

# Fire Prevention Plan

Version 08 will be put in to practice on implementation of the large-scale shredder on site.  
Update May 2023 inline with Environmental Permit Application.

**Plan version:** 08  
**Date of plan:** 12<sup>th</sup> May 2023

## Site details

**Site name:** Ecobat Solutions UK Ltd  
**Site address:** Crescent Works, Willenhall Road, West Midlands, WS10 8JR  
**Operator name:** Ecobat Solutions – EPR/DB3704FG

## Who this plan is for:

Ecobat Leadership Team  
Ecobat Supervisory Staff including operational call out staff  
Ecobat Fire Marshalls  
Environment Agency Officer  
West Midlands Fire Service

All Ecobat Employees working on site  
All Contractors attending and working on site near waste

**All on site must understand the contents of this Fire Prevention Plan to:**

- **Prevent a fire from occurring**
- **Understand what to do during a fire**

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## 1. Types of combustible materials

### Combustible waste

Combustible waste types within Ecobat Solutions are as below:

- Cardboard (25 litre flat)
- Empty Plastic Bottles (15 x meter square IBC's)
- 1 x 40yard roll-on roll-off skip WEEE
- 1 x 40yard roll-on roll-off skip Industrial Rubbish
- 1 x 40yard roll-on roll-off skip Aluminium
- 1 x 40yard roll-on-roll-off skip Steel
- 1 x 40yard roll-on roll-off skip Oil Contaminated Rags & Material

Please note, there are no waste piles on site. All wastes are stored within suitable containers within secondary containment. It is EBS aim to maintain 10m between combustible materials (paper, plastic, etc.) and building walls.

Other wastes stored on site in line with Sector Guidance Note S5.06:

Alkaline Batteries

Nickel Cadmium Batteries

Lead Acid Batteries

Nickel Metal Hydride Batteries

Lithium-Ion Batteries

Lithium Primary Batteries

Aerosol (1 x cage)

Fluorescent Bulbs (if found, stored within aerosol cage as no longer collected)

### Other combustible materials

There are no other combustible materials stored on site.

## **2. Using this Fire Prevention Plan (FPP)**

### **Where the plan is kept and how staff know how to use it**

This FPP is stored on the P drive where all employees have access to it on their own computers, along with computers within the communication booths.

A hard copy of the FPP is kept within the fire control document holder next to the main fire alarm control panel within main reception area on site.

### **Testing the plan and staff training**

This FPP is tested at least twice yearly with full site evacuations in-line with our emergency plan. FPP will also be tested within different operations on site (e.g. sorting, offloading, EV etc) at least once per year, in addition to the above.

One annual test will include contractors whilst on site.

All new starters are issued with the Emergency plan and if required this FPP.

West Midlands Fire Service are invited to site, averaging once per year to complete a full training exercise. This includes stimulating an emergency situation, for example from the previous training exercise, a lithium battery fire within sorting area next to IBC of sulphuric acid (during covid this did not occur, invite sent for 2023 attendance).

Following each test, a full internal audit is completed, identifying corrective action, if required. Corrective actions are recorded within N/C log, with improvements agreed, implemented, and monitored for continual improvement.

## **Fire Prevention Plan Controls**

### **3. Activities at the site**

Ecobat Solutions collects waste and obsolete batteries nationwide, batteries are returned to site in Darlaston where they are manually sorted into chemistry and stored ready for export / despatch for recycling. The main external yard area on site is used for storage of lead acid batteries. Storage buildings within the yard area store lithium batteries.

Unit 2 is used for manual sorting of mixed household batteries, which include chemistries Alkaline, Nickel Cadmium, Nickel Metal Hydride, Lithium Ion, and Lithium Metal. At the end of each shift the Lithium is removed from the units to external storage buildings.

Unit 3 is used for the large-scale (6T per hour) Lithium shredding plant. Within the unit contains a shredding plant on a water loop with a nitrogen generator. The plant contains a primary shredder, secondary shredder, density separation, magnetic separation, and drying augers.

Unit 4 is used for the small-scale (2T per day) Lithium shredding plant and also sorted material storage. The lithium shredding machine is used to shred EV Lithium-Ion cells, and produces black mass, ferrous and non-ferrous fractions. The machine is run under a CO2 atmosphere for fire suppression. The storage area within the unit is sorted Alkaline within metal stillages in 8 storage bays.

Unit 5 is the testing and dismantling of electric vehicle Lithium-Ion batteries. The unit houses an office area, tech room where testing equipment is secured within internal aerosol fire suppression system, and an internal segregated warehouse. Within the main unit no material is stored outside of operating hours. Within the internal warehouse area, two sets of racking houses safe and low voltage lithium-ion vehicle modules, which have been tested, voltage reduced and deemed safe to be placed back on the market.

Each unit has a minimum of 2 x 6KG powder extinguishers at each entrance door.

Unit 5 & 4 have a minimum of 2 x 6L Lith Ex fire extinguishers on the workstations.

On a concrete Base outside Unit 3 is the onsite effluent treatment plant which treats all surface water from the external yard and units, this discharges to foul sewer.

Within the main yard area, there are 3 main storage buildings for lithium batteries. Storage building 1 and 2 for material awaiting processing and processed stock, all batteries in these building have had safety checks completed. Sacrificial building within the yard is for all incoming lithium batteries to be stored to ensure stability and complete safety checks.

*For locations of the below please refer to Annex 1 - Site Plan*

Waste Acceptance – Customs

Waste Acceptance and Sampling – Main Yard

Lithium Battery Sorting EWC 16 06 05 / UN3090 & UN3480 – Lithium Sorting Tent

Lithium Unsorted Battery Storage EWC16 06 05 / UN3090 & UN3480 – Sacrificial Building

Lithium Battery Storage EWC 16 06 05 / UN3090 & UN 3480 – Storage Building 1, 2 & 3

Lithium Electric Vehicle dismantling EWC 16 06 05 / UN3480 – Unit 5 & 4

Non-hazardous battery storage EWC 16 06 04 – Unit 4

Lead Acid battery storage EWC16 06 01\* / UN2794 & UN2800 – Main Yard

WEEE Skip EWC 20 01 35\* / UN3077 – Rented Land area

Plastic Storage EWC 20 01 39 – Main Yard

Aerosols Storage EWC 16 05 04\*/ UN 1950 – Main Yard

Effluent Treatment Plant – Outside Unit 3 Yard Area

Portable battery sorting EWC 20 01 33\* – Unit 2

Black Mass Storage EWC 19 12 11\* / UN3077 –Storage Building 2

## **Site plan**

Site Plans - 2023 Site Layout (*annex 1*)

## **Plan of sensitive receptors near the site**

*For locations of the below please refer to Annex 2*

Residential area: Distance 450meters North

Place of worship: Distance 650meteres North

School: Distance 500meters North East

Canal: 5meters from site for 40meters South

Brook/River: 115meters North East

Woodland area: Over 1km from site

## **4. Manage common causes of fire**

### **Arson**

The site has security measures in place, such as security fencing, intruder alarms & CCTV, to prevent and reduce the likelihood of unlawful entry to site. Alarm systems and CCTV is remotely monitored 24/7 by an external company. Key personnel on site also, each have a tablet with all systems linked to for remote access, they monitor any trigger of alarms by attending site, calling the police, make an announcement via Tannoy system.

### **Plant and equipment**

Plant and equipment on site are 7 Forklift Trucks (FLT), 2 manual sorting conveyors, various sorting tables, hand tools and testing equipment for EV batteries, HGV vehicles (when delivering or collecting), Lithium Shredding Machine (for the shredding of waste lithium batteries) (small scale and large scall). The small-scale shredding machine has a CO2 supply that is used for fire suppression, when the machine is active the CO2 is released throughout the system. The large-scale shredding machines used nitrogen as its fire suppression, whilst machine is running the nitrogen generator (using compressed air) runs.

All plant, machinery, equipment, and vehicles on site have preventative maintenance and inspections in place which are audited against regularly. Checks are completed by internal employees along with third party competent contractors.

All areas on site are equipped with adequate number of fire extinguisher as deemed by our fire risk assessment. It is not deemed necessary for FLT's to be fitted with fire extinguisher, however all HGV's have at least two fire extinguishers on the vehicle.

## **Electrical faults including damaged or exposed electrical cables**

### **Electrics certification**

All electrics on site have received certification by a certified electrician. Last Electrical Installation Condition Report was completed in March 2022. Thermal Imaging Survey was last completed November 2022. No issues identified.

### **Electrical equipment maintenance arrangements**

Preventative maintenance in place on site for electrical equipment. Emergency lighting tested monthly. During winter months, monthly inspections completed of all lighting to show for faults / repairs. Continual monitoring and internal auditing conducted on all equipment on site, including electrical equipment on a regular basis.

## **Discarded smoking materials**

### **Smoking on site policies**

There is a no smoking policy on site, it is prohibited to smoke anywhere within operational areas on site. There is a designated smoking area which is on the opposite side of the industrial park to the regulated facility.

## **Hot works safe working practices**

Hot works will only be completed on site when absolutely necessary. Hot works on site will be managed with Permit to Work system. Hot Work Permit to Work system includes a 2-hour fire watch following all hot work completion with a portable thermal imaging camera.

