



CRESTWOOD ENVIRONMENTAL LTD

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Fire Prevention and Mitigation Plan

Application to Vary Bespoke Environmental Permit (ref: EPR/XP3992FV) for
Unit 4a, Sprint Industrial Estate, Four Ashes, Wolverhampton

Report Reference: CE-FA-1921-RP08-FPP-Final v3

Report Date: 19 June 2023

Produced by Crestwood Environmental Ltd.

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ENVIRONMENT	LANDSCAPE	NOISE	LIGHTING
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MINERALS / WASTE	AIR QUALITY	LAND QUALITY	VISUALISATION

Crestwood Report Reference: CE-FA-1921-RP08-FPP-Final v3:

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CONTENTS

1	INTRODUCTION	1
1.1	OVERVIEW	1
1.2	RELEVANT SECTOR GUIDANCE.....	1
1.3	THE SITE.....	2
1.4	FIRE PREVENTION OBJECTIVES – OUTLINE METHODOLOGY.....	2
1.5	OVERARCHING MANAGEMENT RESPONSIBILITY	2
2	SITE PROCESS DESCRIPTION	3
2.1	WASTE ACCEPTANCE	3
2.2	SITE ACTIVITIES	5
2.3	WASTE MANAGEMENT OPERATIONS.....	6
3	ENVIRONMENTAL SETTING.....	7
3.1	SURFACE WATER	7
3.2	GROUNDWATER.....	7
3.3	DESIGNATED SITES.....	8
3.4	AIR QUALITY AND PREVAILING WINDS	8
3.5	SENSITIVE RECEPTORS.....	9
4	FIRE PREVENTION	13
4.1	FIRE PREVENTION PLAN.....	13
4.2	WASTE STORAGE AND HANDLING.....	13
4.3	WASTE QUARANTINE.....	14
4.4	MONITORING OF WASTE BAYS.....	14
4.5	CONTINGENCY PLANS	15
4.6	ARSON	15
4.7	PLANT AND EQUIPMENT.....	15
4.8	INFRASTRUCTURE AND SITE INSPECTIONS.....	15
4.9	ELECTRICAL FAULTS.....	15
4.10	SMOKING POLICY	15
4.11	HOT WORKS.....	15
4.12	INDUSTRIAL HEATERS.....	15
4.13	FIRE WATCH.....	16
5	MANAGEMENT AND STORAGE OF WASTE.....	16
5.1	WASTE ACCEPTANCE PROCEDURES	16
5.2	IDENTIFICATION OF POTENTIAL SOURCES OF FIRE	18
5.3	WASTE FEEDSTOCK INVENTORY AND SOURCE MATERIALS	18
6	CONTROL MEASURES.....	18
6.1	WASTE TRANSFER BUILDING AND WASTE BAYS.....	18
6.2	VENTILATION OF THE WASTE TRANSFER (NEW) BUILDING	19
6.3	DESIGN AND CONSTRUCTION OF CONTAINERS	19
6.4	LEAKS AND SPILLAGES.....	19
7	FIRE DETECTION AND FIRE FIGHTING	20
7.1	FIRE DETECTION.....	20
7.2	SUPPRESSION	20
8	PROVISION AND MANAGEMENT OF FIREWATER	22
8.1	WATER VOLUMES.....	22
9	FIRE INCIDENT PROCEDURE AND EMERGENCY PLAN.....	22

APPENDICES

APPENDIX 1	Waste Feedstock Inventory and Source Materials
APPENDIX 2	Aquaforce Pre-Acceptance Procedures
APPENDIX 3	Aquaforce Waste Acceptance Procedures
APPENDIX 4	Aquaforce Storage Procedures



DRAWINGS

Drawing No CE-FA-1921-DW01

Site Layout Plan

1:900@A3

Drawing No CE-FA-1921-DW02

Configuration of Bays in Chemical Storage and Storage Areas NTS



1 Introduction

1.1 Overview

- 1.1.1 Crestwood Environmental Ltd has been commissioned by Aquaforce Recycling **(the Client and the Operator)** to prepare a Fire Prevention Plan (FPP).
- 1.1.2 This Fire Prevention Plan relates to waste operations being carried out at Unit 4a Sprint Industrial Estate, Four Ashes, Wolverhampton **(the Site)**.
- 1.1.3 The waste operations are authorised by Environmental Permit ref: EPR/XP3992FV **(the Permit)**. Waste operations carried out under the Permit comprise the transfer and treatment of:
- Waste from Electrical and Electronic Equipment (WEEE)
 - Hazardous waste
 - Non-hazardous waste.
- 1.1.4 WEEE waste activities consists of treatment of commercial and domestic fridges and the transfer of hazardous and non-hazardous WEEE wastes i.e. CRT/TV`s.
- 1.1.5 The hazardous waste activities comprise the transfer of asbestos waste, commercial and domestic batteries and oily wastes such as oily rags and protective clothing, the recovery of paint waste, treatment of airbag and aerosol waste and the storage, recovery and disposal of drummed and containerised waste materials. The waste types accepted at the Site are listed in Appendix 1.

1.2 Relevant sector guidance

- 1.2.1 This FPP has been prepared in accordance with the Health and Safety Executive (HSE)
- HSG71 Chemical Warehousing: The storage of packaged dangerous substances (Fourth Edition, 2009) and
 - HSG51 Storage of flammable liquids in containers (Third Edition, 2015).
- 1.2.2 To ensure robustness, despite it not applying to hazardous waste, reference has also been made to:
- *Fire Prevention plans: Environmental Permits Guidance (EA guidance), updated January 11 2021, and*
 - *the Waste Industry Safety and Health Forum document entitled Reducing Fire Risk at Waste Management Sites, issue 2, April 2017.*
- 1.2.3 The Environment Agency (EA) guidance for FPP`s states:
- ‘ This guidance also does not apply to the storage of coal, materials, or wastes that are:*
- *hazardous – excluding WEEE, but including hazardous waste batteries accepted as a separate waste stream, covered by Sector Guidance Note 5.06*
 - *dangerous substances stored under the Control of Major Accident Hazards Regulations*
 - *liquids*
 - *healthcare wastes, covered by Sector Guidance Note 5.06 or Healthcare waste: appropriate measures for permitted facilities*

This guidance does not apply to non-waste materials such as gas cylinders, aerosols and combustible liquids. They are covered by Guidance for the storage and treatment of aerosol canisters and similar packaged wastes: addendum to S5.06. However, you must still consider these in your fire prevention



plan because they can cause or increase the impact of fire on a site. For example, you may need to use separation distances to manage the risk from these materials'.

1.3 The Site

- 1.3.1 This Fire Prevention Plan relates to waste operations being carried out at Unit 4a Sprint Industrial Estate, Four Ashes, Wolverhampton **(the Site)**.
- 1.3.2 Located in an industrial estate in the village of Four Ashes, Staffordshire, the Site, centred on NGR: SJ 91762 08523 (X (easting) 391762; Y (northing) 308523), is c.9.5km north of central Wolverhampton in the West Midlands and c.4km west of central Cannock in Staffordshire. The villages of Calf Heath, Slade Heath, Lower green, Brewood and Rodbaston are c.1.70km to the east, 1.60km to the south, c.1.40km to the south-west, c.3km to the west and 2.8km to the north of the Sites permit boundary, respectively.
- 1.3.3 Land use immediately adjacent to the Site comprises of industrial businesses and units pertaining to the Sprint and Four Ashes Industrial Estates. A railway line runs close to the western boundary of the Site and the access road, located along the western perimeter, is perpendicular to Station Road which is parallel to the southern boundary.
- 1.3.4 In the wider landscape, pastures and agricultural land occupy the majority of the land which are punctuated with villages, individual businesses and farms. There are residential properties within 250m of the Site, the closest of which are c.65m to the west of the Site along Station Drive.
- 1.3.5 In terms of sensitive habitat and designated sites, there is a Site of Special Scientific Interest (SSSI), the Four Ashes Pit at 320m to the south and Motley Meadows, a Special Area of Conservation (SAC) at 8.6km from the Site. There are also two Local Wildlife Sites at 260m and 570m of the Site (Land at Four Ashes and Somerford Woods, respectively).
- 1.3.6 The EA designates the groundwater held within the superficial geology as a Secondary A whereby it comprises of permeable layers capable of supporting water supplies at a local rather than a strategic scale and are generally aquifers previously designated as a minor aquifer. The aquifer status of the bedrock has a designation of Principal due to the high intergranular and/or fracture permeability which provides a high level of water storage that may support water supply/river base flow on a strategic level. The Site is not underlain by a Source Protection Zone (SPZ).
- 1.3.7 All waste operations on Site are carried out within enclosed buildings with no trade effluent discharge to controlled waters or sewer.

1.4 Fire Prevention Objectives – Outline Methodology

- 1.4.1 The purpose of this FPP is to ensure that all reasonable measures are undertaken to prevent a fire.
- 1.4.2 The FPP has been prepared in accordance with The Health and Safety Executive (HSE) HSG71 Chemical Warehousing: The storage of packaged dangerous substances (Fourth Edition, 2009) and Storage of flammable liquids in containers (Third Edition, 2015). It provides a plan to minimise the likelihood of fire breaking out, a means of extinguishing fire if it broke out, and a statement of methods designed to minimise the spread of fire.
- 1.4.3 Additionally, this FPP has been prepared in line with the EA's guidance: 'Fire Prevention and Mitigation Plan Guidance-Waste Management New Guidance Note 16 version 2 August 2017 updated January 11 2021' and to the Waste Industry Safety and Health Forum document entitled Reducing Fire Risk at Waste Management Sites, issue 2, April 2017.

1.5 Overarching Management Responsibility

- 1.5.1 The Site Manager has the responsibility for ensuring that the potential for fire outbreak arising from operations on the Site is minimised. Adequate staffing levels is maintained at all times to ensure the effective operation of the facilities.



- 1.5.2 In line with current industry best practice, the fire prevention controls set out in the sections below are used as the 'appropriate measures' to minimise the risk of and, wherever possible, prevent outbreak of fire associated with Site operations.
- 1.5.3 Site meetings are held regularly, i.e. during monthly Health and Safety meetings, for Site management to discuss current and planned Site operations with respect to their potential for generating fire and accordingly the FPP is updated as necessary. Identified actions arising from the meetings and responsibilities for their completion is recorded within the meeting minutes prior to circulation within Aquaforce Recycling to the relevant personnel.
- 1.5.4 Additional and more frequent reviews of the FPP will be carried out to reflect any changes to operations on-Site and in circumstances that warrant the requirement. Such instances include but are not limited to: an increase in waste quantities accepted on-Site, specifically combustible materials; after any fire incidents in order to make improvements if required; any development made on-Site such as modifications to existing buildings or the incorporation of new infrastructure and/or the installation of new equipment or plant.
- 1.5.5 The FPP is a live, working document which is made readily available and clearly identified on Site and all staff are aware of the location of the plan. It is referenced in the Environmental Management System (EMS) and there is a requirement that all contractors working on Site are briefed on the contents of the FPP.
- 1.5.6 All staff receive training, which includes on-Site fire drills, in regard to the measures and procedures outlined in the FPP with refresher training conducted quarterly. New employees will receive inductions which will involve the same training with records of all training maintained to ensure refresher courses are carried out as scheduled. Reference should be made to Section 8 'Fire incident and Procedures – Emergency Plan'.
- 1.5.7 Regular Fire Prevention Plan Exercises are carried out quarterly. The frequency of exercises will be reviewed and changed depending on the results of exercises, reviews of incidents and near misses and the turnover of staff.

2 Site Process Description

2.1 Waste Acceptance

- 2.1.1 To ensure due diligence, compliance and tracking and control of stock, all waste received at the Site must adhere to pre-acceptance procedures. The procedure is in accordance with Best Available Technique (BAT). The pre-acceptance procedure for the Site is detailed in Appendix 2 and summarised in paragraph 2.1.7.
- 2.1.2 All vehicles delivering wastes to the Site stop at the weighbridge and are weighed. The total quantity of waste accepted at the Site is currently up to 24,999 tonnes per annum. It is proposed to increase this under the permit variation to a maximum of 29,999 tonnes per annum.
- 2.1.3 Checks will be made to establish whether the haulier is a Registered Waste Carrier or has a valid exemption from registration. Only registered carriers or those who are lawfully exempt from registration will be permitted to use the Site.
- 2.1.4 Waste will not be accepted if for any reason there is insufficient storage capacity available or if the Site is inadequately manned. This is to ensure that all waste is managed effectively to prevent pollution or loss of amenity.
- 2.1.5 Weighbridge staff will be suitably trained and will follow documented procedures. The weighbridge operator will examine waste descriptions at the weighbridge and the information will be checked against the pre-acceptance documentation, six figure European Waste Catalogue Code(s) and other details on the Waste Transfer Note, Season Ticket or Hazardous Waste Consignment Note (as appropriate) and against the waste types permitted by the Environmental Permit.



- 2.1.6 Every delivery of waste will be recorded, detailing the date of the transaction, weight, waste type, registered carrier, Waste Transfer Note number, Hazardous Waste Consignment Note number (as appropriate), vehicle registration and other pertinent information against a unique reference number. It will allow for tracking of wastes, the generation of reports and waste returns, as well as providing comprehensive, auditable information.
- 2.1.7 Additional pre-acceptance procedures will be used to ensure that only suitable waste types are accepted. Customers delivering waste will be required to provide the Operator, in advance, with all necessary information/documentation to satisfy the requirements of the Waste (England and Wales) Regulations 2011 and the Duty of Care. Information required is detailed in Appendix 2 and 3 `Aquaforce Waste Pre-Acceptance Procedures` and `Aquaforce Waste Acceptance Procedures`, respectively.
- 2.1.8 Only wastes subjected to the pre-acceptance procedures detailed in Appendix 2 will be accepted at the Site.
- 2.1.9 The delivery vehicle is directed to the appropriate reception area for off-loading via a fork lift truck to enable the sampling, verification and inspection. For chemical/hazardous waste, with the exception of fridges, asbestos or WEEE, the driver hands the work instruction to the site chemist who conducts an initial visual inspection of the load for the following:
- Labels are clearly visible and in good condition and is matched to the list on the work instruction;
 - Any signs of leaks;
 - Any sign of broken pallets or damaged containers / pressurisation of containers;
 - Any additional labels will be removed;
 - If there is an incompatibility issue the wastes will be segregated immediately.
- 2.1.10 Once the initial inspection has been carried out and the load is authorised by the Site chemist, it is placed in the reception area (as shown on Drawing No. CE-FA-1921-DW01) with the labels clearly visible. Every container is then checked against the pre-acceptance declaration documentation with a sample taken for further analysis either in the on-Site Laboratory or externally, as appropriate.
- 2.1.11 Additionally, each container is also checked for appearance, odour, pH, oxi and compliance with the permit. Once verified, a label will be prepared containing the date, the chemical description, the bay number in which the container will be stored, an ID number (comprising the consignment note and waste stream number) and the hazard code. Old labels will be removed or blacked out.
- 2.1.12 All containers stored in the bays will be placed in such a way that the label is clearly visible and facing the walkway. Waste streams to be bulked up will be tested for compatibility. For full details of the criteria for conducting this, reference should be made to Appendix 3, Section 2.4 Bulking and Compatibility.
- 2.1.13 If, at the verification stage, sampling is a requirement, it is conducted in accordance with the sampling procedures detailed in Section 2.5 of Appendix 3. Samples that require sampling are residual chemicals from processes and, non-conforming wastes and unused chemical wastes that require further verification.
- 2.1.14 Other wastes streams received at the Site as per those listed in Appendix 1, are received at the reception bays prior to separation, sorting and bulking up according to waste type and are stored in designated bays and skips as appropriate. Incompatible waste types are segregated and are not stored in adjacent bays.
- 2.1.15 Any discrepancies found, i.e. suspect, non-conforming and/or random loads, as a result of the checks detailed above will result in the vehicle being detained whilst some, or all, of the following supplementary management decisions are taken:
- Referral to the Site Manager or Technically Competent Person (TCP) on Site;
 - Referral to the waste producer to confirm the nature of the waste load;



- Referral to the Environment Agency;
 - Redirection of delivery vehicle off site, to a suitably authorised facility; and
 - If the waste has been discharged, removal of the waste to a secure quarantine area, prior to off-site removal either to the waste producer or suitably authorised facility.
- 2.1.16 A non-conformance form is completed which contains the arrival date, the consignment note number, the ID number, customer details, quantity and size of container (s), reason for non-conformance, disposal point and quote and any additional analysis or information required. The container(s) is then to be placed in the quarantine bay.
- 2.1.17 Any waste materials dispatched off site to an authorised facility, will be removed in accordance with the Duty of Care. A registered waste carrier will be used. A 'Record of Non-Conformance' will be made in accordance with Appendix 3 of the EMS.
- 2.1.18 Any instances of rejection of loads will be recorded in a Site log, which will be made available for inspection by authorised officers of the Environment Agency at any reasonable time.
- 2.1.19 Copies of Waste Transfer Notes, Consignment Notes, Season Tickets, Pre-Acceptance Declaration Documentation and all records required in accordance with the Environmental Permit will be kept in the Site office. Where at all possible, records will be electronic.

2.2 Site Activities

CURRENT WASTE MANAGEMENT OPERATIONS

- 2.2.1 In summary, waste management operations currently undertaken at the facility can be defined in terms of recovery and disposal codes (R & D Codes), the current waste management operations are summarised in Table 1 below. These will remain unchanged under the permit variation.

Table 1 Waste Management Operations

R & D Code	Activity reference in permit (A1 to A7), limits of activity and waste types
R3: Recycling/reclamation of organic substances which are not used as solvents R4: Recycling/reclamation of metals and metal compounds R5: Recycling/reclamation of other inorganic substances	A1. Treatment of refrigeration units consisting of sorting, separation, grading, shredding, baling, compacting, crushing, granulation, cutting, condensing, and degassing. A2. Mechanical treatment of hazardous WEEE consisting of sorting, separation, shredding, screening, grading, baling, shearing, compacting, crushing, granulation or cutting for the purpose of recovery of constituent parts and materials. A3. Treatment of paint containers consisting of shredding and crushing of paint containers for recovery. A5. Treatment of aerosol wastes consisting of sorting, dismantling, separation, shredding, screening, baling, compacting, crushing, granulation, or of waste into different components for recovery. A6. Treatment of airbags consisting of sorting and dismantling in bespoke dismantling chamber followed by sorting of waste into different components for recovery. All activities above shall be carried out within a building provided with weatherproof covering.
R5: Recycling/reclamation of other inorganic substances D14: Repackaging prior to submission to any of the operations numbered D1 to D13.	A4. Bulking and repackaging of liquid wastes from into intermediate bulk containers for disposal off site. Solvent based paints are bulked for recovery. Paints are collected and sent off site for recovery.
R13: Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)	Storage of refrigeration units, WEEE and hazardous waste: <ul style="list-style-type: none"> • Refrigeration units shall not be stored for more than 3 months without prior written approval from the Environment Agency. • Free storage of refrigeration units, palletised or racked storage shall not exceed a maximum storage height of 3.5 metres. • Storage capacity of refrigeration units shall not exceed 1,540m³ at any one time. • Storage of removed refrigerants and compressor oils. Buildings, covered areas or containers must meet the following requirements:



R & D Code	Activity reference in permit (A1 to A7), limits of activity and waste types
D15: Storage pending any of the operations numbered D1 to D14 (excluding temporary storage, pending collection, on the site where the waste is produced)	Buildings, covered areas, or containers must be designed, constructed and maintained to prevent ingress of rain and surface water; Rain and uncontaminated surface water must be kept separate from contaminated water and other liquids; Containers must be stored on an impermeable surface with sealed drainage. Maximum storage time of 6 months prior to disposal or recovery. Storage to be confined to the areas as shown in Site Layout Plan. Lead acid batteries shall be stored in containers with an impermeable, acid resistant base and a lid to prevent ingress of surface water. Used aerosols and gas cylinders shall be stored in secure lockable cages.

2.2.2 Activities permitted on-Site are specified in Schedule I, Table S1.1 (A1 to A12) of the Permit. Of these, activity references A8 to A12 are classified as Directly Associated Activities, the details of which are included in Table 2 below.

Table 2 Directly Associated Activities

Directly Associated Activity	Description
Steam Boiler	For use as a fuel source in relation to activity A1: the treatment of waste refrigeration equipment
Manual pre-treatment of paints	The manual separation of hazardous solvent-based paints from non-hazardous water-based paints
Storage of processed materials excluding the temporary storage of hazardous waste under Section 5.6 A(1)(a)	Storage of recovered fractions and shredder residue following treatment and the storage of processed materials prior to despatch off-Site for recovery
Collection and disposal of process condensate water	Collection of the condensate water from the steam stripping of the charcoal absorbers into two decant tanks for re-use within the facility or despatch off-Site for disposal
Treatment and storage of non-hazardous waste for the purpose of disposal or recovery	The treatment consists solely of manual sorting, separation, screening, baling, shredding, compaction or crushing of non-hazardous waste into different components for disposal or recovery. Note, there will be no treatment of batteries

2.3 Waste Management Operations

2.3.1 Waste activities undertaken on Site are grouped into three main categories, WEEE waste treatment and the treatment and transfer of hazardous and non-hazardous wastes.

- Storage and treatment of:
 - WEEE including refrigeration plant
 - asbestos/ waste containing asbestos
 - oil-contaminated waste
 - Portable batteries
 - containerised hazardous waste
- Treatment/ recovery of waste;
 - paint canisters/ packaging
 - airbag deployment
 - aerosol canisters
 - washing drum/containers for re-use.

2.3.2 All waste activities are carried out within an enclosed building.



- 2.3.3 Hazardous wastes will be strictly segregated from each other so as to avoid the mixing of the two. Additionally, hazardous wastes will be stored and treated separately from all other waste streams accepted at the Site and any other substances or materials.
- 2.3.4 All waste will be stored in accordance with the Health and Safety Executive (HSE) Guidance HSG 51 and HSG 71 in drums and containers e.g. IBC's.
- 2.3.5 Waste will be stored in bespoke engineered bays, designed for the storage of non-hazardous, hazardous and flammable substances. Spontaneously combustible materials are not accommodated on site and therefore will not be accepted.
- 2.3.6 Storage bays are segregated by 180mm thick preformed concrete walls sealed with intumescent sealant which are fire resistant for 1.5 hours and impervious to liquids. The base of bays comprise concrete flooring which extends across the entire surface of the facility.
- 2.3.7 Bays will have the capacity to store a maximum of 20 IBC's deep, x2 across, with a gap of 70cm in between. They will be stored 2 IBC's high with the bay walls extending to 2.4m high. Sleeping policeman bunds of 10cm high will be installed across the entrance of each bay to contain at least 110% of the contents of the largest container. The configuration of the storage area is shown on Drawing N0. CE-FA-1921-ADW01 and CE-FA-1921-DW02.
- 2.3.8 Storage bays will also be used for the storage of other waste materials accepted at the Site. Non-hazardous and hazardous wastes are stored and handled separately to avoid the mixing of the two. Incompatible wastes will not be stored in adjacent bays or storage areas.
- 2.3.9 The entrance point to the building will comprise of a roller shutter door whilst a concrete bund at 40cm high will be constructed across the entrance to serve as a containment measure. The purpose of the design is to ensure that rainwater and any inadvertent liquors or fire water (in the unlikely event of a fire) are fully contained. Reference should be made to Drawing No. CE-FA-1921-ADW01 for the Site Layout.
- 2.3.10 A comprehensive description of storage for the existing part of the facility is contained within the document titled `Aquaforce Storage Procedure` in Appendix 4.
- 2.3.11 Bunding will encompass the attritor plant and will comprise of a 22cm sleeping policeman capable of containing 110% of the maximum capacity of the attritor contents i.e. 10 m³. The walls of the building will additionally serve as secondary containment for any spillages from the plant.

