RDF) which is baled and stored prior to being sent for incineration. Ferrous metals and other recyclable materials are also recovered as part of the treatment process. This activity will be retained on the permit but is not proposed to be operational in the short term. The site is currently mothballed and due to be refurbished ready for the proposed waste transfer activities. The FPP would be updated to include the installation activity, prior to any operations recommencing.
- 3.1.3 There will be no change to the permit boundary, the total annual quantity of waste accepted at the Site (to be kept at 120,000 tpa) or currently permitted waste types as part of this permit variation. The total amount of MDR and MSW and other wastes as part of the new transfer activity stored at any one time in the building will be 1,000 tonnes. All unloading, bulking, storing and re-loading of wastes will be undertaken within the building, which will have roller shutter doors kept closed when not in use and impermeable concrete surfacing.
- 3.1.4 The waste storage areas are under cover within the fully enclosed building therefore worked dry and runoff would be retained in the building. Surface water from the northern end of the site discharges to Logwood Mill Brook through a private outfall and the southern end discharges to the same brook via a surface water sewer. Automatic penstock valves will be installed within the drainage systems that outfall to sewer and surface water which can be closed in an emergency such as during a fire or leak/spillage incident.

3.2 Combustible Wastes

- 3.2.1 The Environment Agency requires a Fire Prevention Plan (FPP) where operators accept potentially combustible wastes. This FPP covers combustible wastes to be accepted and stored at the site as part of the waste transfer activity and these wastes are non-hazardous.
- 3.2.2 The Site will accept into the waste transfer station the following combustible wastes:
- Residual Municipal Solid Waste (MSW)

- Mixed Dry Recycling (MDR)
- Street cleaning residues/sweepings
- Plant tissue/green waste
- Wood, bark and wood shavings/sawdust/board
- Paper and cardboard
- Plastic, including shavings/turnings
- Textiles, textile fibres
- Rubber
- Packaging – paper, cardboard, plastic, wooden, composite, mixed and textile.
- Wastes unsuitable for consumption or processing from processing of fruit, vegetables, tea, coffee tobacco, dairy and confectionary/baking industries, and alcoholic and non-alcoholic beverages industries.
- Absorbents, filter materials and wiping clothes and protective clothing.
- Off-specification compost and non-composted fractions.

3.2.3 The Environment Agency Fire Prevention guidance does not apply to the storage of hazardous wastes (excluding WEEE, but including hazardous waste batteries), dangerous substances stored under the Control of Major Accident Hazards (COMAH) Regulations, liquids or healthcare wastes. It also does not apply to non-waste materials such as gas cylinders, aerosols and combustible liquids, however these have still been considered in this FPP, where relevant, as they may cause or increase the impact of a fire on site.

3.3 Storage Arrangements

3.3.1 The proposed site layout of the Site is shown in attached drawing ref. EC-22022-S01-211.

3.3.2 All waste will be stored within the concrete storage bays within the building, which have 4m high bay walls. Waste will be stored no higher than 3m high, providing a 1m freeboard above each waste pile, with the 3m level marked out on the bay wall.

3.3.3 The typical volumes to be accepted at the site may fluctuate depending on the season and quantities of waste received but will remain within the permitted limits.

3.3.4 There will be one 40m³ skip stored in the building for non-conforming items/general litter which will only be used for non-hazardous incidental/litter waste and not a specific storage area for incoming waste, therefore it will likely be empty most of the time. The container will

be stored on the impermeable concrete surfacing and will be at least 6m away from other combustible materials and able to be moved by mobile plant if required. A large fire extinguisher will be situated in adjacent to the skip as contingency in case of fire in the container.

3.4 Waste Electrical & Electronic Equipment (WEEE)

- 3.4.1 It is not proposed to accept Waste Electrical & Electronic Equipment (WEEE) onto Site and so this is not considered further in this FPP.

3.5 Persistent Organic Pollutants

- 3.5.1 It is proposed to accept bulky furniture waste and soft furnishings which may contain Persistent Organic Pollutants (POPs) in a separate designated concrete bay with 4m high walls.
- 3.5.2 Persistent organic pollutants (POPs) can be present in waste (typically WEEE and soft furnishings waste) and can have significant effects on human health and the environment. They are subject to the POPs regulations 2019 – UK SI.2019 No.1099, implementing Regulation (EU) 2019/1021. These regulations specify the appropriate treatment for the recovery and disposal of POPs.
- 3.5.3 The operator will identify if any wastes on site contain POPs. If a waste type is likely to contain POPs, then the Operator must assume that it does unless there is evidence to prove otherwise, for example, through analysis.
- 3.5.4 Any waste containing POPs will be segregated from other wastes and stored separately in the POPs bay as shown on attached drawing ref. EC-22022-S01-211. If there is a fire, the operator will tell the Fire & Rescue Service that there are wastes containing POPs on site. If there is a fire involving POPs-containing waste then any residue from the fire may contain POPs and so will be segregated and treated following the POPs regulations. This could include firefighting water. The POPs waste storage bay will be constructed of impermeable concrete surfacing and concrete walls with full containment of any potentially contaminated run-off.

3.6 Hazardous Wastes

- 3.6.1 Hazardous wastes are not covered by the EA Fire Prevention Plan guidance. It is not proposed to accept any hazardous wastes onto Site and so this is not considered further in this FPP.

3.7 Gas Cylinders, Fuels & Lubricants

- 3.7.1 It is not proposed to accept gas cylinders onto Site, however if these are encountered as non-conforming waste items within a waste load, they will be pulled out and moved to a lockable cage for safe storage within the building prior to removal off-site.
- 3.7.2 Fuels, lubricants and hydraulic oils for plant refuelling and maintenance will be stored within containers within an area of the building and be provided with secondary containment situated on the impermeable site surfacing.

- 3.7.3 There will be a self-bunded fuel tank for storing diesel and Ad-Blu outside on the impermeable concrete surfacing (see site layout plan ref. EC-22022-071-S03).
- 3.7.4 Refuelling will only occur in designated areas with impermeable surfacing and spill kits available, by trained staff. When not in use the fuel tank will be locked, with 24/7 CCTV surveillance and security guards manning the site out of hours for added security.

4.0 MANAGING COMMON CAUSES OF FIRE

4.1 Arson

4.1.1 Security measures are in place to prevent unauthorised access to the site. The site boundary is surrounded by 2m high palisade (or similar) security fencing, and the site entrance/exit gates are lockable. The gates will be closed and locked outside of operational hours, with no unauthorised access out of hours. The site will have a security guard patrolling the site out of hours and 24/7 CCTV surveillance.

4.1.2 The integrity of the security fencing and gates are inspected daily and at the end of the working day. Any defective locks or damaged fencing or gates will be repaired as soon as practically possible. The site is operational during the following hours:

Monday to Friday	07:30 – 18:00
Saturday and Bank Holidays	07:30 – 13:00
Closed Sundays	(limited operations if required)

4.1.3 The site will operate a CCTV system across the facility, cameras monitoring activities 24 hours a day, 365 days a year. The CCTV is connected to a monitoring system which alerts Site Management to a site incident, including fire, during out of hours. An intruder alarm is also fitted at the Site. The exact location of the CCTV cameras will be confirmed upon completion of the site infrastructure, however the Operator confirms there will be adequate cameras to monitor all waste piles/storage areas on site and also the site entrance/exit and buildings.

4.2 Plant and Equipment

4.2.1 The following equipment are to be used on site:

- CAT 950M loader
- 360 excavator

4.2.2 All plant and mobile equipment will undergo regular inspection, staff will be trained to identify any leaks or damage and report any faults to site management immediately so remedial actions can be scheduled. At the beginning of every plant operator's shift, the plant or vehicle will be inspected prior to workers starting their shift in order to carry out checks on plant and mobile equipment and to report any defects to site management.

4.2.3 All mobile plant will be fitted with a fire extinguisher and any plant that are not being used will be safely parked at least 6m away from any combustible materials. Out of hours mobile plant will be parked within the building for security, ensuring they are at least 6m away from any combustible materials and undergo a minimum 30-minute cool-down period after prolonged use which is overseen by site operatives.

4.3 Re-fuelling of Plant and Equipment

- 4.3.1 All refuelling of mobile plant used on site will be undertaken on impermeable concrete surfacing by trained staff using a diesel tank and pump, which is stored on site in a secure location with secondary containment when not in use, away from combustible materials (outside as per site plan ref. EC-22022-071-S03). Spill kits are available around site, and only trained site staff will undertake refuelling duties.

4.4 Electrical Faults including Damaged or Exposed Electrical Cables

- 4.4.1 All electrics on site will be regularly inspected and cables which provide power for general plant, roller shutter doors or lighting will be inspected to ensure there are no broken or exposed wires. Any defects will be reported immediately to site management, and remedial actions will be scheduled.
- 4.4.2 Any electrical works that are required, will be carried out by a fully certified electrician. Fixed electrics are installed by a qualified electrician certified by NICEIC and are inspected 3 yearly. Portable appliances are tested annually.
- 4.4.3 The location of electric cables and other utilities on site are shown on attached drawing ref. OST51902492-P-1_Arpley2 'Utilities Survey'.

4.5 Smoking On-Site Policy

- 4.5.1 To prevent and reduce the risk of fires as a result of discarded smoking materials, the site will operate a strict 'no smoking' policy, and signs will be displayed around the site.
- 4.5.2 As part of the site induction, staff, visitors and contractors will be advised and made aware of the no smoking policy enforced on site and be directed to a suitable designated smoking area.

4.6 Hot Works Safe-Working Practices

- 4.6.1 Any hot works such as welding or cutting undertaken by staff or contractors are done so with a suitable risk assessment and safe working procedure in place. Hot works undertaken by contractors are done so under a Permit to Work and a fire watch is set for a minimum of 30 minutes after work has been completed with a final check after 120 minutes.
- 4.6.2 Due to the nature of the operations on site, no hot works such as welding and or cutting is anticipated to be carried out within the boundary of the Site.

4.7 Industrial Heaters

- 4.7.1 Industrial heaters are kept away from combustible materials, must not be covered and are switched off during non-operational hours. They are regularly maintained and inspected.
- 4.7.2 Industrial heaters are not anticipated to be utilised on Site.

4.8 Hot Exhausts and Engine Parts

- 4.8.1 Mobile plant exhausts and engine surfaces can become hot and dust settling on these surfaces can cause a fire risk. As part of the site operations, 30 minutes before site closure all mobile plant under-go a 'cooling period' where they are moved to the plant parking area at least 6m away from combustible materials (parked inside the building for security) and allowed to cool down.
- 4.8.2 A visual check will be carried out at regular intervals during the working day by site operatives to identify any signs of a fire caused by dust settling on hot exhausts and engine parts. At the end of the working day a record will be made of the plant and with details of visual inspections made. Where necessary any build-up of dust and debris will be wiped down. All records will be made in FCC's EcoOnline database.

4.9 Ignition Sources

- 4.9.1 Naked flames, such as those from welding works (e.g. building maintenance or other) or generators, will be kept at least 6m away from any combustible or flammable wastes.
- 4.9.2 No industrial heaters, incinerators, or furnaces are to be utilised on site.
- 4.9.3 The site operates a 'no smoking' policy throughout the site, and so no naked flames will arise from this.

4.10 Batteries

- 4.10.1 No batteries will be accepted intentionally onto Site, however due to the nature of the wastes accepted (which includes municipal wastes from council kerbside collections) occasional small domestic batteries may sometimes be found in the waste and therefore a battery box will be provided on site for the safe storage and subsequent removal of any batteries found, as deemed best practice by the Operator.
- 4.10.2 If found within the waste, to prevent the risk of fire caused by incorrect disposal or damage of batteries, the batteries are stored in a weather-proof battery box under cover. If batteries are damaged, they are isolated from other batteries, stored away from buildings and other combustible materials. The damaged batteries are stored in a weatherproof container filled with sand or similar inert material until they can be removed from Site.

4.11 Batteries in End-of-Life Vehicles

- 4.11.1 No batteries from ELVs will be accepted onto Site and are not expected to be in the proposed incoming waste types.

4.12 Leaks and Spillages

- 4.12.1 As part of the EMS, in the event of a potentially polluting leakage or polluting spillage taking place, immediate remedial actions will be carried out. These will include trained site staff,

wearing personal protective clothing and using suitable spill kits to isolate the spill and clean it up. Any hazardous spillages will be contained and the used spill kit materials (booms, spill pads, granules) disposed of as hazardous waste.

- 4.12.2 All vehicles used on site shall undergo regular maintenance and daily checks to ensure they are in good working order to prevent any fuel or lubricant leaks from site vehicles.
- 4.12.3 Operational areas are surfaced with impermeable concrete to ensure that the potential for leaks and spillages of potentially hazardous substances to the surrounding environment is minimised, and which will be maintained in good working order, free of damage, cracks or holes, as per the management system for the site.
- 4.12.4 All refuelling of mobile plant used on site will be undertaken on impermeable surfacing by trained staff using a diesel tank and pump, which is stored on site in a secure location with secondary containment (bunded tanks or drip trays) when not in use, away from combustible materials. Spill kits are available around site, and only trained site staff will undertake refuelling duties.
- 4.12.5 Fuels and oils/lubricants stored on site for plant refuelling and maintenance will be within containers that have secondary containment, and stored within the lockable area/shed, situated on the impermeable site surfacing.
- 4.12.6 As part of daily site inspections, staff will confirm that the site is clear of any leaks or spillages, and if any are identified during this check, remedial actions will be carried out and recorded in FCC's EcoOnline database. Site vehicles and plant are subject to regular inspection and maintenance.