## **Industrial heaters**

### **Use of industrial heaters**

Industrial heaters are not used or permitted on site at any time.

## **Hot exhausts and engine parts**

### **Fire watch procedures**

There are no hot exhausts and engine parts on site. Fire watch procedure for hot works covered within the hot work section.

### **Ignition sources**

All possible ignition sources on site are:

- Static electricity (arcs, short circuiting of batteries); Waste pre-acceptance and waste acceptance checks in place to prevent accepting material incorrectly packaged to prevent short circuiting. Un-sorted battery material stored at least 6meters from combustible material.
- Plant and machinery malfunction; regular inspections and preventative maintenance schedule in place.
- Hot Surfaces (sun exposure); During hot weather, material is inspected and monitored more regularly. All waste stored outside is non-hazardous waste. Thermal monitoring increased during hot weather spell of externally stored material
- Lighting strikes: Reduce exposure to material stored outside by use of temporary coverage.
- High temperature caused by direct sunlight on to externally stored materials
- Vehicles; Regular maintenance and preventative maintenance in place for all vehicles. Only FLT's permitted within battery storage areas.
- Hot or Electrical Works; All Controlled though permit to work system, which ensures work not completed within 6meters of combustible material.
- Poor Housekeeping: daily housekeeping rota in place and audited. On site road sweeper used for at least 1 hour per day on whole site
- Incorrect material being received / incorrectly packaged: waste pre-acceptance procedure in place, all materials inspected prior to approving, driver inspects and customs control on site inspect prior to accepting.
- Batteries arcing or short circuiting; all material inspected (including waste pre-acceptance) and packaged accordingly, terminals taped and inert cushioning material used.



## **Leaks and spillages of oils and fuels**

It is highly unlikely that spills of oils or fuels will occur on site, however in the event of a spillage on site, the whole permitted site is fully bunded to on-site Effluent Treatment Plant (ETP). The site has self-contained storage capacities which are:

- 30,000 litres storage tank
- ETP 37,000 litre storage capacity
- 33,000 weighbridge pit
- The site yard-surface-bunded around all its sides up to 150mm depth at its minimum, leads its-self to a further 250,000litres storage capacity
- 15,000 litres water loop system on Large scale shredder

## **Build-up of loose combustible waste, dust, and fluff**

There is minimal loose waste on site, each sorting area has dedicated storage for waste streams which are then transferred to skips. Daily housekeeping is completed by an operative each day with housekeeping trolley. Also, on site we have an internal road sweeper which covers the whole site for at least 1 hour per day to ensure good housekeeping standards.

During hot spells, the main yard area is washed down with clean water for dust suppression.

## **Reactions between wastes**

This section does not apply as we do not store reactive wastes on site.

## **Deposited hot loads**

This section does not apply as we do not accept deposited hot loads.

# **5. Prevent self-combustion**

## **General self-combustion measures**

Lithium batteries on site have the potential to self-combust when they are damaged, short circuited or heated by the sun etc. We control this by storing the material in adequate areas, monitoring, and inspecting the material with Thermal Imaging Cameras every 2 hours during operational hours. During warmer weather this monitoring is done hourly. In high-risk areas on site (incoming, receipt of lithium) there is static continually thermal imaging being recorded to identify any issue immediately.

## **Manage storage time.**

### **Method used to record and manage the storage of all waste on site.**

Prior to any material being collected and returned to site a waste pre-acceptance process is in place (annex 5). For all high-risk material such as lithium batteries, more than 3 x 1m<sup>2</sup> containers of mixed household, customer non-conforming history, new or unusual collection, the customer must complete a control form covering all aspects of hazards for the material, along with supplying photographs of, the material, the container, and how it is packed in the container. Our driver is issued with the approved control form and photographs and makes a visual inspection on the customers site prior to collecting, if acceptable, on arrival to site, customs control also inspects the material against the control form to ensure acceptable and safe.

All high-risk material (Lithium Batteries) is inspected during offloading and placed into the Sacrificial building within its container (if applicable), usually UN approved 1m<sup>2</sup> container or 205L UN approved drums. For larger scale batteries this can be wooden crates or pallets (battery within EV metal external casing). The temperature is recorded of the material when taken in to building and 2 hourly therefore after during operational hours. This material is stored for a maximum of 72hours prior to being repackaged and deemed safe for export.

The sacrificial building maximum storage allowance is 10tonnes. Which may consist of 10 x 1m<sup>2</sup> containers, or 14 x pallets of 4xUN approved 205L drums. The containers can vary dependant on incoming material; however, all lithium batteries on site are stored within appropriate ADR complaint containers under cover.

If Lithium batteries are found to be damaged, they are isolated, placed in to quarantine away from main buildings and any other combustible materials, and continuously or manually monitored with thermal imaging, maximum every 2 hours. Damaged lithium batteries are placed into a suitable container, either submerged within water or vermiculite (inert material).

Electric vehicle batteries are stored in a dedicated area where no other battery chemistries are stored, again in appropriate containers under cover. All battery storage areas on site prevent the batteries from coming into contact with any liquid (all containers under cover or lidded) and prevent the batteries from being damaged (appropriate containers, barriers in place etc.

All stock on site is recorded and reported on a weekly, monthly, quarterly, and annual basis. It is a paper-based system with numbers of bays to numbers stock sheets, these are audited weekly. Maximum time for combustible wastes stored on site is 6 months.

**Stock rotation policy**

This is not applicable as we do not store material in piles etc. Material stored on site is within containers and we work on first in, first out policy so waste is not on site for a period of time.

**Monitor and control temperature.**

**Reduce the exposed metal content and proportion of 'fines.**

This is not applicable as we do not store exposed metal.

**Monitoring temperature**

All material on site is monitored within a thermal imaging camera every 2 hours during operational hours. Process in place that is trained out to all operatives responsible for recording and monitoring temperatures. The temperature for investigation is 21°C & above, or 2°C above ambient background temperature. Please refer to temperature monitoring process in Annex 4.

**Controlling temperature**

Controlling the temperature of stored external material is monitoring of temperature and if spikes seen or rise in temperature seen. It is investigated.

**Dealing with hot weather and heating from sunlight**

During hot weather, material is inspected and monitored more regularly. All waste stored outside is non-hazardous and non-combustible waste. If material is stored in drums then shrink wrap used is white.

**Waste bale storage**

This section does not apply as we do not store waste bales.

## **6. Manage waste piles**

**Maximum pile sizes for the waste on your site**

This section is not applicable as we do not store waste piles on our site.

**Storing waste materials in their largest form**

This is not applicable to our operations.

## **7. Where maximum pile sizes do not apply**

This section is not applicable as we do not store waste piles on our site.

### **Waste stored in containers**

#### **Types of containers you are using**

Containers over 1,100 litres on site are:

1 x 40yard roll-on roll-off skip WEEE

1 x 40yard roll-on roll-off skip Industrial Rubbish

1 x 40yard roll-on roll-off skip Aluminium

1 x 40yard roll-on roll-off skip Steel

1 x 40yard roll-on roll-off skip Oil Contaminated Rags & Material

#### **Accessibility of containers**

All roll-on roll-off skips are accessible from the front, side, and rear on site. There storage spaces have been dedicated to easily access and move in the event of a fire occurring, also to prevent the spread of fire. We can utilise equipment on site to move the skips where required.

#### **Moving containers in a fire**

On site we have a JCB grab which is only used for skips. All authorised operatives who are on the call-out list are fully trained and have a key each for easy use in the event of a fire. In the event of a fire occurring within a roll-on roll-off skip on site, the individual location of this skip would be assessed to see if required to be moved. WEEE skip & Oil contaminated skip are within their own location therefore would not be required to be moved as there is no risk of fire spreading and is accessible from all sides.

## **8. Prevent fire spreading**

### **Separation distances**

On site we do not store waste piles however all material on site complies with separation distances. Combustible materials within containers are at least 6 meters away from other material, site perimeter and buildings.

### **Fire walls construction standards**

This section is not applicable as we do store combustible material within the building. All combustible material stored is outside with fire breaks in place of at least 6 meters.

### **Storing waste in bays**

Wastes stored within bays are on regular stock rotation, where we ensure a first in, first out policy, this is monitored during the weekly stock take.

Temperature checks are completed on each bays as described in monitoring temperature section of this FPP.

Bays for high risk material are separated by concrete A frame construction and maximum storage capacity of each bay is 10tonnes.

In an event of a fire within a storage bays, the material will be removed and cooled with water.

## **9. Quarantine area**

### **Quarantine area location and size**

The sacrificial building location point 12 on the site plan, is utilised as a quarantine area on site, where a container can be stored if it contains contamination, or hot spots. All material within this building is within containers and is signed into the building by an operative and temperature recorded of the material, temperature checks are then completed 2 hourly.

If material placed into the sacrificial building due to non-conforming material, the non-conformance process is followed, customer sent non-conformance report and corrective actions agreed. If material placed into sacrificial building due to high risk, it is monitored and when deemed safe following temperature checks, the material will be sorted and made safe by repacking and segregating (e.g., taping terminal end, placing into fire-approved ADR P911 container) and send for recycling.