3 Environmental Setting

3.1 Surface Water

- 3.1.1 There are three identified surface water features or water networks identified within a 250m radius of the Site's boundary. The closest waterbody is an unnamed lake or reservoir some 164m south of the Site. At the closest extent, the Saredon Brook, a tributary of the River Penk, is located at 172m to the south. With an east to west flow regime, this merges into the River Penk orientated to the west of the Site at c. 2km. In addition, the Staffordshire and Worcester Canal is 243m to the north-east at the closest point.
- 3.1.2 Under the WFD, environmental objectives have been set for each water body and reported on in six-year periods. The most recent report carried out in 2016 states that the chemical rating for the Saredon Brook and the Staffordshire and Worcester Canal is 'good' whereas the ecological and overall ratings are 'moderate'.

3.2 Groundwater

- 3.2.1 Based on records obtained from the British Geological Survey website <http://mapapps.bgs.ac.uk/geologyofbritain/home.html>, the groundwater on Site would be held within both the bedrock strata and the superficial aquifer, although predominantly within the Principal bedrock aquifer which comprises of high intergranular and/or fracture permeability usually providing a high level of water storage to support water supply and river base flow on a strategic scale.



- 3.2.2 The superficial deposits on-Site are designated as a Secondary A aquifer, formerly termed as minor aquifers. Despite this, it contains permeable layers capable of supporting water supply at a local level as opposed to a strategic scale, and, in some cases, can form an important source for the base flow of rivers. Both are defined as Productive Aquifers.

GROUNDWATER SOURCE PROTECTION ZONES

- 3.2.3 A Source Protection Zone defines the sensitivity around a deep groundwater abstraction to contamination. The Site location is location upon groundwater Source Protection Zone 3 - total catchment area.
- 3.2.4 Despite this, the bedrock geology is classified as having a low vulnerability whilst the superficial geology has a high vulnerability. This is due to the presence of superficial deposits that provide the bedrock with protection from pollution coupled with the high leaching class of the soils which enable the transmission of pollutants to the superficial aquifer.

NITRATE VULNERABLE ZONE

- 3.2.5 Nitrate Vulnerable Zones (NVZ), under the EC Nitrate Directive (91/676/EEC), are areas designated as being at risk from agricultural nitrate pollution. They are defined as 'catchments where nitrate concentrations in sources of public drinking water exceed, or are likely to exceed, the EC limit of 50 milligrams per litre'. Records show that within 2km of the Site, there are two identified surface water NVZ's with both located on the Site itself; one for groundwater, NVZ identification G30 for Staffordshire and one for surface water, NVZ identification number S308 for the River.
- 3.2.6 Groundwater bodies, as with surface water bodies, are covered by the WFD and the overall, chemical and ecological rating for the groundwater held within the sandstone aquifer on-Site is classified as 'poor'.

3.3 Designated Sites

- 3.3.1 Designated sites are defined as Special Area of Conservation (SAC), Special Protection Areas (SPA's), RAMSAR sites), Sites of Special Scientific Interest (SSSI), national Nature Reserve (NNR), Local Nature Reserve (LNR).
- 3.3.2 There was one designated site identified within 2km of the Site – the Four Ashes Pit SSSI, located 182m south-west of the Site. There is also an area of Green Belt Land, 37m west of the Site.

3.4 Air Quality and Prevailing Winds

- 3.4.1 The Site is not located within a designated AQMA.
- 3.4.2 South Staffordshire District Council has five Air Quality Management Area`s (AQMA`s) in the local authority in which the Site is located. The closest AQMA to the Site is Oak Farm AQMA, located c.3.25km north-east of the Site. This AQMA was designated for Nitrogen Dioxide (NO₂) on 01/03/2007.
- 3.4.3 According to DEFRA's Background Mapping Data and based on the 2018 reference year mapping data, background emission concentrations in the locality of the Site are 13.71µg/m³ and 13.82µg/m³ for NO₂ and PM₁₀ respectively. National air quality objectives and European Directive limits and target values stipulate that concentrations of PM₁₀ measured at 24-hour mean levels should not exceed 50 µg/m³ for more than 35 times a year. NO₂ concentrations should not exceed 40µg/m³ when measured on an annual mean basis. The background concentrations in the vicinity of the Site are therefore well within these limits and it is unlikely that activities relating to the waste recovery operation will increase concentrations in excess of air quality objectives.
- 3.4.4 Statistics based on observations taken from the nearest weather station at Cosford/Albrighton (c. 12.15km south-west of the Site) between November 2009 and June 2021 indicates that prevailing winds originate predominantly from the west to south-west with an average annual speed of 6.3kts (refer to Diagram 1 and Diagram 2 below).



Diagram 1 Monthly average wind speed statistics

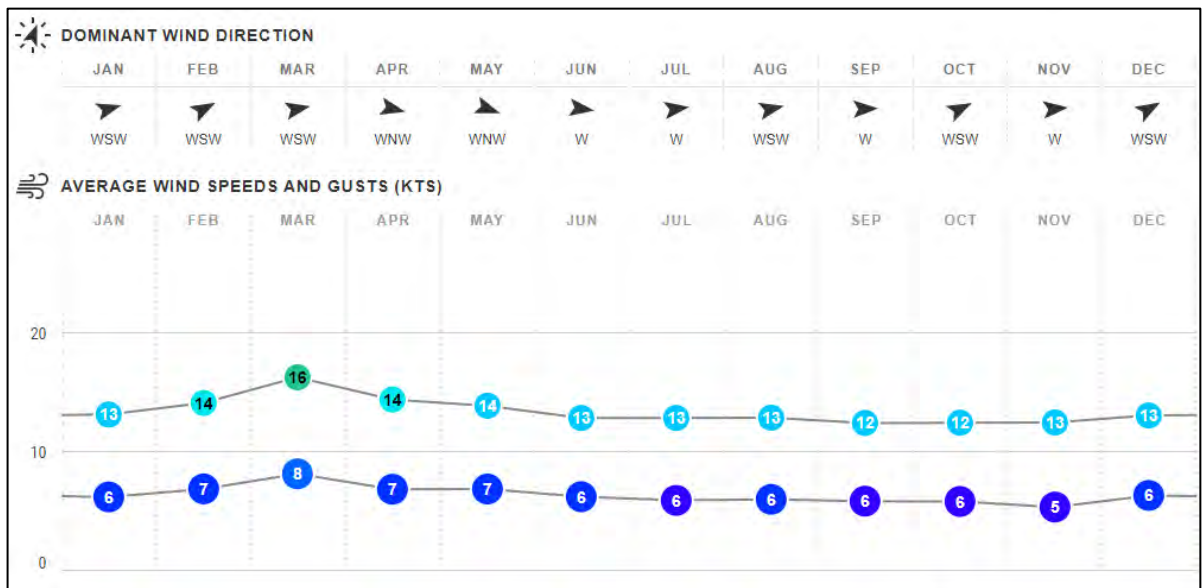
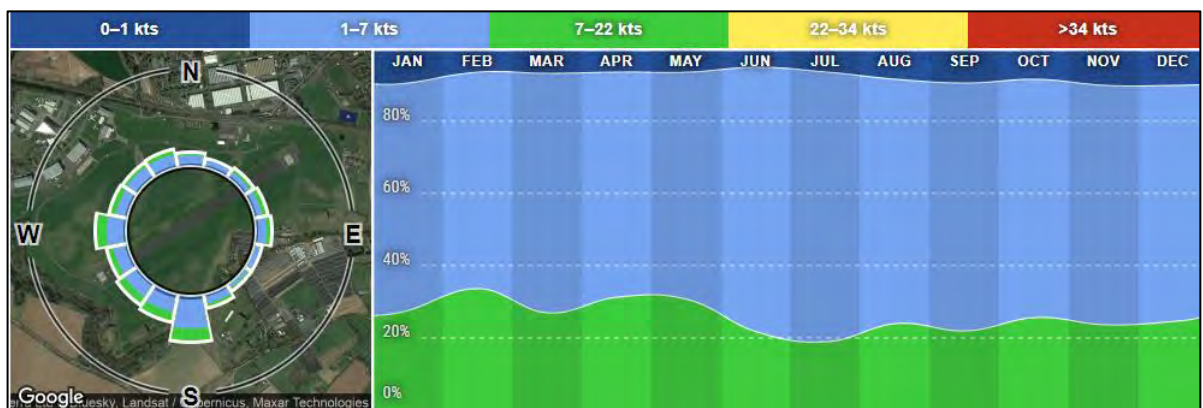


Diagram 2 Monthly wind direction and strength distribution

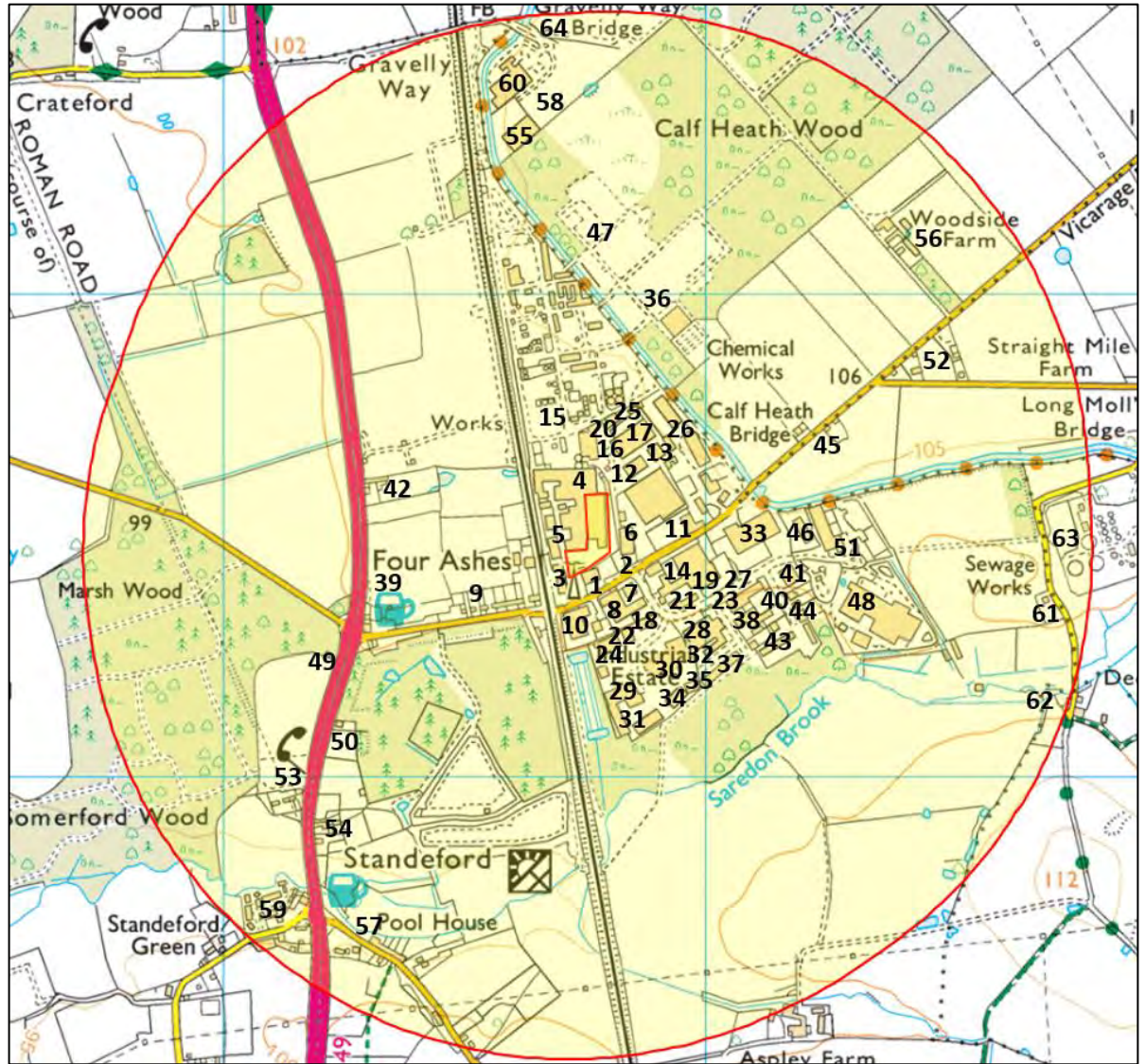


3.5 Sensitive Receptors

- 3.5.1 A review of potentially sensitive receptors within a 1km radius of the Site has been undertaken using the hierarchy of hospitals, schools, childcare facilities, elderly housing and convalescent facilities i.e. areas where inhabitants are more vulnerable to the adverse effects of exposure to elevated levels of dust and particulate matter. Residential properties, food manufacturers, major infrastructure and protected sites such as SSSIs, SPAs and SCAs are also considered (refer to Diagram 3 for sensitive receptor locations).
- 3.5.2 In terms of predicted exposure risk, levels have been determined via a qualitative assessment which evaluates the likelihood of exposure to dust and particulate emissions based on the receptors' proximity to the Site and the location of the sensitive receptors in relation to the prevailing wind direction as depicted in Diagram 1 and Diagram 2 above.
- 3.5.3 A 1km radius has been applied as a worst-case scenario and it reflects the maximum potential distance that fugitive dust and particulate matter could reasonably be dispersed in extreme meteorological conditions without any mitigation measures in place. Identified sensitive receptors within this range are shown on Diagram 3 below (The Site location is outlined in red, the highlighted circle indicates the 1km radius and the numbers denote location of identified potential sensitive receptors).
- 3.5.4 A summary of the identified potentially sensitive receptors along with the overall exposure levels and principal receptor features has been tabulated in Table 3. For each receptor within the categories the determination of the overall risk classification has been based on the dominant risk level. Receptors are

denoted by the numbered location points in Diagram 3 for ease of reference. Note that given the absence of hospitals, schools, elderly housing and convalescent facilities in the search area, the sensitive receptors are categorised in terms of distance from the Site.

Diagram 3 Sensitive receptor locations within a 1km radius of the Site



3.5.5 Institute of Air Quality Management (IAQM) Guidance on the Assessment of Mineral Dust Impacts for Planning (May 2016) states that “it is commonly accepted that the greatest impacts will be within 100 m of a source and this can include both large (>30 µm) and small dust particles. The greatest potential for high rates of dust deposition and elevated PM₁₀ concentrations occurs within this distance. Intermediate-sized particles (10 to 30 µm) may travel up to 400m, with occasional elevated levels of dust deposition and PM₁₀ possible. Particles less than 10µm have the potential to persist beyond 400m but with minimal significance due to dispersion.” This statement is has been considered in the assessment of the exposure level for each receptor.



Table 3 Sensitive receptor details

Facility and location point	Distance and direction from Site (m)	Overall exposure level	Comments
1.Boundary Fencing	Adjacent S	Medium-High	Receptor is located upwind of the dominant wind direction and intervening fencing and vegetation serves as a barrier against emissions.
2.Snack Shack	5m S	Medium-High	As above
3.Click Marketplace	5m W	Medium-High	As above
4.Four Ashes Motor Services	10m N	Medium	Located downwind from the dominant wind direction, however intervening infrastructure and fencing acts as a barrier.
5.Four Ashes Plumbing Supplies	20m W	Medium-Low	Receptor is proximal to the source however it is not located in the direction of the dominant wind and the intervening trees and fencing block the pathway for emissions.
6.OSF Steel Fabricators	25m E	Medium-Low	There is a medium frequency of winds in the direction of the receptor. Fencing and infrastructure provide a barrier between the source and the receptor.
7.MG Accident Repair Centre	50m S	Low	Airbourne emissions are obstructed by the intervening trees and buildings. There is also a low frequency of winds in the direction of the receptor
8.Spillard Safety Systems	50m S	Low	As above
9. Residential Properties on Station Drive	60-260m W	Low	As above
10.Morris Site Machinery	60m S	Low	As above
11. Danescourt Roofing	85m E	Low	The receptor is located relatively remote from the source and there is a medium frequency of winds towards the east.
12.Ginger6 Computers	85m NE	Low	Although the receptor is located directly downwind from the source, fencing and vegetation obstruct the pathway of emissions.
13.SABA Engineering	86m NE	Low	As above
14. C.M.H. Transport	90m SE	Low	There is a low frequency of winds from source to receptor and intervening infrastructure and vegetation serves as a barrier.
15.SI Group UK Ltd	93m N	Low	There is a medium to high frequency of winds in the direction of the receptor and the pathway for emissions is blocked by the bunds, intervening buildings and trees
16.United Bright Bar	105m NE	Low	Directly downwind from the dominant wind but fencing and vegetation block the pathway of emissions.
17.(RS) Four Ashes Limited	115m NE	Low	As above.
18.Energy Bolting	115m S	Low	There is a low frequency of winds in the direction of the receptor but it is considered remote from the source and the intervening fencing and trees offers protection from airbourne emissions
19.C`art Art Transport	120m SE	Low	There is a lack of direct pathways for the airbourne emissions to reach the receptor and it is considered remote from the Site.
20.Molapo	120m N		There is a medium to high frequency of winds in the direction of the receptor and the pathway for emissions is blocked by the bunds, intervening buildings and trees
21.Rolls Freight	125m SE	Low	The receptor is upwind of the prevailing wind direction and it is remote from the source. Trees and the bunds obstruct the pathway of emissions.
22.Dressage Mirrors	140m S	Low	Airbourne emissions are obstructed by the bunds, trees and buildings and the source is distal from the source.



Facility and location point	Distance and direction from Site (m)	Overall exposure level	Comments
23.West Midlands American Vehicles	145m SE	Low	There is a low frequency of winds from the source to the receptor and the pathway for emissions is restricted by the bunds on-Site, trees and buildings.
24.National Milk Laboratories	152m S	Low	As above
25.Takefood Event Catering	160m N	Low	The receptor is considered distal from the Site, there is a medium frequency of winds and intervening fencing, trees and hedgerows act as a barrier.
26.Veolia Environmental Services	190m E	Low	As above
27.PcP Gratings	210m SE	Low	Infrastructure and vegetation obstruct the pathway of emissions and there is a low frequency of winds from source to receptor.
28.Initial Projects Ltd	230m SE	Low	As above
29.Reiter UK	245m S	Low	As above
30.Bow Sports Archery Centre	250m S	Low	As above
31.Dransfields	260m S	Low	As above
32.Cannock Mobile Welders	280m SE	Low	As above
33.Telling Architecture	305m E	Low	As above although there is a medium frequency of winds from source to receptor.
34.Lichfield Fire & Safety Equipment	310m S	Low	There is a low frequency of winds in the direction of the receptor but it is considered remote from the source and the intervening fencing and trees offers protection from airborne emissions.
35.De-STA-Co UK	315m S	Low	As above
36.Wolverhampton 450	320m NE	Low	Direct pathways from source to receptor are obstructed by the intervening fencing, trees and buildings. The receptor is also remote from the Site.
37.BM Automotive Solutions	335m SE	Low	Infrastructure and vegetation obstruct the pathway of emissions and there is a low frequency of winds from source to receptor.
38.Jackson Lifting	340m SE	Low	As above
39.The Four Ashes Public Inn	345m W	Low	As above
40.P and D York Coach Travel	370m SE	Low	As above
41.Space Seal (Midlands)	380m SE	low	As above
42.Firtree Cottage	395m NW	Low	As above
43.The Print Box Limited	420m SE	Low	As above
44.Allsorts Office Supplies	425m SE	Low	As above
45.Residential Properties	420 – 540m NE	Low	Although the receptor is directly downwind from the dominant wind direction, it is remote from the Site and infrastructure and tall vegetation obstruct the pathway of emissions.
46.Simpsons Commercial Services	480m E	Low	As above but there is a medium to high frequency of winds in the direction of the receptor.
47.Gestamp West Midlands	495m NE	Low	Direct pathways from source to receptor are obstructed by the intervening fencing, trees and buildings. The receptor is also remote from the Site.
48.W2R/Veolia	500m SE	Low	Infrastructure and vegetation obstruct the pathway of emissions and there is a low frequency of winds from source to receptor.



Facility and location point	Distance and direction from Site (m)	Overall exposure level	Comments
49.Residential Property	500m SW	Low	The receptor is directly downwind and distal from the source.
50.Residential Property	550m SW	Low	As above
51.Power Electrics – midlands Depot	560m E	Low	The receptor is considered distal from the Site, there is a medium frequency of winds and intervening fencing, trees and hedgerows act as a barrier.
52.Residential Properties	630 – 800m NE	Low	Direct pathways from source to receptor are obstructed by the intervening fencing, trees and buildings. The receptor is also remote from the Site.
53.Standeford Cafe	680m SW	Low	The receptor is directly downwind and distal from the source. An abundance of trees, buildings and infrastructure block the pathway of emissions.
54.Barr House Farm	720m SW	Low	As above
55.Air Liquide Healthcare	760m N	Low	The receptor is considered distal from the Site, there is a medium frequency of winds and intervening fencing, trees and hedgerows act as a barrier.
56.Woodside Farm House	795m NE	Low	Although the receptor is directly downwind from the dominant wind direction, it is remote from the Site and infrastructure and tall vegetation obstruct the pathway of emissions.
57.Residential Properties	800 - 1000m SW	Low	Receptor is downwind from the source and intervening fencing, tall vegetation and buildings serve as barriers.
58.Haulotte UK	846m NE	Low	Although the receptor is directly downwind from the dominant wind direction, it is remote from the Site and infrastructure and tall vegetation obstruct the pathway of emissions.
59.The Harrows Mobile Home Park	850m SW	Low	The receptor is directly downwind and distal from the source. An abundance of trees, buildings and infrastructure block the pathway of emissions.
60.HOPPE UK	870m N	Low	The receptor is considered distal from the Site, there is a medium frequency of winds and intervening fencing, trees and hedgerows act as a barrier.
61.Deepmore Cottages	920m E	Low	The receptor is considered distal from the Site, there is a medium frequency of winds and intervening fencing, trees and hedgerows act as a barrier.
62.Deepmore Farm	996m SE	Low	As above
63.Flare Stack Sewage Works	975m E	Low	As above
64.Gravelly Way Farm	1000m N	Low	As above

4 Fire Prevention

4.1 Fire Prevention Plan

- 4.1.1 This FPP is readily available and clearly identified on Site and all staff are aware of the location of the Plan. It forms part of the Environment Management System (EMS) (report reference: CE-FA-1921-RP01) for the Site. There is a requirement that all contractors working on Site are briefed on the contents of the FPP.
- 4.1.2 Regular Fire Prevention Plan Exercises are carried out on a quarterly basis although frequency will change depending on results of exercises, any incidents and turnover of staff.
- 4.1.3 The following aspects have been considered to make up this FPP.

4.2 Waste Storage and handling

- 4.2.1 In accordance Table S1.1 of the Permit, refrigeration units are stored for no longer than 3 months without



written approval from the Environment Agency.

- 4.2.2 All other waste will be stored for a maximum duration of 6 months although typically turnaround times are significantly less than this. The turn-around time adheres to relevant guidance and ensures the mitigation against the build-up of hot spots.
- 4.2.3 Incoming wastes are typically processed on a first in first out basis. Any potentially flammable wastes or wastes that have been placed in quarantined storage will be prioritised for removal.
- 4.2.4 Solid wastes will be stored in bays constructed from concrete with a fire-resistant capability of 2 hours at a minimum. Stockpiles will reach no higher than 1.4m giving a freeboard space of 1m to the top of the 2.4m high bay walls. This freeboard space will be demarcated with a line marked clearly on the inside of the bay walls 1m from the top and additionally 1m in from the side to prevent any fire from migrating to the adjacent bay.
- 4.2.5 Site cleaning procedures include sweeping out the bays and containers, including the corners, to ensure all material is removed and potentially combustible residues do not remain. Operational staff record the housekeeping of the bays and containers on the appropriate checklist, maintained in the Site office, to adhere to the maximum waste storage duration of 6 months.
- 4.2.6 Waste acceptance procedures require that unloading of waste deliveries are supervised by Site staff. The waste stacks for liquid/sludge wastes stored in IBC's and drums will be compliant with the HSE guidance on stack/pile configuration: <https://www.hse.gov.uk/pubns/books/hsg51.htm> and <https://www.hse.gov.uk/pubns/books/hsg71.htm>.