4.13 Build-Up of Loose Combustible Waste

- 4.13.1 Good housekeeping, cleaning and maintenance of the site and mobile plant and equipment will prevent the build-up of loose combustible wastes. Visual daily site checks will be completed to monitor any dust, debris or waste accumulation, plant exhausts or hot surfaces and will be cleaned immediately. A daily site inspection by trained site staff will check for any any build-up or accumulation of dust or debris and remedial actions carried out as appropriate and recorded on FCC's EcoOnline database.

4.14 Reaction Between Incompatible Wastes/Materials

- 4.14.1 No hazardous, reactive or volatile wastes will be accepted onto Site as per the Permit, only non-hazardous wastes as per the permitted waste list, largely dry mixed recyclables and municipal solid waste.
- 4.14.2 The site will operate according to the waste acceptance, waste receipt and control, and waste consolidation operational procedures detailed in within Appendix 1 of this document. The waste acceptance and storage procedures at the site will ensure that all wastes are inspected to identify any non-conforming wastes.

4.14.3 In the event that that a non-conforming waste is brought to site and deposited, the use of the Quarantine Area will ensure that any non-conforming wastes are segregated away, and a Fire Watch (Section 4.16) will be carried out regularly and at the end of the working day. The non-conforming waste will be removed as soon as practicable.

4.14.4 As part of daily site inspections, trained site staff will ensure that waste storage areas are inspected for any signs of smoking, smouldering or heat prior to the site closing for that working day.

4.15 Waste Acceptance and Deposited Hot Loads

4.15.1 It is unlikely hot loads of waste will be brought to and deposited at the site. Waste acceptance procedures (Appendix 1) are in place to prevent incoming hot loads being accepted onto site. Staff are trained to be vigilant and identify any incompatible and non-conforming wastes including any hot loads.

4.15.2 However, in the rare and exceptional circumstance that any waste vehicles found to be carrying hot loads are identified, the waste vehicle will be directed to the Quarantine Area and the waste unloaded and extinguished by trained site operatives using fire extinguishers. If wastes are already unloaded and then identified as a hot load, the waste will be segregated using mobile plant and taken to the Quarantine Area outside, or where this is not possible then any combustible wastes adjacent to the deposited hot load will be removed to prevent spread of fire to the unburnt wastes.

4.15.3 The site has an automatic water cannon system which will activate in the event of a fire/hot spot being detected by the sensors within the building. In addition, the use of fire extinguishers around site which can be utilised should a hot load of non-hazardous waste be found. Site staff are trained to watch for and identify any potential fires e.g. smoke/steam coming from wastes and daily visual checks will be regularly carried out on waste loads, with any identified as burning being segregated and moved to the Quarantine Area by mobile plant.

4.15.4 Should any hot loads be unloaded within the site and stored in the Quarantine Area, this waste will be inspected as part of daily site inspections and recorded in FCC EcoOnline database, to ensure that the waste is cooled and not smoking/smouldering.

4.16 Hot and Dry Weather

4.16.1 The wastes will be stored within bays in the building and therefore sheltered from direct sunlight and heat or wind. This will prevent or reduce the potential for the drying and external heating of stored wastes by the weather.

4.16.2 As a precaution, to prevent and check for any external heating of waste during hot and dry weather, all stored combustible wastes will be subject to regular inspections.

- 4.16.3 All wastes will be stored for the minimum storage time, waste operations will be performed so that all incoming waste brought to site is processed, separated and loaded off-site in the shortest time possible, on a first-in first-out basis.
- 4.16.4 It is considered that dry mixed recyclables and municipal solid waste will not be significantly at risk from external heating by hot weather within the building, due to the shelter from the sun the building provides the wastes and the bulky/large fractions sizes to be accepted.
- 4.16.5 If absolutely required, water can be used to cool down any materials showing any indication of smoking, smouldering or being actively on fire.

5.0 PREVENTING SELF-COMBUSTION

5.1 Overview

5.1.1 To minimise the risk of self-combustion, waste storage times, pile volumes and heights, and temperatures of wastes are managed.

5.1.2 Self-combustion happens when a material which can self-heat generates heat at a rate faster than it can be lost to the environment. The temperature continues to rise until the auto-ignition temperature is reached and the material then self-combusts. Prevention and ultimately negating the initial fire risk is therefore given the highest priority in terms of the control of a fire. The Operator will employ a range of methods for fire prevention, and in addition to these, the site will carry out a daily fire watch as part of the daily site inspections.

5.2 Managing Storage Times

5.2.1 To prevent self-combustion, maximum storage times of all waste materials on site will be minimised. All combustible wastes are stored for less than 3 months. Typically, within 7 days all wastes are handled and transferred on a 'first-in first-out' basis. See Table 2 for storage times of each waste material:

Table 2 – Maximum Storage Times of Waste Materials

Waste type	How is it stored? E.g. piles, containers, bays, skips, racks, bales	Form		Max. storage time (days)	Location	Max. volume of waste pile (m ³)	Maximum size of waste pile		
		Unprocessed; shredded; baled	>150mm; 30-150mm; <30mm				Length (m)	Width (m)	Height (m)
Municipal Dry Recyclables (MDR)	Concrete bay x2	Unprocessed	>150mm 30-150mm <30mm	7 days	Area used for MDR inside northern part of building	Approx max. 750 m ³	10 -18m Ave 14m	18m	3m
Residual Waste from Household, Trade, CRC, Street Cleansing and Ground Maintenance	Concrete bay	Unprocessed	>150mm 30-150mm <30mm	5 days	Bay 1	Approx max. 750 m ³	14m	17m	3m
Residual Waste from Household, Trade, CRC, Street Cleansing and Ground Maintenance	Concrete bay	Unprocessed	>150mm 30-150mm <30mm	5 days	Bay 2	Approx max. 750 m ³	14m	17m	3m
Bulky wastes	Concrete bay	Unprocessed	>150mm 30-150mm <30mm	7 days	Bay 3	Approx. max 450 m ³	6m	17m	3m
Gully Arisings and Mechanical	Concrete bay	Unprocessed	>150mm 30-150mm <30mm	7 days	Bay 4	Approx. max 450 m ³	6m	17m	3m

<i>Sweeping wastes</i>									
<i>Bulky POPs and CRC POPs wastes</i>	<i>Concrete bay</i>	<i>Unprocessed</i>	<i>>150mm 30-150mm <30mm</i>	<i>14 days</i>	<i>Bay 5</i>	<i>Approx max. 750 m³</i>	<i>12m</i>	<i>20m</i>	<i>3m</i>

5.2.2 As per the site's Waste Acceptance Procedures, all loads deposited at the site shall have the following information recorded at the weighbridge:

- Date and time of receipt of waste
- Vehicle size/type and registration number
- Name and address of customer/hauler
- Waste type and quantity
- Waste carrier registration number

5.2.3 The above procedure will similarly be followed for any outgoing loads of combustible wastes. This monitoring of waste will allow the operator to track all material flow through the site to ensure that storage times are not exceeded.

5.2.4 All waste materials will be processed on a 'first-in, first-out' principle and should it be required, mobile plant can be used to rotate stock in waste storage bays where applicable. Typically, within waste bays whole waste loads will be moved in and out as one load in one go, so this generally removes the requirement for waste rotation etc to prevent self-heating.

5.2.5 Extra measures to prevent self-combustion include:

- Temperature monitoring
- Fire walls
- Reduced pile sizes (less than maximum recommended)
- Turning of wastes
- Additional detection and suppression

5.3 Monitoring and Control of Temperature

5.3.1 Heat is controlled within waste piles to prevent self-combustion.

5.3.2 Waste piles containing combustible waste such as the MDR and MSW piles (inc. packaging, wood, cardboard, plastics etc.) will be stored in 3m high piles within 4m high concrete bays and regularly inspected by trained site staff for signs of self-heating such as smoking, smouldering or indications of fire or hotspots. The largest waste piles will be up to 750m³.

5.3.3 Waste piles can be monitored using temperature probes or similar to determine the extent of any self-heating detected.

5.3.4 If temperatures within piles are detected to be increasing, the cannons can be used to cool or dampen the waste, and mobile plant can be used to turn waste piles or spread them out to allow cooling.

5.3.5 All waste materials will be processed typically within 7 day within the waste transfer station before being transferred off-site. Therefore, it is unlikely self-heating of wastes will occur.

5.4 Waste Bale Storage

5.4.1 There is no waste bale storage proposed for the Site as part of the waste transfer activity.

5.5 Waste ELV bales

5.5.1 There is no ELV bale storage proposed for the site.

6.0 MANAGING WASTE PILES – STORING MATERIALS IN THEIR LARGEST FORM

6.1 Maximum Pile Sizes

- 6.1.1 Pile sizes of combustible wastes are managed to help prevent self-combustion and to limit the scale of a fire if one breaks out. In accordance with the EA Fire Prevention Plan guidance, wastes will be stored in stockpiles that do not exceed 4 metres high, and do not exceed 20m long or wide (whichever is largest) on site to allow fire-fighting.
- 6.1.2 At Arpley 2 waste piles will not exceed 3m high or 20m long or wide. The largest pile sizes will be 750m³ within the concrete bays, typically consisting of bulk MSW and MDR.
- 6.1.3 Non-hazardous combustible wastes such as dry recyclables and packaging waste are to be stored in concrete bays in the building within 4m high bay walls. The stockpiled wastes will be stored no higher than 3m allowing a 1m freeboard between the top of the waste pile and the top of the concrete bay walls. There will be a painted line or other marker indicating the 3m level on the bays.
- 6.1.4 Operations will be carried out so that there is a rapid turnover of stock, typically within 7 days, which will drastically reduce the risk of 'older' material from self-heating and practically eliminating the potential for thermal build up and self-combustion. The stored wastes will be within the building which will protect the wastes from excessive heating from the sun or build-up of rainwater encouraging biodegradation and heating of materials such as cardboard.

6.2 Storing Waste Materials in Their Largest Form

- 6.2.1 Pile sizes are minimised, and wastes are stored in their largest form where possible. No reduction in size or processing of the waste materials will be undertaken on-site, with wastes only bulked-up within the concrete bays prior to being transferred off-site for recovery.
- 6.2.2 Non-hazardous, combustible waste materials (which include dry mixed recyclables, packaging wastes, wood, rubber, other municipal solid wastes etc.) will be brought onto site, bulked-up and stored in 3m high stockpiles within the 4m high concrete bays inside the building.
- 6.2.3 The majority of wastes to be accepted at the site will be MSW and this will be loose with fraction sizes more than 150mm, but with occasional fractions between 30 and 150mm.

7.0 WHERE MAXIMUM PILE SIZES DO NOT APPLY

7.1 Whole ELVs

7.1.1 Not relevant – whole ELVs will not be accepted at the site.

7.2 Compost Production

7.2.1 No composting activities are to be carried out at the site.

7.3 Waste Stored in Containers

7.3.1 The EA's Fire Prevention Plan (FPP) Guidance stipulates that if you store waste in containers that can be moved, then maximum pile sizes do not apply.

7.3.2 The majority of the combustible wastes accepted at the site will be stored in stockpiles within the concrete bays on impermeable concrete surfacing within the building.

7.3.3 There will be one 40m³ skip stored in the building for non-conforming items/general litter which will only be used for non-hazardous incidental/litter waste and not a specific storage area for incoming waste, therefore it will likely be empty most of the time. The container will be stored on the impermeable concrete surfacing and will be at least 6m away from other combustible materials and able to be moved by mobile plant if required. A large fire extinguisher will be situated in adjacent to the skip as contingency in case of fire in the container.

8.0 PREVENTING FIRE SPREADING

8.1 Separation Distances

- 8.1.1 In accordance with the EA's fire prevention plan guidance, separation distances are not required where concrete fire walls and bays are used to store wastes and can be used to prevent the risk of a fire spreading on Site.

8.2 Fire Walls and Bays

- 8.2.1 Fire walls are of a design and construction to resist fire and have a fire resistance period of 120 minutes to allow waste to be isolated and help to enable a fire to be extinguished within 4 hours. Concrete storage bay walls between stored waste piles negate the need to have a 6m separation distance due to their fire-resistance properties.

- 8.2.2 Where combustible wastes are stored within bays the following measures are in place:

- Frequent stock rotation and wastes moved and stored on a first-in first-out basis.
- Temperature monitoring and regular inspections.
- A freeboard space of 1m will be maintained at the top and sides of the waste stockpiles at all times within the bay, with a line marking this level in the bays.
- Brands (burning wood) or lighted materials will be prevented from moving outside the bay walls and igniting other wastes.
- A Quarantine Area outside will be used where necessary to isolate burning wastes or reduce pile sizes and store wastes not burning.
- Mobile plant is available to allow wastes to be removed from bays quickly and effectively to isolate it during an incident. Mobile plant can also move containers of wastes.