In the instance of thermal runaway within a container, it will be removed to just outside the building and extinguished if possible. This size of the area including the building is 150m<sup>2</sup>, this is an adequate size as all material is stored within 1m<sup>2</sup> containers.

We have the potential to utilise space at location point 26 on the site plan, to store material temporarily (for example, non-permitted wastes). This location point is kept clear until storing such material.

Please refer to Annex 4 & Annex 5.

### **How to use the quarantine area if there is a fire**

Material will be taken to the sacrificial building area and continually dosed with copious amounts of water until extinguished or until West Midlands Fire Service arrive.

### **Procedure to remove material stored temporarily if there is a fire**

We have a number of competent third-party suppliers in place to accept materials off site. There are two areas on site, therefore one will be kept clear. On site all operatives are FLT competent, and we have 7 FLT's on site, in the event material is to move in the event of a fire, operatives will remove using FLT or if not possible, utilise the JCB grab.

## **10. Detecting fires**

### **Detection systems in use**

Fire detection systems in place on site have been installed and service by appropriate UKAS-accredited third-party contractors. On site the detection systems in place are, Optical smoke detectors, Heat Detectors, Infrared smoke beams, Continual thermal imaging monitoring on all sorting/dismantling stations &, Flame detectors on all storage area.

### **Certification for the systems**

The fire systems on site are certified to BS5839. Serviced 6 monthly by an UKAS accredited contractor.

## **11. Suppressing fires**

### **Suppression systems in use**

Manual systems in place for smoking / hot batteries, where batteries are dosed in either sand or water buckets. During the event of a thermal runaway batteries, this is removed from the area immediately if possible and dosed.

The small-scale shredding machine can only operate under a CO2 atmosphere. CO2 is feed into the machine when running to prevent any potential thermal runaway when Lithium Batteries are being shredded.

The large-scale shredding machine will only operate with water and nitrogen being feed into the plant. Water and nitrogen are used to control any incidents of thermal runaway during the shredding processed, along with controlling environmental emissions.

Walls between Unit 4 & 3, and Units 4 & 5 are 4-hour fire rating.

Unit 3 is where the large scale shredding machine and separation kit is housed for lithium batteries. Unit 4 is used for dismantling, testing, and discharging of Electric Vehicle battery modules (low voltage), the small-scale shredding machine and temporary storage of alkaline batteries. Unit 5 is for the EV dismantling, testing and refurbishment (low-voltage).

Within Unit 5 there is a 4-hour fire rating tech room to house the computer system for the testing equipment, this room is fitted with aerosol suppression system. This suppression system is linked to the whole sites fire detection, if a fire was detected within the tech room, the suppression system alerts the office and has a 30second warning before activating. During the activation process the solid potassium carbonate compound which are housed within the room on the ceiling, changes into a swiftly spreading aerosol consisting of micro particles (between 10-6m and 10-9m) that are suspended in the gas phase. The composition of the FirePro aerosol, consisting of potassium compounds is, in the intended concentration, not corrosive, not electrically conductive and does not cause damage to the equipment protected.

The FirePro aerosol forming compound is not based on halogen compounds to react with the fire. It does not produce any corrosive halogen acid by-products in its reaction with the fire. The aerosol will suppress the fire by removing the oxygen.

The Fire Suppression system within Unit 5 will activate if fire alarm activated, and it is not manually disabled within 30seconds (e.g., out of hours, it will activate as no one will be on site to deactivate).

## **Certification for the systems**

1. BS5389-1:2017 - Fire Detection
  - a. The panels will be provided with 24-hour battery back-up. Specifically, for the fire extinguishant panel, this takes the form of 23.5 hours of quiescent cover and 0.5 hour, in alarm.
2. BS7273-1:2006 - Fire Suppression Electrical Activation
3. BS EN15276-1:2019 - Fixed Fire Suppression - Condensed Aerosol Systems

All systems on site have been designed, installed, and are maintained by an appropriate UKAS-accredited third-party contractor. The fire system on site has a 6monthly service to ensure compliance, along with an internal check each day.

## **12. Firefighting techniques**

### **Active firefighting**

We have a number of resources available at all times to fight a fire, these are:

- Access to JCB grab and FLT's to move wastes arounds site
- Staff – including trained operatives who rotated on weekly call out schedule to cover out of hour events

- Water supply – mains water fed along with abstraction point from the canal

There are a variety of firefighting techniques used together or separately to extinguish a fire, these are:

- Applying copious amount of water to the fire and surrounding areas if required
- Separating material by using heavy plant (JCB) including removing material from areas
- Suffocate the fire with sand (this is only used when fire is of a small quantity, 1 x 1m<sup>2</sup> container maximum)

Site employees are only permitted to fight a fire if they are trained to do so, it is safe to do so and on the instruction of the West Midlands Fire Service. We do not advise employees to endanger themselves fighting a fire and to raise the alarm and report to emergency assembly point.

## **13. Water supplies**

### **Available water supply**

The available water supply on site is:

- Mains water
- Water hydrants
- Abstraction point from canal

Mains water would be used to fill containers / IBC's on site to empty on to fire using FLT's.

2 x Fire hydrants available to site are serviceable, however 1 hydrant within site boundary has previously had low water flow. The preferred option to use on site is canal water abstraction.

On site there is an abstraction point identified on site plan (Annex 1) which has a drawbridge that is dropped into the canal for the WMFS to access and abstract water.

WMFS hold the key to the padlock on the drawbridge, there are also two on site. One within Fire document folder inside main reception door on the right, this door opens automatically when the fire alarm is activated.

WMFS hold the abstraction licence from the canal trust to enable use of this.

### **Show the calculation for your required water supply**

We do not store any waste in waste piles on site. All material on site is stored within dedicated storage areas and bays. With the use of the canal abstraction we have an



unlimited amount of water available. The below calculation is based on the biggest bay within the Lithium battery storage area (ready for export material).

Maximum pile volume in cubic metres	Water supply needed in litres per minute	Overall water supply needed over 3 hours in litres	Total water available on site in litres
<i>Enter volume, for example, 300</i>	<i>Pile volume x 6.67</i>	<i>Water supply per minute x 180</i>	
<b>31 cubic meters</b>	<b>206.77L</b>	<b>37,218.6L</b>	<b>Unlimited (Canal Abstraction)</b>

## 14. Managing fire water

### Containing the run-off from fire water

All drainage within the permit boundary of the site is sealed to our Effluent Treatment Plant, Annex 3. The site has self-contained storage capacities, these are:

- 30,000-liter storage tank.
- Effluent Treatment Plant has 37,000-liter storage capacity
- 33,000-liter weigh-bridge pit.
- The site yard surface - bunded around all its sides up to 150mm depth at its minimum, leads itself to a further 250,000 liters storage capacity.

## 15. During and after an incident

### Dealing with issues during a fire

During a fire incident on site, the site is closed to all to access expected authorised personnel such as Fire Service. All Ecobat vehicles are redirected via their tom-tom system to our sister company Ecobat Resources UK Ltd in Darley Dale, South Matlock, DE4 2LP.

The Incident controller will monitor the protection of the environment throughout the incident and in consultation with the EA, who will be called to attend the site. In the event of a danger to the off-site escape of water from the site causing pollution to surrounding ground and/or controlled inland waters the manhole leading directly to the sewer system will be lifted. STW Ltd will be contacted to inform them of the incident, and an estimate of the amount of contaminated water diverted to sewer will be recorded.

Water Authority Emergency Contact Number – 0800 783 4444

## **Fire occurring during out of hours.**

All systems on site including fire detection system are connected to an external 24hour monitoring company MVTek. If detection alerts, an alert is sent automatically to the out of hours MVTek. MVTek procedure is to review the CCTV in the area of the alert, if evidence of fire is seen they contact West Midland Fire Service (near fire station located 1 mile from site, previous attendance time is 2-3minutes), MVTek then call an appointed member of Ecobat Solutions. There are currently 8 appointed persons within Ecobat Solutions who have tablets at home with full site CCTV & Fire Detection on. Once a call is received to an Ecobat Solutions person, if Fire Service summoned already to site, they person will alert management of Ecobat Solutions, review CCTV on tablet and attend site along with relevant persons detailed within Ecobat Solutions Emergency Plan SM12.

## **Notifying residents and businesses**

On site neighbours will be informed immediately by phone and raising of the alarm procedure.

Nearby businesses / residents are contacted by phone if required under the instruction of the West Midlands Fire Service, a contact list is stored within the fire documents folder next to our fire control panel on site.

## **Clearing and decontamination after a fire**

The site will be cleared of material being sorted and segregated for onward recycling. Utilizing equipment on site, such as FLT & JCB. Material will be placed into containers, sorted where possible and send for recycling to approved and authorised party.

The area will be cleaned with onsite road sweeper with the water being treated through onsite effluent treatment plant. If large volumes of water, it may be required for authorised third-party environmental service company attending to remove water.

If sand used, this will be stored in adequate containers and disposed of when safe to do so with competent hazardous waste company.