4.3 Waste Quarantine

- 4.3.1 A quarantine area will be clearly identified and marked on Site to allow the segregation of unsuitable or combusted material. Quarantined waste will be removed, as soon as practicable in appropriate vehicles and properly disposed of at a suitably permitted site.
- 4.3.2 The quarantine area has a 6m separation distance around it and is shown on Drawing No: CE-FA-1921-DW01. Quarantine procedures are also detailed in the Site's storage procedures in Appendix 4 and consists of marking up quarantine material with red and white tape so they can be easily identified prior to storing them in the usual storage bays with other compatible chemicals.

4.4 Monitoring of Waste Bays

- 4.4.1 All deliveries of incoming material to the waste bays will be supervised by operational staff. The external areas and the interior of the waste transfer building will be extensively equipped with CCTV which enables visual monitoring and allows for any hot spots, vapours or smoke to be identified.
- 4.4.2 At a minimum of twice daily, the temperature of the waste stacks and piles will be monitored using a handheld thermal temperature monitor. Should the results indicate a temperature rise of 5°C from the previous temperature, monitoring will be conducted hourly.
- 4.4.3 Due to the turnaround time of waste on-site, the probability of self-combustion is unlikely and the most probable cause of fire is arson. The presence of the CCTV will therefore act as a deterrent and minimise the likelihood of a fire occurring. In addition, this will allow the Operator to inform the fire service and attend the Site to ensure the fire is extinguished within a maximum timeframe of four hours.
- 4.4.4 In view of the fire prevention measures outlined within this report and in paragraphs 4.4.1 and 4.4.2, the possibility of the fire spreading within the Site itself or to neighbouring locations is minimised.
- 4.4.5 Waste stockpiles, stacks and rows will be inspected at the beginning and end of the operational day to identify any hot spots, spills or leakages. Liquors are stored in IBC's and will be double stacked in the waste bays within the building to a height of 2.3m. The bay walls adhere to the HSE guidance in so far as they are beyond the 2m limit at 2.4m high.
- 4.4.6 Solid wastes will also be stored in 2.4m high bays to a maximum height of 1.4m. Capacities therefore do



not exceed those specified in the Section 9.2 of the Fire Prevention Plan guidance <https://www.gov.uk/government/publications/fire-prevention-plans-environmental-permits/fire-prevention-plans-environmental-permits#manage-waste-piles>.

4.4.7 Wastes will not be burnt at the site and there will be no hot works activities will be conducted at the Site.

4.5 Contingency Plans

4.5.1 In the event of an un-planned incident on Site, the company from whom the waste derives will be informed and the delivery cancelled.

4.6 Arson

4.6.1 The Site is surrounded by palisade fencing and lockable gates with controlled vehicular entry during working hours. In addition, the Site will be fully fitted with CCTV monitoring with no blind spots to detect any attempts at unauthorised entry.

4.7 Plant and Equipment

4.7.1 An Operating and Maintenance Manual is held by Site management in line with Aquaforce Ltd procedures for plant and equipment. As a part of these procedures all plant and equipment on Site which requires maintenance will be assessed for fire risk. Checks will be programmed and records retained with a log of maintenance carried out.

4.7.2 Fire extinguishers will be readily available for use across the Site in strategic locations (reference should be made to Drawing CE-FA-1921-DW01 for locations). Vehicles and equipment will be regularly inspected for electrical faults and for any fuel or combustible liquid leakages. Spill kits will be readily available on the Site and within each vehicle in the event of such leaks. When not in use, mobile plant will be stored away from any combustible waste materials. A log of inspection and maintenance of all plant and equipment will be maintained which will include a record of any spills or leakages and the action taken.

4.8 Infrastructure and Site Inspections

4.8.1 A programme of Site inspections is in place for all operational areas as part of Site operating procedures. Records of these inspections are a standard requirement of each working day. Records will be kept of inspections with requirements for maintenance and actions taken.

4.9 Electrical Faults

4.9.1 All electrical work on Site will be inspected and signed off by fully qualified electricians and it will comply with the relevant British Standard for design and installation of electrical equipment. Detailed operational manuals for any equipment requires it to be checked and maintained as part of a planned maintenance regime. Vehicles and equipment will be regularly inspected daily by Site operators for electrical faults and serviced as required for each specific type of equipment or plant.

4.10 Smoking Policy

4.10.1 The Site operates a strict no smoking policy.

4.11 Hot Works

4.11.1 Hot works carried out on Site will be carried out in accordance with the Hot Works Procedure.

4.12 Industrial Heaters

4.12.1 There are no industrial heaters on Site.



4.13 Fire Watch

- 4.13.1 The waste storage buildings are fitted with smoke and heat detection sensors which are monitored out of hours. As such a fire watch is not considered to be required.
- 4.13.2 All staff are instructed to remain vigilant for fire and raise the alarm immediately following detection of smoke or fire.

5 Management and Storage of Waste

5.1 Waste Acceptance Procedures

- 5.1.1 All vehicles delivering wastes to the Site stop at the weighbridge and are weighed. The total quantity of waste accepted at the Site is 29,999 tonnes per annum.
- 5.1.2 Only registered carriers or those who are lawfully exempt from registration will be permitted to use the Site. Checks are made to establish whether the haulier is a Registered Waste Carrier or has a valid exemption from registration.
- 5.1.3 Waste will not be accepted if for any reason there is insufficient storage capacity available or if the Site is inadequately manned. This is to ensure that all waste is managed effectively to prevent pollution or loss of amenity.
- 5.1.4 Weighbridge staff are suitably trained and will follow documented procedures. The weighbridge operator will examine waste descriptions at the weighbridge and the information will be checked against the pre-acceptance documentation, six figure European Waste Catalogue Code(s) and other details on the Waste Transfer Note, Season Ticket or Hazardous Waste Consignment Note (as appropriate) and against the waste types permitted by the Environmental Permit.
- 5.1.5 Every delivery of waste will be recorded, detailing the date of the transaction, weight, waste type, registered carrier, Waste Transfer Note number, Hazardous Waste Consignment Note number (as appropriate), vehicle registration and other pertinent information against a unique reference number. It will allow for tracking of wastes, the generation of reports and waste returns, as well as providing comprehensive, auditable information.
- 5.1.6 Additional pre-acceptance procedures will be used to ensure that only suitable waste types are accepted. Customers delivering waste will be required to provide the Operator, in advance, with all necessary information/documentation to satisfy the requirements of the Waste (England and Wales) Regulations 2011 and the Duty of Care. Information required is detailed in Appendix 2 and 3 `Aquaforce Waste Pre-Acceptance Procedures` and `Aquaforce Waste Acceptance Procedures`, respectively and summarised in Section 4.2 and 4 of the EMS, respectively.
- 5.1.7 Only wastes subjected to the pre-acceptance procedures detailed in Appendix 2 of the EMS will be accepted at the Site.
- 5.1.8 The delivery vehicle is directed to the appropriate reception area for off-loading via a fork lift truck to enable the sampling, verification and inspection. For chemical/hazardous waste, with the exception of fridges, asbestos or WEEE, the driver hands the work instruction to the site chemist who conducts an initial visual inspection of the load for the following:
- Labels are clearly visible and in good condition and is matched to the list on the work instruction;
 - Any signs of leaks;
 - Any sign of broken pallets or damaged containers / pressurisation of containers;
 - Any additional labels will be removed;
 - If there is an incompatibility issue the wastes will be segregated immediately.



- 5.1.9 Relevant wastes are checked and authorised by the Site Chemist for appearance, odour, pH and ox. i.
- 5.1.10 Once verified, a label will be prepared containing the date, the chemical description, the bay number in which the container will be stored, an ID number (comprising the consignment note and waste stream number) and the hazard code. Old labels will be removed or blacked out.
- 5.1.11 All containers stored in the bays will be placed in such a way that the label is clearly visible and facing the walkway. Waste streams to be bulked up will be tested for compatibility. For full details of the criteria for conducting this, reference should be made to Appendix 13, Section 2.4. Bulking and Compatibility in the EMS.
- 5.1.12 If, at the verification stage, sampling is a requirement, it is conducted in accordance with the sampling procedures detailed in Section 2.5 of Appendix 3 of the EMS. Samples that require sampling are residual chemicals from processes and, non-conforming wastes and unused chemical wastes that require further verification.
- 5.1.13 Any discrepancies found, i.e. suspect, non-conforming and/or random loads, as a result of the checks detailed above will result in the vehicle being detained whilst some, or all, of the following supplementary management decisions are taken:
- Referral to the Site Manager or Technically Competent Person (TCP) on Site;
 - Referral to the waste producer to confirm the nature of the waste load;
 - Referral to the Environment Agency;
 - Redirection of delivery vehicle off site, to a suitably authorised facility; and
 - If the waste has been discharged, removal of the waste to a secure quarantine area, prior to off-site removal either to the waste producer or suitably authorised facility.
- 5.1.14 A non-conformance form is completed which contains the arrival date, the consignment note number, the ID number, customer details, quantity and size of container (s), reason for non-conformance, disposal point and quote and any additional analysis or information required. The container(s) is then to be placed in the quarantine bay (see Drawing No. CE-FA-1921-DW01 for location).
- 5.1.15 Any waste materials dispatched off site to an authorised facility, will be removed in accordance with the Duty of Care. A registered waste carrier will be used. A 'Record of Non-Conformance' will be made in accordance with the EMS.
- 5.1.16 Any instances of rejection of loads will be recorded in a Site log, which will be made available for inspection by authorised officers of the Environment Agency at any reasonable time.
- 5.1.17 Copies of Waste Transfer Notes, Consignment Notes, Season Tickets, Pre-Acceptance Declaration Documentation and all records required in accordance with the Environmental Permit will be kept in the Site office. Where at all possible, records will be electronic.
- 5.1.18 Hot loads are not accepted at the Site, however, in the unlikely event that any wastes are discovered to be a hot load or have the potential to be a hot load, they will be removed from the Site as a matter of urgency, or temporarily stored in the designated quarantine area.
- 5.1.19 Designated quarantine procedures ensure that such wastes will be kept segregated from other wastes which are or are likely to be incompatible. Quarantined wastes (including any inadvertently received powdery or excessively dusty wastes) will be removed from the Site as a priority incident and within 24 hours, subject to an authorised facility being able to accept them within this timescale. If appropriate and dependant on the nature of the material, wastes will be dampened down using a hose prior to being transferred to quarantine or handling in any way so that dust emissions during handling are minimised.
- 5.1.20 Wastes will not be accepted if for any reason there is insufficient storage capacity available or if the Site is inadequately manned. This is to ensure that all waste is managed effectively to prevent pollution or loss of amenity.



5.2 Identification of Potential Sources of Fire

5.2.1 In constructing robust risk-based management protocols for the Site, it is recognised that there are several potential sources of fire associated with the waste transfer station from:

- Container defects and/or deterioration,
- Shredding activities including the attritor plant;
- Vehicles and plant delivering and processing wastes to/at the facility; and
- Waste storage, bulking up, storage and dispatch.

5.2.2 These matters are addressed further in the relevant sections below.

5.3 Waste Feedstock Inventory and Source Materials

5.3.1 Waste streams received at the facility are listed in Appendix 1.

6 Control Measures

6.1 Waste Transfer Building and Waste Bays

6.1.1 The waste transfer buildings are constructed from brick and metal cladding and comprise of two reception bays identified for material sorting and separation along with numerous other bays for the storage of permitted wastes.

6.1.2 Waste storage waste bays are separated on two sides by 2.4m high concrete fireproof walls (both the back and front will be open to allow access) Concrete bay construction and height will meet the requirements of The Health and Safety Executive (HSE) HSG71 Chemical Warehousing: The storage of packaged dangerous substances (Fourth Edition, 2009); Storage of flammable liquids in containers (Third Edition, 2015) and the EA's guidance for Fire Prevention Plans. They are impervious to liquids and capable of withstanding an intense fire without collapse.

6.1.3 Furthermore, the bay walls will meet the specifications set out in the Environment Agency guidance on Fire Prevention Plans: environmental permits: Fire prevention plans: environmental permits - GOV.UK (www.gov.uk) to ensure a heat resistance period of at least two hours so that any fire is suitably isolated from another waste storage area.

6.1.4 Forklift trucks transfer the wastes to the appropriate bay within the building according to waste types. Mixed wastes are deposited in the reception bay prior to separation and sorting.

6.1.5 Waste loads are placed into appropriate bay and bulked up within the confines of the bay wall using a mobile pallet truck or forklift truck as appropriate by a suitably trained Site operative. Mixed wastes are stored in the reception bay prior to sorting and separation into different components for storage and recovery and in excess of ten tonnes/day of residual waste for disposal at an appropriately authorised site. All waste deposit, separation, bulking up, storage and loading for off-Site removal or transfer takes place within the building.

6.1.6 The waste bays within the facilities building have a 10cm bund along the entrance to allow for the containment of any leaks or spillages. These bunds as such, prevent the mixing of incompatible liquids and ensures any leaks or spillages do not escape from the confines of the individual bays.

6.1.7 Containerised waste materials are stacked on top of pallets in the bays which in turn are stacked onto the impermeable concreted floor. These comprise the largest waste stacks and bay dimensions for the Site and the proposed additional storage bays in the newly acquired building are detailed below in Table 4.



Table 4 Waste Stack and Storage Bay Dimensions

Stockpile ID	Maximum Waste Stack Dimensions (L x W x H)	Maximum Volume of Waste (m ³)	Bay/Storage Area Dimensions
Compatible Hazardous	1m x 24m x 2.3m (2 stacks per bay with 0.70m separation distance)	40 per stack; 80 per bay	25.5m x 3.7m x 2.4m

6.1.8 Given that the stack sizes are between 1 and 100m³, the fire walls and the 1m distance between the stack and the bund at the front of the bay allows for the 4m horizontal distance from flammable storage areas around the wall to the adjacent stockpile as specified in HSG 51 and 71.

6.2 Ventilation of the Waste Transfer (New) Building

6.2.1 To prevent the accumulation of flammable vapours that may arise from leaks or releases from the stored materials, ventilation of the waste transfer building will be achieved via a natural system. To facilitate cross-flow ventilation induced by wind forces and air circulation by thermal currents, permanent airbricks will be installed at high and low levels in the front and back external walls of the building.

6.2.2 As the building is located in an open, unsheltered environment, the airbricks will have a total free area equivalent of at least 1% of the total area of the walls. Inspections will be made during the daily routine site checks to ensure that these vents are free from any obstructions and blockages.

6.3 Design and Construction of Containers

6.3.1 Most waste materials will be stored in IBC`s and metal drums that will be stacked no more than two high. There will be a separation distance from the stacks/stockpiles to the back and sides of the bay walls of 500mm to enable the inspection of all surfaces of the containers for any defects or deterioration that may result in the release of the contents.

6.3.2 Wastes will only be stored in containers constructed from material that is compatible with the physical and chemical properties of the contents. The openings of the containers will be secured with a precise corresponding lid or cap to prevent the escape of flammable vapours or liquids.

6.3.3 Individual containers will be clearly marked to indicate their contents and the degree of flammability. Flammable liquids arriving on site will be marked in accordance with the Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (CDG) and to a lesser extent the Classification, Labelling and Packaging (CLP) Regulation.

6.4 Leaks and Spillages

6.4.1 The design of the waste transfer building takes into consideration the need to prevent the spread of any leaks or spillages beyond the confines of the waste bays. A 100mm bund will be constructed along the entrance of each bay as well as along the entry and exit point to the building. Additionally, the fireproof bay walls and the base of the bays are constructed of concrete that is impervious to fluids and the floor of each bay graduates in a downward dip from the front to the back to facilitate further in the containment of any spillages.

6.4.2 In accordance with the HSG71 and 51, each bay has the capacity to contain a volume of at least 110% of the capacity of the largest container. For thoroughness, the storage bays are designed as such so that they have the capacity to contain 110% of the contents of eight and a half containers stored within them i.e. bays have the capacity to hold a volume of 9.4m³ (110% of the contents of one container is 1.1m³).

6.4.3 There are two entrance/exit points to the facility which have a bund of a minimum 40mm high extending laterally across the entrances. Not only will these ensure fugitive liquids are prevented from escaping the confines of the Site, they allow for the internal aspects of the buildings to serve as firewater containment areas.



7 Fire Detection and Fire Fighting

7.1 Fire Detection

- 7.1.1 The Site employ the use of smoke and heat detectors which are monitored out of hours. Heat detection by this means monitors the temperature through each individual container rather than a temperature probe which detects at point source locations.
- 7.1.2 Any evidence of a hot spot triggers an assessment of the most appropriate action which may be the separation of the stack to dissipate heat, transfer of material to the quarantine area or application of cooling water, foam, CO₂ or powder depending on the properties of the waste material.
- 7.1.3 Extensive CCTV coverage will be installed around the Site in such a way that there will be no blind spots. This will allow for the detection of any fire and smoke in addition to serving as security for the facility.

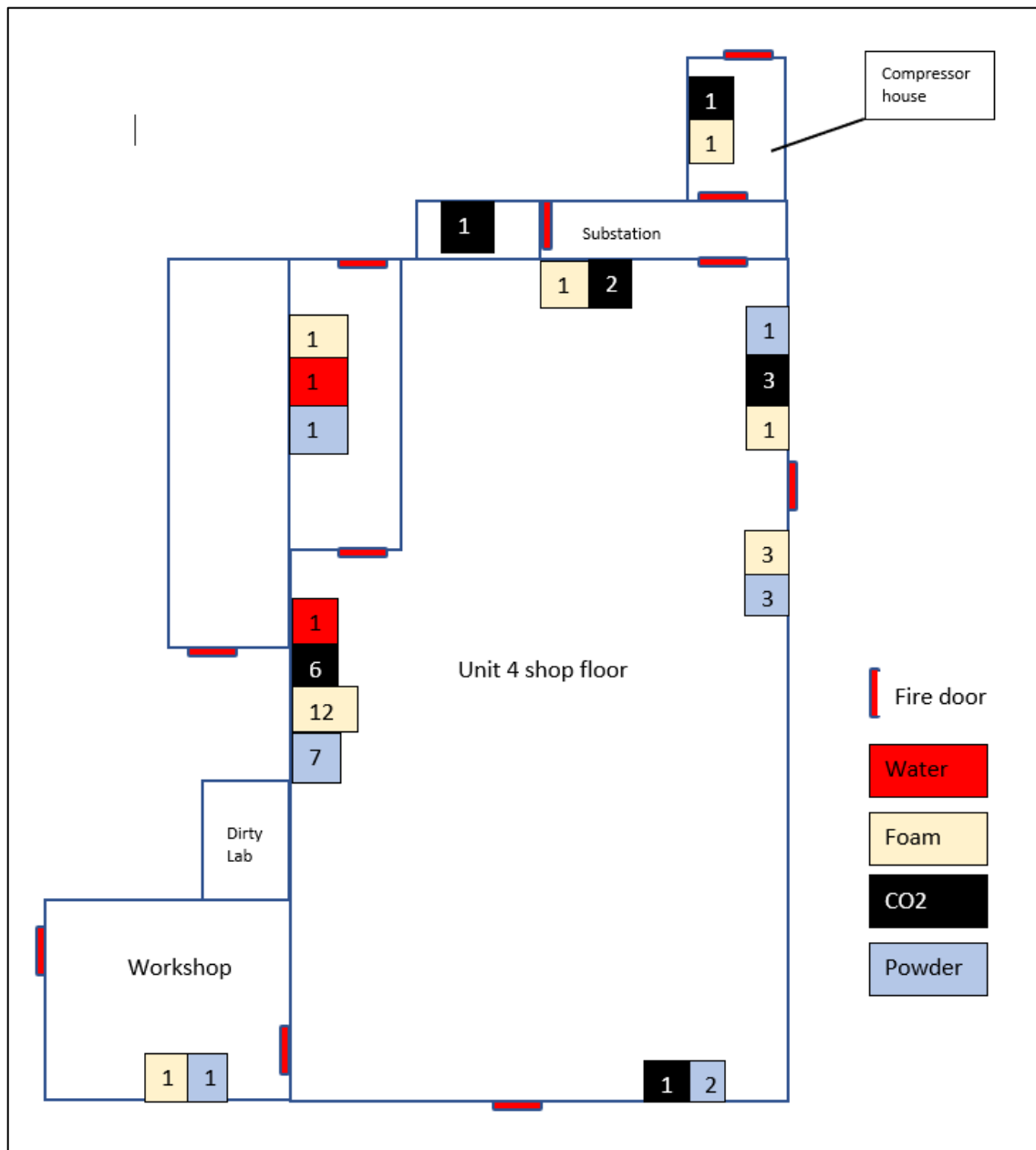
7.2 Suppression

FIRE EXTINGUISHERS

- 7.2.1 Within the container washing area, there will be a total of seven foam fire extinguishers, six each containing CO₂ and powder, and two water fire extinguishers positioned in strategic, easily accessible locations around the internal areas of the Site and staff are trained in their use. A fire extinguisher will be positioned in a similarly strategic location in the waste storage building. Records of training testing and maintenance of fire extinguishers are kept in the Site`s office. Fire extinguishers meet the requirements of BS 5036. The locations are shown in Diagram 4 overleaf.



Diagram 4 Fire Extinguishers and Fire Door Locations



WATER SUPPLY

- 7.2.2 A fire hydrant is located by the Site entrance, see Drawing No CE-FA-1921-ADW01 Site Layout Plan.
- 7.2.3 It is important to note that the Fire Service are no longer permitted to test the flow rates of fire hydrants due to the discolouration it causes and the potential to taint water supplies. Consequently, the flow rate of the hydrant is unavailable.
- 7.2.4 Hydrants can be supplemented, where required or appropriate, with the use of a supply hose and mains water. Additionally, water can be sourced from the reservoir/lake and the Saredon Brook located some 164m and 172m to the south of the Site, respectively.



8 Provision and Management of Firewater

8.1 Water volumes

- 8.1.1 The maximum stack size is calculated to be of 80m³, based on the design capacity of 80 IBC's or drums (1m x 1.2m), double stacked in the bays.
- 8.1.2 Environment Agency guidance recommends the use of 2m³/min of water to extinguish a 300m³ pile of waste in 3 hours. The guidance requires demonstration that a fire can be extinguished in 4 hours.
- 8.1.3 Using the above application rate for 300m³, it is calculated that approximately 1.2m³ of water is required to extinguish 1m³ of waste within 3 hours. Using this as a guide, it is calculated that the Site would require 96m³ of water to extinguish the 80m³, largest pile of waste on Site.
- 8.1.4 To assist in the containment of fire water, a 40mm bund extends across the two entrance and exit points of the facility. Firewater would then be potentially available for reuse by the fire service or would be removed by tanker and transferred to an appropriately licensed wastewater treatment facility. Note that there are no surface drains on the Site.

9 Fire Incident Procedure and Emergency Plan

- 9.1.1 Emergency procedures for the Site have been developed and are the subject of training and exercising for all staff engaged at the Site. A copy of the Fire Emergency Plan is retained at the Site office.
- 9.1.2 The plan sets out the following key points:
- Fire actions and reporting procedures.
 - Emergency Procedures including communication and evacuation.
 - Identification of off-Site fire assembly point.
 - Circumstances under which trained staff may be involved in actions to separate affected waste.
 - Cancellation of any deliveries to the Site.
 - Recovery, including appropriate removal, of burned waste to an authorised facility. Tankering of any residual firewater by a licensed waste transfer operator to an appropriately permitted wastewater treatment facility.
 - Should the plant and machinery on Site prove to be insufficient for the removal of burnt waste, additional plant will be sourced from nearby industrial premises.
- 9.1.3 Key actions to be undertaken in the event of discovering a fire are detailed in Table 5 below.