- 8.2.3 Combustible wastes stored in concrete bays include:

- Municipal Solid Waste (MSW)
- Mixed Dry Recycling (MDR)
- Street cleaning residues/sweepings
- Plant tissue/green waste
- Wood, bark and wood shavings/sawdust/board
- Paper and cardboard

- Plastic, including shavings/turnings
- Textiles, textile fibres
- Rubber
- Packaging – paper, cardboard, plastic, wooden, composite, mixed and textile.
- Wastes unsuitable for consumption or processing from processing of fruit, vegetables, tea, coffee tobacco, dairy and confectionary/baking industries, and alcoholic and non-alcoholic beverages industries.
- Absorbents, filter materials and wiping clothes and protective clothing.
- Off-specification compost and non-composted fractions.

8.2.4 Where concrete bays are used to store combustible wastes then they will be constructed of fire-resistant bay walls in accordance with the factors outlined in Section 11.2 of the EA's FPP guidance, which includes a fire resistance period of at least 120 minutes (for both radiative heat and flaming). The bay wall will be constructed from concrete, where concrete has a major inherent benefit with regards to its fire-resistant properties and its material performance in a fire. It is non-combustible and has a slow rate of heat transfer, making it a highly effective barrier to the spread of fire. Values from Figure 3 (see below) of the British Standard Structural Use of Concrete Part 1 (BS 8110-1:1997), outlines the requirements which ensures that the fire resistance on concrete walls are satisfied:

Fire resistance <i>h</i>	Minimum beam width (<i>b</i>) mm	Rib width (<i>b</i>) mm	Minimum thickness of floors (<i>h</i>) mm	Column width (<i>b</i>)			Minimum wall thickness		
				Fully exposed mm	50 % exposed mm	One face exposed mm	$p < 0.4\%$ mm	$0.4\% < p < 1\%$ mm	$p > 1\%$ mm
0.5	200	125	75	150	125	100	150	100	75
1	200	125	95	200	160	120	150	120	75
1.5	200	125	110	250	200	140	175	140	100
2	200	125	125	300	200	160	—	160	100
3	240	150	150	400	300	200	—	200	150
4	280	175	170	450	350	240	—	240	180

NOTE 1 These minimum dimensions relate specifically to the covers given in Table 3.4 and Table 4.9.
NOTE 2 p is the area of steel relative to that of concrete.

Figure 3 – Minimum dimensions of reinforced concrete members for fire resistance

- 8.2.5 The locations of non-hazardous waste storage areas for MSW, MDR, sweepings and other wastes are shown on the attached EC-22022-S01-211 'Proposed Operations Plan'.
- 8.2.6 Site inspections will be undertaken at least daily by trained site staff to ensure that all stockpiles are being inspected and managed correctly in line with this Fire Prevention Plan.

9.0 QUARANTINE AREA

9.1 Quarantine Area

- 9.1.1 A Quarantine Area will be located outside the building on the concrete site surfacing and be available at all times to be used in the event of a fire, to either hold burning wastes or to hold unburnt wastes to isolate and prevent them catching fire.
- 9.1.2 The location of the Quarantine Area is shown on the attached 'Proposed Operations Plan' ref. EC-22022-071-S03.
- 9.1.3 The site drainage system is able to be isolated by use of a penstock valve in the event of the Quarantine Area generating any potentially polluting liquids/firewater.
- 9.1.4 The wastes will be transported to the Quarantine Area with use of the site mobile plant by site operatives who are trained in moving burning wastes, or segregating wastes from a burning pile safely.
- 9.1.5 The Quarantine Area will be large enough to hold up to at least 50% of the volume of the largest combustible waste pile (half of largest waste pile 750m³ which is 375m³) and maintain a separation distance of 6 metres from other wastes, buildings, site perimeter and other infrastructure.
- 9.1.6 Where smouldering waste has been identified, and if it is safe to do so, the Quarantine Area should be used. In the event of fire, waste will be moved to the Quarantine Area as soon as possible or, at most, within 1 hour of a fire starting.

10.0 DETECTING AND SUPPRESSING FIRES

10.1 Detecting and Suppressing Fires

- 10.1.1 Site staff will be trained in the potential signs of waste showing signs of self-heating or combustion and will raise the alarm to other site staff and site management immediately.
- 10.1.2 As part of routine site inspections, all bays and containers storing waste materials will be checked daily for signs of smoking, smouldering, steam, heat or flames and the alarm raised if detected. Any heat build-up or hot spots will be detected quickly and doused by the water cannons and the alarm raised. If a fire or signs of a fire are detected early by site staff before the water cannons then they will use mobile plant to ensure waste piles are rotated and spread out or a fire extinguisher to extinguish the fire. However it is highly unlikely that the cannons will not activate.
- 10.1.3 The site office is a portacabin style temporary building, which also houses the canteen and welfare facilities. These will be supplied with fire extinguishers. Site operatives will carry out a daily site inspection to ensure that the site is being managed correctly and that all fire detection, suppression equipment and fire alarms are calibrated and working.

Automated Fire Detection and Water Cannon System

- 10.1.4 The main waste transfer building on Site will be fitted with an automatic fire detection and suppression system using water cannons targeted at waste bays. This system is designed to use substantially less water to douse a fire within a waste stockpile than conventional fire-fighting and is proven to be very effective in quickly detecting and tackling a fire, preventing fires spreading and generating much smaller volumes of firewater left on site after a fire. This therefore protects both the environment and human health from the effects of a fire on site, reduces clean-up costs and damage to site infrastructure, and also reduces the wider impacts on the local community from smoke and general disruption.
- 10.1.5 At this stage it has not been confirmed that MDR will definitely be accepted, in the event that is not required, fire detection and a cannon will not be installed in this separate section of the building.
- 10.1.6 The water cannons will be supplied by an on-site fire water storage tank adjacent to the building for immediate access to water, the location of which is shown on drawing ref. EC-22022-S01-211 'Proposed Operations Plan'.
- 10.1.7 It is considered that most incidents of fire on waste sites are small and containable, and the use of water cannons targeting the waste bays will reduce the potential for a fire to become out of control and into a large fire within the building. This will help fire to be extinguished within 4 hours as per the EA's fire prevention guidance.
- 10.1.8 The following figures 3, 4, 5 and 6 indicate the water cannons zones of influence and pipework.