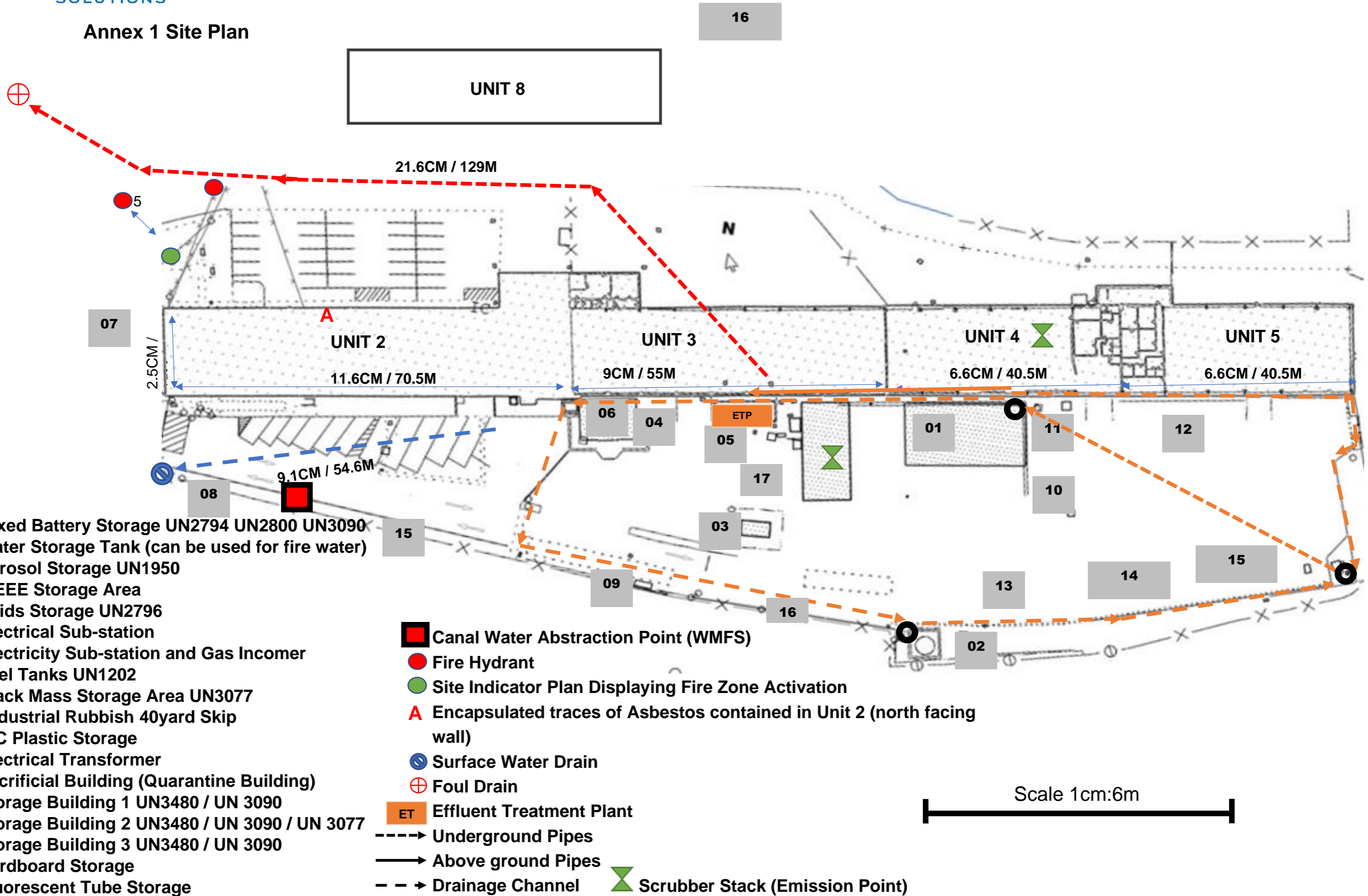
Ecobat Solutions have agreements in place with at least 2 authorised and competent third-party contractors to assist in site decontamination.

Once site has been cleaned and decontaminated, we would complete a site survey to ensure the site is safe and can be operational again.

## **Making the site operational after a fire**

Business continuity plan will be implemented, which includes, delivering all lead acid material directly to Ecobat Resources UK Ltd following customer collections, divert mixed-non lead batteries to be stored and sorted within Unit 8 (opposite current site) whilst organising an alternative location to continue further sorting activities. Office staff could work from home, or potentially utilise facilities at our sister plant Ecobat Resources UK in Darley Dale, whilst rebuilding / re-siting of the admin infrastructure was progressed.

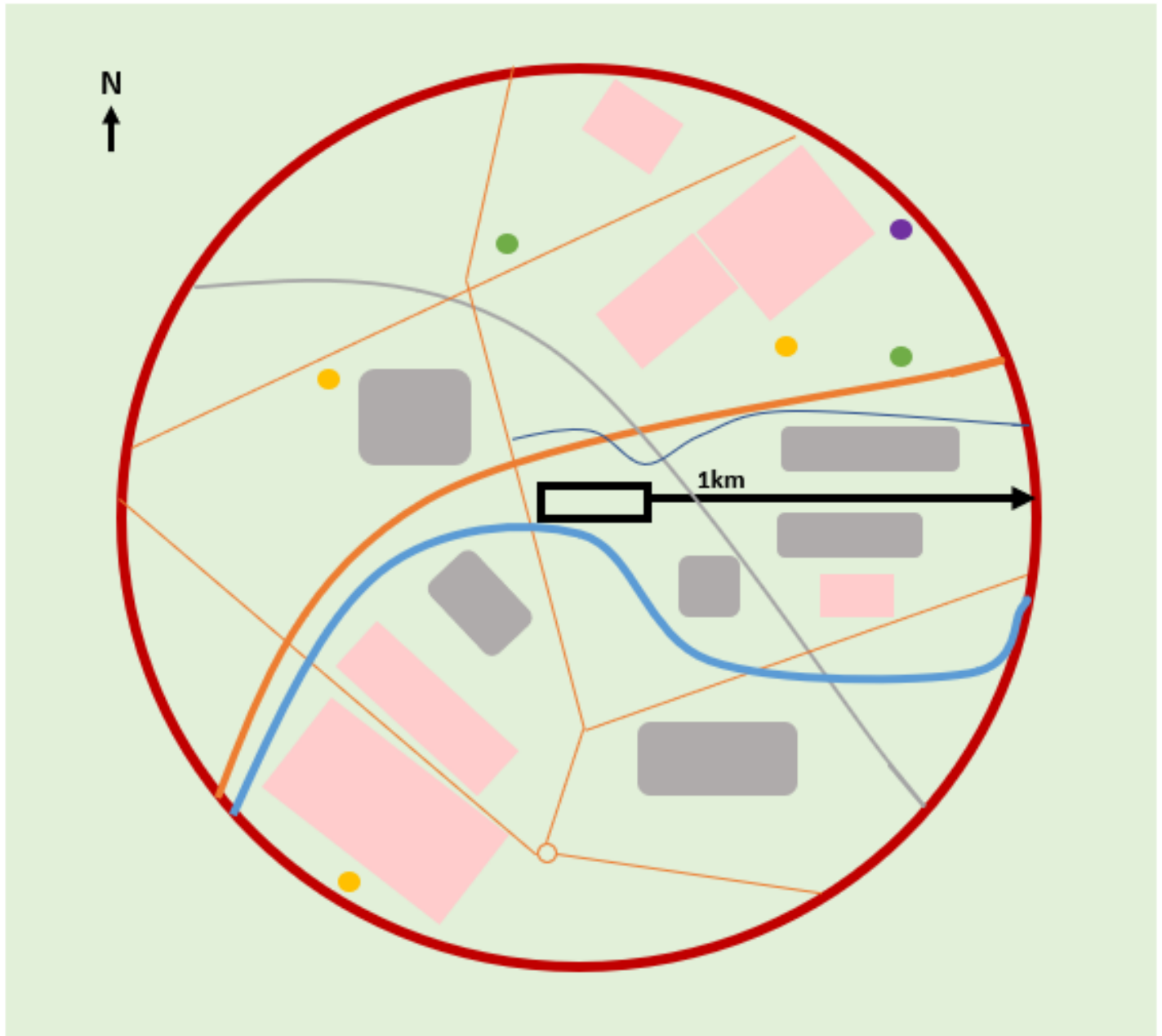
**Annex 1 Site Plan**



- 1 Mixed Battery Storage UN2794 UN2800 UN3090
- 2 Water Storage Tank (can be used for fire water)
- 3 Aerosol Storage UN1950
- 4 WEEE Storage Area
- 5 Acids Storage UN2796
- 6 Electrical Sub-station
- 7 Electricity Sub-station and Gas Incomer
- 8 Fuel Tanks UN1202
- 9 Black Mass Storage Area UN3077
- 10 Industrial Rubbish 40yard Skip
- 11 IBC Plastic Storage
- 12 Electrical Transformer
- 13 Sacrificial Building (Quarantine Building)
- 14 Storage Building 1 UN3480 / UN 3090
- 15 Storage Building 2 UN3480 / UN 3090 / UN 3077
- 16 Storage Building 3 UN3480 / UN 3090
- 17 Cardboard Storage
- 18 Fluorescent Tube Storage