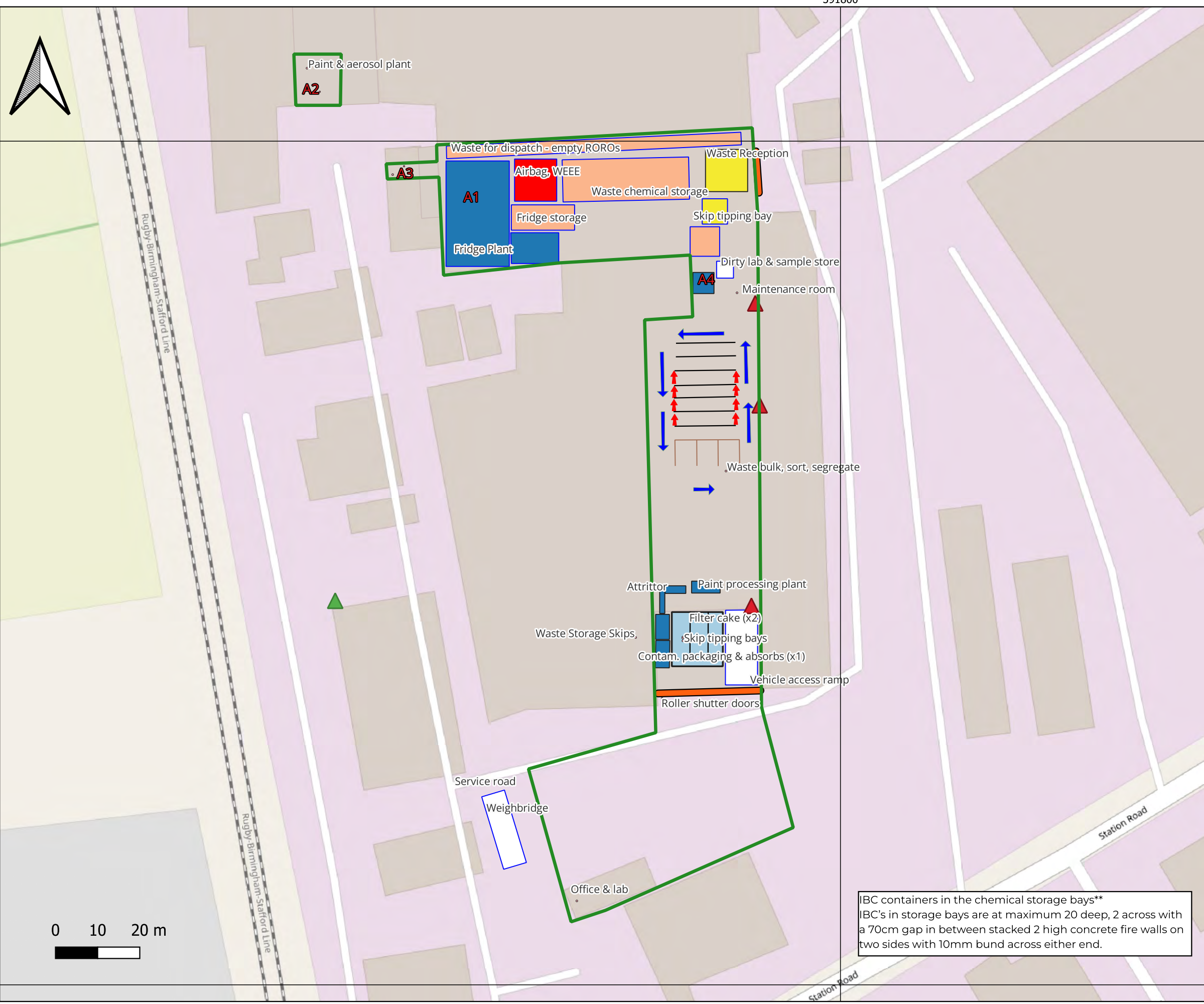
Table 5 Key Actions on discovering a fire

Box 1 - Action on discovering a fire
<ul style="list-style-type: none">• Fire service to be informed immediately of the location of the fire and the waste types involved.• All personnel must follow Emergency Fire Plan.• Neighbouring businesses and residents will be informed via telephone (note that there is a contact list held in the Site office that is updated regularly).• Fire extinguishers and water hoses must only be used by trained fire marshals and when it is safe and appropriate to do so.• Once the Site is cleared of burned material and firewater (see bullet point 6 above in section 8.1.1), the yard area will be washed down before replacing or repairing damaged equipment and/or infrastructure as necessary.• Electrical checks and the re-evaluation of contingency plans will also be carried out prior to the Site becoming operational again.



DRAWINGS

Drawing No CE-FA-1921-DW01	Site Layout Plan	1:900@A3
Drawing No CE-FA-1921-DW02	Configuration of Bays in Chemical Storage and Storage Areas	NTS



Legend:

- Permit boundary
- Emission points (A1-A4)
- Storage
- Plant
- Skip tipping bays
- Waste reception
- Airbag deployment and we
- Waste processing areas
- Bays
- ▲ Fire hydrant
- ▲ Fire extinguishers
- ➔ One way internal routing
- ➔ 10mm bund across entran
- 40mm bund

Consultant:
 Crestwood Environmental Ltd.
 Science, Technology And
 Prototyping Centre University
 Of Wolverhampton Science
 Park Glaisher Drive
 Wolverhampton WV10 9RU



Client:
**AQUAFORCE
 RECYCLING**

Site: Unit 4a Sprint Industrial Estate, Four
 Ashes, Wolverhampton

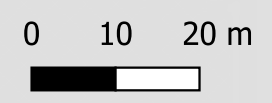
Drawing title:
 Site Layout Plan

Date: 19/06/2023	Scale: 1:900	Paper size: A3 (420x297mm)
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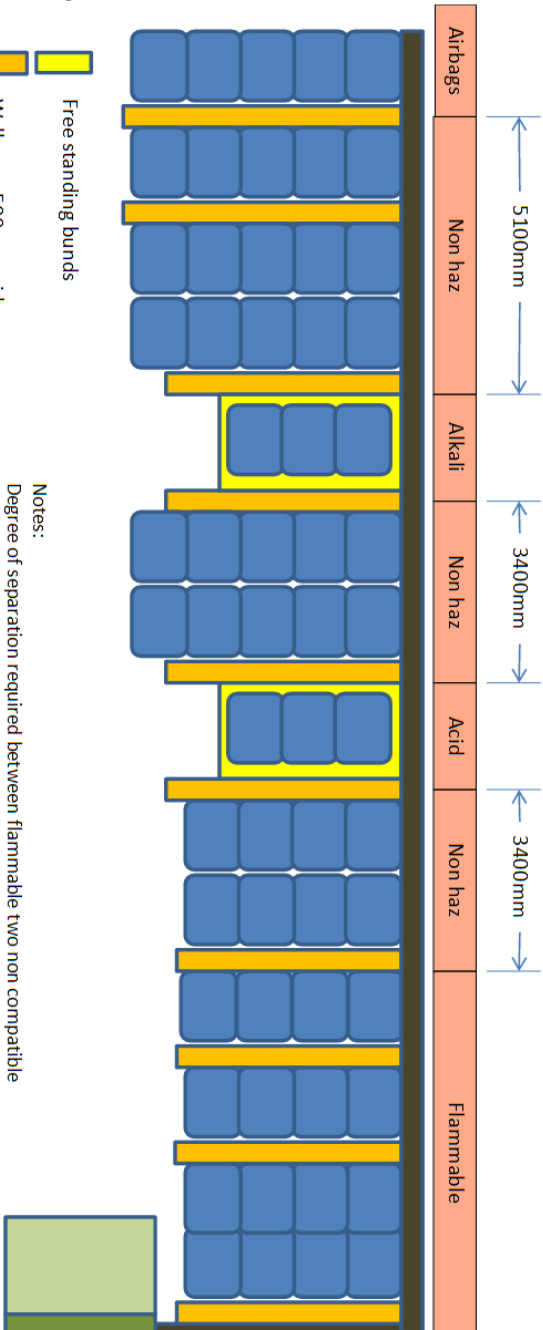
Drawing Ref: CE-FA-1921-DW01-Final	Drawing No: DW01
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IBC containers in the chemical storage bays**
 IBC's in storage bays are at maximum 20 deep, 2 across with
 a 70cm gap in between stacked 2 high concrete fire walls on
 two sides with 10mm bund across either end.

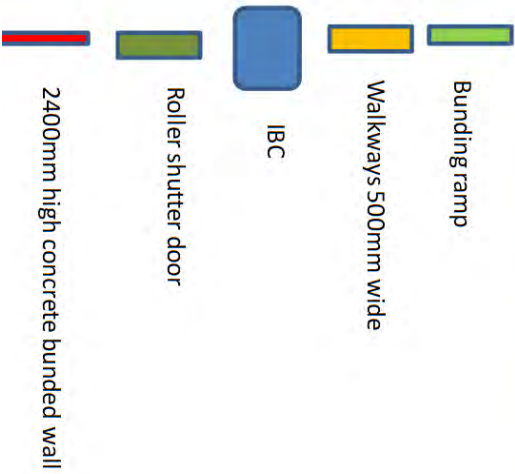
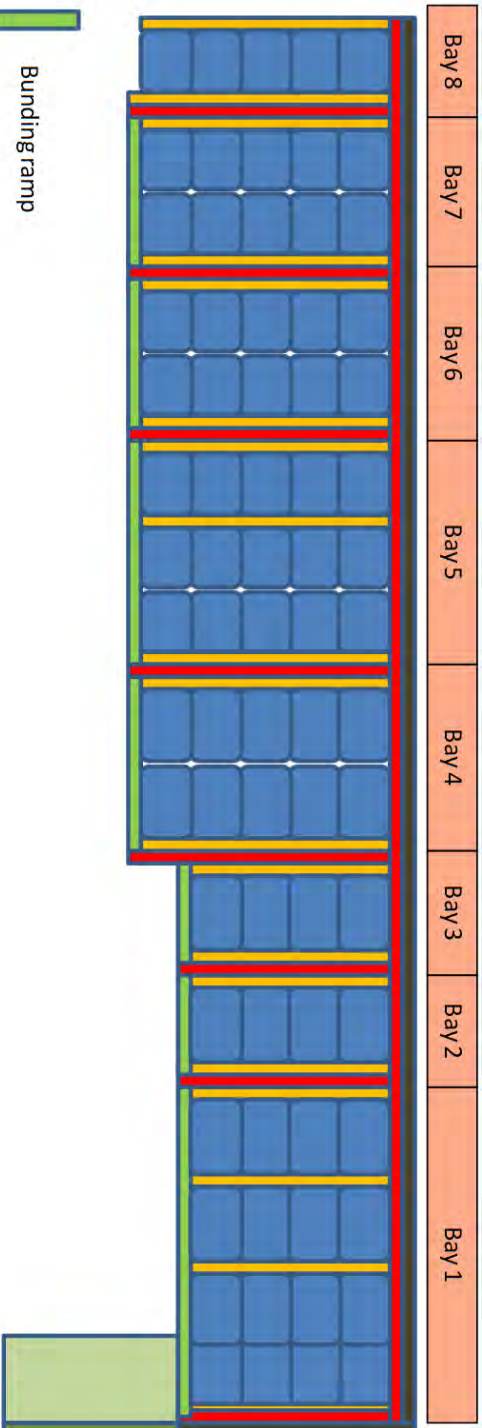
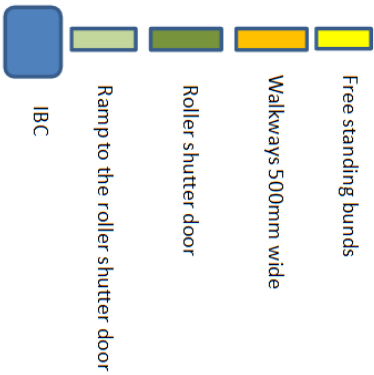


Configuration of Bays in Chemical Storage and Storage Areas

Drawing No. CE-FA-1921-DW02



Notes:
 Degree of separation required between flammable two non compatible corrosives and airbags is 3000mm. The plan shows that this is always exceeded. Bunding of non compatible wastes.
 IBCs stacked 2 x high apart from IBCs of rags where, when stable three high is permitted
 IBC dimensions 1200mm high; 1200mm wide; 1000mm deep



Notes:
 Bays separated by 2400mm high preformed section concrete wall.
 Bunding lip designed to prevent 110% liquid largest container i.e. IBC 1100litres bund capacity
 IBCs stacked 2 x high apart from IBCs of rags where, when stable three high is permitted
 IBC dimensions 1200mm high; 1200mm wide; 1000mm deep
 Bunding ramp to be 12cm in height



APPENDIX 1 WASTE FEEDSTOCK INVENTORY AND SOURCE MATERIALS

EWC Code	Description
01	Wastes resulting from exploration, mining, quarrying, and physical and chemical treatment of minerals
01 03	Wastes from physical and chemical processing of metalliferous minerals
01 03 07	Other wastes containing hazardous substances from physical and chemical processing of metalliferous minerals
01 05	Drilling muds and other drilling wastes
01 05 05	Oil-containing drilling muds and wastes
02	Wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing, food preparation and processing
02 01	Wastes from agriculture, horticulture, forestry, hunting and fishing
02 01 01	sludges from washing and cleaning
02 01 04	waste plastics (except packaging)
02 01 08	agrochemical waste containing hazardous substances
02 01 09	agrochemical waste containing hazardous substances
02 01 10	waste metal
02 03	wastes from fruit, vegetables, cereals, edible oils, cocoa, coffee, tea and tobacco preparation and processing; conserve production; yeast and yeast extract production, molasses preparation and fermentation
02 03 02	wastes from preserving agents
02 03 03	wastes from solvent extraction
02 03 04	materials unsuitable for consumption or processing
02 03 05	sludges from on-site effluent treatment
02 04	wastes from sugar processing
02 04 02	off-specification calcium carbonate
02 04 03	sludges from on-site effluent treatment
02 05	wastes from the dairy products industry
02 05 01	materials unsuitable for consumption or processing
02 05 02	sludges from on-site effluent treatment
02 06	wastes from the baking and confectionery industry
02 06 01	materials unsuitable for consumption or processing
02 06 02	wastes from preserving agents
02 06 03	sludges from on-site effluent treatment
02 07	wastes from the production of alcoholic and nonalcoholic beverages (except coffee, tea and cocoa)
02 07 01	wastes from washing, cleaning and mechanical reduction of raw materials
02 07 02	wastes from spirits distillation
02 07 03	wastes from chemical treatment
02 07 04	materials unsuitable for consumption or processing
02 07 05	sludges from on-site effluent treatment
03	Wastes from wood processing and the production of panels and furniture, pulp, paper and cardboard
03 01	wastes from wood processing and the production of panels and furniture
03 01 04	sawdust, shavings, cuttings, wood, particle board and veneer containing hazardous substances
03 01 05	sawdust, shavings, cuttings, wood, particle board and veneer other than those mentioned in 03 01 04
03 02	wastes from wood preservation



EWC Code	Description
03 02 01	non-halogenated organic wood preservatives
03 02 02	organochlorinated wood preservatives
03 02 03	organometallic wood preservatives
03 02 04	inorganic wood preservatives
03 02 05	other wood preservatives containing hazardous substances
03 03	wastes from pulp, paper and cardboard production and processing
03 03 05	de-inking sludges from paper recycling
03 03 08	wastes from sorting of paper and cardboard destined for recycling
03 03 11	sludges from on-site effluent treatment other than those mentioned in 03 03 10
04	Wastes from the leather, fur and textile industries
04 01	wastes from the leather and fur industry
04 01 02	liming waste
04 01 03	degreasing wastes containing solvents without a liquid phase
04 01 04	tanning liquor containing chromium
04 01 05	tanning liquor free of chromium
04 01 06	sludges, in particular from on-site effluent treatment containing chromium
04 01 07	sludges, in particular from on-site effluent treatment free of chromium
04 02	wastes from the textile industry
04 02 09	wastes from composite materials (impregnated textile, elastomer, plastomer)
04 02 10	organic matter from natural products (for example grease, wax)
04 02 14	wastes from finishing containing organic solvents
04 02 15	wastes from finishing other than those mentioned in 04 02 14
04 02 16	dyestuffs and pigments containing hazardous substances
04 02 17	dyestuffs and pigments other than those mentioned in 04 02 16
04 02 19	sludges from on-site effluent treatment containing hazardous substances
04 02 20	sludges from on-site effluent treatment other than those mentioned in 04 02 19
04 02 21	wastes from unprocessed textile fibres
04 02 22	wastes from processed textile fibres
05	Wastes from petroleum refining, natural gas purification and pyrolytic treatment of coal
05 01	05 01 wastes from petroleum refining
05 01 02	desalter sludges
05 01 03	tank bottom sludges
05 01 04	acid alkyl sludges
05 01 05	oil spills
05 01 06	oily sludges from maintenance operations of the plant or equipment
05 01 07	acid tars
05 01 08	other tars
05 01 09	sludges from on-site effluent treatment containing hazardous substances
05 01 10	sludges from on-site effluent treatment other than those mentioned in 05 01 09
05 01 11	wastes from cleaning of fuels with bases
05 01 12	oil containing acids
05 01 13	boiler feedwater sludges
05 01 14	wastes from cooling columns
05 01 15	spent filter clays
05 01 16	sulphur-containing wastes from petroleum desulphurisation



EWC Code	Description
05 01 17	Bitumen
05 06	wastes from the pyrolytic treatment of coal
05 06 01	acid tars
05 06 03	other tars
05 06 04	waste from cooling columns
05 07	wastes from natural gas purification and transportation
05 07 01	wastes containing mercury
05 07 02	wastes containing sulphur
06	Wastes from inorganic chemical processes
06 01	wastes from the manufacture, formulation, supply and use (MFSU) of acids
06 01 01	sulphuric acid and sulphurous acid
06 01 02	hydrochloric acid
06 01 03	hydrofluoric acid
06 01 04	phosphoric and phosphorous acid
06 01 05	nitric acid and nitrous acid
06 01 06	other acids
06 01 99	wastes not otherwise specified
06 02	wastes from the MFSU of bases
06 02 01	calcium hydroxide
06 02 03	ammonium hydroxide
06 02 04	sodium and potassium hydroxide
06 02 05	other bases
06 02 99	wastes not otherwise specified
06 03	wastes from the MFSU of salts and their solutions and metallic oxides
06 03 11	solid salts and solutions containing cyanides
06 03 13	solid salts and solutions containing heavy metals
06 03 14	solid salts and solutions other than those mentioned in 06 03 11 and 06 03 13
06 03 15	metallic oxides containing heavy metals
06 03 16	metallic oxides other than those mentioned in 06 03 15
06 03 99	wastes not otherwise specified
06 04	metal-containing wastes other than those mentioned in 06 03
06 04 03	wastes containing arsenic
06 04 04	wastes containing mercury
06 04 05	wastes containing other heavy metals
06 04 99	wastes not otherwise specified
06 05	sludges from on-site effluent treatment
06 05 02	sludges from on-site effluent treatment containing hazardous substances
06 05 03	sludges from on-site effluent treatment other than those mentioned in 06 05 02
06 06	wastes from the MFSU of sulphur chemicals, sulphur chemical processes and desulphurisation processes
06 06 02	wastes containing hazardous sulphides
06 06 03	wastes containing sulphides other than those mentioned in 06 06 02
06 06 99	wastes not otherwise specified
06 07	wastes from the MFSU of halogens and halogen chemical processes
06 07 01	wastes containing asbestos from electrolysis



EWC Code	Description
06 07 02	activated carbon from chlorine production
06 07 03	barium sulphate sludge containing mercury
06 07 04	solutions and acids, for example contact acid
06 07 99	wastes not otherwise specified
06 08	wastes from the MFSU of silicon and silicon derivatives
06 08 02	wastes containing hazardous chlorosilanes
06 08 99	wastes not otherwise specified
06 09	wastes from the MSFU of phosphorous chemicals and phosphorous chemical processes
06 09 02	phosphorous slag
06 09 03	calcium-based reaction wastes containing or contaminated with hazardous substances
06 09 04	calcium-based reaction wastes other than those mentioned in 06 09 03
06 09 99	wastes not otherwise specified
06 10	wastes from the MFSU of nitrogen chemicals, nitrogen chemical processes and fertiliser manufacture
06 10 02	wastes containing hazardous substances
06 10 99	wastes not otherwise specified
06 11	wastes from the manufacture of inorganic pigments and opacifiers
06 11 01	calcium-based reaction wastes from titanium dioxide production
06 11 99	wastes not otherwise specified
06 13	wastes from inorganic chemical processes not otherwise specified
06 13 01	inorganic plant protection products, wood-preserving agents and other biocides.
06 13 02	spent activated carbon (except 06 07 02)
06 13 03	carbon black
06 13 04	wastes from asbestos processing
06 13 05	soot
06 13 99	wastes not otherwise specified
07	Wastes from organic chemical processes
07 01	wastes from the manufacture, formulation, supply and use (MFSU) of basic organic chemicals
07 01 01	aqueous washing liquids and mother liquors
07 01 03	organic halogenated solvents, washing liquids and mother liquors
07 01 04	other organic solvents, washing liquids and mother liquors
07 01 07	halogenated still bottoms and reaction residues
07 01 08	other still bottoms and reaction residues
07 01 09	halogenated filter cakes and spent absorbents
07 01 10	other filter cakes and spent absorbents
07 01 11	sludges from on-site effluent treatment containing hazardous substances
07 01 12	Sludges from on-site effluent treatment other than those mentioned in 07 01 11
07 01 99	wastes not otherwise specified
07 02	wastes from the MFSU of plastics, synthetic rubber and man-made fibres
07 02 01	aqueous washing liquids and mother liquors
07 02 03	organic halogenated solvents, washing liquids and mother liquors
07 02 04	other organic solvents, washing liquids and mother liquors
07 02 07	halogenated still bottoms and reaction residues
07 02 08	other still bottoms and reaction residues
07 02 09	halogenated filter cakes and spent absorbents



EWC Code	Description
07 02 10	other filter cakes and spent absorbents
07 02 11	sludges from on-site effluent treatment containing hazardous substances
07 02 12	sludges from on-site effluent treatment other than those mentioned in 07 02 11
07 02 13	waste plastic
07 02 14	wastes from additives containing hazardous substances
07 02 15	wastes from additives other than those mentioned in 07 02 14
07 02 16	wastes containing hazardous silicones
07 02 17	wastes containing silicones other than those mentioned in 07 02 16
07 02 99	wastes not otherwise specified
07 03	wastes from the MFSU of organic dyes and pigments (except 06 11)
07 03 01	aqueous washing liquids and mother liquors
07 03 03	organic halogenated solvents, washing liquids and mother liquors
07 03 04	other organic solvents, washing liquids and mother liquors
07 03 07	halogenated still bottoms and reaction residues
07 03 08	other still bottoms and reaction residues
07 03 09	halogenated filter cakes and spent absorbents
07 03 10	other filter cakes and spent absorbents
07 03 11	sludges from on-site effluent treatment containing hazardous substances
07 03 12	sludges from on-site effluent treatment other than those mentioned in 07 03 11
07 03 99	wastes not otherwise specified
07 04	wastes from the MFSU of organic plant protection products (except 02 01 08 and 02 01 09), wood preserving agents (except 03 02) and other biocides
07 04 01	aqueous washing liquids and mother liquors
07 04 03	organic halogenated solvents, washing liquids and mother liquors
07 04 04	other organic solvents, washing liquids and mother liquors
07 04 07	halogenated still bottoms and reaction residues
07 04 08	other still bottoms and reaction residues
07 04 09	halogenated filter cakes and spent absorbents
07 04 10	other filter cakes and spent absorbents
07 04 11	sludges from on-site effluent treatment containing hazardous substances
07 04 12	sludges from on-site effluent treatment other than those mentioned in 07 04 11
07 04 13	solid wastes containing hazardous substances
07 04 99	wastes not otherwise specified
07 05	wastes from the MFSU of pharmaceuticals
07 05 01	aqueous washing liquids and mother liquors
07 05 03	organic halogenated solvents, washing liquids and mother liquors
07 05 04	other organic solvents, washing liquids and mother liquors
07 05 07	halogenated still bottoms and reaction residues
07 05 08	other still bottoms and reaction residues
07 05 09	halogenated filter cakes and spent absorbents
07 05 10	other filter cakes and spent absorbents
07 05 11	sludges from on-site effluent treatment containing hazardous substances
07 05 12	sludges from on-site effluent treatment other than those mentioned in 07 05 11
07 05 13	solid wastes containing hazardous substances
07 05 14	solid wastes other than those mentioned in 07 05 13