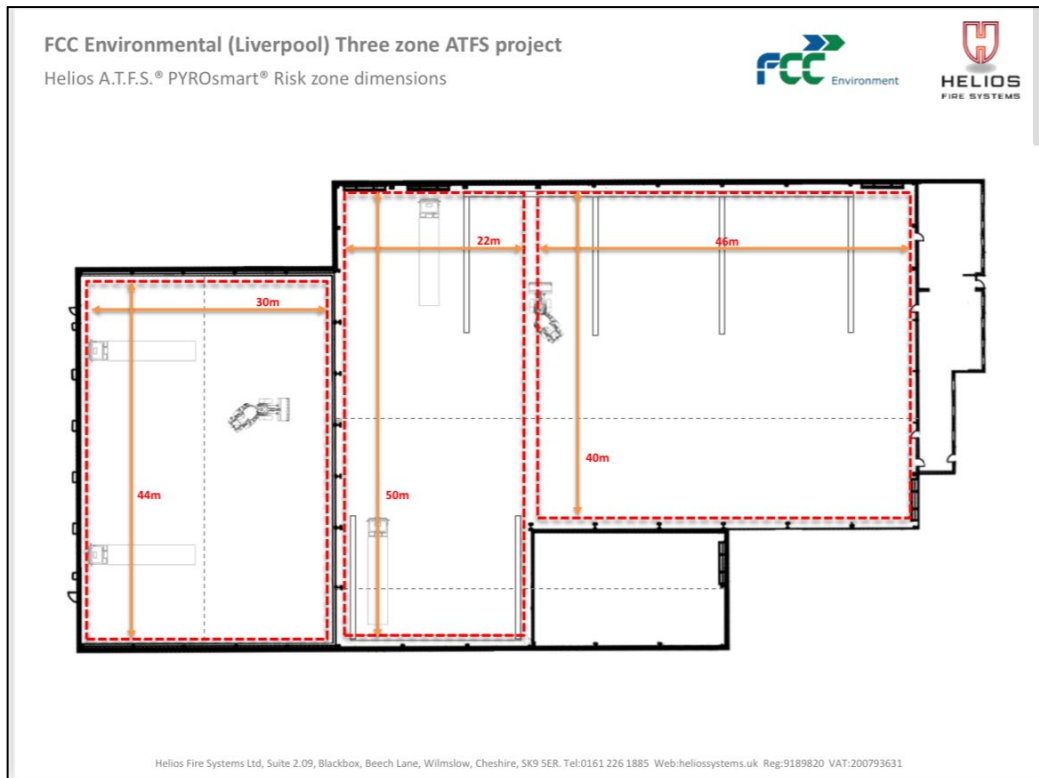


Figure 3 – Water cannons: three zones covered within building

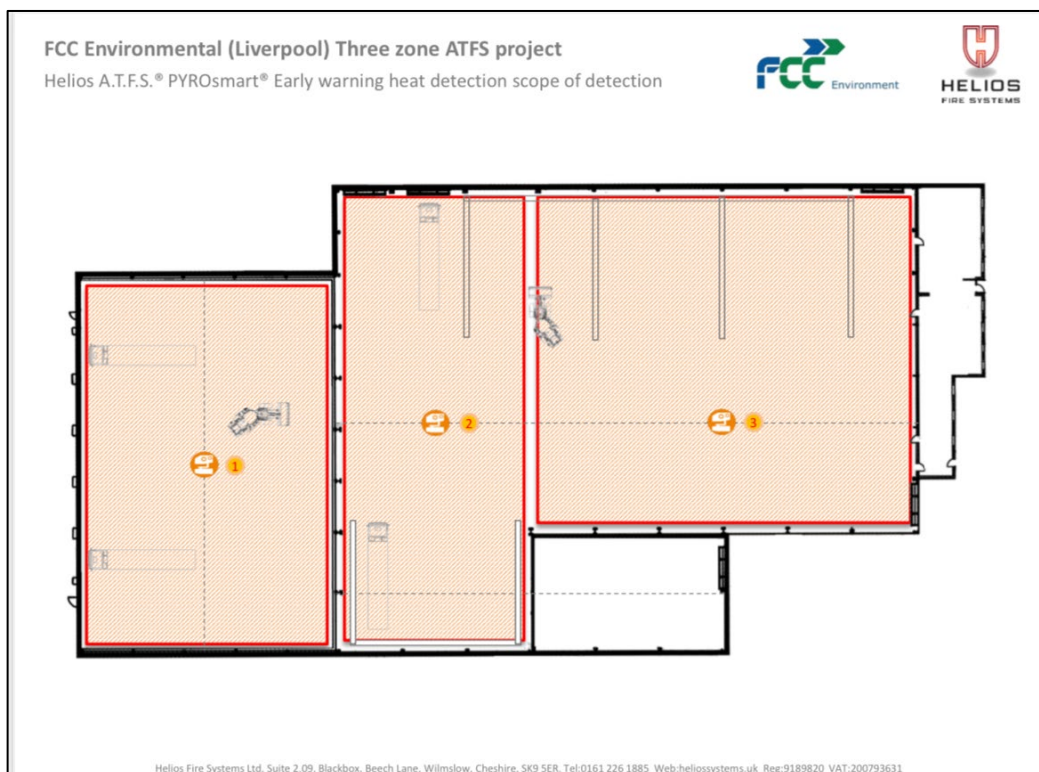


Figure 4 – Water cannons – early warning heat detection scope

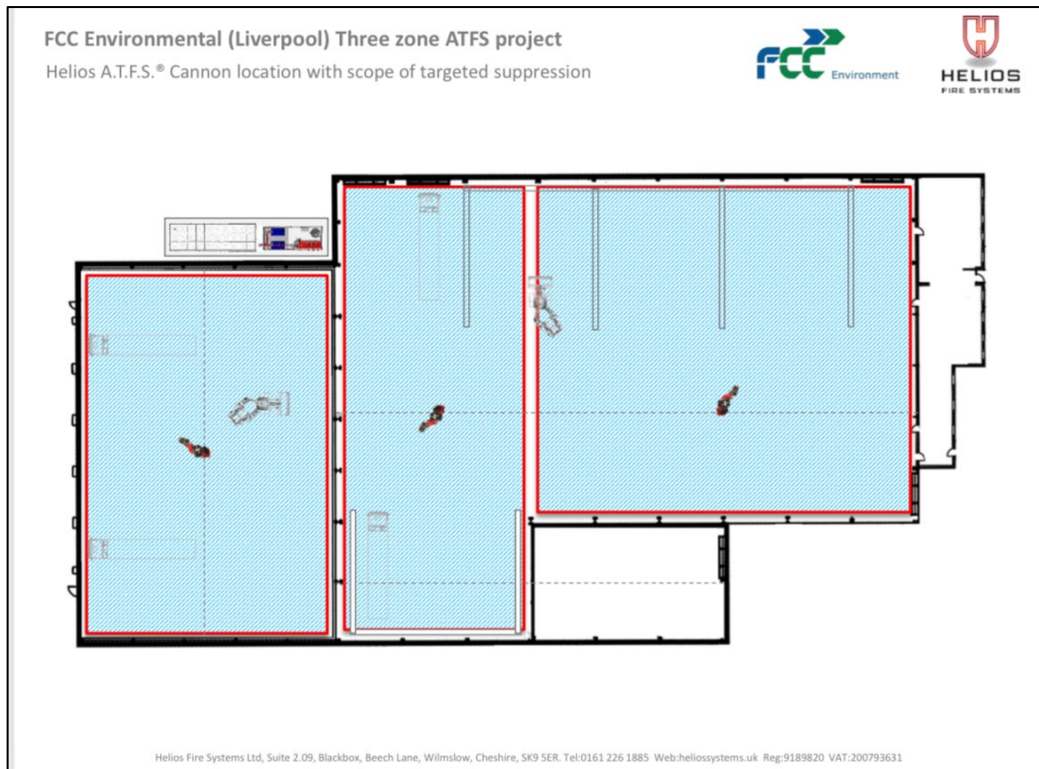


Figure 5 – Water cannons: scope of targeted suppression

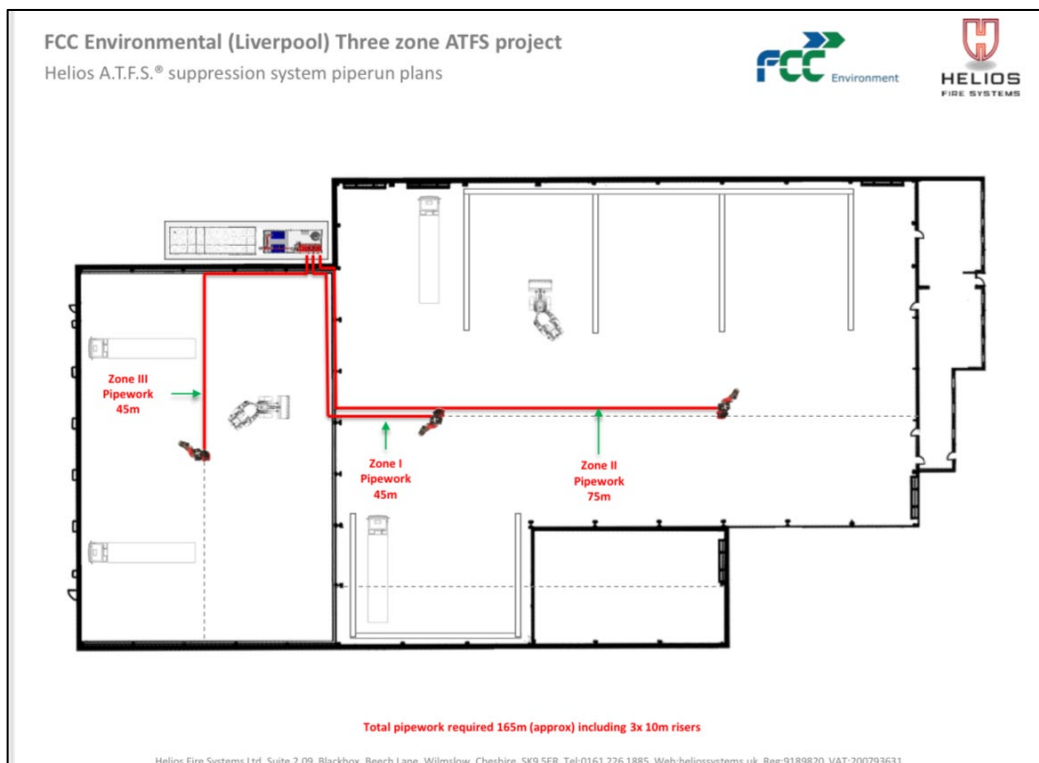


Figure 6 – Water cannons: pipework plans

Manual Fire Suppression

- 10.1.9 The waste stockpiles will be stored within fire-proof concrete bays, with 1m freeboard above the waste to prevent fires spreading between bays.
- 10.1.10 In addition to dousing fires using the automated water cannons, fire extinguishers on-site can also be used to target small fires.
- 10.1.11 Site staff will be trained in fire safety awareness and in the use of site fire-fighting equipment. Fire extinguishers will be placed at strategic locations around the site, particularly in the site office and fuel store. A check (discharged/full, service date etc) of fire extinguishers will be undertaken weekly and logged in FCC's EcoOnline database. All fire extinguishers are subject to annual testing by an approved accredited supplier. All fire extinguishers conform to British Standards EN 3. Mobile plant on site will be provided with fire extinguishers to be kept in the vehicle cab at all times in case of a fire emergency.
- 10.1.12 Smouldering/self-heating wastes can be pulled out of a large stockpile by mobile plant operated by trained site staff, if safe to do so, into the Quarantine Area outside, to prevent the fire spreading or engulfing an entire waste pile.
- 10.1.13 Manual fire suppression is unlikely to be undertaken out of hours, with Site Management instead notified of a fire at the Site out of hours by the automatic fire alarm system and the automated water cannons system being triggered. The site also will have a security patrol out of hours which will alert site management to any incidents including fires outside of normal operating hours. The Fire & Rescue Service will also be notified.

Fire Alarm

- 10.1.14 The site will have an automatic fire alarm system that will be sounded in the event of a fire to make site staff aware of a fire emergency during the day and out of hours, and to muster at a designated fire assembly point if during operational hours. If required, on-site firefighting can be undertaken by trained site staff for smaller fires not doused by the cannons using fire extinguishers on-site.
- 10.1.15 The fire alarm will be regularly checked by site management and the checks recorded in the FCC's EcoOnline database. Any fault will be reported immediately for repairs or replacement.
- 10.1.16 The fire alarm will be tested weekly, and this will be recorded in FCC's EcoOnline database.
- 10.1.17 Fire assembly points will be kept clear, visible and correctly labelled at all times.

CCTV System & Security Patrol

- 10.1.18 The site will operate a 24/7 CCTV system across the site, with cameras monitoring activities 24 hours a day, 365 days a year. The CCTV is connected to a monitoring system which alerts Site Management to a site incident during out of hours. The site also will have a security patrol

out of hours which will alert site management to any incidents including fires outside of normal operating hours.

- 10.1.19 Site Management will notify the Fire & Rescue Service of the Fire Information box which holds a copy of the Fire Prevention Plan. On arrival, the Site Manager/Deputy will engage with the Fire & Rescue Service in any way and provide instructions to assist with the fire.

11.0 FIRE-FIGHTING

11.1 Fire-Fighting Techniques

11.1.1 The Site is designed and operated to allow for active firefighting. Appropriate resources are available to fight a fire including:

- Automated water cannon system with hot spot detection and fire alarm.
- Immediate water supply for water cannons from on-site fire water storage tank.
- Mobile plant to move waste – CAT 950M loader and 360 excavator.
- Trained site staff able to operate the mobile plant in an emergency fire scenario.
- Impermeable sloped surfacing on-site, kerbing, sleeping policeman at doorways of the buildings and site drainage with automated stop valves to enable isolation of fire waters on-site.
- Suitable finances in place to prepare site in the event of a fire.

11.1.2 Firefighting techniques will include some or all of the following:

- Trained site staff using fire extinguishers on site to tackle small fires.
- Separating unburned material from the fire using mobile plant.
- Separating burning material from the fire to douse it and extinguish the fire.
- Ability to activate water cannon system manually if required (likely only in exceptional circumstances).
- Site staff ensuring Fire & Rescue Service have been alerted to the fire on-site.

11.1.3 These actions will be taken under supervision of Site Management and from the Fire & Rescue Service. The Fire Prevention plan will be made available to the Fire & Rescue Service. Safe access for Fire & Rescue Service will be achieved by maintaining routes for fire engines and access points around the site perimeter.

12.0 WATER SUPPLIES

12.1 Water Supply Requirements for Worst-Case Scenario

- 12.1.1 In accordance with the Environment Agency's 'Fire prevention plans: environmental permits' guidance (updated 11th January 2021), there must be enough water available for fire-fighting to take place and to manage a reasonable worst-case scenario, typically the largest waste pile catching fire.
- 12.1.2 The EA Fire Prevention Plan guidance that states, '*a 300m³ pile of waste will require at least 2,000 litres per minute of water for 3 hours*', (calculated to be a total of 360,000 litres or 360m³). To scale this up, the largest waste pile on site will be 750m³ and therefore based on the above EA guidance, this would require 5,000 litres per minute for 3 hours which would total 900,000 litres. This is a significant volume of water to be supplied and subsequently isolated on-site after a fire, with significant risks to the environment and tankering costs to the Operator.
- 12.1.3 In the interests of environmental protection and rapid fire detection and suppression, the Operator therefore proposes using alternative measures for the fire-fighting and water supplies for the Site which is the preferred alternative.
- 12.1.4 It is proposed for the building on-site to be fitted with an automatic fire detection and suppression system using water cannons targeted at waste bays that quickly detect hot spots within stockpiles. This will require much less water to tackle a fire on-site due to rapid fire detection and subsequent fire extinguishing. The system is designed to use a total of 3 water cannons inside the building and the water will be sourced from a water tank on-site using a pumphouse. The following specifications have been provided by the appointed suppliers:
- Rectangular water storage tank dimensions (L x W x H) - 10m x 3m x 3.5m - water volume in tank 105,000 litres (105m³) .
 - Pumphouse dimensions (L x W x H) - 6m x 2.4m x 2.4m – anti-vandal steel container
 - Pumps flow – 1,500 litres per minute
 - Cannon turrets flow – 1,500 litres per minute per cannon
- 12.1.5 The water tank on-site provides 105,000 litres and if one water cannon was triggered to tackle a hot spot within the one bay of the largest stockpile of waste on site, a 750m³ pile, then based on a cannon turret flow rate of 1,500 litres per minute, the tank would provide up to 1 hour and 10 minutes (70 minutes) of targeted fire-fighting, which, during this time, a fire would have been doused, prevented from spreading to adjacent bays and the Fire & Rescue Service would have been alerted and likely arrived at site.

- 12.1.6 It is also anticipated that the local Fire & Rescue Service upon attendance at site will provide 1 to 3 fire engines containing 1,800 litres each, and they will utilise nearby fire hydrant(s) if required.
- 12.1.7 It is considered that the above will provide quick fire detection, rapid fire suppression and sufficient water supply to tackle a fire quickly on site. As per the EA guidance, the rapid detection and immediate response will be applied so that the waste pile will not be fully involved in a fire and therefore large volumes of water will not be required.
- 12.1.8 In the event of a fire breaking out, site staff will ensure stop valves in the site drainage system will be closed to contain fire waters from leaving site.

12.2 Summary of Available Water Supplies

- 12.2.1 The summary of available water supplies at the site is provided below in Table 3:

Table 3 - Fire water supplies available at the Site

Description	Capacity & Flow	Location
Water Cannons supplied by 105m ³ (105,000 litre) fire water tank and pumphouse	Flow will be 1,500 litres per minute. This would provide 90,000 litres in 1 hour (or 105,000 litres in 1 hour 10 mins). Cannons will direct water immediately to hotspot/area of fire and use less water due to quick fire suppression.	The water cannons will be installed above each waste storage bay within the building, for targeted fire detection and suppression. The fire water tank will be situated external to the building, next to the north-eastern wall of the building, as per attached drawing ref. EC-22022-S01-211 'Proposed Operations Plan'.
Fire and Rescue Fire Engines	Fire tenders containing 1,800 litres of water, typical approx. flow rate of 18.9 litres per second (1,134 litres per minute). Will connect to Fire Hydrant for unlimited supply of water.	Fire & Rescue Service engines/vehicles situated on site and at the site perimeter/entrance to tackle fire.

- 12.2.2 It is anticipated that most small fires can be doused by the automated fire detection and suppression system using the water cannons directed at individual waste storage bays within the building.
- 12.2.3 If further assistance is required the Fire & Rescue Service will be alerted once fire tenders arrive on site, assuming 1 to 3 engines attend site, this would provide between 1,800 to 5,400 litres of water, before connecting to the fire hydrant nearby. It is not anticipated that the Fire

& Rescue Service will require additional water sources such as fire hydrants, due to the water cannon's ability to provide quick fire detection and suppression. Therefore, once the Fire & Rescue Service arrive at site it is likely the fire will have already been successfully doused and they will only be required to check this is the case and ensure structural integrity of the building.

- 12.2.4 The fire water on site will be contained by the site drainage, concrete surfacing and perimeter bunding, with all stop valves closed to prevent uncontrolled release of fire waters to surface water receptors/sewer.
- 12.2.5 It is very unlikely more than one stockpile would be on fire at once, and very unlikely fire would spread due to the fireproof concrete storage bay walls and floors on site, limits of stockpile sizes and other fire prevention measures in place, such as the ability to pull smouldering wastes into the Quarantine Area on-site.

13.0 MANAGING FIRE WATER

13.1 Containment

13.1.1 The Site must be able to contain the run-off from firewater to prevent pollution of the environment in the event of a fire.