- Canal Water Abstraction Point (WMFS)
- Fire Hydrant
- Site Indicator Plan Displaying Fire Zone Activation
- Encapsulated traces of Asbestos contained in Unit 2 (north facing wall)
- Surface Water Drain
- Foul Drain
- Effluent Treatment Plant
- Underground Pipes
- Above ground Pipes
- Drainage Channel
- Scrubber Stack (Emission Point)

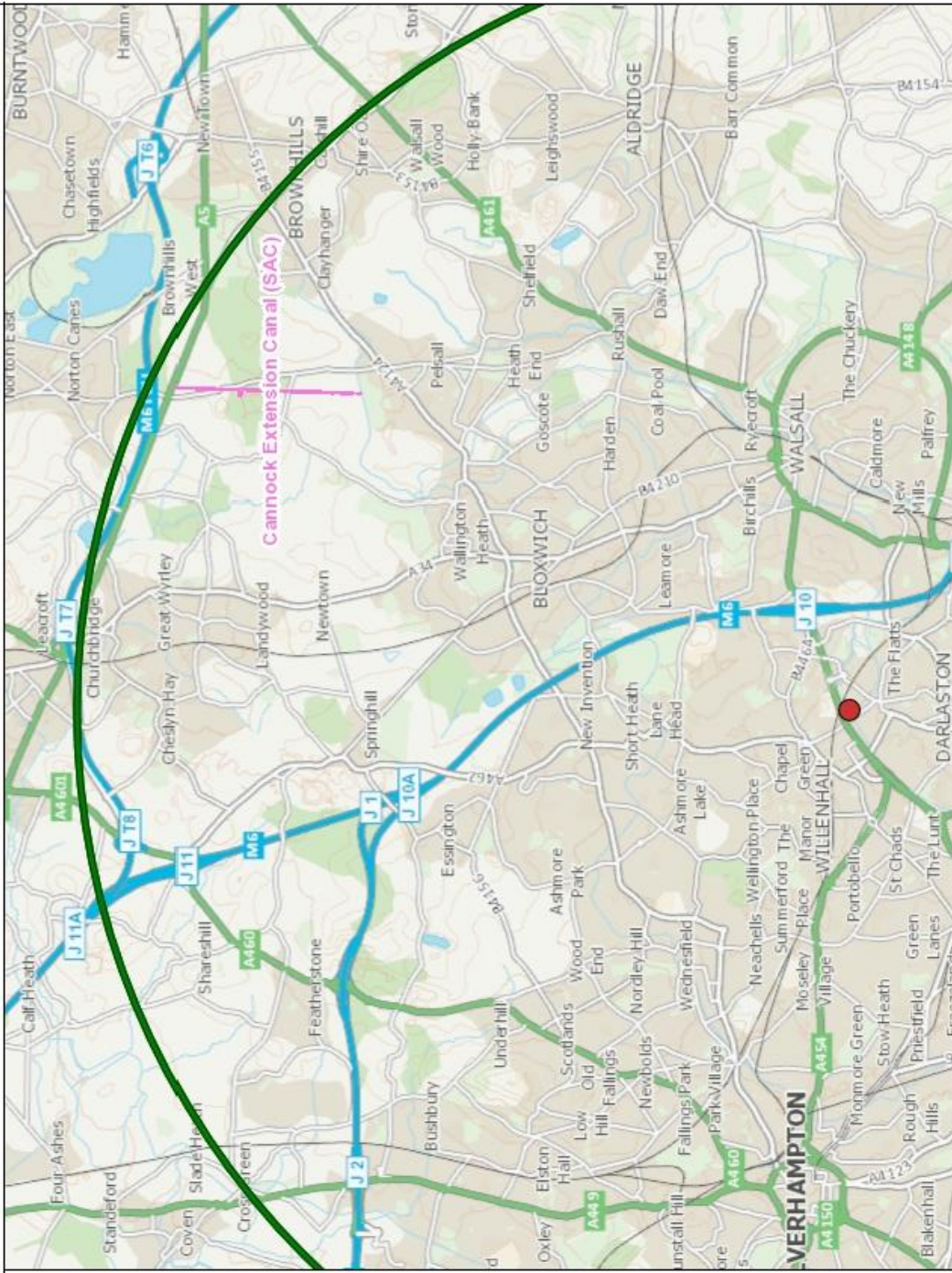
**Annex 2 Site Plans – Including Conservation Screening Maps**



- |   |  |
|---|--|
|  Site Boundary   |  Residential Area  |
|  Road            |  Place of worship |
|  Railway         |  Schools          |
|  Walsall Canal   |  Healthcare       |
|  Darlaston Brook |  Industrial Area   |



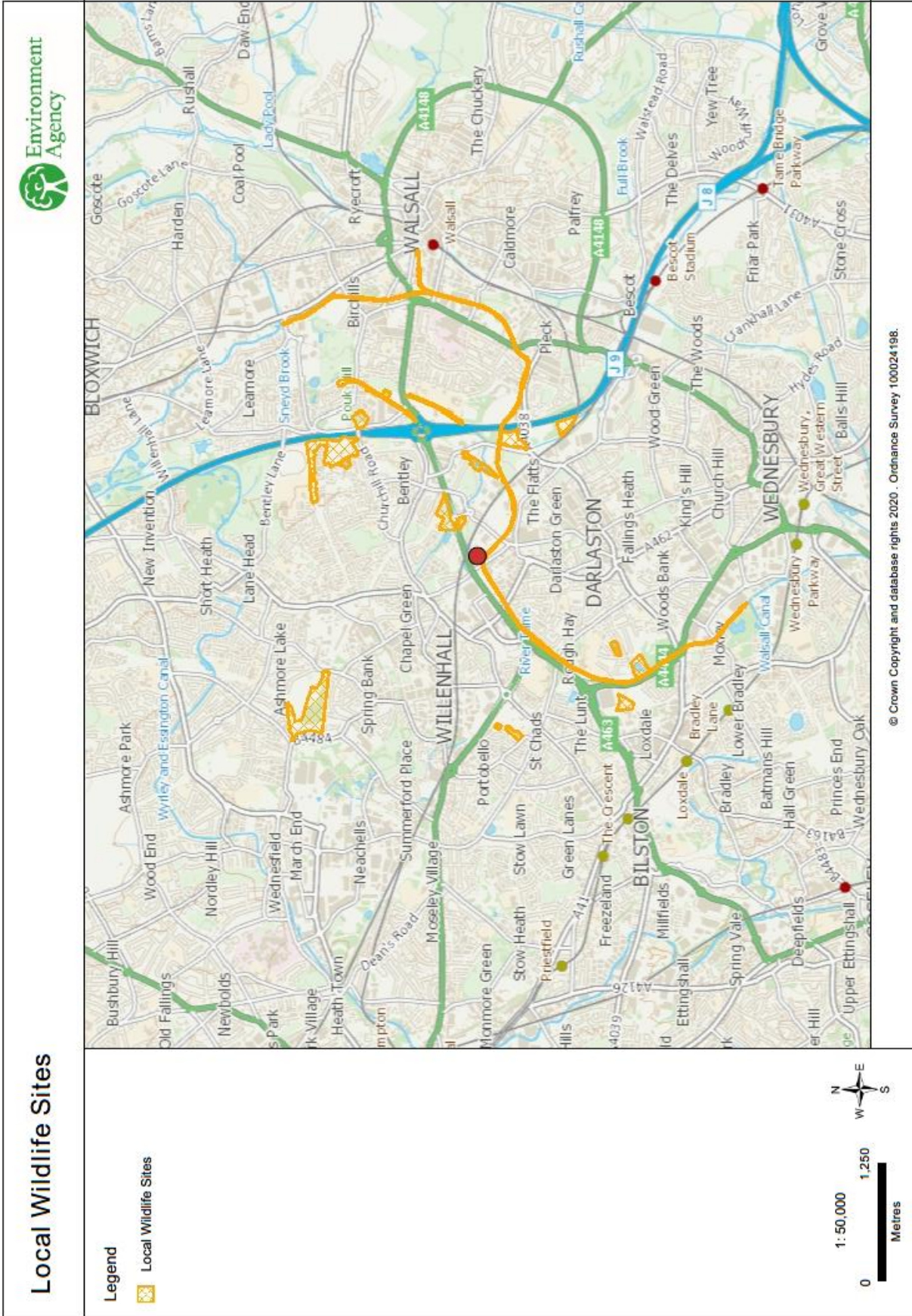
Special Areas of Conservation



- Legend**
-  SAC (England)