EWC Code	Description
07 05 99	wastes not otherwise specified
07 06	wastes from the MFSU of fats, grease, soaps, detergents, disinfectants and cosmetics
07 06 01	aqueous washing liquids and mother liquors
07 06 03	organic halogenated solvents, washing liquids and mother liquors
07 06 04	other organic solvents, washing liquids and mother liquors
07 06 07	halogenated still bottoms and reaction residues
07 06 08	other still bottoms and reaction residues
07 06 09	halogenated filter cakes and spent absorbents
07 06 10	other filter cakes and spent absorbents
07 06 11	sludges from on-site effluent treatment containing hazardous substances
07 06 12	sludges from on-site effluent treatment other than those mentioned in 07 06 11
07 06 99	wastes not otherwise specified
07 07	wastes from the MFSU of fine chemicals and chemical products not otherwise specified
07 07 01	aqueous washing liquids and mother liquors
07 07 03	organic halogenated solvents, washing liquids and mother liquors
07 07 04	other organic solvents, washing liquids and mother liquors
07 07 07	halogenated still bottoms and reaction residues
07 07 08	other still bottoms and reaction residues
07 07 09	halogenated filter cakes and spent absorbents
07 07 10	other filter cakes and spent absorbents
07 07 11	sludges from on-site effluent treatment containing hazardous substances
07 07 12	sludges from on-site effluent treatment other than those mentioned in 07 07 11
07 07 99	wastes not otherwise specified
08	Wastes from the MFSU of coatings (paints, varnishes and vitreous enamels), adhesives, sealants and printing inks
08 01	wastes from MFSU and removal of paint and varnish
08 01 11	waste paint and varnish containing organic solvents or other hazardous substances
08 01 12	waste paint and varnish other than those mentioned in 08 01 11
08 01 13	sludges from paint or varnish containing organic solvents or other hazardous substances
08 01 14	sludges from paint or varnish other than those mentioned in 08 01 13
08 01 15	aqueous sludges containing paint or varnish containing organic solvents or other hazardous substances
08 01 16	aqueous sludges containing paint or varnish other than those mentioned in 08 01 15
08 01 17	wastes from paint or varnish removal containing organic solvents or other hazardous substances
08 01 18	wastes from paint or varnish removal other than those mentioned in 08 01 17
08 01 19	aqueous suspensions containing paint or varnish containing organic solvents or other hazardous substances
08 01 20	aqueous suspensions containing paint or varnish other than those mentioned in 08 01 19
08 01 21	waste paint or varnish remover
08 01 99	wastes not otherwise specified
08 02	wastes from MFSU of other coatings (including ceramic materials)
08 02 01	waste coating powders
08 02 02	aqueous sludges containing ceramic materials
08 02 03	aqueous suspensions containing ceramic materials
08 02 99	wastes not otherwise specified



EWC Code	Description
08 03	wastes from MFSU of printing inks
08 03 07	aqueous sludges containing ink
08 03 08	aqueous liquid waste containing ink
08 03 12	waste ink containing hazardous substances
08 03 13	waste ink other than those mentioned in 08 03 12
08 03 14	ink sludges containing hazardous substances
08 03 15	ink sludges other than those mentioned in 08 03 14
08 03 16	waste etching solutions
08 03 17	waste printing toner containing hazardous substances
08 03 18	waste printing toner other than those mentioned in 08 03 17
08 03 19	disperse oil
08 03 99	wastes not otherwise specified
08 04	wastes from MFSU of adhesives and sealants (including waterproofing products)
08 04 09	waste adhesives and sealants containing organic solvents or other hazardous substances
08 04 10	waste adhesives and sealants other than those mentioned in 08 04 09
08 04 11	adhesive and sealant sludges containing organic solvents or other hazardous substances
08 04 12	adhesive and sealant sludges other than those mentioned in 08 04 11
08 04 13	aqueous sludges containing adhesives or sealants containing organic solvents or other hazardous substances
08 04 14	aqueous sludges containing adhesives or sealants other than those mentioned in 08 04 13
08 04 15	aqueous liquid waste containing adhesives or sealants containing organic solvents or other hazardous substances
08 04 16	aqueous liquid waste containing adhesives or sealants other than those mentioned in 08 04 15
08 04 17	rosin oil
08 04 99	wastes not otherwise specified
08 05	wastes not otherwise specified in 08
08 05 01	waste isocyanates
09	Wastes from the photographic industry
09 01	wastes from the photographic industry
09 01 01	water-based developer and activator solutions
09 01 02	water-based offset plate developer solutions
09 01 03	solvent-based developer solutions
09 01 04	fixer solutions
09 01 05	bleach solutions and bleach fixer solutions
09 01 06	wastes containing silver from on-site treatment of photographic wastes
09 01 07	photographic film and paper containing silver or silver compounds
09 01 08	photographic film and paper free of silver or silver compounds
09 01 10	single-use cameras without batteries
09 01 11	single-use cameras containing batteries included in 16 06 01, 16 06 02 or 16 06 03
09 01 12	single-use cameras containing batteries other than those mentioned in 09 01 11
09 01 13	aqueous liquid waste from on-site reclamation of silver other than those mentioned in 09 01 06
09 01 99	wastes not otherwise specified
10	Wastes from thermal processes
10 01	wastes from power stations and other combustion plants (except 19)



EWC Code	Description
10 01 01	bottom ash, slag and boiler dust (excluding boiler dust mentioned in 10 01 04)
10 01 02	coal fly ash
10 01 03	fly ash from peat and untreated wood
10 01 04	oil fly ash and boiler dust
10 01 05	calcium-based reaction wastes from flue-gas desulphurisation in solid form
10 01 07	calcium-based reaction wastes from flue-gas desulphurisation in sludge form
10 01 09	sulphuric acid
10 01 13	fly ash from emulsified hydrocarbons used as fuel
10 01 14	bottom ash, slag and boiler dust from co-incineration containing hazardous substances
10 01 15	bottom ash, slag and boiler dust from co-incineration other than those mentioned in 10 01 14
10 01 16	fly ash from co-incineration containing hazardous substances
10 01 17	fly ash from co-incineration other than those mentioned in 10 01 16
10 01 18	wastes from gas cleaning containing hazardous substances
10 01 19	wastes from gas cleaning other than those mentioned in 10 01 05, 10 01 07 and 10 01 18
10 01 20	sludges from on-site effluent treatment containing hazardous substances
10 01 21	sludges from on-site effluent treatment other than those mentioned in 10 01 20
10 01 22	aqueous sludges from boiler cleansing containing hazardous substances
10 01 23	aqueous sludges from boiler cleansing other than those mentioned in 10 01 22
10 01 24	sands from fluidised beds
10 01 25	wastes from fuel storage and preparation of coal-fired power plants
10 01 26	wastes from cooling-water treatment
10 01 99	wastes not otherwise specified
10 02	wastes from the iron and steel industry
10 02 01	wastes from the processing of slag
10 02 02	unprocessed slag
10 02 07	solid wastes from gas treatment containing hazardous substances
10 02 08	solid wastes from gas treatment other than those mentioned in 10 02 07
10 02 10	mill scales
10 02 11	wastes from cooling-water treatment containing oil
10 02 12	wastes from cooling-water treatment other than those mentioned in 10 02 11
10 02 13	sludges and filter cakes from gas treatment containing hazardous substances
10 02 14	sludges and filter cakes from gas treatment other than those mentioned in 10 02 13
10 02 15	other sludges and filter cakes
10 02 99	wastes not otherwise specified
10 03	wastes from aluminium thermal metallurgy
10 03 02	anode scraps
10 03 04	primary production slags
10 03 05	waste alumina
10 03 08	salt slags from secondary production
10 03 09	black drosses from secondary production
10 03 15	skimmings that are flammable or emit, upon contact with water, flammable gases in hazardous quantities
10 03 16	skimmings other than those mentioned in 10 03 15
10 03 17	tar-containing wastes from anode manufacture
10 03 18	carbon-containing wastes from anode manufacture other than those mentioned in 10 03 17



EWC Code	Description
10 03 19	flue-gas dust containing hazardous substances
10 03 20	flue-gas dust other than those mentioned in 10 03 19
10 03 21	other particulates and dust (including ball-mill dust) containing hazardous substances
10 03 22	other particulates and dust (including ball-mill dust) other than those mentioned in 10 03 21
10 03 23	solid wastes from gas treatment containing hazardous substances
10 03 24	solid wastes from gas treatment other than those mentioned in 10 03 23
10 03 25	sludges and filter cakes from gas treatment containing hazardous substances
10 03 26	sludges and filter cakes from gas treatment other than those mentioned in 10 03 25
10 03 27	wastes from cooling-water treatment containing oil
10 03 28	wastes from cooling-water treatment other than those mentioned in 10 03 27
10 03 29	wastes from treatment of salt slags and black drosses containing hazardous substances
10 03 30	wastes from treatment of salt slags and black drosses other than those mentioned in 10 03 29
10 03 99	wastes not otherwise specified
10 04	wastes from lead thermal metallurgy
10 04 01	slags from primary and secondary production
10 04 02	dross and skimmings from primary and secondary production
10 04 03	calcium arsenate
10 04 04	flue-gas dust
10 04 05	other particulates and dust
10 04 06	solid wastes from gas treatment
10 04 07	sludges and filter cakes from gas treatment
10 04 09	wastes from cooling-water treatment containing oil
10 04 10	wastes from cooling-water treatment other than those mentioned in 10 04 09
10 04 99	wastes not otherwise specified
10 05	wastes from zinc thermal metallurgy
10 05 01	slags from primary and secondary production
10 05 03	flue-gas dust
10 05 04	other particulates and dust
10 05 05	solid waste from gas treatment
10 05 06	sludges and filter cakes from gas treatment
10 05 08	wastes from cooling-water treatment containing oil
10 05 09	wastes from cooling-water treatment other than those mentioned in 10 05 08
10 05 10	dross and skimmings that are flammable or emit, upon contact with water, flammable gases in hazardous quantities
10 05 11	dross and skimmings other than those mentioned in 10 05 10
10 05 99	wastes not otherwise specified
10 06	wastes from copper thermal metallurgy
10 06 01	slags from primary and secondary production
10 06 02	dross and skimmings from primary and secondary production
10 06 03	flue-gas dust
10 06 04	other particulates and dust
10 06 06	solid wastes from gas treatment
10 06 07	sludges and filter cakes from gas treatment
10 06 09	wastes from cooling-water treatment containing oil
10 06 10	wastes from cooling-water treatment other than those mentioned in 10 06 09



EWC Code	Description
10 06 99	wastes not otherwise specified
10 07	wastes from silver, gold and platinum thermal metallurgy
10 07 01	slags from primary and secondary production
10 07 02	dross and skimmings from primary and secondary production
10 07 03	solid wastes from gas treatment
10 07 04	other particulates and dust
10 07 05	sludges and filter cakes from gas treatment
10 07 07	wastes from cooling-water treatment containing oil
10 07 08	wastes from cooling-water treatment other than those mentioned in 10 07 07
10 07 99	wastes not otherwise specified
10 08	wastes from other non-ferrous thermal metallurgy
10 08 04	particulates and dust
10 08 08	salt slag from primary and secondary production
10 08 09	other slags
10 08 10	dross and skimmings that are flammable or emit, upon contact with water, flammable gases in hazardous quantities
10 08 11	dross and skimmings other than those mentioned in 10 08 10
10 08 12	tar-containing wastes from anode manufacture
10 08 13	carbon-containing wastes from anode manufacture other than those mentioned in 10 08 12
10 08 14	anode scrap
10 08 15	flue-gas dust containing hazardous substances
10 08 16	flue-gas dust other than those mentioned in 10 08 15
10 08 17	sludges and filter cakes from flue-gas treatment containing hazardous substances
10 08 18	sludges and filter cakes from flue-gas treatment other than those mentioned in 10 08 17
10 08 19	wastes from cooling-water treatment containing oil
10 08 20	wastes from cooling-water treatment other than those mentioned in 10 08 19
10 08 99	wastes not otherwise specified
10 09	wastes from casting of ferrous pieces
10 09 03	furnace slag
10 09 05	casting cores and moulds which have not undergone pouring containing hazardous substances
10 09 06	casting cores and moulds which have not undergone pouring other than those mentioned in 10 09 05
10 09 07	casting cores and moulds which have undergone pouring containing hazardous substances
10 09 08	casting cores and moulds which have undergone pouring other than those mentioned in 10 09 07
10 09 09	flue-gas dust containing hazardous substances
10 09 10	flue-gas dust other than those mentioned in 10 09 09
10 09 11	other particulates containing hazardous substances
10 09 12	other particulates other than those mentioned in 10 09 11
10 09 13	waste binders containing hazardous substances
10 09 14	waste binders other than those mentioned in 10 09 13
10 09 15	waste crack-indicating agent containing hazardous substances
10 09 16	waste crack-indicating agent other than those mentioned in 10 09 15
10 09 99	wastes not otherwise specified
10 10	wastes from casting of non-ferrous pieces



EWC Code	Description
10 10 03	furnace slag
10 10 05	casting cores and moulds which have not undergone pouring, containing hazardous substances
10 10 06	casting cores and moulds which have not undergone pouring, other than those mentioned in 10 10 05
10 10 07	casting cores and moulds which have undergone pouring, containing hazardous substances
10 10 08	casting cores and moulds which have undergone pouring, other than those mentioned in 10 10 07
10 10 09	flue-gas dust containing hazardous substances
10 10 10	flue-gas dust other than those mentioned in 10 10 09
10 10 11	other particulates containing hazardous substances
10 10 12	other particulates other than those mentioned in 10 10 11
10 10 13	waste binders containing hazardous substances
10 10 14	waste binders other than those mentioned in 10 10 13
10 10 15	waste crack-indicating agent containing hazardous substances
10 10 16	waste crack-indicating agent other than those mentioned in 10 10 15
10 10 99	wastes not otherwise specified
10 11	wastes from manufacture of glass and glass products
10 11 03	waste glass-based fibrous materials
10 11 05	particulates and dust
10 11 09	waste preparation mixture before thermal processing, containing hazardous substances
10 11 10	waste preparation mixture before thermal processing, other than those mentioned in 10 11 09
10 11 11	waste glass in small particles and glass powder containing heavy metals (for example from cathode ray tubes)
10 11 12	waste glass other than those mentioned in 10 11 11
10 11 13	glass-polishing and -grinding sludge containing hazardous substances
10 11 14	glass-polishing and -grinding sludge other than those mentioned in 10 11 13
10 11 15	solid wastes from flue-gas treatment containing hazardous substances
10 11 16	solid wastes from flue-gas treatment other than those mentioned in 10 11 15
10 11 17	sludges and filter cakes from flue-gas treatment containing hazardous substances
10 11 18	sludges and filter cakes from flue-gas treatment other than those mentioned in 10 11 17
10 11 19	solid wastes from on-site effluent treatment containing hazardous substances
10 11 20	solid wastes from on-site effluent treatment other than those mentioned in 10 11 19
10 11 99	wastes not otherwise specified
10 12	wastes from manufacture of ceramic goods, bricks, tiles and construction products
10 12 01	waste preparation mixture before thermal processing
10 12 03	particulates and dust
10 12 05	sludges and filter cakes from gas treatment
10 12 06	discarded moulds
10 12 08	waste ceramics, bricks, tiles and construction products (after thermal processing)
10 12 09	solid wastes from gas treatment containing hazardous substances
10 12 10	solid wastes from gas treatment other than those mentioned in 10 12 09
10 12 11	wastes from glazing containing heavy metals
10 12 12	wastes from glazing other than those mentioned in 10 12 11
10 12 13	sludge from on-site effluent treatment
10 12 99	wastes not otherwise specified



EWC Code	Description
10 13	wastes from manufacture of cement, lime and plaster and articles and products made from them
10 13 01	waste preparation mixture before thermal processing
10 13 04	wastes from calcination and hydration of lime
10 13 06	particulates and dust (except 10 13 12 and 10 13 13)
10 13 07	sludges and filter cakes from gas treatment
10 13 09	wastes from asbestos-cement manufacture containing asbestos
10 13 10	wastes from asbestos-cement manufacture other than those mentioned in 10 13 09
10 13 11	wastes from cement-based composite materials other than those mentioned in 10 13 09 and 10 13 10
10 13 12	solid wastes from gas treatment containing hazardous substances
10 13 13	solid wastes from gas treatment other than those mentioned in 10 13 12
10 13 14	waste concrete and concrete sludge
10 13 99	wastes not otherwise specified
10 14	waste from crematoria
10 14 01	waste from gas cleaning containing mercury
11	Wastes from chemical surface treatment and coating of metals and other materials; non-ferrous hydrometallurgy
11 01	wastes from chemical surface treatment and coating of metals and other materials (for example galvanic processes, zinc coating processes, pickling processes, etching, phosphating, alkaline degreasing, anodising)
11 01 05	pickling acids
11 01 06	acids not otherwise specified
11 01 07	pickling bases
11 01 08	phosphatising sludges
11 01 09	sludges and filter cakes containing hazardous substances
11 01 10	sludges and filter cakes other than those mentioned in 11 01 09
11 01 11	aqueous rinsing liquids containing hazardous substances
11 01 12	aqueous rinsing liquids other than those mentioned in 11 01 11
11 01 13	degreasing wastes containing hazardous substances
11 01 14	degreasing wastes other than those mentioned in 11 01 13
11 01 15	eluate and sludges from membrane systems or ion exchange systems containing hazardous substances
11 01 16	saturated or spent ion exchange resins
11 01 98	other wastes containing hazardous substances
11 01 99	wastes not otherwise specified
11 02	wastes from non-ferrous hydrometallurgical processes
11 02 02	sludges from zinc hydrometallurgy (including jarosite, goethite)
11 02 03	wastes from the production of anodes for aqueous electrolytical processes
11 02 05	wastes from copper hydrometallurgical processes containing hazardous substances
11 02 06	wastes from copper hydrometallurgical processes other than those mentioned in 11 02 05
11 02 07	other wastes containing hazardous substances
11 02 99	wastes not otherwise specified
11 03	sludges and solids from tempering processes
11 03 01	wastes containing cyanide
11 03 02	other waste
11 05	wastes from hot galvanising processes



EWC Code	Description
11 05 01	hard zinc
11 05 02	zinc ash
11 05 03	solid wastes from gas treatment
11 05 04	spent flux
11 05 99	wastes not otherwise specified
12	Wastes from shaping and physical and mechanical surface treatment of metals and plastics
12 01	wastes from shaping and physical and mechanical surface treatment of metals and plastics
12 01 01	12 01 01 ferrous metal filings and turnings
12 01 02	12 01 02 ferrous metal dust and particles
12 01 03	12 01 03 non-ferrous metal filings and turnings
12 01 04	12 01 04 non-ferrous metal dust and particles
12 01 05	12 01 05 plastics shavings and turnings
12 01 06	12 01 06 mineral-based machining oils containing halogens (except emulsions and solutions)
12 01 07	12 01 07 mineral-based machining oils free of halogens (except emulsions and solutions)
12 01 08	12 01 08 machining emulsions and solutions containing halogens
12 01 09	12 01 09 machining emulsions and solutions free of halogens
12 01 10	12 01 10 synthetic machining oils
12 01 12	12 01 12 spent waxes and fats
12 01 13	12 01 13 welding wastes
12 01 14	12 01 14 machining sludges containing hazardous substances
12 01 15	12 01 15 machining sludges other than those mentioned in 12 01 14
12 01 16	12 01 16 waste blasting material containing hazardous substances
12 01 17	12 01 17 waste blasting material other than those mentioned in 12 01 16
12 01 18	12 01 18 metal sludge (grinding, honing and lapping sludge) containing oil
12 01 19	12 01 19 readily biodegradable machining oil
12 01 20	12 01 20 spent grinding bodies and grinding materials containing hazardous substances
12 01 21	12 01 21 spent grinding bodies and grinding materials other than those mentioned in 12 01 20
12 01 99	12 01 99 wastes not otherwise specified
12 03	wastes from water and steam degreasing processes (except 11)
12 03 01	12 03 01 aqueous washing liquids
12 03 02	12 03 02 steam degreasing wastes
13	Wastes and wastes of liquid fuels (except edible oils and those in chapters 05, 12 and 19)
13 01	waste hydraulic oils
13 01 01	13 01 01 hydraulic oils, containing PCBs
13 01 04	13 01 04 chlorinated emulsions
13 01 05	13 01 05 non-chlorinated emulsions
13 01 09	13 01 09 mineral-based chlorinated hydraulic oils
13 01 10	13 01 10 mineral based non-chlorinated hydraulic oils
13 01 11	13 01 11 synthetic hydraulic oils
13 01 12	13 01 12 readily biodegradable hydraulic oils
13 01 13	13 01 13 other hydraulic oils
13 02	13 02 waste engine, gear and lubricating oils
13 02 04	13 02 04 mineral-based chlorinated engine, gear and lubricating oils
13 02 05	13 02 05 mineral-based non-chlorinated engine, gear and lubricating oils



EWC Code	Description
13 02 06	13 02 06 synthetic engine, gear and lubricating oils
13 02 07	13 02 07 readily biodegradable engine, gear and lubricating oils
13 02 08	13 02 08 other engine, gear and lubricating oils
13 03	13 03 waste insulating and heat transmission oils
13 03 01	13 03 01 insulating or heat transmission oils containing PCBs
13 03 06	13 03 06 mineral-based chlorinated insulating and heat transmission oils other than those mentioned in 13 03 01
13 03 07	13 03 07 mineral-based non-chlorinated insulating and heat transmission oils
13 03 08	13 03 08 synthetic insulating and heat transmission oils
13 03 09	13 03 09 readily biodegradable insulating and heat transmission oils
13 03 10	13 03 10 other insulating and heat transmission oils
13 04	13 04 bilge oils
13 04 01	13 04 01 bilge oils from inland navigation
13 04 02	13 04 02 bilge oils from jetty sewers
13 04 03	13 04 03 bilge oils from other navigation
13 05	13 05 oil/water separator contents
13 05 01	13 05 01 solids from grit chambers and oil/water separators
13 05 02	13 05 02 sludges from oil/water separators
13 05 03	13 05 03 interceptor sludges
13 05 06	13 05 06 oil from oil/water separators
13 05 07	13 05 07 oily water from oil/water separators
13 05 08	13 05 08 mixtures of wastes from grit chambers and oil/water separators
13 07	13 07 wastes of liquid fuels
13 07 01	13 07 01 fuel oil and diesel
13 07 02	13 07 02 petrol
13 07 03	13 07 03 other fuels (including mixtures)
13 08	13 08 oil wastes not otherwise specified
13 08 01	13 08 01 desalter sludges or emulsions
13 08 02	13 08 02 other emulsions
13 08 99	13 08 99 wastes not otherwise specified
14	Waste organic solvents, refrigerants and propellants (except 07 and 08)
14 06	14 06 waste organic solvents, refrigerants and foam/aerosol propellants
14 06 01	14 06 01 chlorofluorocarbons, HCFC, HFC
14 06 02	14 06 02 other halogenated solvents and solvent mixtures
14 06 03	14 06 03 other solvents and solvent mixtures
14 06 04	14 06 04 sludges or solid wastes containing halogenated solvents
14 06 05	14 06 05 sludges or solid wastes containing other solvents
15	Waste packaging, absorbents, wiping cloths, filter materials and protective clothing not otherwise specified
15 01	15 01 packaging (including separately collected municipal packaging waste)
15 01 01	15 01 01 paper and cardboard packaging
15 01 02	15 01 02 plastic packaging
15 01 03	15 01 03 wooden packaging
15 01 04	15 01 04 metallic packaging
15 01 05	15 01 05 composite packaging
15 01 06	15 01 06 mixed packaging