13.1.1 All spent fire waters will be contained on-site to prevent run-off and pollution to the surrounding environment by the site's engineered and sloped impermeable concrete surfacing, perimeter kerbing/walls, and surface water drainage system installed with interceptors and stop valves.

13.1.2 The fire water from the cannons (105m³) will be retained within the building that will be sealed with ramps at doorways to ensure this volume does not escape .

13.1.3 Automated penstocks activated by the fire detection system will be installed to the external drainage system manholes will seal the drainage system and contain any additional firewaters (eg from fire service) within the site.

13.1.4 A copy of the proposed drainage system for the site is shown on attached drawing ref. 27942 /C-001 Proposed Drainage Layout.

13.1.5 All areas of site surfacing, concrete storage bays and containers will be visually inspected daily, to ensure continuing integrity and fitness for purpose. Staff are trained on site to make visual observations and reports any signs of wear & tear and damage to the Site Manager. The inspection and any necessary maintenance and repairs of areas identified to be damaged or cracked will be recorded.

13.2 Groundwater Vulnerability

13.2.1 Below the Site the bedrock is the Pennine Middle Coal Measures, with the bedrock designated as a Secondary A Aquifer. The site is not located on a groundwater vulnerable zone or Source Protection Zone (SPZ). The closest SPZ is a Zone III located 365m to the south, 1km to the west and 1.5km to the east of the Site boundary at its closest point, likely associated with the Principal Aquifer to the south. A Zone II SPZ is also located 1.7km to the south and southwest.

13.2.2 The site has an impermeable site surface (concrete) with perimeter kerbing, sleeping policeman at the building doorways and stop valves within the drainage system that will prevent infiltration of any spent fire water into the ground below or running off into the surrounding environment. Fire waters will be contained on-site and later tankered off-site for treatment.

14.0 DURING A FIRE – ACTION PLAN

14.1 Immediate Fire Incident Response

- The automated water cannon fire suppression system within the building will detect any fires within the wastes on site and will immediately activate, dousing the corresponding area with water and triggering the fire alarm, alerting all people on site to a fire.
- Upon discovering a fire, if the fire alarm does not activate automatically, the Site Manager/Fire Marshall shall manually activate it and also alert site users by shouting “FIRE, FIRE, FIRE”.
- The Site Manager/Fire Marshall/trained staff, upon discovering the fire but without endangering themselves or others, will decide whether or not the fire can be controlled using the on-site fire-fighting equipment (water cannons and where required fire extinguishers).
- If the fire is deemed significant and/or out of control and may affect site safety, the Site Manager/Fire Marshall/trained staff will alert the Fire & Rescue Service. When practicably possible, the regulatory bodies (Environment Agency) will also be contacted.
- All personnel, staff and visitors will evacuate from the building and outside areas in accordance with the ‘Site Evacuation Plan’ to the emergency assembly point. It is the responsibility of the Site Manager/Fire Marshal to ensure that all company personnel, visitors and sub-contractors are accounted for, and to give that information to the Fire & Rescue Service on their arrival.
- No member of the public, visitors or customers will be allowed to enter the site during the incident.

14.2 Additional Actions During a Fire

- 14.2.1 Where safe to do so and deemed necessary, trained staff will operate mobile plant to segregate any waste stockpiles not impacted by the fire to reduce the likelihood of fire spread.
- 14.2.2 Burning wastes can also be isolated for cooling and/or dousing with water or fire extinguishers using the Quarantine Area outside as required.
- 14.2.3 Small fires can be extinguished by trained on-site members of staff with the use of appropriate hand-held fire extinguishers. Fire extinguishers will be located as required around the site entrances and offices for easy access and usage.
- 14.2.4 Containers containing waste (i.e. skips) will already be separated at an appropriate distance so that the potential for spread from container to container is minimised. In the event of a fire in one of the containers, mobile plant will be deployed to isolate the affected materials and/or

containers provided that it is safe to do so and isolate that container to the Quarantine Area. The container can be doused to extinguish the fire.

- 14.2.5 Staff will only tackle the fire with use of the fire extinguishers if it is safe to do so. In the unlikely event of a fire which has been unsuccessfully extinguished by the sites available water cannon suppression system or fire extinguishers, staff are to await the Fire & Rescue Service who would then take the appropriate action.

14.3 Site Access and Water Supplies

- 14.3.1 Site access for Fire & Rescue Service and vehicles will be via the main entrance/exit on the western boundary and access will be unobstructed at all times for Fire & Rescue Service.
- 14.3.2 Access routes to waste storage and Quarantine Areas in the event of a fire are shown on attached drawing ref. EC-22022-S01-211 'Proposed Operations Plan'.

14.4 Role of Site Manager/Fire Marshall

- 14.4.1 The Site Manager/Fire Marshall will:

- Appraise the Fire & Rescue Service with the details of the fire including the location and composition of the waste/materials involved.
- Assist with the Fire & Rescue Service in any way safely to provide clear access routes to the fire, ensuring the site drainage system is isolated and providing mobile plant if necessary to ensure that the fire is extinguished.
- Control vehicle movements and prevent further access to the site by directing waste vehicles to alternative local third-party or FCC facilities such as FCC Wigan and Ellesmere Port waste transfer stations.
- Ensuring that at no time should personnel safety be compromised.

- 14.4.2 Should the Fire & Rescue Service take control of the fire incident, water supplies are available as detailed in Section 12 'Water Supplies' of this Fire Prevention Plan, including a 105m³ (105,000 litre) water storage tank on-site. Penstock valves are to be closed in the site drainage system by trained site staff to isolate fire waters on-site.

14.5 Out of Hours Fire Response

- 14.5.1 A 'Fire and Emergency Information Box' will be located at the site entrance/main weighbridge building which will contain the following key information for FCC staff and the Fire & Rescue Service:
- Fire Prevention Plan (this document)
 - FCC Emergency Management Plan
 - Emergency Site Plan

- Site drawings showing the locations of water supplies and fire extinguishers
- Information relating to the waste operations on site
- Information relating to the mobile plant and vehicles on site
- Contact details for key staff/site management.

14.5.2 Out of hours, the site gates will be closed and locked, with no unauthorised access. The site will have a security guard patrolling when the site is not operational and 24/7 CCTV surveillance that can trigger the alarm to an incident (fire, vandalism etc.) out of hours.

14.5.3 In the event of an out of hours fire when the operator is not present on site, the patrolling security guard and/or CCTV surveillance company will contact the Fire & Rescue Service who will be granted entry by the security guard, or force entry to site if required.

14.6 Engagement with Neighbours and Receptors

14.6.1 During any firefighting or subsequent clean-up operation, any incoming wastes will be diverted to an alternative waste processing site, such as FCC Wigan and Ellesmere Port waste transfer stations.

14.6.2 Neighbouring residential and commercial properties will be notified immediately of a fire at the site, where this is proportionate to the scale and relevant to the specific receptors that may be affected. Site Management (or their nominated persons) will visit the nearest neighbours and advise of a fire emergency at the site and advise of actions required to be taken i.e. closing windows and staying away from the site perimeter.

14.6.3 Contact with other properties located further afield will be undertaken under the direction of the Fire & Rescue Service attending site.

14.6.4 Management will contact their customers and clients and advise them to re-direct their waste vehicles to an alternative facility until the site is operational.

15.0 AFTER A FIRE

15.1 Site Clean-Up

- 15.1.1 Any fire waters/contaminated waters will be tankered off-site to a suitable treatment facility for disposal.
- 15.1.2 After any fire or hot waste load event, the waste after extinguishing will be loaded onto an appropriate waste carrier and taken to landfill. Under no circumstances will this waste be mixed and/or placed within any of the waste streams on site.
- 15.1.3 If the Quarantine Area was used during the fire to contain hot loads/burning wastes, then it will undergo deep cleaning using the pressure washing facilities and brushes, where the surface water will be tankered off site to a suitable treatment site. Containers and any remaining waste affected by fire will be removed from site and taken to an appropriate disposal facility off site.
- 15.1.4 All site infrastructure, mobile plant and equipment will be checked to ensure they are functioning correctly and have had no fire damage. The Site Manager will carry out a thorough inspection of the site to ensure it is in a satisfactory condition before the site can reopen.
- 15.1.5 Following a fire which required the presence of the Fire & Rescue Services, in addition to above, management will liaise with the regulatory authorities and Fire & Rescue Services to produce a plan to allow normal operations at the site.
- 15.1.6 After a significant fire incident and damage, technically competent manager and/or engineers will assess the degree of damaged caused by a fire, and the residual fire damaged waste, emissions or equipment.
- 15.1.7 Site Management will make a record of the incident and the procedures carried out to manage the fire. As assessment will be carried out to determine whether further mitigation measures could have prevented the fire, with an update to the FPP and EMS as required.

16.0 REFERENCES

1. Environment Agency – 'Fire Prevention Plans: Environmental Permits', published July 2016, last updated January 2021.

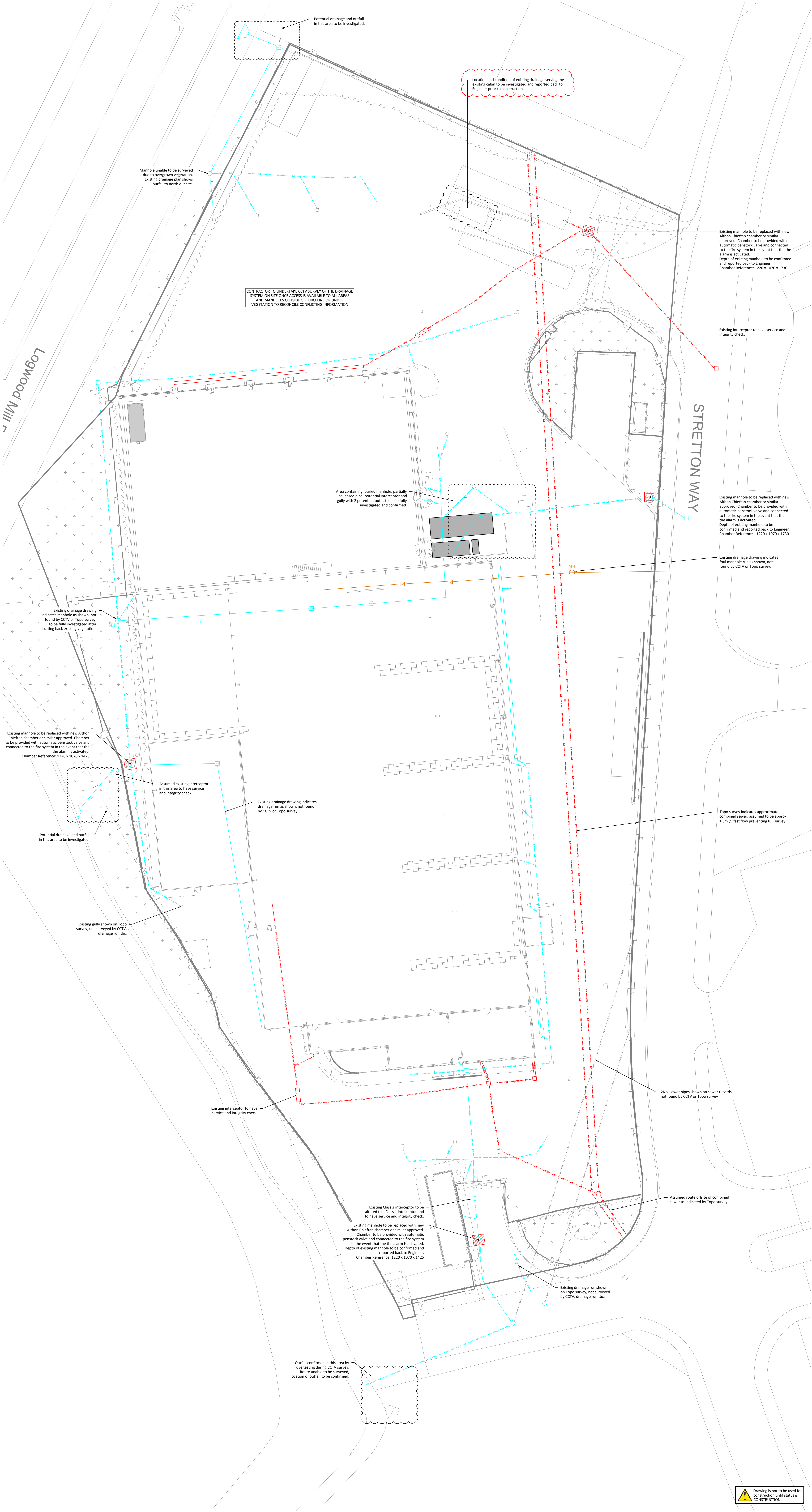
DRAWINGS

EC-22022-071-S03..... Proposed Operations Plan

27942/C-001 Proposed Drainage Layout

OSTS1902492-P-1 Arpley2 Utilities Survey

6109-CAU-XX-XX-DR-V-1800 Sensitive Receptor Plan



NOTES

GENERAL

Do not scale from this drawing.

All dimensions and levels are in metres unless noted otherwise.

Overall setting out information shall be taken from 'FCC Environment' drawings.

This drawing shall be used in conjunction with all relevant drawings, specifications and details, in particular JPP general notes drawing.