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## Protected Species

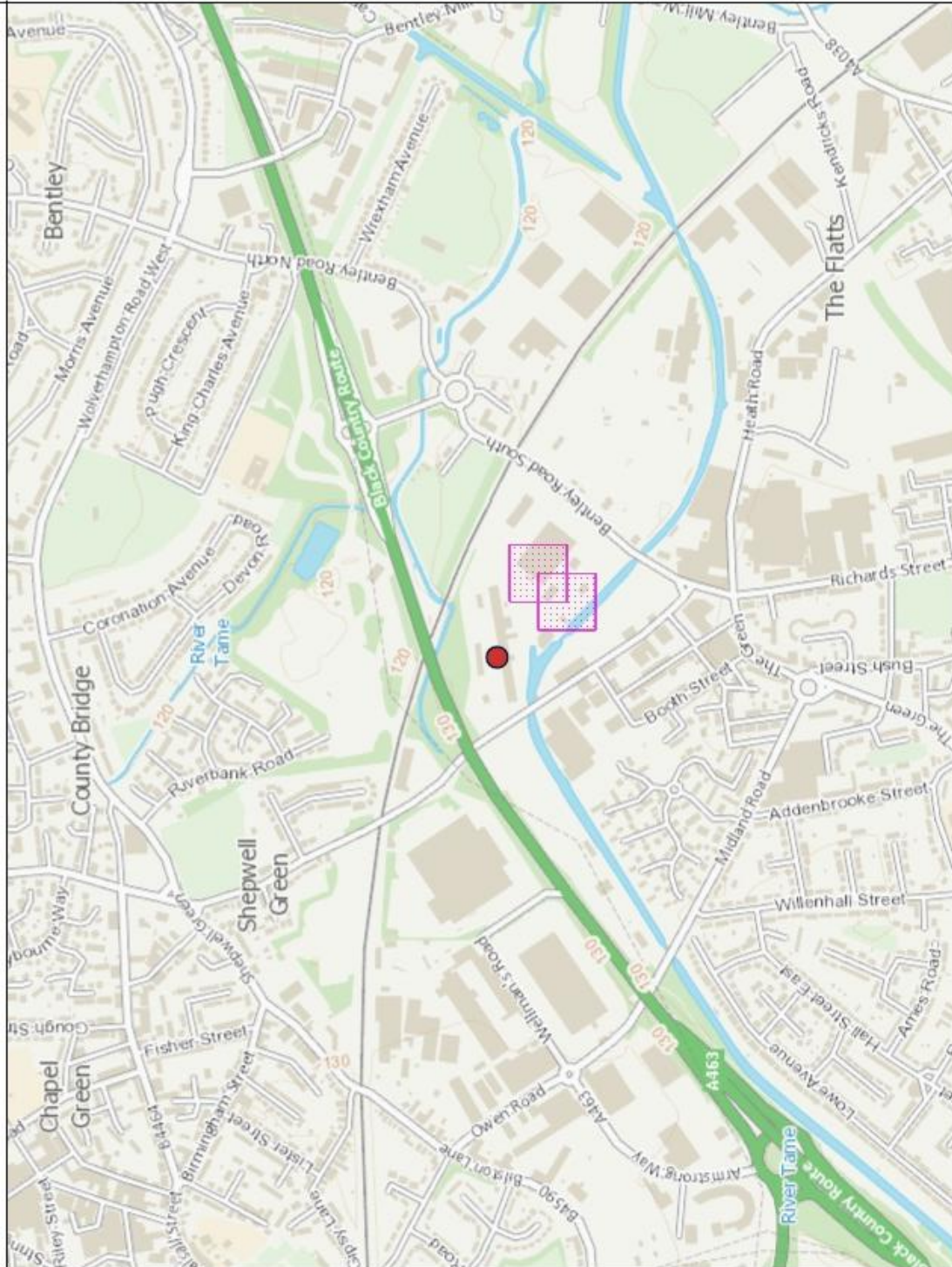
### Legend

Protected species screened for Env Permits - complete set

Protected species, non fish

Protected fish

Protected fish migratory route

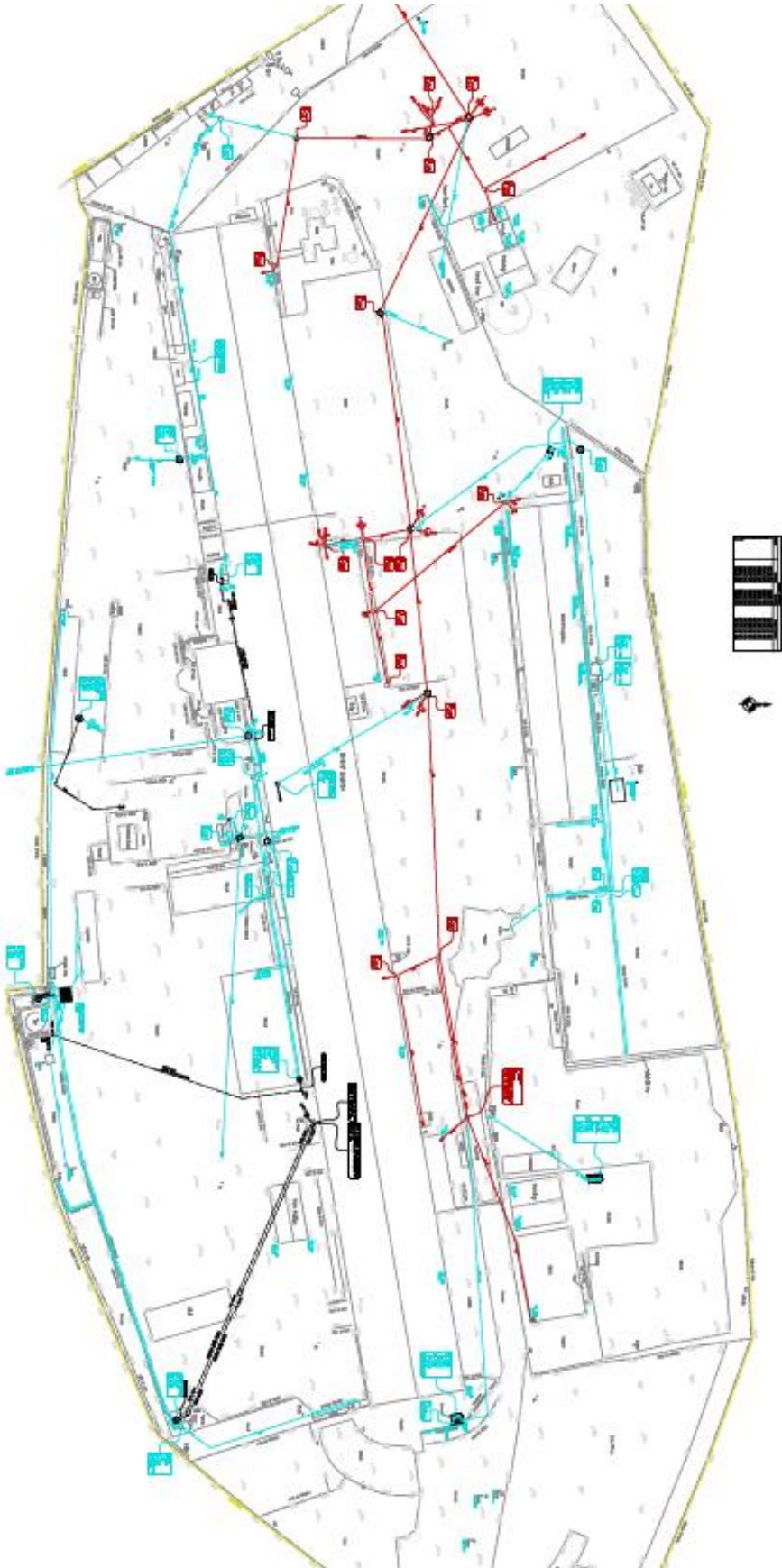


1: 10,000  