EWC Code	Description
15 01 07	15 01 07 glass packaging
15 01 09	15 01 09 textile packaging
15 01 10	15 01 10 packaging containing residues of or contaminated by hazardous substances
15 01 11	15 01 11 metallic packaging containing a hazardous solid porous matrix (for example asbestos), including empty pressure containers
15 02	15 02 absorbents, filter materials, wiping cloths and protective clothing
15 02 02	15 02 02 absorbents, filter materials (including oil filters not otherwise specified), wiping cloths, protective clothing contaminated by hazardous substances
15 02 03	15 02 03 absorbents, filter materials, wiping cloths and protective clothing other than those mentioned in 15 02 02
16	Wastes not otherwise specified in the list
16 01	16 01 end-of-life vehicles from different means of transport (including off-road machinery) and wastes from dismantling of end-of-life vehicles and vehicle maintenance (except 13, 14, 16 06 and 16 08)
16 01 03	16 01 03 end-of-life tyres
16 01 07	16 01 07 oil filters
16 01 08	16 01 08 components containing mercury
16 01 09	16 01 09 components containing PCBs
16 01 10	16 01 10 explosive components (for example air bags)
16 01 11	16 01 11 brake pads containing asbestos
16 01 12	16 01 12 brake pads other than those mentioned in 16 01 11
16 01 13	16 01 13 brake fluids
16 01 14	16 01 14 antifreeze fluids containing hazardous substances
16 01 15	16 01 15 antifreeze fluids other than those mentioned in 16 01 14
16 01 16	16 01 16 tanks for liquefied gas
16 01 17	16 01 17 ferrous metal
16 01 18	16 01 18 non-ferrous metal
16 01 19	16 01 19 plastic
16 01 20	16 01 20 glass
16 01 21	16 01 21 hazardous components other than those mentioned in 16 01 07 to 16 01 11 and 16 01 13 and 16 01 14
16 01 22	16 01 22 components not otherwise specified
16 01 99	16 01 99 wastes not otherwise specified
16 02	16 02 wastes from electrical and electronic equipment
16 02 09	16 02 09 transformers and capacitors containing PCBs
16 02 10	16 02 10 discarded equipment containing or contaminated by PCBs other than those mentioned in 16 02 09
16 02 11	16 02 11 discarded equipment containing chlorofluorocarbons, HCFC, HFC
16 02 12	16 02 12 discarded equipment containing free asbestos
16 02 13	16 02 13 discarded equipment containing hazardous components other than those mentioned in 16 02 09 to 16 02 12
16 02 14	16 02 14 discarded equipment other than those mentioned in 16 02 09 to 16 02 13
16 02 15	16 02 15 hazardous components removed from discarded equipment
16 02 16	16 02 16 components removed from discarded equipment other than those mentioned in 16 02 15
16 03	16 03 off-specification batches and unused products
16 03 03	16 03 03 inorganic wastes containing hazardous substances
16 03 04	16 03 04 inorganic wastes other than those mentioned in 16 03 03



EWC Code	Description
16 03 05	16 03 05 organic wastes containing hazardous substances
16 03 06	16 03 06 organic wastes other than those mentioned in 16 03 05
16 03 07	16 03 07 metallic mercury
16 05	16 05 gases in pressure containers and discarded chemicals
16 05 04	16 05 04 gases in pressure containers (including halons) containing hazardous substances
16 05 05	16 05 05 gases in pressure containers other than those mentioned in 16 05 04
16 05 06	16 05 06 laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals
16 05 07	16 05 07 discarded inorganic chemicals consisting of or containing hazardous substances
16 05 08	16 05 08 discarded organic chemicals consisting of or containing hazardous substances
16 05 09	16 05 09 discarded chemicals other than those mentioned in 16 05 06, 16 05 07 or 16 05 08
16 06	16 06 batteries and accumulators
16 06 01	16 06 01 lead batteries
16 06 02	16 06 02 Ni-Cd batteries
16 06 03	16 06 03 mercury-containing batteries
16 06 04	16 06 04 alkaline batteries (except 16 06 03)
16 06 05	16 06 05 other batteries and accumulators
16 06 06	16 06 06 separately collected electrolyte from batteries and accumulators
16 07	16 07 wastes from transport tank, storage tank and barrel cleaning (except 05 and 13)
16 07 08	16 07 08 wastes containing oil
16 07 09	16 07 09 wastes containing other hazardous substances
16 07 99	16 07 99 wastes not otherwise specified
16 08	16 08 spent catalysts
16 08 01	16 08 01 spent catalysts containing gold, silver, rhenium, rhodium, palladium, iridium or platinum (except 16 08 07)
16 08 02	16 08 02 spent catalysts containing hazardous transition metals or hazardous transition metal compounds
16 08 03	16 08 03 spent catalysts containing transition metals or transition metal compounds not otherwise specified
16 08 04	16 08 04 spent fluid catalytic cracking catalysts (except 16 08 07)
16 08 05	16 08 05 spent catalysts containing phosphoric acid
16 08 06	16 08 06 spent liquids used as catalysts
16 08 07	16 08 07 spent catalysts contaminated with hazardous substances
16 09	16 09 oxidising substances
16 09 01	16 09 01 permanganates, for example potassium permanganate
16 09 02	16 09 02 chromates, for example potassium chromate, potassium or sodium dichromate
16 09 03	16 09 03 peroxides, for example hydrogen peroxide
16 09 04	16 09 04 oxidising substances, not otherwise specified
16 10	16 10 aqueous liquid wastes destined for off-site treatment
16 10 01	16 10 01 aqueous liquid wastes containing hazardous substances
16 10 02	16 10 02 aqueous liquid wastes other than those mentioned in 16 10 01
16 10 03	16 10 03 aqueous concentrates containing hazardous substances
16 10 04	16 10 04 aqueous concentrates other than those mentioned in 16 10 03
16 11	16 11 waste linings and refractories
16 11 01	16 11 01 carbon-based linings and refractories from metallurgical processes containing hazardous substances
16 11 02	16 11 02 carbon-based linings and refractories from metallurgical processes other than those



EWC Code	Description
	mentioned in 16 11 01
16 11 03	16 11 03 other linings and refractories from metallurgical processes containing hazardous substances
16 11 04	16 11 04 other linings and refractories from metallurgical processes other than those mentioned in 16 11 03
16 11 05	16 11 05 linings and refractories from non-metallurgical processes containing hazardous substances
16 11 06	16 11 06 linings and refractories from non-metallurgical processes other than those mentioned in 16 11 05
17	Construction and demolition wastes including excavated soil from contaminated sites
17 01	Concrete, bricks, tiles and ceramics
17 01 06*	Mixtures of, or separate fractions of concrete, bricks, tiles and ceramics containing hazardous substances
17 02	Wood, glass and plastic
17 02 04*	glass, plastic and wood containing or contaminated with hazardous substances
17 03	17 03 bituminous mixtures, coal tar and tarred products
17 03 01	17 03 01 bituminous mixtures containing coal tar
17 03 02	17 03 02 bituminous mixtures other than those mentioned in 17 03 01
17 03 03	17 03 03 coal tar and tarred products
17 04	17 04 metals (including their alloys)
17 04 01	17 04 01 copper, bronze, brass
17 04 01	17 04 02 aluminium
17 04 03	17 04 03 lead
17 04 04	17 04 04 zinc
17 04 05	17 04 05 iron and steel
17 04 06	17 04 06 tin
17 04 07	17 04 07 mixed metals
17 04 09	17 04 09 metal waste contaminated with hazardous substances
17 04 10	17 04 10 cables containing oil, coal tar and other hazardous substances
17 04 11	17 04 11 cables other than those mentioned in 17 04 10
17 05	17 05 soil (including excavated soil from contaminated sites), stones and dredging spoil
17 05 03	17 05 03 soil and stones containing hazardous substances
17 05 04	17 05 04 soil and stones other than those mentioned in 17 05 03
17 05 05	17 05 05 dredging spoil containing hazardous substances
17 05 06	17 05 06 dredging spoil other than those mentioned in 17 05 05
17 05 07	17 05 07 track ballast containing hazardous substances
17 05 08	17 05 08 track ballast other than those mentioned in 17 05 07
17 06	17 06 insulation materials and asbestos-containing construction materials
17 06 01	17 06 01 insulation materials containing asbestos
17 06 03	17 06 03 other insulation materials consisting of or containing hazardous substances
17 06 04	17 06 04 insulation materials other than those mentioned in 17 06 01 and 17 06 03
17 06 05	17 06 05 construction materials containing asbestos
17 08	17 08 gypsum-based construction material
17 08 01	17 08 01 gypsum-based construction materials contaminated with hazardous substances
17 08 02	17 08 02 gypsum-based construction materials other than those mentioned in 17 08 01
17 09	17 09 other construction and demolition wastes
17 09 01	17 09 01 construction and demolition wastes containing mercury



EWC Code	Description
17 09 02	17 09 02 construction and demolition wastes containing PCB (for example PCB-containing sealants, PCB-containing resin-based floorings, PCB-containing sealed glazing units, PCB-containing capacitors)
17 09 03	17 09 03 other construction and demolition wastes (including mixed wastes) containing hazardous substances
17 09 04	17 09 04 mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03
18	Wastes from human or animal health care and/or related research (except kitchen and restaurant wastes not arising from immediate health care)
18 01	18 01 wastes from natal care, diagnosis, treatment or prevention of disease in humans
18 01 06	18 01 06 chemicals consisting of or containing hazardous substances
18 01 07	18 01 07 chemicals other than those mentioned in 18 01 06
18 01 08	18 01 08 cytotoxic and cytostatic medicines
18 01 09	18 01 09 medicines other than those mentioned in 18 01 08
18 01 10	18 01 10 amalgam waste from dental care
18 02	18 02 wastes from research, diagnosis, treatment or prevention of disease involving animals
18 02 05	18 02 05 chemicals consisting of or containing hazardous substances
18 02 06	18 02 06 chemicals other than those mentioned in 18 02 05
18 02 07	18 02 07 cytotoxic and cytostatic medicines
18 02 08	18 02 08 medicines other than those mentioned in 18 02 07
19	Wastes from waste management facilities, off-site waste water treatment plants and the preparation of water intended for human consumption and water for industrial use
19 01	19 01 wastes from incineration or pyrolysis of waste
19 01 02	19 01 02 ferrous materials removed from bottom ash
19 01 05	19 01 05 filter cake from gas treatment
19 01 06	19 01 06 aqueous liquid wastes from gas treatment and other aqueous liquid wastes
19 01 07	19 01 07 solid wastes from gas treatment
19 01 10	19 01 10 spent activated carbon from flue-gas treatment
19 01 11	19 01 11 bottom ash and slag containing hazardous substances
19 01 12	19 01 12 bottom ash and slag other than those mentioned in 19 01 11
19 01 13	19 01 13 fly ash containing hazardous substances
19 01 14	19 01 14 fly ash other than those mentioned in 19 01 13
19 01 15	19 01 15 boiler dust containing hazardous substances
19 01 16	19 01 16 boiler dust other than those mentioned in 19 01 15
19 01 17	19 01 17 pyrolysis wastes containing hazardous substances
19 01 18	19 01 18 pyrolysis wastes other than those mentioned in 19 01 17
19 01 19	19 01 19 sands from fluidised beds
19 01 99	19 01 99 wastes not otherwise specified
19 02	19 02 wastes from physico/chemical treatments of waste (including dechromatation, decyanidation, neutralisation)
19 02 03	19 02 03 premixed wastes composed only of non-hazardous wastes
19 02 04	19 02 04 premixed wastes composed of at least one hazardous waste
19 02 05	19 02 05 sludges from physico/chemical treatment containing hazardous substances
19 02 06	19 02 06 sludges from physico/chemical treatment other than those mentioned in 19 02 05
19 02 07	19 02 07 oil and concentrates from separation
19 02 08	19 02 08 liquid combustible wastes containing hazardous substances
19 02 09	19 02 09 solid combustible wastes containing hazardous substances



EWC Code	Description
19 02 10	19 02 10 combustible wastes other than those mentioned in 19 02 08 and 19 02 09
19 02 11	19 02 11 other wastes containing hazardous substances
19 02 99	19 02 99 wastes not otherwise specified
19 03	19 03 stabilised/solidified wastes
19 03 04	19 03 04 wastes marked as hazardous, partly stabilised other than 19 03 08
19 03 05	19 03 05 stabilised wastes other than those mentioned in 19 03 04
19 03 06	19 03 06 wastes marked as hazardous, solidified
19 03 07	19 03 07 solidified wastes other than those mentioned in 19 03 06
19 03 08	19 03 08 partly stabilised mercury
19 04	19 04 vitrified waste and wastes from vitrification
19 04 01	19 04 01 vitrified waste
19 04 02	19 04 02 fly ash and other flue-gas treatment wastes
19 04 03	19 04 03 non-vitrified solid phase
19 04 04	19 04 04 aqueous liquid wastes from vitrified waste tempering
19 07	19 07 landfill leachate
19 07 02	19 07 02 landfill leachate containing hazardous substances
19 07 03	19 07 03 landfill leachate other than those mentioned in 19 07 02
19 08	19 08 wastes from waste water treatment plants not otherwise specified
19 08 06	19 08 06 saturated or spent ion exchange resins
19 08 07	19 08 07 solutions and sludges from regeneration of ion exchangers
19 08 08	19 08 08 membrane system waste containing heavy metals
19 08 09	19 08 09 grease and oil mixture from oil/water separation containing only edible oil and fats
19 08 10	19 08 10 grease and oil mixture from oil/water separation other than those mentioned in 19 08 09
19 08 11	19 08 11 sludges containing hazardous substances from biological treatment of industrial waste water
19 08 12	19 08 12 sludges from biological treatment of industrial waste water other than those mentioned in 19 08 11
19 08 13	19 08 13 sludges containing hazardous substances from other treatment of industrial waste water
19 08 14	19 08 14 sludges from other treatment of industrial waste water other than those mentioned in 19 08 13
19 08 99	19 08 99 wastes not otherwise specified
19 09	19 09 wastes from the preparation of water intended for human consumption or water for industrial use
19 09 01	19 09 01 solid waste from primary filtration and screenings
19 09 02	19 09 02 sludges from water clarification
19 09 03	19 09 03 sludges from decarbonation
19 09 04	19 09 04 spent activated carbon
19 09 05	19 09 05 saturated or spent ion exchange resins
19 09 06	19 09 06 solutions and sludges from regeneration of ion exchangers
19 09 99	19 09 99 wastes not otherwise specified
19 10	19 10 wastes from shredding of metal-containing wastes 19 10 01 iron and steel waste
19 10 02	19 10 02 non-ferrous waste
19 10 03	19 10 03 fluff-light fraction and dust containing hazardous substances
19 10 04	19 10 04 fluff-light fraction and dust other than those mentioned in 19 10 03
19 10 05	19 10 05 other fractions containing hazardous substances



EWC Code	Description
19 10 06	19 10 06 other fractions other than those mentioned in 19 10 05
19 11	19 11 wastes from oil regeneration
19 11 01	19 11 01 spent filter clays
19 11 02	19 11 02 acid tars
19 11 03	19 11 03 aqueous liquid wastes
19 11 04	19 11 04 wastes from cleaning of fuel with bases
19 11 05	19 11 05 sludges from on-site effluent treatment containing hazardous substances
19 11 06	19 11 06 sludges from on-site effluent treatment other than those mentioned in 19 11 05
19 11 07	19 11 07 wastes from flue-gas cleaning
19 11 99	19 11 99 wastes not otherwise specified
19 12	19 12 wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified
19 12 01	19 12 01 paper and cardboard
19 12 02	19 12 02 ferrous metal
19 12 03	19 12 03 non-ferrous metal
19 12 04	19 12 04 plastic and rubber
19 12 05	19 12 05 glass
19 12 06	19 12 06 wood containing hazardous substances
19 12 07	19 12 07 wood other than that mentioned in 19 12 06
19 12 08	19 12 08 textiles
19 12 09	19 12 09 minerals (for example sand, stones)
19 12 10	19 12 10 combustible waste (refuse derived fuel)
19 12 11	19 12 11 other wastes (including mixtures of materials) from mechanical treatment of waste containing hazardous substances
19 12 12	19 12 12 other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11
20	Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions
20 01	Separately collected fractions (except 15 01)
20 01 01	Paper and cardboard
20 01 02	Glass
20 01 08	biodegradable kitchen and canteen waste
20 01 10	Clothes
20 01 11	Textiles
20 01 13	20 01 13 solvents
20 01 14	20 01 14 acids
20 01 15	20 01 15 alkalines
20 01 17	20 01 17 photochemicals
20 01 19	20 01 19 pesticides
20 01 21	20 01 21 fluorescent tubes and other mercury-containing waste
20 01 23	20 01 23 discarded equipment containing chlorofluorocarbons
20 01 25	Edible oils and fats
20 01 26	20 01 26 oil and fat other than those mentioned in 20 01 25
20 01 27	20 01 27 paint, inks, adhesives and resins containing hazardous substances
20 01 28	paint, inks, adhesives and resins other than mentioned in 20 01 27
20 01 29	Detergents containing hazardous substances



EWC Code	Description
20 01 30	detergents other than those mentioned in 20 01 31
20 01 31	cytotoxic and cytostatic medicines
20 01 32	medicines other than those mentioned in 20 01 32
20 01 33	batteries and accumulators included in 16 06 01, 16 06 02 or 16 06 03 and unsorted batteries and accumulators containing these batteries
20 01 34	batteries and accumulators other than those mentioned in 20 01 33
20 01 35	discarded electrical and electronic equipment other than those mentioned in 20 01 21 and 20 01 23 containing hazardous components
20 01 36	discarded electrical and electronic equipment other than those mentioned in 20 01 21, 20 01 23 and 20 01 35
20 01 37	wood containing hazardous substances
20 01 38	wood other than that mentioned in 20 01 37
20 01 39	Plastics
20 01 40	Metals
20 01 41	Wastes from chimney sweeping
20 01 99	other fractions not otherwise specified



APPENDIX 2 AQUAFORCE PRE-ACCEPTANCE PROCEDURE

1 Waste pre-acceptance procedure

Contents:

- 1.1 Introduction**
 - 1.2 Waste characterisation**
 - 1.3 Sampling and analysis**
 - 1.4 Waste Declaration Approval**
 - 1.5 Booking**
 - 1.6 Lab Smalls**
-

1.1 Introduction

All waste received on site is to follow this method to ensure: permit and health and safety compliance, stock tracking and control.

This document references to the:

1. Permit – held by Aquaforce Special Waste Limited
2. Sector guidance S5.06
3. WM3 – Technical guidance hazardous waste and ECHA – European Chemical Agency, C&L Inventory.

The procedures set out below are to act as a guidance and procedural policy, intended to offer procedures that are within the confines of Sector Guidance note S5.06 and are also intended to be in line with Best Available Techniques. However due to the low level of complexity and limited waste streams acceptable at the facility. Notwithstanding this they are compiled to reflect the recycling/recovery processes set out within the Environmental permit.

1.2 Waste Characterisation

Sufficient information will need to be gathered and documented to be able to determine if waste is suitable to be accepted at Aquaforce facility. Each individual waste stream will be characterised by completion of a customer Declaration as part of our pre-acceptance procedure. If there are more than one waste from one site then a single declaration can be completed with a list attached characterising the waste fully see Lab Smalls section at the end for this procedure. Information contained within the declaration can be and in some circumstances, will have to be supported by:

1. SDS/MSDS – chemical data sheets.
2. Chemical analysis of the waste individual constituents and their concentrations that is less than six months old and is representative of the waste.
3. Analytical results from sampling of waste.
4. Written description of sufficient to be able to assess the waste utilising WM3.
5. Samples taken and destined for independent laboratory and or receiving/onward transfer waste facility laboratory for their pre-acceptance.

1 Waste pre-acceptance procedure

6. Quantity and format.
7. Quotes from external facilities for onward transfer/recovery of the waste.
8. A description of the process generating the waste.

A sample of the waste will be required at the pre acceptance stage if insufficient analytical or characterisation information is available with the declaration to be able to characterise the waste sufficiently.

1.3 Waste sampling and analysis

A sample of waste will be required at the pre acceptance stage for used process wastes and if insufficient analytical or characterisation information is available with the declaration. Samples will not be required for unused chemicals or labs smalls with known compositions described fully. Pre-acceptance analysis of samples taken from process wastes will be compared to the waste as described in the declaration to ensure consistency.

Samples must be:

1. Representative and taken by a person trained and competent to do so.
2. Labelled with the: date; waste description; hazards; tracking sample number.
3. Entered onto the sample log in the on-site lab and assigned a sample tracing number.
4. Stored in the sample store in the on-site lab in appropriate conditions and in clean containers in order to preserve the sample and prevent leaks and unwanted reactions e.g. blowing out of containers; gassing; degradation of contents; reactions with adjacent samples.
5. Analysis must be carried out by a Quality Assured laboratory with auditable internal recording systems.
6. Results of analysis will be attached to the Waste Declaration file.
7. Additional analytical requirements will be determined by:
 - a. The site chemist.
 - b. And or the requirements of the onward or disposal or recovery facility's waste composition specification.
8. Wastes suspected of containing PCBs will be sampled and analysed for this determinant i.e. permitted list of waste code 16 02 09* Transformers and capacitors containing PCBs.

1.4 Waste Declaration approval

Adequate information needs to be available as part of the declaration and approved by the site chemist so that:

1. An assessment can be made as to if we're permitted to accept the waste i.e. can be found in our permit in tables: S2.2; S2.3; S2.4; S2.5; S2.6; S2.7; S2.8. i.e. permitted List of Waste codes.
2. So we are able to assess the waste for Hazardous Properties (HP codes) and utilising guidance WM3 and ECHA resources assign or approve correct HP code.

1 Waste pre-acceptance procedure

3. If we are collecting the waste we will be able to assign correct packaging and labelling requirements as per the Carriage of Dangerous Goods.
4. So we can determine that we have the correct resources to: process; treat; transfer; store the waste safely and in line with: permitted activities Table S1.1; internal procedures.
5. Staff receiving waste can safely identify and verify waste on receipt.
6. A clear method of treatment and or onward disposal/recovery can be identified.
7. A decision can be made as to the commercial viability of accepting the waste i.e. a price for onward treatment or disposal of waste or process residues from recovery will be obtained and included on or attached to the declaration form.

Hazardous waste streams excluded from the declaration process Pre acceptance declaration are as follows:

1. Hazardous WEEE waste – permitted List of Waste codes 20 01 21/23/33/35, Permitted activity: A1; A2; A7.
2. Hazardous Batteries including EWC 16 06 01/02/03. Permitted activity: A7.
3. CFC / PCB containing waste /panels /dismantled fridges EWC 16 02 09/11/13 Permitted activity: A1; A2; A7.
4. Asbestos containing wastes EWC 17 06 01, 17 06 05, 16 01 11 16 02 12 and 17 06 03 ONLY. Permitted activity: A7.
5. Airbags EWC 16 01 10* permitted activity A6 table S1.1

Once the Declaration form is completed along with: analysis; pricing and onward transfer information a technical assessment separate to sales will take place. The Declaration information will be assessed and signed off by the Site Chemist (Degree level qualified in Chemistry or related subject with similar chemical discipline) or Manager to accept the waste(s) on site. This person will assess the declaration and any attached analysis and information:

1. To screen out unsuitable wastes.
2. Ensure that the waste has the correct permitted list of waste codes.
3. Assigning the internal processes, storage and onward transfer.
4. Ensuring resources are available so that waste can be verified against the characterisation on arrival including internal and or external verification analysis when required.
5. To query and clarify information provided on the Declaration so that the waste is properly characterised and can be processed safely and in line with permit conditions.
6. To request further analysis if required.
7. To keep pre acceptance analysis of samples taken so as to be compared to the waste description in the declaration to ensure consistency.
8. To identify requirements of packaging especially for lab smalls and non compatible chemicals.

Approved Declarations with additional information attached will kept for a minimum of three years. Two copies filed:

- a. Office.

1 Waste pre-acceptance procedure

- b. Laboratory.

Wastes that require a Declaration will not be accepted without approval unless an emergency and the site chemist or manager can advise that the same level of characterisation information to ensure compliance.

1.5 Booking

Waste can be booked into site once the Declaration has been approved. The booking sheet (see attached) is utilised to enter details of waste arrivals as follows:

1. Waste for the tipping bay – usually oil contaminated absorbents and or packaging.
2. Fridges.
3. Hazardous waste – continuation lists; and or print outs of consignment notes will be attached to the booking sheet for the site chemist to take so they can assess the quantity of waste booked in and is they have suitable storage and other necessary resource available to off load and verify.
4. Paint waste.