This drawing is based on EC-22022-032/REV 502, supplied by 'FCC Environment'.

HEALTH, SAFETY AND THE ENVIRONMENT

In accordance with the Construction (Design and Management) Regulations 2015, designs and details on this drawing have been the subject of a designers risk assessment, to identify risks in construction, use, and demolition of the scheme.

It is not considered necessary for designers to highlight obvious and/or common risks (such as deep excavations, manual handling and working around heavy plants), which contractors should be familiar with.

So far as is reasonably practicable, risks inherent in the design have been eliminated. Where it has been considered that elimination of a risk (or part of a risk) is not reasonably practicable, it has been reduced.

Significant unusual residual risks are identified below, beside the measures which have been adopted to eliminate and/or reduce them:

- No significant or unusual issues have been identified

Drawing Key

- Surface water run taken from existing drainage drawing
- Foul water run taken from existing drainage drawing
- Surface water run taken from CCTV and Topo Surveys
- Foul water run taken from CCTV and Topo Surveys
- Combined Sewer run taken from CCTV and Topo Surveys

Rev	T5	All internal drainage removed as per latest client comments.	By	IH	Checked	MT	14.07.2025
Rev	T4	Updated to suit latest comments.	By	ME	Checked	AAK	05.07.2024
Rev	T3	Updated to suit latest comments.	By	IH	Checked	PAB	30.05.2024
Rev	T2	Updated to suit latest comments.	By	IH	Checked	PAB	14.05.2024
Rev	T1	Tender issue.	By	IH	Checked	PAB	13.05.2024

jpp
Northampton
Grand Union Works, Whilton Locks, Daventry
Northamptonshire, NN11 2NH
T: 01604 781511
E: mail@jppuk.net W: jppuk.net

- Infrastructure Design
- Structural Engineering
- Development Planning
- Professional Advice
- Geotechnical & Environmental
- Surveying

Client

FCC Environment

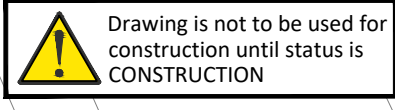
Project

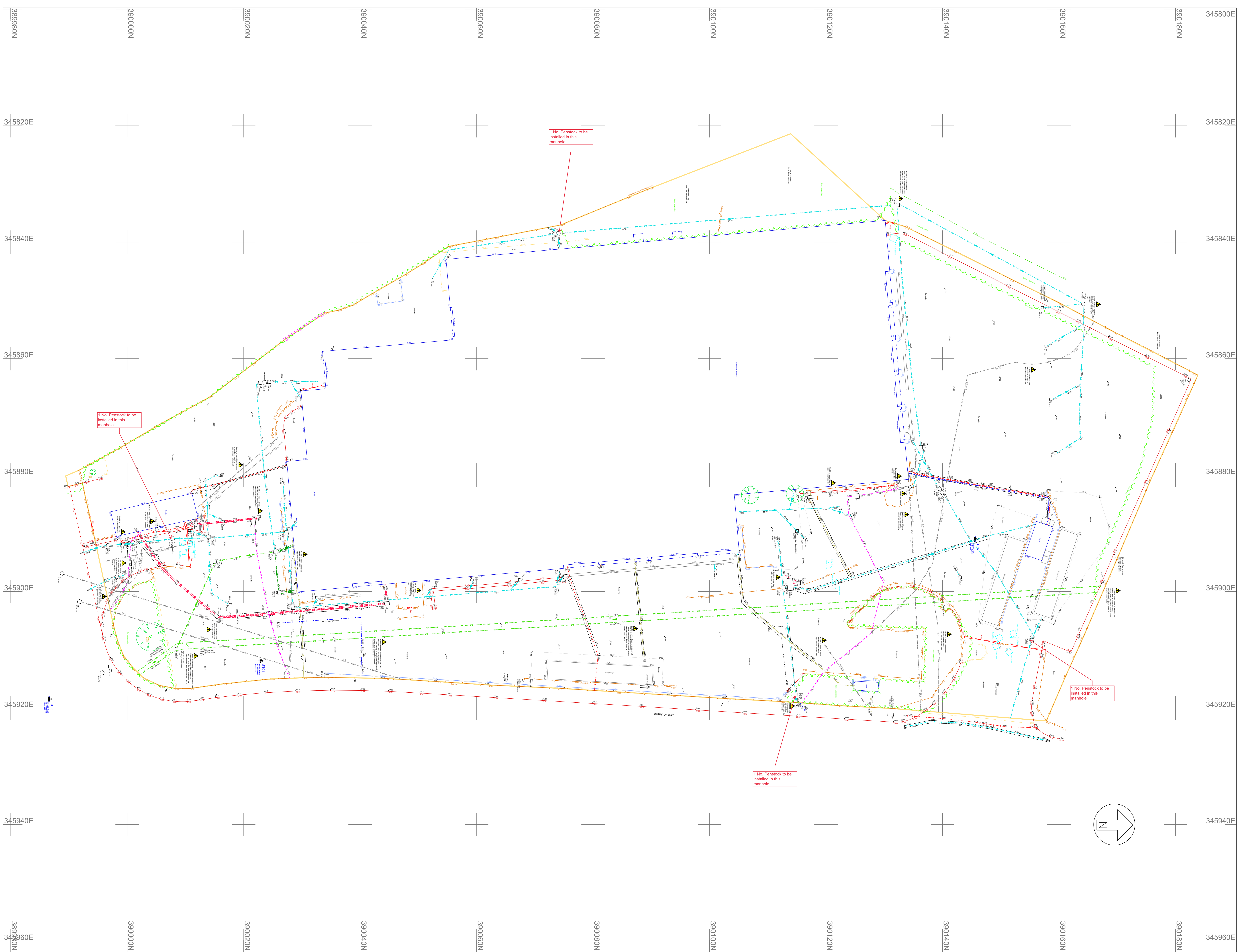
Arpley 2 Waste Transfer Station
Stretton Way, Liverpool

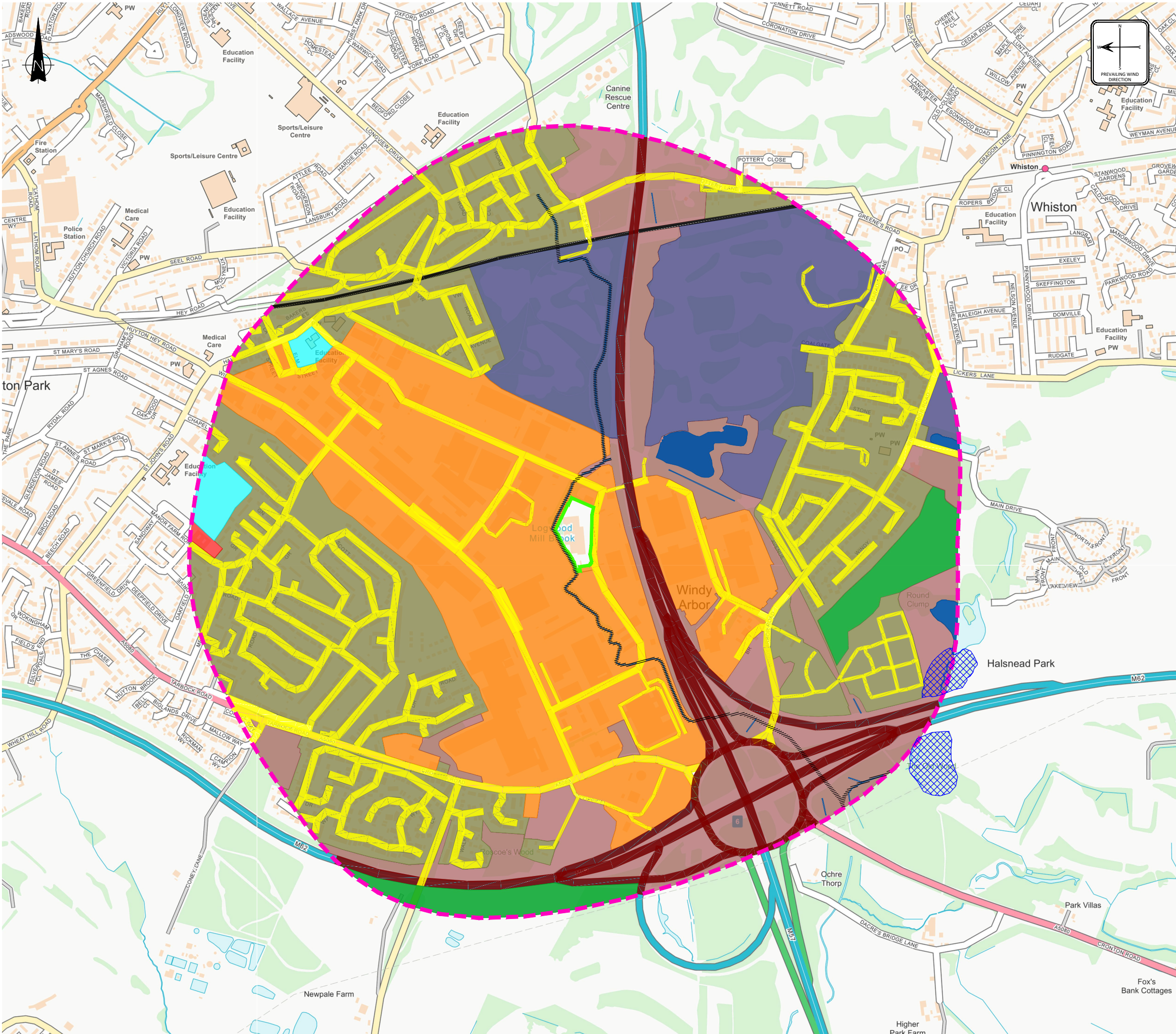
Title

Proposed Drainage Layout

Scale at A0	1:200	Drawn by	IH	Checked by	PAB	Date	April 2024
Status	TENDER	Project ref	27942	Drawing no.	C-001	Revision	T5



[illegible]



LEGEND

- PERMIT BOUNDARY
- 1000m OFFSET
- SURFACE WATER
- WOODLAND / SCRUBLAND
- RECREATIONAL
- EDUCATIONAL FACILITY
- COMMERCIAL / INDUSTRIAL
- RESIDENTIAL
- MEDICAL FACILITY
- AGRICULTURAL
- MAJOR ROAD
- MINOR ROAD
- RAIL
- EUROPEAN EEL MIGRATORY ROUTE
- ANCIENT WOODLAND

P02	WIND ROSE ADDED	EJD	SH	SH	16.04.24
P01	ISSUED FOR INFORMATION	EJD	SH	SH	21.02.24
REV	MODIFICATIONS	BY	RE	AP	DATE
PURPOSE OF ISSUE				STATUS	
FOR INFORMATION				S2	
CLIENT:					
					
PROJECT:					
ARPLEY 2 TRANSFER STATION					
TITLE:					
SENSITIVE RECEPTOR PLAN					
DESIGNED BY		DRAWN BY		REVIEWED BY	
EJD		EJD		SH	
AUTHORISED BY					
SH					
DATE		SCALE @ A3		JOB REF:	
20.02.2024		1:10000		6109	
REVISION					
P02					
DRAWING NUMBER					
6109-CAU-XX-XX-DR-V-1800					
					

Appendix 1

Waste Acceptance Procedures

	FCC Environment Integrated Management System	
Document Title:	Waste Acceptance and Handling Procedure Guidance	Mandatory
		Guidance
		Project Specific

This guidance document should be used in conjunction with IMS-PRO-089 Waste Acceptance Procedure; and IMS- PRO-094 Waste Handling Procedure. The procedure takes precedence over the guidance.

1.0 Overview

The Waste Acceptance Procedure details the process by which a waste stream is approved for acceptance at any FCC site. The procedure begins from the moment an enquiry is received from a customer and ends when the waste, having arrived at site, has undergone the necessary checks and has been given final approval. The handling of the waste after final approval is detailed in IMS-PRO-094

2.0 Checks at point of arrival:

2.1 All wastes that are accepted for disposal, treatment, recycling, recovery or onward movement and are not domestic wastes being deposited by a householder at a Household Waste Recycling Centre must be approved by a competent assessor who will ensure that the waste is correctly characterised for the receiving facility.

- In the case where a site is using realtime GLADIS then the enquiry will show up as 'Live' on the system if the approval process is complete and it can be assumed that it has been adequately characterised. If the waste stream is not visible on the GLADIS system then the Compliance Team must be contacted to determine whether it is legal to receive the waste. If so then they will ensure that the DW number is made live and that a Waste Summary Form or a confirmation email is supplied to the weighbridge operator.
- If a site uses non-realtime GLADIS and a job is not visible then the Compliance Team must be contacted in order to arrange an information download and provision of the Waste Summary Form or confirmation email. If site does not use GLADIS and a load arrives for which no Waste Summary Form or confirmation email has been supplied then the Compliance Team must be contacted for authorisation by provision of one or other of these documents.
- If the Compliance Team confirm that the waste is not adequately characterised then it cannot be accepted and further instructions will be required. The Compliance Team will then determine whether adequate information can be obtained in a realistic time-frame or whether the load should be rejected. If the weighbridge is instructed to hold the load then it must be moved to a safe area off the weighbridge while the Compliance Team determine and communicate the appropriate course of action.