0 250 Metres

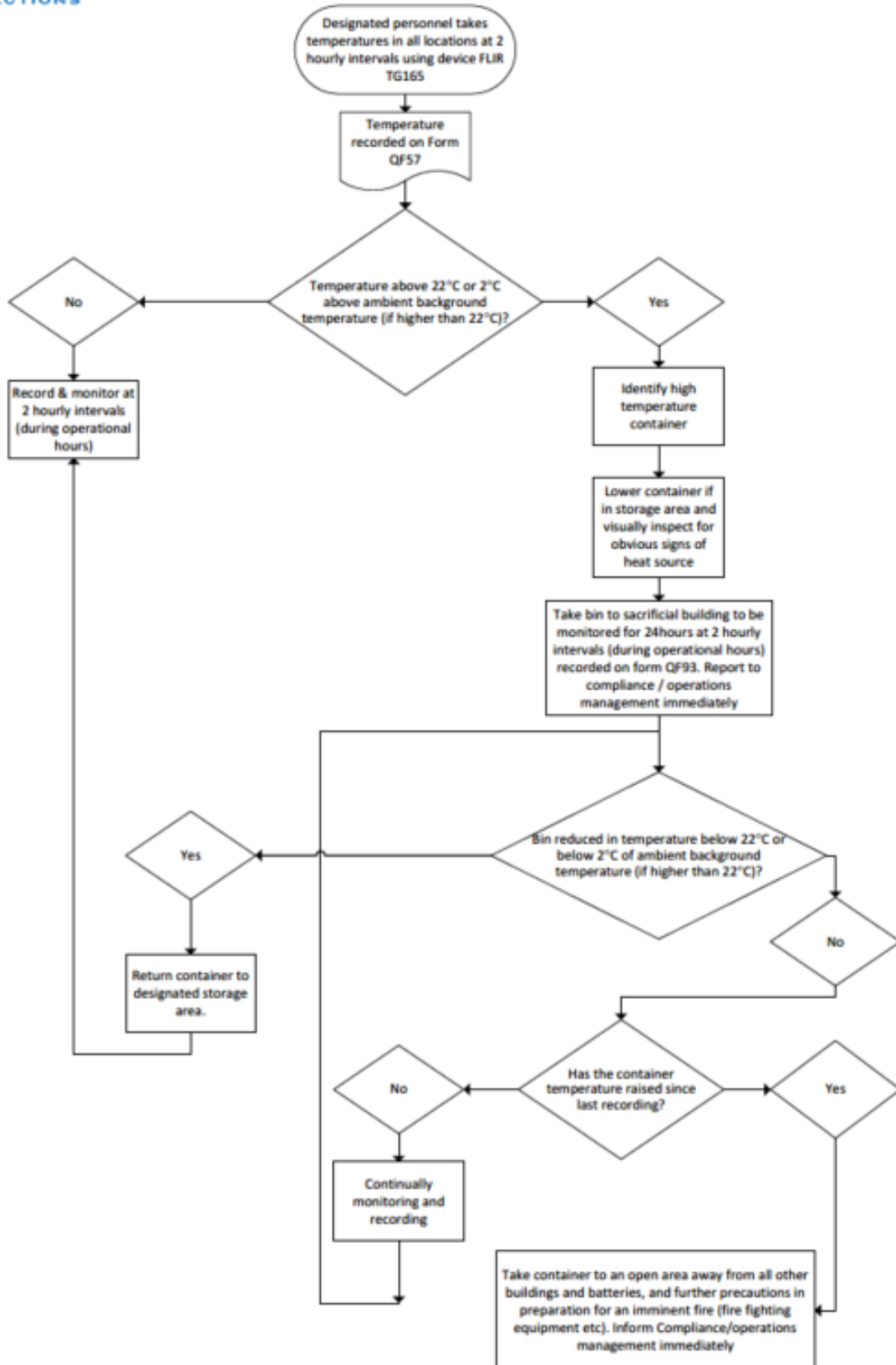




**Annex 3 Drainage Plan**



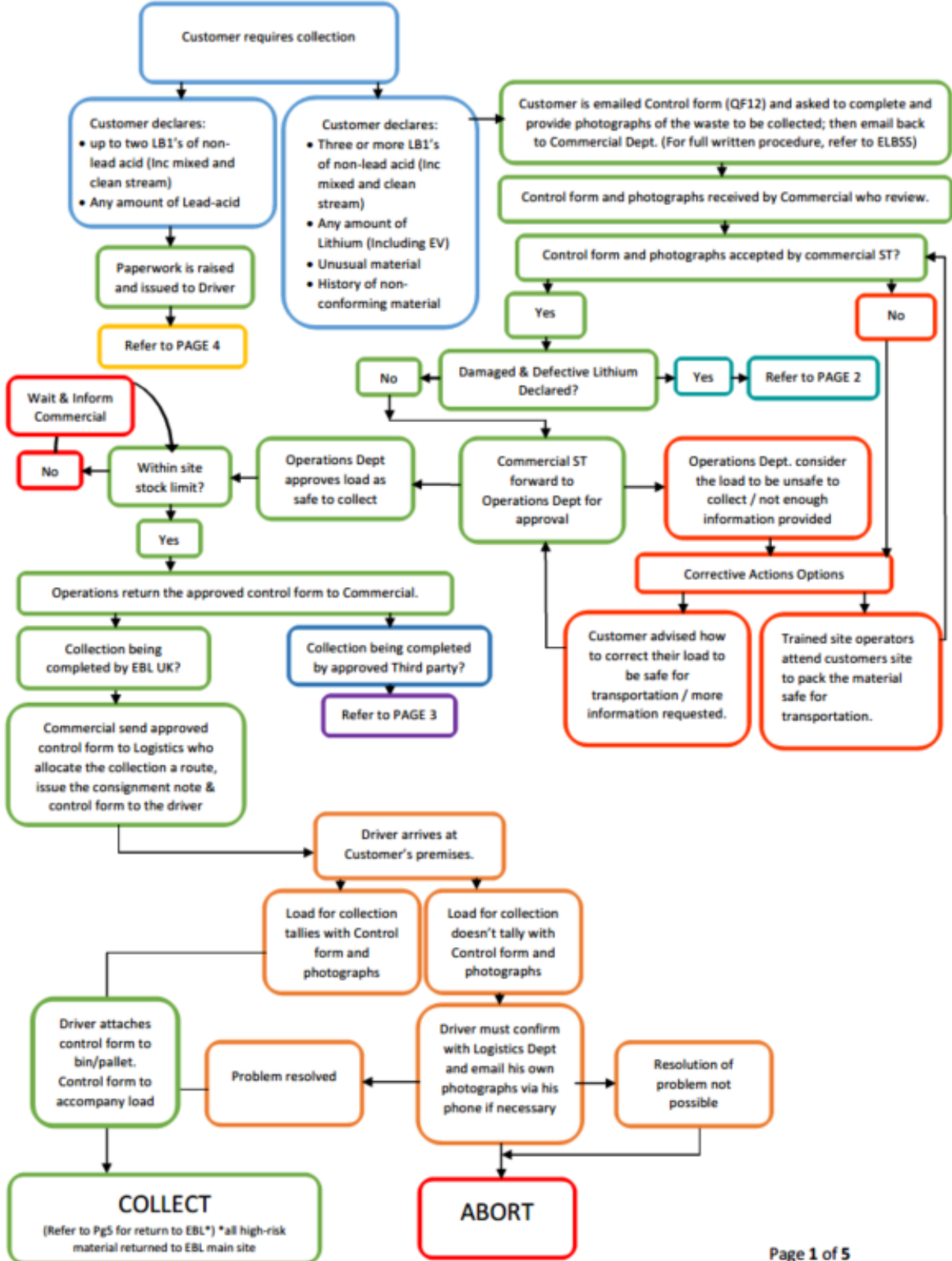
**Annex 4 Temperature Monitoring Process SM15**



# Annex 5 Waste Pre-acceptance EP11

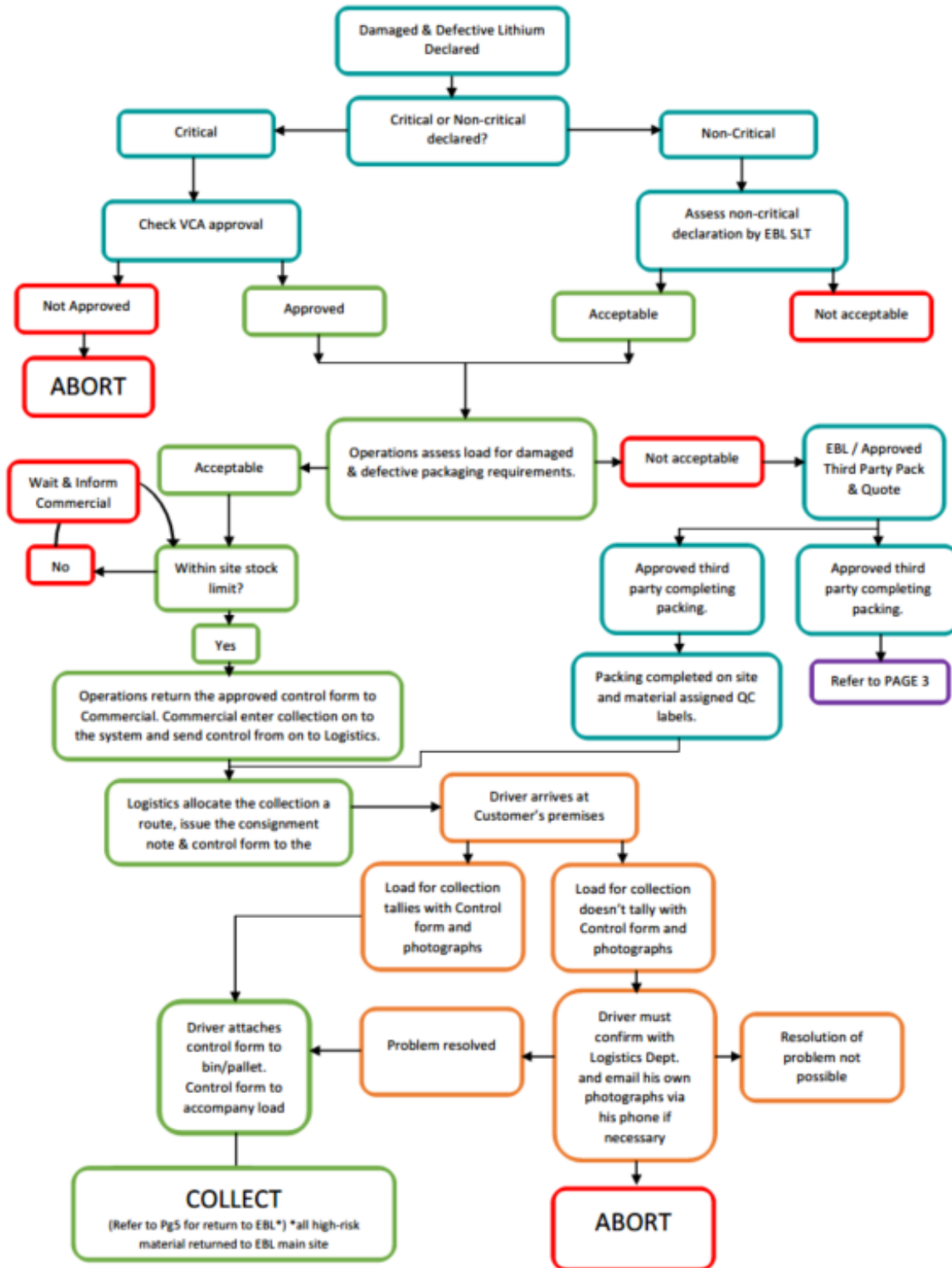
## Waste Battery Pre-acceptance Process flow chart