See storage procedures.

For regular inputs, especially fridges, a production meeting can be held to discuss input levels especially when running at capacity. Internal representatives from sales and production operations are required to attend.

Site chemist and management will manage outputs from site. A bay log is kept up to date by the site chemist. The bay log is utilised so as to assess the quantity and type of waste on site and manage bookings and logistics out from the site. All bookings can be made up to the end of the day two days prior, if a booking is required for the next day the site chemist or production manager is consulted.

1.6 Lab Smalls

A single declaration for a lab smalls form can be completed and approved as long as there is a full list of the chemicals is attached to contain:

1. ID number
2. Product name
3. Full chemical description with constituents percentages
4. Size of container
5. Number of containers
6. Hazardous property/properties
7. UN number
8. Onward transfer destination or internal bulking process.
9. Costs for onward disposal/transfer

This list will need to be approved by the site chemist prior to collection.

1 Waste pre-acceptance procedure

The site chemist will also, designate a specialist packing list and labelling so that no incompatible wastes are stored together in transit or on arrival at Aquaforce. Refer to acceptance procedures.

The approved list will be transported with the wastes as part of the consignment note system.

Lab smalls will not be accepted from a customer unless the site chemist approves the packing list.

Waste will be labelled as per the chemist approved packing list and attending consignment note.



APPENDIX 3 AQUAFORCE WASTE ACCEPTANCE PROCEDURE

2 Waste acceptance procedure

Contents:

2.1 Aim

2.2 Load Arrival

2.3 Waste verification inspection

2.4 Bulking and compatibility

2.5 Sampling

2.6 Non Conformance

2.7 Rejection

2.8 Lab smalls

2.9 Pre acceptance

2.10 Waste tracking system

2.11 Site storage plan

2.1 Aim

This procedure aims to set out internal processes for accepting and verifying waste arriving at our facility in line with: the permit, sector guidance 5.06 and BAT.

2.2 Load Arrival

Upon arrival the driver will weigh in on the company weighbridge then, report to reception, sign in and hand in his paperwork, a work instruction is given to the driver; a message is sent usually via radio call to the site chemist or production manager to inspect consignment note/duty of care paperwork for compliance with the site permit. Only when site is ready for the waste and has capacity is the vehicle off loaded to the appropriate reception area usually by fork lift truck to allow sampling, verification and inspection (see site plan below). Once the load has been checked and off loaded the driver will weigh off at the site weighbridge and go to reception to receive the signed paperwork, and sign out.

For fridges, WEEE waste and asbestos a designated person (under the supervision of the site chemist) is given the waste instruction sheet by the driver which lets the designated person (under the supervision of the site chemist) know how many fridges to expect these are counted as off loaded and noted on the work instruction list, if there are any non conforming wastes the production manager or site chemist is informed.

2.3 Waste verification inspection

For chemical/hazardous waste, (not including fridges, asbestos or WEEE) arrival the driver hands the work instruction to the site chemist, there is an initial check of visual inspection of the load for the following

- Labels on clearly visible and in good condition, this is matched to the list on the work instruction
- Any signs of leaks

2 Waste acceptance procedure

- Any sign of broken pallets or damaged containers / pressurisation of containers
- Any additional labels will be removed
- If there is an incompatibility issue the wastes will be segregated immediately

Once authorised by the site chemist the load is then placed in the reception area, with the labels being clearly visible. The site chemist checks every container against the following criteria:

- Appearance
- odour
- pH
- oxi
- pre acceptance declaration documentation (available in lab or office)
- If required a sample is taken for further analysis, either internal or external
- Compliance within the permit

Once checked and verified a label is prepared containing:

- The date received
- Waste chemical description
- Bay number (see storage plan)
- Consignment note and waste stream number. A unique identification number will be made up of consignment note number and waste stream number
- For external customers the whole consignment note code is added
- Hazard code is added to the label.

Any old labels will be removed or sprayed out.

The label is placed on the container where once in the bay the label is clearly visible, facing the walkways.

2.4 Bulking and compatibility

Waste streams to be bulked will be compatibility tested for suitability into the appropriate bulk IBC, this will be done by the following

1. Check the bay for current bulk appropriate bulking IBC for the waste the chemist wants to bulk, for new bulks, a suitable container needs to be used i.e new clean, UN approved for the acid.
2. For new bulks containers wished to be bulked, a sample from each added one at a time to a clean bucket testing for colour changes; precipitation; reaction; bubbles; heat; phase changes; gas; miscibility.
3. For current bulks take a sample of between 1000-2000ml from the selected bulking IBC and pour into a clean plastic bucket.
4. Take a small (approx 50ml) sample of the chemical to be bulked and add slowly to the bucket initially a few drops – continue to add at a greater rate if no notable reaction takes place.

2 Waste acceptance procedure

5. Observe as the waste is added to the bulking sample. Make note of: colour changes; precipitation; reaction; bubbles; heat; phase changes; gas; miscibility.
6. If any reaction is observed cease the test and remove the waste from the bulking area to be transferred out for disposal in its original packaging.
7. If no reactions are observed add a further 50ml of the waste to the bulking sample and observe for same reactions.
8. If any reaction go to 6.
9. If no reaction is observed then proceed to bulk the waste. If whilst bulking any reaction is observed cease bulking and go to 6.
10. The compatibility form will be filled in for each bulk container.

Bulk IBC's will be given their own reference giving an indication of the bulk material and date started i.e *description XX/XX/XXXX/number* (day/month/year). This will be labelled when a new bulk container is started.

For bulk materials these are kept in the appropriate bay and bulked in the reception area when the bulking bund is available for that particular waste type of material. Bulk IBC's will be kept at the front of the bay for easy access.

2.5 Sampling

Samples will be taken at the verification stage. Wastes that require sampling are:

1. Used chemicals from processes.
2. Non conforming wastes that require further verification - where required.
3. Unused chemical wastes that require further verification.

If a waste requires sampling then this is indicated on the instruction/verification sheet that attends the waste paperwork.

The sample taken will be taken so as:

1. To be representative of the waste as a whole. (Core or composite samples are taken)
2. To preserve the chemistry of the sample.
3. The waste will be stored in an appropriate container i.e. chemical resistant bottle for liquids and a similar tub for solids.
4. To be of sufficient quantity to be able to carry out necessary analysis.
5. Where required to conform to external laboratory storage handling and analytical requirements.
6. The lids will be replaced immediately

The sample taken will be labelled with the following information:

1. Consignment note number
2. Date of sampling
3. Waste description and item number if part of a list on a consignment note.
4. Hazards associated with the waste

2 Waste acceptance procedure

Samples will be stored in the laboratory sample store until:

1. Information has been gathered to verify the waste sufficiently.
2. Accepted and disposed of at the receiving facility – without non-conformance.
3. In all cases a minimum of two days after the waste is accepted at the receiving facility.

Samples take will be logged in the sample log kept in the lab. The sample log will contain:

1. Unique sample reference number. Starting at and numerically from one.
2. Consignment note number
3. Date of sampling
4. Waste description and item number if part of a list on a consignment note.

Note the sample number will be logged on the waste container and on the bay log

Where internal capability is not sufficient analysis can be carried out by an external laboratory with robust quality assurance and control methods. A Lab analysis sheet will be used to communicate what analysis is required.

The outbound log will be Created and transferred from the bay log once it has loaded onto the vehicle for disposal, see outbound load spreadsheet. A new tab will be created for each outbound load and will be on a month by month basis i.e. 1 file per month.

Lab samples will be kept until we have been invoiced from the disposal point.

2.6 Non Conformance

A non conformance is raised from waste verification and waste stream is different to the description on the consignment note and or pre acceptance information received before arriving on site.

The non conformance form will include the following

- Arrival date
- Consignment note number
- Unique ID
- Customer
- Waste stream description
- Number and size of containers
- Reason for non conformance (to include basic wet tests and changes in regular waste streams)
- What additional info / analysis is required
- Disposal point and quote
- Where this is stored (site chemist discretion for the hazards present)
- Noted in the bay log
- The container to be quarantined within the bay will be labelled “Quarantine”.

2 Waste acceptance procedure

Sales will be informed and report back to the customer, gaining any additional information in a timely manner and will inform the production manager / site chemist when the material can be released from quarantine and dispatched either for disposal or return to customer.

Once the non conformance is documented on the non conformance form (see non conformance form) and handed to the office along with the work instruction sheet this will then be passed onto sales before invoicing.

Storage of quarantine waste s will be for no longer than five days. Once storage bay is at capacity waste will be rejected on the grounds of insufficient capacity. If wastes are non conforming because of compatibility then these wastes will be segregated immediately.

2.7 Rejection

Waste will be rejected on the following grounds:

- Waste not conforming to description.
- Site operations are affected by site closure, maintenance, breakdown or bad weather.
- Hazardous wastes arrive without a consignment note
- Hazardous waste that are with a consignment note that is incomplete or incorrect
- Wastes not permitted on site.
- Inappropriately packaged.
- Customer unwilling to pay the increase in price or provide information on non-conforming (reject accept) wastes.
- Insufficient resource e.g. Appropriate storage.
- Items that have been sent even when rejected at pre acceptance stage

Rejections will be reported using the non conformance procedure.

Rejected items will be dealt with in a timely manner following quarantine. Maximum quarantine time is five days.

The producer and the Environment Agency will be informed as per guidance found:

<https://www.gov.uk/guidance/hazardous-waste-rejected-loads-supplementary-guidance>

2.8 Lab Smalls

Lab smalls are packed by the site chemist, this can be done either

1. On a customer's site
2. At the Aquaforce facility

When sending a chemist out to a customer site the following information will be obtained before leaving the Aquaforce facility

- A list of wastes materials
- Volume of each waste
- Number of containers of each waste

2 Waste acceptance procedure

- Pallets availability
- Lifting equipment
- MSDS'S for unused products – process wastes will need a declaration or declaration and sample (pre acceptance)

Once the information is produced along with a purchase order the chemist will go through the list to judge the number and size of drums needed to complete the job a packing list for each hazard type issuing a suitable UN numbers, EWC code, description these will be used to raise the consignment note.

Each packing list will have a total of 5 copies be taken, (one in the drum, 3 to go with the consignment notes and the other for site. Labels will be prepared and spares taken, these will be suitable for transport.

Once at the customer site the chemist will use the packing list to segregate the lab smalls. Vermiculite (or an inert packing material) to securely pack the drums, a list will be put into each drum and labelled correctly, this is then transported to aqua forces facility and labelled for storage as above for waste verification (the list and label are double checked)

When lab smalls are brought onto the Aqua Force facility the following information is needed

- List of waste: including characterisation information (See pre-acceptance 1.6)
- Volumes
- Number of containers

A packing list will be given to the customer along with labels and lists for the drums, when these are brought onto the Aquaforce they will be checked thoroughly and ticked off against the list and either repacked or processed.

Lab Smalls are not accepted at the facility where the site chemist is unable to process by the end of the operational hours or working hours.

All lab smalls' containers will be opened in the designated reception area to check that items remain undamaged.

If on opening a drum it is found to contain incompatible substances, or that the substances have been packaged adequately the drum is sorted and repacked immediately and the non- conformance procedure is followed.

All lab smalls' lists for site will be put in a file in the lab; this will then be used for the preparation of loads out. All documentation will be on the transfer station area of the shared drive.

Repacking and sorting of lab smalls will take place in area 18 of the site plan. After repacking lab smalls will be stored in their appropriate storage areas according to compatibility. The lab smalls reject tin procedure will be the same as in section 2.7.

2 Waste acceptance procedure

2.09 Pre acceptance

Approved Declarations with additional information attached will be kept for a minimum of three years.
Two copies filed:

- a. Office.
- b. Laboratory (used to assist in verification)

Wastes that require a Declaration will not be accepted without approval unless an emergency and the site chemist or manager can advise that the same level of characterisation information to ensure compliance.

2.10 Waste tracking system

The waste tracking system consists of two parts as follows

1. Waste inventory - this will cover BAT 35 and is covered by the waste acceptance sheet, Bay Log, outbound load record and lab analysis.
2. Quantities on site in relation to facility capacities this will cover BAT 37; this is covered by the production report and the white board at the entrance to the facility.

The waste inventory is based on a waste acceptance sheet which notes down the Ph, oxy test appearance which bulk has been used and the compatibility tests have been done. This also notes the container number and any non conformances raised. This also notes which bay the container is stored in this also shows who has checked the waste.

This enables checks to make sure bulk compatibilities have been done; the information can be then transferred to the bay log this includes the following: -

- Date of arrival – so we can monitor the length of time waste is on site
- Job number (refers to producer deceleration)
- EWC code
- Waste description
- Components and concentration
- Quantity
- Container type
- Disposal point
- Price and quote number
- Lab analysis required (Y/N)
- Unique ID number
- Bay number
- Verification completed by
- Non conformance reference
- HP codes

2 Waste acceptance procedure

- Activity (to show these are for bulking or direct transfer)

If any lab analysis is required the analysis is either reported from an independent lab or internal analysis using the lab analysis sheet (report). This allows the acceptance to be compared to the pre acceptance.

Once we have enough waste to go out to a disposal point we book the load out and raise a consignment note, once the load has left site the bay log is amended and the waste streams are transferred to the outbound load record this shows the waste moving through the transfer station.

A record of the site capacities are recorded on the site production report and the white board at the entrance to the unit which compares the sites capacity and what is actually on site, see the storage procedure for the definite site capacities.

The capacities are in m³ on the production report and the white board. These are recorded by bay which in turn classifies by hazard (see site storage plan) the bay log also shows the onward disposal route and date of arrival so the timeframe of material on site is monitored.

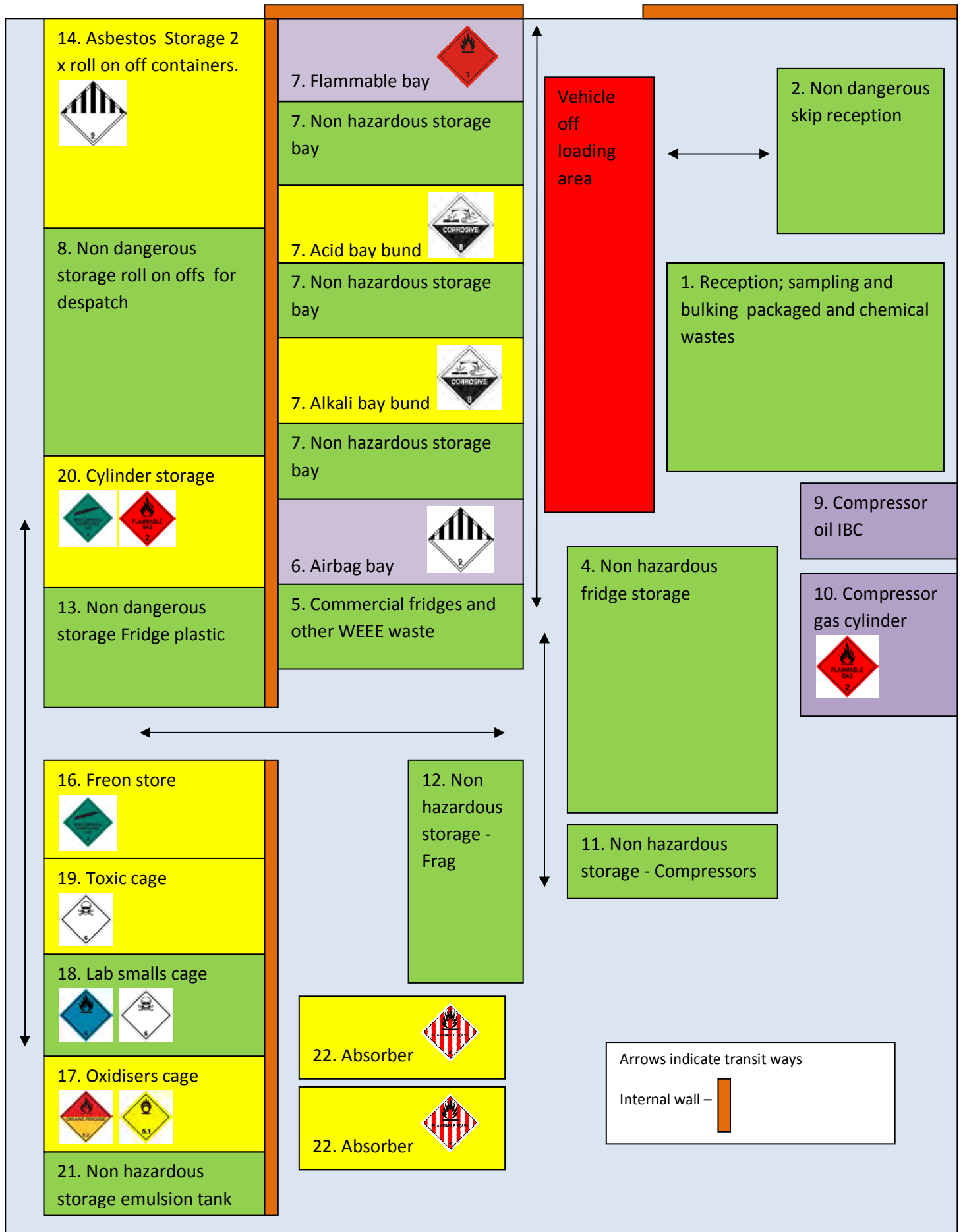
The white board at the entrance to the unit shows the site layout and therefore indicates where in relation to the site plan each hazard type is segregated with the bays explained in the storage plan.

The capacities for the process waste are noted on the production report which compares the total capacity and actual capacity. These are identified on the bay log as well.

All records and documents are kept away from the treatment plant and transfer station and are kept for a minimum of two years.

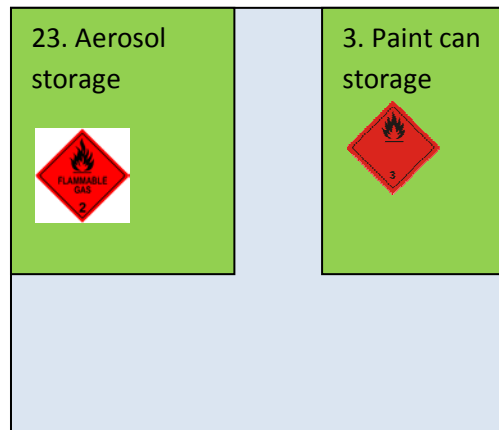
2 Waste acceptance procedure

2.11 Site storage plan with hazard designation – See 3. Storage plan



2 Waste acceptance procedure

Paint plant





APPENDIX 4 AQUAFORCE STORAGE PRODEDURE

3. Storage plan

Contents:

3.1 Aim

3.2 Background

3.3 Reception

3.4 Storage of waste

3.5 Storage of hazardous substances

3.6 Site storage plan with hazard designation

3.7 Maximum storage capacity with calculation

3.8 Notes on method of calculation

3.9 Interim storage plan: Bay chemical waste storage area

3.10 Stock control

3.11 Fire prevention

3.12 Planned packaged waste (bayed) storage area

3.13 Planned Reception area

3.14 Waste Tracking system

3.15 HSG 71 Storage matrix

3.1 Aim

This procedure sets out the storage locations, quantities and waste types on site and how wastes are stored so as to: be able to manage stock effectively; prevent and or contain accidental releases or uncontrolled and unintended reactions from incompatible chemicals mixing.

3.2 Background

Storage, quarantine, bulking and reception areas for wastes are:

- Indoors so run off from precipitation will not occur.
- On impervious surface.
- Bunded therefore containing all contaminated run off.
- Are performed in an area with nil drainage with no access to discharge to watercourse or sewer, storm or foul.
- Tankers are not discharged on site.

There are additional free standing bunds to prevent mixing of chemically incompatible wastes. Some wastes do not contain any free liquid and are not readily chemically reactive and therefore when containerised will not require additional drainage or bunding.

There is nil drainage so fire may not pass between storage areas via this system.

See site plan.

3. Storage plan

3.3 Reception

Areas allocated for reception of wastes to allow verification and space for: verification; acceptance; sampling; labelling; transfer to bulking; internal transfer to despatch storage or internal processing. See diagram 3.6 for location and 3.13 for specification.

Reception of:

- Chemicals
- Contaminated absorbents/packaging – arriving in skips
- Fridges/WEEE waste
- Commercial fridges and other WEEE waste
- Paint cans

Maximum storage time in the area is 5 days.

3.4 Storage of waste

Materials that have been verified, processed, bulked and or treated and are packaged and labelled, where required, prepared and ready for despatch or further processing.

1. Bays: storage of waste that is packaged in IBCs, pallets and drums. There is a live bay log that will be updated by the site chemist with an inventory of wastes in the storage bays.
2. Waste bins waste from fridge and other waste processing
3. Frag – fragmentised steel and aluminium from processed fridges
4. Plastic – Plastic from processed fridges
5. Fridge compressors – from processed fridges

Maximum storage time is six months. All waste is labelled and dated.

Waste will be directed to the correct location for storage by the work/drivers instruction sheet and by further inspection by the site chemist. See acceptance procedure.

Along with the bay log a production report is completed. These documents are a daily account of the quantity by percentage of capacity and location of waste stored on site.

3.5 Storage of hazardous substances









Some wastes will require additional consideration for storage because of their chemical or physical properties. These are identified at the pre-acceptance stage. Provision for these is covered in HSG71 and catered for in our storage plans.

The location of all storage areas is indicated on the site plan below. The location of all storage areas by hazard classification is indicated on the site plan below:


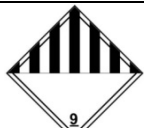

In line with HSG71, HSG76 and HSG51 this plan sets out the control measures storage locations,

This will be indicated on the plan by use of pictograms as follows:

3. Storage plan



Waste type And typical examples listed	Hazard	Pictogram
Flammable liquids 1. Solvents 2. Paints 3. Fuels 4. Paint thinners	Flammable	
Flammable gasses 1. Gas cylinders: i. LPG ii. Propane iii. Butane iv. Acetylene 2. Aerosols 3. Some refrigerant gasses	Flammable Asphyxiate	
Compressed gasses 1. Gas cylinders 2. Fire extinguishers 3. Some refrigerant gasses 4. Nitrogen 5. Argon 6. Helium 7. Carbon Dioxide	Explosion in fire Asphyxiation	
Toxic gasses 1. Gas cylinders	Toxic Explosion	
Organic peroxides 1. Butanox	Oxidising Flammable	
Oxidizers 1. Swimming pool additives 2. Pesticides 3. Sterilising chemicals 4. Bleaches	Oxidising	
Readily combustible 1. Solvent sludge 2. Paint sludge 3. Solvent impacted rags	Flammable solids	
Toxic Substances 1. Lab chemicals 2. Industrial chemicals 3. Chlorinated solvents	Toxic	

3. Storage plan

Corrosive 1. Acids 2. Alkalis 3. Amine resin hardeners 4. Hypochlorite	Corrosive	
Other/Miscellaneous 1. Asbestos 2. Pesticides	Dangerous for the environment	
Dangerous when wet 1. Lab smalls 2. Metal hydrides	Flammable Emit dangerous gasses	

Spontaneously combustible materials are not accommodated on site and therefore will not be accepted.