2.2 All wastes entering a treatment facility and difficult and hazardous wastes entering a landfill should be booked in advance to ensure that safe and appropriate mechanisms for handling the waste are available. A note should be made in the site diary of all such loads and the site manager informed when one is expected. If a waste stream of this kind arrives without being booked in advance then the weighbridge operation must inform the site manager or supervisor who can then determine if the waste can be handled. If the waste cannot be handled safely and disposed of in accordance with the permit and legislation then it must be rejected.

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2.3 Waste Carrier's Licences:

Anyone bringing controlled waste to an FCC site who is not a householder carrying their own waste will usually require a waste carrier's licence. The licence number or reason for exemption will be included as part of the details of the duty of care transfer note or hazardous waste consignment note. Whoever is responsible for accepting waste into site, usually the weighbridge operator, must confirm that the carrier has a valid licence or is otherwise not required to hold one. Carrier's licence registrations can be searched on the EA, SEPA or NRW websites at the following locations:

England:

<https://environment.data.gov.uk/public-register/view/search-waste-carriers-brokers>

Scotland:

<http://apps.sepa.org.uk/rocas/>

Wales:

<https://www.wastecarriersregistration.naturalresourceswales.gov.uk/en/registrations/search>

If the carrier cannot produce a valid waste carrier's licence and the registration cannot be confirmed then the first load can be accepted provided that the customer is informed that no future loads can be accepted until a valid licence is obtained. Subsequent loads should be rejected.

2.4 Duty of Care Transfer Notes:

Anyone bringing non-hazardous controlled waste to an FCC site who is not either 1) an FCC vehicle bringing waste from an FCC site, or 2) a householder carrying their own waste, will require a valid waste transfer note. These notes can either be supplied for individual loads or annual 'season tickets' may be used in specific circumstances. EDOC may also be used to create and store transfer notes.

The minimum information that a valid transfer note is required to display is as follows:

- A description that accurately identifies the composition of the waste
- The correct EWC code or codes
- An approximate quantity for the load, if on a single load transfer note, or for the year if on a season ticket
- Information on how the waste is contained
- The time, date and place of transfer

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- **The SIC code of the transferor**
- **The name, address and postcode of the transferor accompanied by a signature**
- **The name of the unitary authority or council of the site where the waste originated**
- **Confirmation of whether the transferor and transferee are the producer, importer or local authority and whether they hold an environment permit or exemption and/or a waste carrier's license. If they are a holder of an exemption or permit and/or a registered waste carrier then the details of these registrations including registration numbers must be detailed**
- **Signed confirmation that the waste hierarchy has been applied to the load or waste stream**

2.5 Hazardous Waste Consignment Notes:

Hazardous wastes entering an FCC site for disposal, recycling, treatment, recovery or onward movement, unless brought into a HWRC by a member of the public who is the producer and owner of the waste, must be accompanied by a valid Hazardous Waste Consignment Note. A consignment note must be provided for each load. All transfers of hazardous wastes between FCC sites, e.g. oil or grease contaminated wastes or asbestos, must also be accompanied by a valid Consignment Note

The minimum information requirements for a valid consignment note are as follows:

- **A consignment code in the form XXXXXX/YYYYY where the first part is the first six letters of the name of the company from whose site the waste is to be removed and the second part comprises only letters and numbers such that the whole code constitutes a unique identifier for the site from which the waste is removed. If the name of the company which operates the site has fewer than six digits then the remainder should be represented by letter Qs**
- **The name, address, postcode, telephone and fax numbers of the site from which the waste is to be removed (unless the site does not have a postcode in which case the closest one is to be used, or a telephone or fax in which case the note should read N/A)**
- **The name, address and postcode of the place the waste is to be taken to (consignee)**
- **The name, address, postcode, telephone and fax numbers of the waste producer if different from the details given for the site from which the waste is to be removed**
- **A full written description and the 2007 SIC code of the process which generated the waste**
- **A full written description of the waste(s) and the appropriate EWC code(s)**

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- **An accurate weight in kg of each waste type identified by an EWC code**
- **The chemical/biological components of the waste and their concentrations**
- **The physical form of the waste(s) e.g. solid, liquid, powder, sludge, gas or mixed**
- **The appropriate hazard codes to fully describe the hazardous properties of the waste(s)**
- **Container type, number and size**
- **If the waste is hazardous for transport then the consignment note must include the UN identification number(s), proper shipping name(s), UN class(es), packaging group(s) and special handling requirements**
- **Date and signature**

3.0 Booking Vehicles into site and completing appropriate records

- 3.1** Where a site is not an HWRC and a load is booked onto site after arrival a ticket must be produced in duplicate that displays the weight or estimated weight of the load. One copy is returned to the company which is depositing the waste and a copy is retained by FCC. Where a weighbridge with GLADIS is available then loads are booked in through the GLADIS system and an electronically signed ticket is produced for each load. Where GLADIS is unavailable a manual ticket is produced by the weighbridge operator. This can either be a single ticket for each load or a bulk ticket at the end of the day showing the total weight of material deposited against a particular DW number. Manual tickets are sent to the Sales Ledger Team at Doncaster for input into GLADIS.
- 3.2** Trade wastes entering a HWRC will have an alternative receipting system which will be detailed in the working plan or other site-specific documentation.
- 3.3** On arrival at a landfill site, any load of soil, difficult or hazardous waste must be checked against a Waste Summary Form which is supplied by the Compliance Team. If a Waste Summary Form is not present on site for a particular job then the weighbridge operator must contact the Compliance Team and request a copy of the form. The details provided on the paperwork supplied by the haulier and any visual checks that can be carried out at the weighbridge must be checked against the details on the Waste Summary form and if a discrepancy is found then the Compliance Team must be contacted for further instructions. If the Waste Summary Form requires that sampling of the waste stream be performed then the Sampling Plan must be requested by the Weighbridge Operator and then supplied to the site operative responsible for performing compliance testing.

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3.4 When a site receives hazardous waste then the weighbridge operator or other responsible person must complete section E of the consignment note. This must detail:

- The EWC Code(s) accepted
- The quantity of waste for each EWC code received
- Place and time that the waste was accepted
- The registration number of the vehicle that delivered the waste
- The name, address, postcode, telephone number, e-mail address and fax-number of the company receiving the waste
- The licence, permit or exemption number applicable to the deposit
- The signature of the person authorising the receipt of the waste along with the date and time the signature was made
- For consignment that forms part of a multiple collection, the number of consignments forming the collection
- If some or all of the load is rejected, the EWC code of the rejected waste and a written description of then reason for rejection.

4.0 Waste Handling at Point of Deposit

4.1 Specialised Containers at HWRCs

Difficult and hazardous wastes must be deposited in the appropriate containers.

- **Asbestos:**
Where a site is permitted to accept asbestos, a dedicated and lockable skip must be provided which is clearly identified by signage and kept locked when not in immediate use. Personnel adequately trained in the identification and handling of asbestos should be provided along with sufficient quantities of suitable PPE. The asbestos skip should be sited on impermeable hardstanding and, where possible, separate from other waste containers. Equipment for damping down asbestos should be available in the vicinity of the asbestos skip.
- **Batteries:**
Vehicle batteries and domestic batteries must be kept in separate dedicated, non-conductive containers which are well ventilated and fitted with lids. A battery container should not have drainage holes. A vehicle battery container should be clearly identified by signage, show the corrosive warning sign plus a written warning and must not be sited within 6 metres of flammable gasses or flammable liquids. A domestic battery container should be such that vehicle batteries cannot be accidentally placed within it and must be clearly labelled as for dry batteries only – not vehicle batteries. Domestic and Vehicle battery containers should not be kept closer than 3 metres from one another. Appropriate PPE must be available for anyone handling batteries.
- **Fluorescent Tubes and Cathod Ray Tubes:**
Fluorescent tubes and televisions and computer monitors containing cathode ray tubes must be stored away from other wastes and must not be dropped or damaged. Televisions must not be stacked. Appropriate

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PPE must be available for anyone handling fluorescent or cathode ray tubes.

- Household Chemicals:

Flammable liquids such as thinners or solvents should be stored in an appropriate container that will have internal isolation, bunding and internal and external ventilation. Flammable liquids must not be mixed or bulked up on site and the flammable liquid cabinet must be kept at least 6 metres away from any battery container or other potential source of ignition. Storage of flammable liquids must be kept to a minimum. An eyewash station, spill kit, fire fighting apparatus and appropriate PPE must be kept near the cabinet and the cabinet should carry the appropriate warning symbol(s).

Non-reactive toxic substances such as pesticides should be stored in a secure cupboard as per flammable liquids displaying appropriate hazard symbols. Reactive chemicals e.g. oxidising agents and fertilisers should be stored separately in a container which cannot be penetrated by water and displays the appropriate hazard symbols.

- Gas Cylinders:

Flammable gasses must be kept separate from non-flammable and toxic gasses and this may necessitate two gas cages. Gas cages should be kept locked when not in use and display appropriate hazard symbols. Gas stores should be at least 3 metres apart or separated by a firewall. Cages must be designed and sited such that water cannot build up in them. Cylinders should be stored upright unless instructions on the cylinders state otherwise. Flammable gas stores must be kept at least 6 metres from battery storage or other source of ignition, at least 3 metres from the site boundary and the area around the cages must be kept free from flammable materials. Gas cylinders should not be stored any longer than necessary. If acetylene cylinders are received by the site they must be stored separately from other gasses and removed from site as soon as possible.

- Waste Oil:

Waste oil must be stored in a tank bunded to 110% of the total volume and sited on an impermeable surface with sealed drainage. Spill kits must be readily available near the oil tank and spills must be cleaned up promptly. Waste oil tanks should have clear signage and display appropriate hazard warning symbols. Appropriate PPE must be available to any employee handling waste oil. If the site accepts contaminated oil containers then a separate container for the public to dispose waste oil containers should be provided. If waste oil containers cannot be accepted but are left on site by members of the public then site staff should follow the site's non-conforming waste procedure for hazardous wastes. Oil contaminated containers must not be mixed with general waste or recycleables by site staff.

- Paints and Adhesives:

It is recommended that paint and adhesive containers be placed on a bunded tray for sorting by site staff into separate hazardous and non-hazardous containers. Containers for paint and adhesives should be lockable and well ventilated. Containers should have clear signage and

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display appropriate hazard warning symbols. Solvent-based paints and adhesives must be kept at least 6 metres away from a flammable gas store or battery container.

- **Fridges:**
Fridges should be stored with a weatherproof covering, sited on an impermeable surface with sealed drainage and away from risk of vehicle collision. Fridges should not be stacked more the 2 units high.
- **Other WEEE:**
Containers for types of WEEE not previously discussed should be sited on an impermeable surface with sealed drainage.
- **Fly-Tipped Wastes**
Wastes that are fly-tipped at a HWRC or disposed into the incorrect container should be removed and placed within the correct container or quarantined for removal from site where the site is not permitted to accept them.

4.2 Burial and covering of waste on landfill

Difficult and Hazardous wastes accepted into a landfill site must be buried on deposit. Hazardous wastes must only be deposited into a cell permitted for hazardous waste unless specific permission has been obtained by the regulating authority. High sulphate bearing waste must only be deposited in a specifically permitted cell with no biodegradable waste. Stable non-reactive hazardous wastes must only be deposited in an appropriately permitted cell. If a secure, certified burial has been requested then the load must be buried on deposit and witnessed and a certificate of destruction filled in and signed by the witness. Any wastes containing Japanese Knotweed must be buried a minimum of 3m from the basal liner, 5m from the cap and 7m from any cell edge or infrastructure. At the end on the working day the working face must be covered with enough daily cover to ensure that the waste is not lost and is inaccessible to scavenging pests.

4.3 Segregated areas at transfer stations:

In order to prevent the mixing of different waste types a transfer station should have separate, clearly delineated bays for different waste types.

4.4 Clinical Wastes:

Clinical wastes must be stored in locked clinical waste containers which should be either labelled with the appropriate hazard warnings and, where needed, UN numbers or sited in separate bays displaying clear signage to differentiate containers holding different classifications of clinical waste. Odorous wastes may need to be stored in refrigerators

4.5 Handling with machinery:

Where wastes are handled using machinery this must be done by an appropriately trained and licensed person and in accordance with the risk assessments and safe working procedures

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5.0 Inspection at point of deposit and compliance sampling

5.1 Visual Inspection:

All wastes should be inspected visually at the point of deposit in order to confirm that the waste matches the description on the transfer or consignment note and to make sure that there are no contaminants that would need to be removed in order to conform with the site permit. Records of the results of visual inspections should be recorded in accordance with site procedures. If the waste does not conform to the description on the waste transfer note , consignment note or waste summary form then the advice should be sought from a competent waste assessor to determine the appropriate course of action.