Ref. EP11 Rev. 11



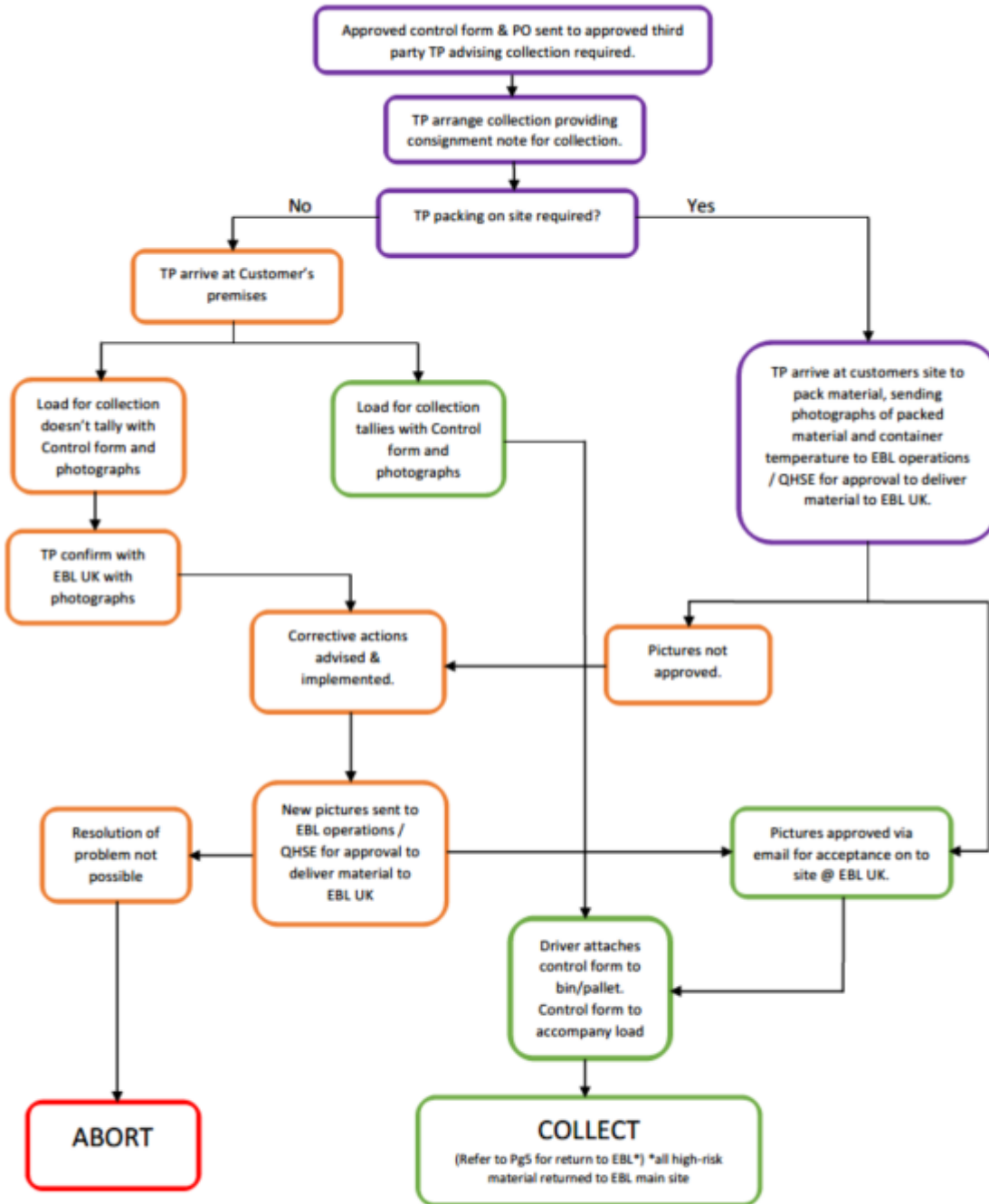
**Waste Battery Pre-acceptance  
Process flow chart**

Ref. EP11 Rev. 11



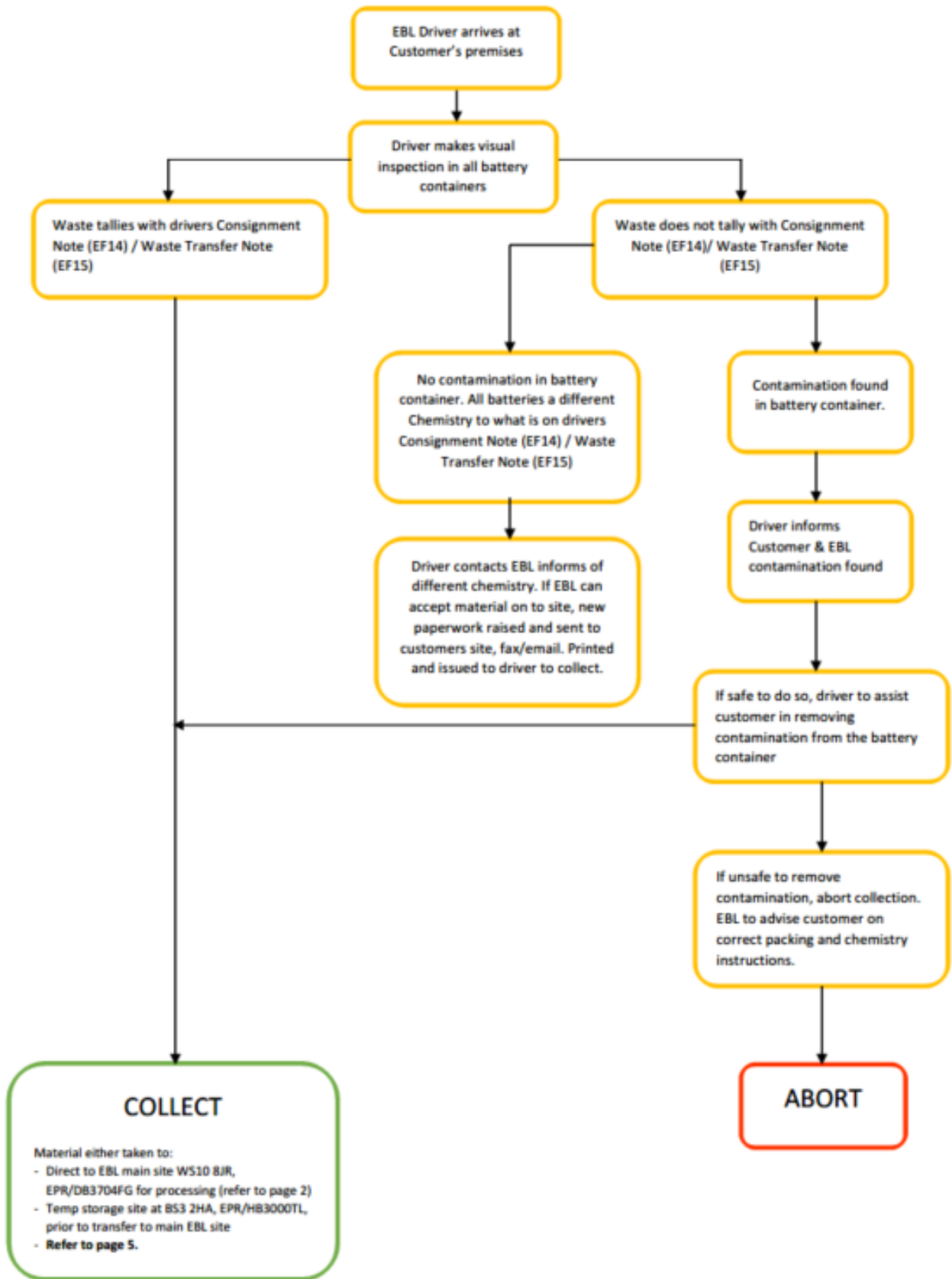
**Waste Battery Pre-acceptance  
Process flow chart**

Ref. EP11 Rev. 11



**Waste Battery Pre-acceptance  
Process flow chart**

Ref. EP11 Rev. 11



**Waste Battery Pre-acceptance  
Process flow chart**

Ref. EP11 Rev. 11