On the planned storage bays (see 3.12) the bund wall at the entrance to each bay will be labelled with the bay number and the quantity of waste by capacity and its hazard designation. For example bay one with 10 x IBCs of flammable waste contained within will be labelled as follows:

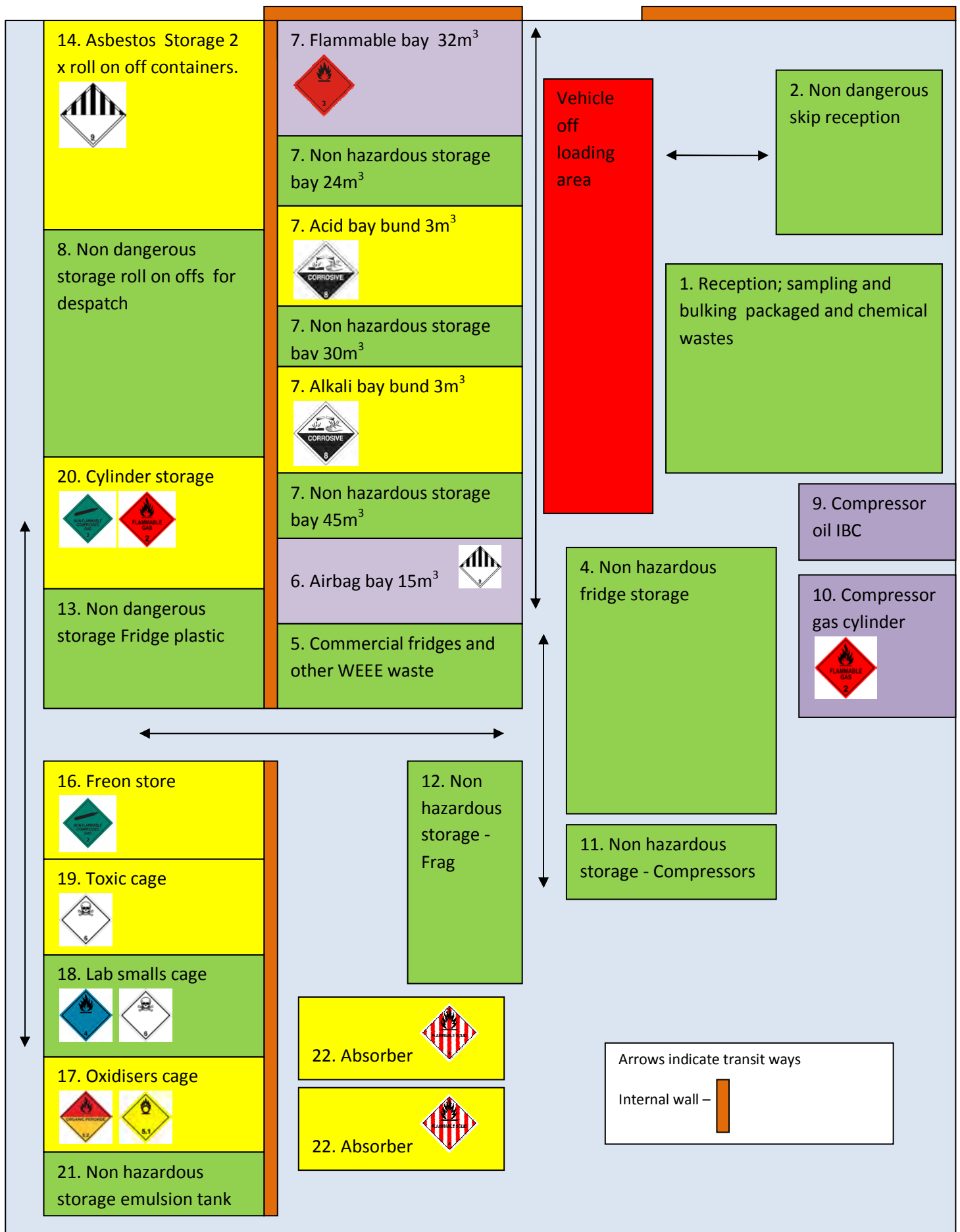
BAY 1 

Contents 10 m ³
Capacity 32m ³

For the interim storage plan the bays will be written on the white board in the transfer station.

Flammable	Non Haz	Acid	Non Haz	Alkali	Non Haz	Airbags
Capacity 32m ³	Capacity 24m ³	Capacity 3m ³	Capacity 30m ³	Capacity 3m ³	Capacity 45m ³	Capacity 15m ³
Contents 10 m ³	Contents m ³	Contents m ³	Contents m ³	Contents m ³	Contents m ³	Contents m ³

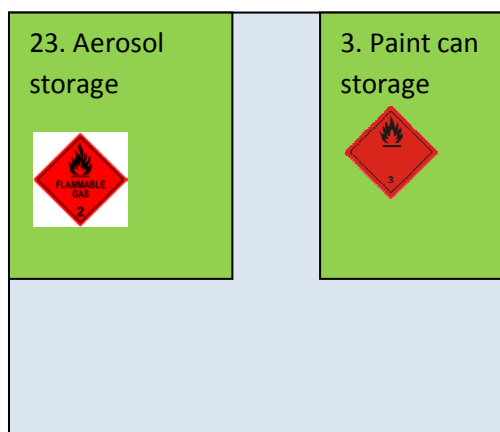
3. Storage plan

3.6 Site storage plan with hazard designation



3. Storage plan

Paint plant



3.7 Maximum storage capacity with calculation

Storage capacity for reception/waste input and storage prior to processing.

Site plan reference number	Waste type	Container type	Size (m ³)	Number	Maximum storage (m ³)	Notes on calculation of maximum storage
1	Reception packaged chemical waste	IBCs/pallets	1	32	32	IBCS 5 x rows x 1 high x 6 deep
2	Reception skipped wastes and over-drum/repack area	Roll on off and skip	26.7	1	26.7	1 x 35 yard roll on off
3	Paint can storage	IBCs	1	45	45	IBCs stacked 3 high 1. 5 deep x 3 wide 2. 2 x deep x 4 wide
4	Domestic fridges	Various	Various	1000 fridges	750	Based on 3 metres high and an area of 25m x 10m
5	Commercial fridges and other WEEE waste	Various	Various		150	Based on two areas fridges stacked 3m high and 10m x 5m
6	Airbag storage	IBCs	1	12	15	IBCs stacked 3 high x 1 row x 4 deep
7	Bays for chemical waste ready for despatch or bulking from chemical transfer and	IBCs pallets	1	152	152	IBCs stacked see transfer station by layout plan

3. Storage plan

	bulking activity					
8	Non hazardous waste for despatch	Roll on off	26.7	3	80.1	3 x roll on off containers
9	Pot oil – Stage one de-pollution	IBC	1	1	1	One IBC to collect oil from ATN degasser.
10	Pot gas – stage one de-pollution	BOC refrigerant gas cylinder	1	1	1	One gas cylinder to collect refrigerant gas from ATN degasser
11	Fridge compressors	IBCs	1	40	40	Stacked 2 x high x 4 rows x five deep
12	Frag – fragmentised de-polluted steel and aluminium from fridge stage 2 de-pollution.	Ford bins	0.6	35	21	35 x stackable metal ford bins
13	Plastic – HIPS from fridge stage 2 de-pollution	Poly woven sack	2	44	88	44 x 2m ³ poly woven sacks
14	Asbestos Storage	Enclosed roll on off bins	26.7	2	53.4	2 x 26.7m ³ enclosed roll on off bins
15	Bulking/sampling bund	IBCs 205l drum	1	3	1	1 x IBC
16	Refrigerated Freon storage and decanters	205 litre drums & decanters	4 2	0.2 0.8	2.4	4 x 205 litre drums & 2 x 800litre decanters
17	Oxidizers cage	Cage	2	0.8	1.6	Caged area containing 2 x 0.8m ³ waste safes
18	Lab smalls storage	Cage			3	2 x 1m ³ pallets or equivalent and 2 x 0.5m ³ cabinets for Water reactives and cyanides
19	Toxic storage	Cage	2	0.8	1.6	2 x 0.8m ³ waste safes
20	Gas cylinder cage	Cage	4	1	4	Caged area for gas cylinders
21	Emulsion storage	Tank	16	1	16	One 16m ³ banded tank

3. Storage plan

						for storage of water based emulsion paints.
22	Absorbers	Tank	4	2	8	Two sealed tanks containing 4m ³ carbon filter for CFC and cyclopentane blowing agent
23	Aerosols	IBCs	1	18	18	Open IBCs stacked 3 high x 3 wide x 2 deep.

Maximum site capacity: 1509.6m³ for all wastes stored on site.

3.8 Notes on method of calculation

Stacking of waste containers specifically IBCs and pallets of drums. A large proportion of wastes are received and or bulked and made ready for despatch in IBC containers. Most wastes are stored in this format. Each IBC has capacity for one tonne stacked on top of it. Therefore full IBCs containing liquids may only be stacked two high assuming the density of waste is the same similar or less than as water. Waste that comply with this characterisation are: most detergents; oily waters; oils; Aqueous burn; paints water and solvent based.

Stacking of IBCs three high is limited to low density material such as oily contaminated rags, paint cans and aerosols. Stacking three high will only take place when the capacity is required, otherwise stacking two high will be used as standard.

Wastes with a potential high density or high risk profile need only be stacked one high e.g. acids or alkalis. Pallets of four drums can only be stacked two high.

Aerosols will be stored in vented or open containers only.

In addition to the bay storage of hazardous packaged wastes there are additional areas of lockable bunded cages where small quantities of hazardous wastes may be processed and stored. There are three cages that are for:

1. Toxic storage bunded cage in 2 x 800 litre waste safe. Set aside safe storage for toxic materials.
2. Lab smalls bunded lockable cage. Additional cabinets inside this cage for storage of water reactive and cyanide wastes.
3. Organic peroxides and oxidisers: stored in a separate lockable bunded cage in individual 800 litre waste safes.

3. Storage plan

Lab smalls will be listed and assessed prior to collection by the site chemist to identify and assess:

1. If we have correct applicable storage capacity available.
2. That we have capability to handle the waste.

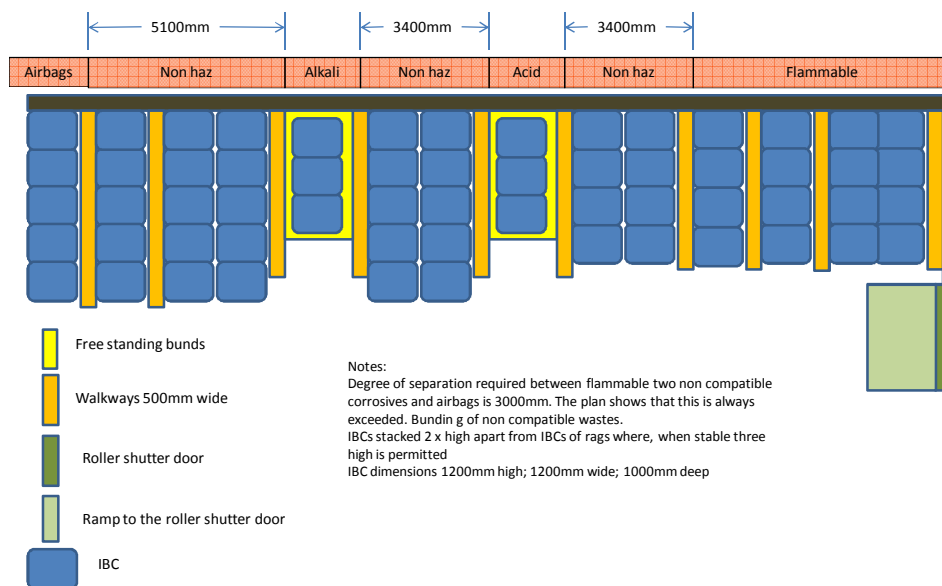
In addition to the bay storage of hazardous packaged wastes there is an additional cage for the storage of gas cylinders.

3.9 Interim storage plan: Bay chemical waste storage area

Utilising separation by storage of non hazardous wastes and selective bunding of non compatible materials. Packaged waste storage will be compliant with HSG71 and HSG51.

- There is a separation of at least 3000mm between flammable and corrosive wastes.
- There is stand alone bunding in place for non compatible corrosive wastes.
- Bays will be signed with the quantity and hazardous characteristics of the waste

Aquaforce Special Waste Limited Storage procedure Packaged waste storage bays interim plan: utilising non haz waste bays as separation of non compatible hazardous wastes



Cages

3.10 Stock control

A stock inventory is kept of all waste on site this includes:

1. Bay Log – this is a live document populated by the site chemist of packaged chemical wastes that:
 - a. Have been verified and accepted
 - b. Are quarantined

3. Storage plan

- c. Are part full bulking IBCs
2. Production report (see production report) that is made each day. This documents the levels of waste on site as a percentage of capacity.

At the same time the production report is made and inspection is performed of storage areas so as to assess waste quantities on site and manage stock control and at the same time inspect containers and containment for:

1. Integrity of containers and containment
 - a. Waste must not be stored on/within a compromised containment system e.g. bund.
 - b. Containers to have well fitting lids, caps and valves secured and in place.
2. Correct suitably resilient labelling:
 - a. Date of arrival
 - b. Hazard codes
 - c. Chemical identity and composition of the waste
 - d. Tracking number – invoice and consignment note number
3. Dates exceeding or close to maximum storage times
 - a. report so that waste can be arranged for disposal
 - b. rotate waste in storage areas so that older waste gets despatched before exceeding maximum storage period.
4. Spillages/leaks and the source of the spillage/leak
 - a. Immediate containment action required.
 - b. Cleaning of spillage
 - c. Spillages >200litres to be reported to the Environment Agency.
5. Exceeding maximum containment/storage capacity.
 - a. Waste must be placed in an alternative appropriate storage area
Or
 - b. Waste must be despatched or not accepted if arriving for reception.

Remedial action to be reported to management and taken for non conformances spillages and emergencies.

3.11 Fire prevention

Activities prohibited in waste storage areas to prevent fire:

1. Smoking is banned across that whole site.
2. Welding or metal working or any maintenance or activity that generates heat or sparks can only be carried out when that storage area or containment system being worked in or on is empty and clean – ensuring any adjacent storage areas are made safe.

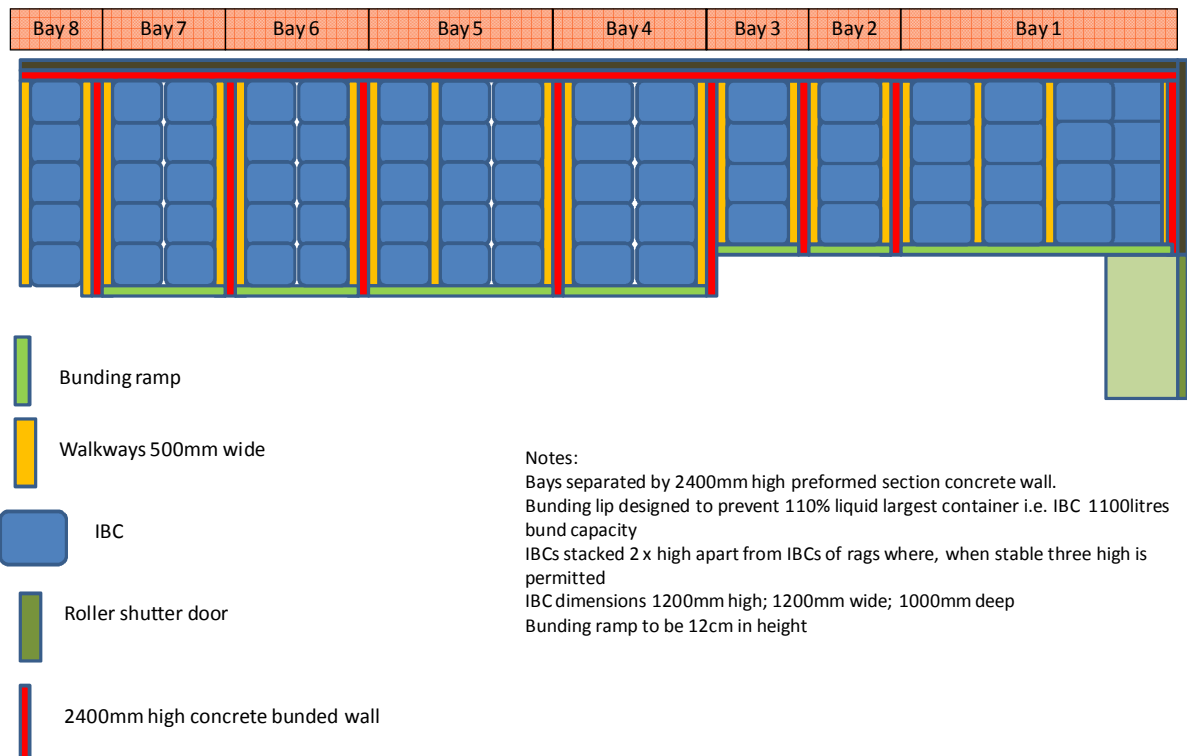
3.12 Planned packaged waste (bayed) storage area

This plan shows the design for the bay areas including fire proof to burn time 30minutes, 80mm wide precast concrete bund walls 2400mm high and sealed at the bottom to prevent leaking into

3. Storage plan

adjacent bunds. The bund walls are shown in red. At the front of each of the bays is a bund lip to prevent the escape of liquid this is constructed to as to retain the volume of 110% of the largest container i.e. a 1000 litre IBC. For the smallest bay therefore the tallest bund lip, the bund lip needs to be 125mm tall. Bays will be signed with the quantity and hazardous characteristics of the waste. Bays will be labelled with content hazard characteristics and quantities.

Packaged waste storage area (Bays)



3. Storage plan

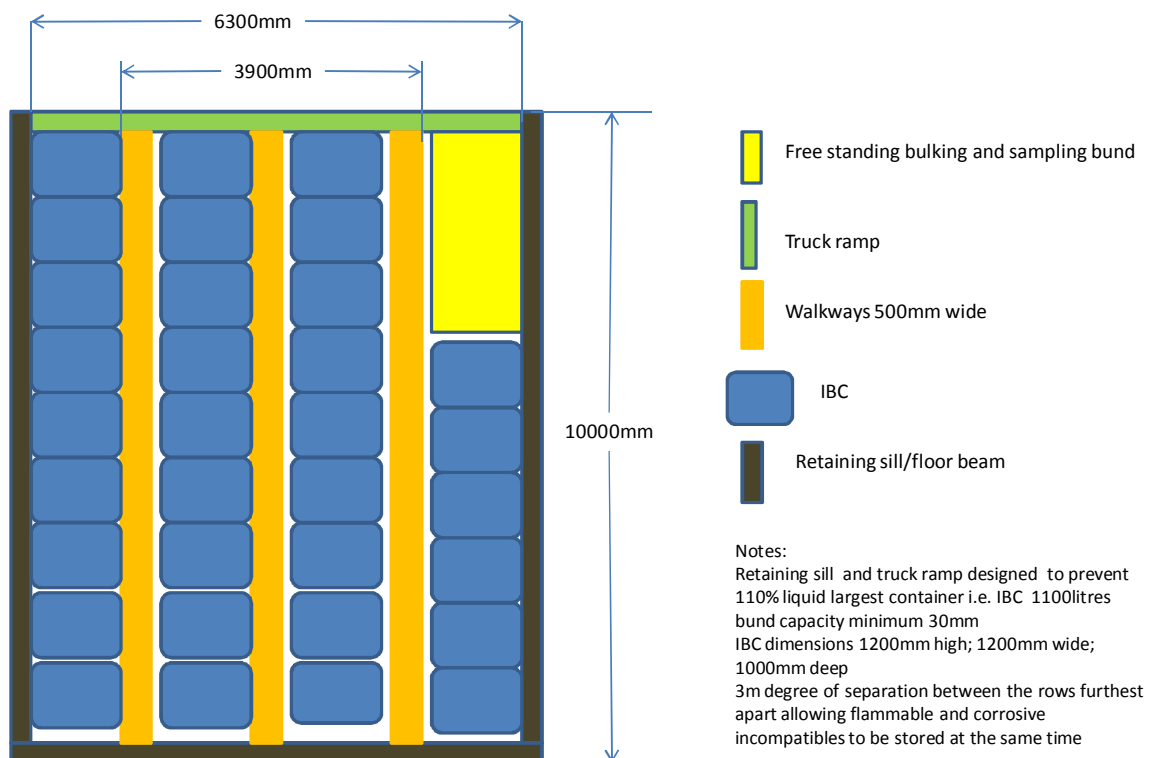
3.13 Planned Reception area

Area set out to receive and verify wastes. Packaged wastes will be off loaded from vehicles into this area for reception and verification.

There is provision for bulking, over drumming and sampling. This will be performed on a free standing bund placed inside the bunded reception area. Other damaged containers and packaging such as pallets will be replaced in this area on receipt.

To keep apart non compatibles there is a degree of separation of 3m between the furthest rows allowing incompatible materials to be off loaded into the Reception area. In line with HSG71 Storage matrix (pg 13-14 this document).

Aquaforce Special Waste Limited
Storage procedure



3.14 Waste tracking system

The waste tracking system consists of two parts as follows

1. Waste inventory - this will cover BAT 35 and is covered by the waste acceptance sheet, Bay Log, outbound load record and lab analysis.
2. Quantities on site in relation to facility capacities this will cover BAT 37; this is covered by the production report and the white board at the entrance to the facility.

3. Storage plan

The waste inventory is based on a waste acceptance sheet which notes down the Ph, oxy test appearance which bulk has been used and the compatibility tests have been done. This also notes the container number and any non conformances raised. This also notes which bay the container is stored in this also shows who has checked the waste.

This enables checks to make sure bulk compatibilities have been done; the information can be then transferred to the bay log this includes the following: -

- Date of arrival – so we can monitor the length of time waste is on site
- Job number (refers to producer deceleration)
- EWC code
- Waste description
- Components and concentration
- Quantity
- Container type
- Disposal point
- Price and quote number
- Lab analysis required (Y/N)
- Unique ID number
- Bay number
- Verification completed by
- Non conformance reference
- HP codes
- Activity (to show these are for bulking or direct transfer)

If any lab analysis is required the analysis is either reported from an independent lab or internal analysis using the lab analysis sheet (report). This allows the acceptance to be compared to the pre acceptance.

Once we have enough waste to go out to a disposal point we book the load out and raise a consignment note, once the load has left site the bay log is amended and the waste streams are transferred to the outbound load record this shows the waste moving through the transfer station.

A record of the site capacities are recorded on the site production report and the white board at the entrance to the unit which compares the sites capacity and what is actually on site, see the storage procedure for the definite site capacities.

The capacities are in m³ on the production report and the white board. These are recorded by bay which in turn classifies by hazard (see site storage plan) the bay log also shows the onward disposal route and date of arrival so the timeframe of material on site is monitored.

The white board at the entrance to the unit shows the site layout and therefore indicates where in relation to the site plan each hazard type is segregated with the bays explained in the storage plan.











The capacities for the process waste are noted on the production report which compares the total capacity and actual capacity. These are identified on the bay log as well.

3. Storage plan

All records and documents are kept away from the treatment plant and transfer station and are kept for a minimum of two years.

3. Storage plan

3.15 HSG 71 Storage matrix

Class	2.1 Flammable gas	2.2 Compressed gas	2.3 Toxic gas	3 Flammable liquid	4.1 Readily combustible	4.3 Dangerous when wet	5.1 Oxidizing	5.2 Organic peroxide	6 Toxic	8 Corrosive
										
2.1 Flammable gas	X	KA	SG/KA	SF	SF	SF	SF	ISO	KA	KA
2.2 Compressed gas	KA	X	KA	KA	NN	NN	NN	SF	NN	KA
2.3 Toxic gas	SF/KA	KA	X	SF	KA	KA	NN	SF	NN	KA
3 Flammable liquid	SF	KA	SF	X	KA	SF	SF	ISO	KA	KA
4.1 Readily combustible	SF	NN	NN	KA	X	SF	SF	SF	KA	NN
4.3 Dangerous when wet	SF	NN	NN	SF	SF	X	KA	SF	NN	KA
5.1 Oxidizing	SF	NN	NN	SF	SF	KA	X	SF	KA	KA

3. Storage plan

5.2 Organic peroxide	ISO	SF	SF	ISO	SF	SF	SF	X	KA	KA
6 Toxic	KA	NN	NN	KA	KA	NN	KA	KA	X	NN
8 Corrosive	KA	KA	KA	KA	NN	KA	KA	KA	NN	X

KA – KEEP APART: 3 metre separation or 30 minute fire resistant wall of concrete and or brick.

NN – Segregation may not be necessary.

SF – Segregate from: Should not be kept in the same building or 30 minute fire resistant wall of concrete or brick.

ISO – Isolate: Organic peroxides. These will be stored in a fire resistant waste safe within a locked cage.



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