5.2 Compliance Testing:

Where the Waste Summary Form requires that Compliance Testing be undertaken then a Sampling Plan must be requested from the Compliance Team. The sampling plan will determine the frequency of testing and the determinands that the samples should be analysed for. The instructions on the sampling plan should be followed and samples should be taken in duplicate with a minimum of 500g but preferably 1kg of sample. Samples should be clearly labelled with an identifying number such as a DW number that relates them to a specific waste stream or load. A brief description of the material that has been sampled should be recorded and one of each pair of samples should be sent to the appropriate testing laboratory in a timely fashion. The second of each sample pair should be stored on site in case additional analysis is required. The laboratory should be instructed to forward the results of the analysis to a competent waste assessor who should contact the sampler with further instructions should the data show any unexpected results.

Refs:

Managing Health and Safety in Civic Amenity Sites (HSE Guidance)

The Hazardous Waste Regulations 2015

The Waste (England and Wales) Regulations 2011

The Waste (Scotland) Regulations 2012

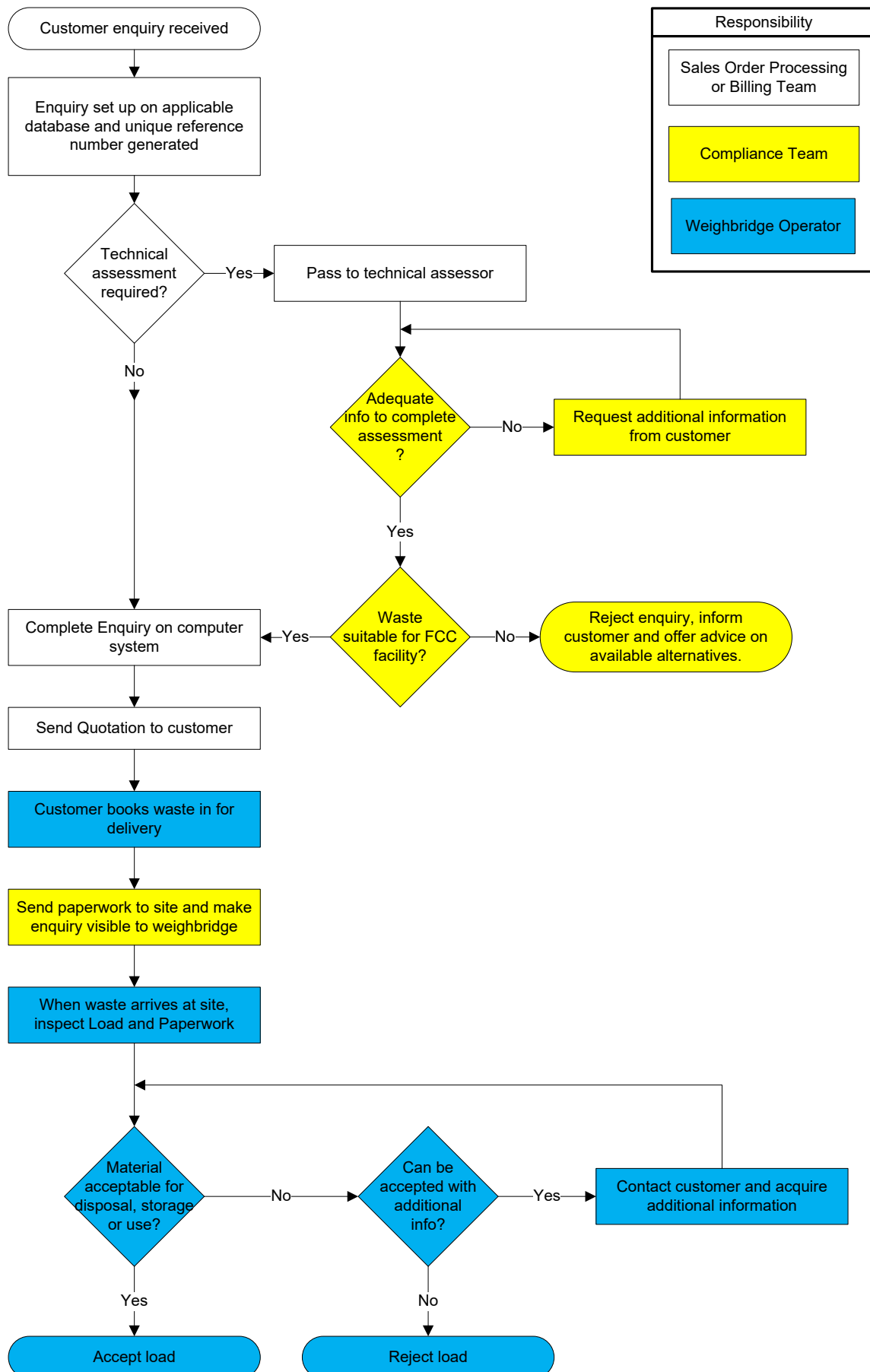
Waste Duty of Care Code of Practice (DEFRA 2016)

The Environmental Permitting Regulations 2010

<https://www.gov.uk/guidance/hazardous-waste-consignment-note-supplementary-guidance>

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2.0 Definitions

Ref	Item	Definition
2.1	Technical Assessment	Classification of a waste stream in accordance with current legislation and guidance
2.2	Technical Assessor	Someone suitably qualified and experienced to accurately classify a waste stream in accordance with current legislation and guidance

3.0 References

3.1 IMS-UG031; Waste Acceptance Guidance

3.2 The Environmental Permitting (England and Wales) Regulations 2016

3.3 The Waste Management Licensing (Scotland) Regulations 2011 ammended 2016

3.4 The Waste (England and Wales) Regulations 2011

3.5 The Waste (Scotland) Regulations 2011 ammended 2012

3.6 Guidance on the classification and assessment of waste Technical Guidance WM3

4.0 Narrative

None required as relevant information to this procedure is contained within the flow chart, the relevant paragraphs of Section 2 Definitions and the Waste Acceptance Assessment Guidance.

5.0 Training & Competency

5.1 All functions within the procedure shall be trained in the operation of this procedure and the details recorded on the appropriate Training Record form to demonstrate competence.

5.2 Weighbridge Operator and supervisory staff to have completed the Duty of Care and Permit Compliance courses

6.0 Records

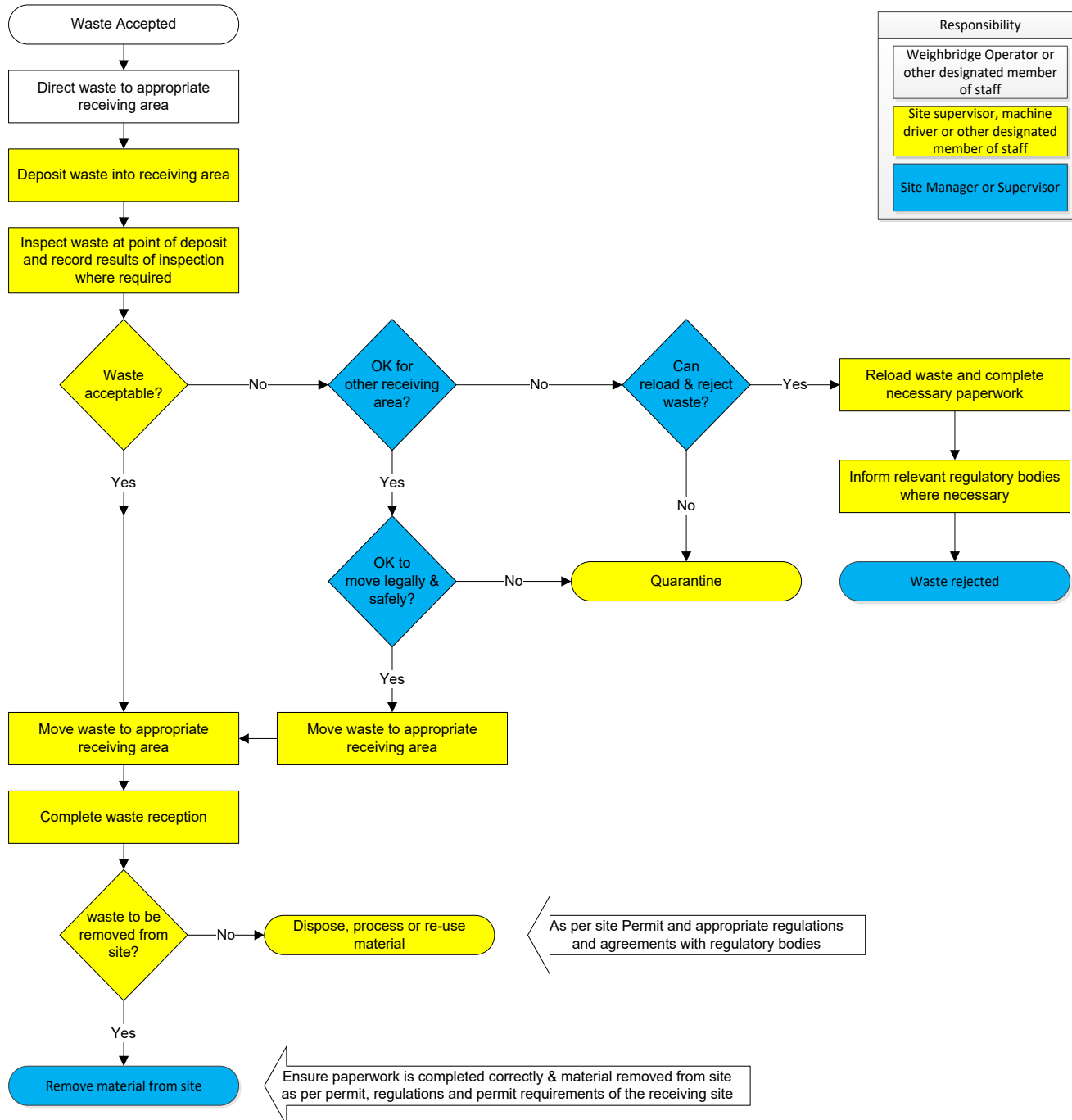
Record type	Storage Method	Storage Location
Duty of Care Transfer Notes	Hard Copy	Site Filing System (SFS) and kept for a minimum of 2 years
Hazardous Waste Consignment Notes	Hard Copy	SFS and kept for a minimum of 3 years
Weighbridge Ticket	Hard Copy	SFS
Customer Enquiry Form	Electronic Copy	Doncaster Z Drive or Northampton G Drive and keep for a minimum of 6 years after the final deposited
Pre-Treatment Confirmation Form	Electronic Copy	Doncaster Z Drive or Northampton G Drive
Waste Summary Form	Electronic Copy and Hard Copy	Electronic copy on Doncaster Z Drive or Northampton G Drive. Hard Copy kept in Weighbridge
Waste Sampling Plan	Electronic Copy and Hard Copy	Electronic copy on Doncaster Z Drive or Northampton G Drive. Hard Copy kept in Weighbridge
Completed Waste Enquiry	Electronic Copy	GLADIS Database updated And electronic copy on Doncaster Z Drive

7.0 Appendices

7.1 None.

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2.0 Definitions

Ref	Item	Definition
2.1	Receiving Area	Area designated for the deposit of a specific waste type e.g. landfill tipping face, information area, recycling skip or transfer station bay.

3.0 References

- 3.1 IMS-UG-031; Waste Acceptance Guidance
- 3.2 The Environmental Permitting (England and Wales) Regulations 2010
- 3.3 The Waste Management Licensing (Scotland) Regulations 2011 ammended 2016
- 3.4 The Waste (England and Wales) Regulations 2011
- 3.5 The Waste (Scotland) Regulations 2011 ammended 2012
- 3.6 Guidance on the classification and assessment of waste (1st edition 2015) Technical Guidance WM3

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4.0 Narrative

None required as relevant information to this procedure is contained within the flow chart, the relevant paragraphs of Section 2 Definitions and the Waste Acceptance Assessment Guidance.

5.0 Training & Competency

- 5.1** All functions within the procedure shall be trained in the operation of this procedure and the details recorded on the appropriate Training Record form to demonstrate competence.
- 5.2** Weighbridge Operator and supervisory staff to have completed the Duty of Care and Permit Compliance courses
- 5.3** Site manager, supervisor or other designated member of staff to hold a Certificate of Technical Competence appropriate to the facility type from an accredited body e.g. CIWM. Attendance levels of the CoTC holder to be set by agreement with the Environment Agency, SEPA or Natural Resources Wales.
- 5.4** An appropriate Driver's License must be held by all drivers of road-going vehicles and ADR certification is required for the transport of materials under the Carriage of Dangerous Goods regulations.
- 5.5** All operators of plant and other mobile machinery on site must hold current AITT, EU SKILLS Plant Plus or IPAF certification as appropriate to the type of machinery being operated.

6.0 Records

Record type	Storage Method	Storage Location
Load Inspection Records	Hard Copy	Site Filing System (SFS)
Records of Schedule 5 and 6 notifications	Hard Copy	SFS
Duty of Care transfer notes and Consignment notes for waste removed from site	Hard Copy	SFS
Records of internal waste movements	Logged under the enquiry number on Gladis	Doncaster server
Tickets to show receipt of waste from onward movement	Hard Copy	SFS
Training Records	Hard Copy/Electronic Copy	File on site and training database on sharepoint

7.0 Appendices

- 7.1** None

WWW.CAULMERT.COM



Registered Office: InTec, Parc Menai, Bangor, Gwynedd, LL57 4FG

Tel: 01248 672666

Email: contact@caulmert.com

Web: www.caulmert.com