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Project No: 315994

Environmental Risk Assessment

Prepared for:

Aquaforce Special Waste Limited

Aquaforce Special Waste Ltd
Unit 4a, Sprint Industrial Estate
Four Ashes
Wolverhampton, UK
WV10 7ED

Contents Amendment Record

This report has been issued and amended as follows:

Revision	Description	Date	Author	Reviewer
1.0	Final	29/07/24	RM, DJ	KB

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Acknowledgement

This report has been prepared for the sole and exclusive use of Aquaforce Special Waste Limited (Aquaforce) in accordance with the scope of work presented in the Mabbett & Associates Ltd (Mabbett) Letter Agreement dated 03 July 2024 (Ref. 315994/KB/030724/1.0). This report is based on information and data collected by Mabbett. Should any of the information be incorrect, incomplete, or subject to change, Mabbett may wish to revise the report accordingly.

This report has been prepared by the following Mabbett personnel:

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Section 1.0: Introduction

Aqua Force Special Waste Ltd (trading as Aquaforce Recycling) 'the Operator', has instructed Mabbett & Associates Ltd to prepare an application the Environment Agency (EA) for a Substantial Variation to their Environmental Permit (Ref.: EPR/XP3992FV and herein referred to as the 'Permit') for activities regulated by the Environmental Permitting (England and Wales) Regulations 2016 (EPR) at Unit 4a Sprint Industrial Estate, Station Road, Four Ashes, Wolverhampton, WV10 7DB (the Site).

1.1 Site Setting

The Site is centred at Ordnance Survey grid reference SJ 91763 08541, is located on Sprint Industrial Estate in Four Ashes on Station Road approximately 2.2 miles north of the northernmost extent of Wolverhampton. Wolverhampton is a city and metropolitan borough located in the northwest of West Midlands county, approximately 12 miles west of Birmingham.

Waste operations undertaken on the Site comprise a recycling and waste transfer and treatment facility for hazardous and non-hazardous waste. The Installation comprises one main warehouse type building comprising a series of internal rooms or units and two (2) smaller office buildings located in the Sprint Industrial Estate, noted to house a number of commercial properties including a plumber's merchant, vehicle/plant hire company and a scrap metal merchant.

All permitted activities currently take place within the Existing installation Area within the north of the site, this comprises a main unit (also known as Unit 4) which houses waste reception, fridge treatment plant and storage, chemical waste storage bays, airbag treatment and other waste electrical equipment (WEEE) treatment, a separate roofed area for waste dispatch (separated from unit 4 by an internal wall) and a separate paint and aerosol treatment plant.

The Additional Installation Area to the south comprises an internal area within the main warehouse type building comprising a maintenance workshop, areas used for the storage of unused plant/empty containers (including IBCs, drums, and pallets) and a diesel tank and an external area comprising two (2) office buildings and an area of hardstanding used for vehicular access to the Existing Installation Area and for the storage of unused plant/empty containers. The proposed permit boundary extension will mean inclusion of waste storage and some treatment activities within this area, see Drawing number CE-FA-1921-DW01 Rev A, Site Layout Plan.

1.2 Operational Background

The Operator currently operates a recycling and waste transfer and treatment facility for the treatment of hazardous waste and transfer of non-hazardous waste streams comprising of waste from electrical and electronic equipment (WEEE) wastes, paint waste, oily rags and protective clothing, airbags, aerosols and minor quantities of asbestos (for transfer).

The application for a Substantial Variation to the current Permit allows for the following amendments to the Permit:

- Increased maximum waste throughput from 24,999 tonnes per annum to 29,999 tonnes per annum;
- The incorporation into the Permit of additional waste streams (identified by waste code) permissible for acceptance at the facility. Specifically this updates the list of acceptable WEEE waste codes to include additional waste codes and the inclusion of treatment of non-hazardous WEEE waste;
- Amendment of the treatment of non-hazardous waste to include additional non-hazardous waste codes (including use of a second mechanical separation plant (attritor); and
- The amendment of the Permit boundary to include additional land (see Drawing number CE-FA-1921-DW03 Permit Boundary Plan).

Since submission of the application in 2023, Aquaforce is no longer seeking to add drum washing to the Permit. At the time of writing, the aerosol and waste paint treatment building is not operational due to a recent fire. It is proposed to move the paint treatment plant to within the main building (as shown on Site Layout Plan drawing number CE-FA-1921-DW01 Rev A) on a medium term basis. It is the intention to

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return aerosol and paint treatment activities to the original building once repairs have been completed and so it is not presently proposed to surrender this part of the permit boundary at this stage.

Additional waste codes include more of the same wastes already accepted at the site, from a wider variety of sources. All waste activities will be carried out within a building. There is a risk of dust and odour emissions and so a Dust and Emissions Management Plan and Odour Management Plan have been prepared separately.

It is considered that the existing emissions to air will continue to comply with the existing monitoring and reporting controls and limits within the Permit.

There are no point source discharges from the Site to controlled waters or sewer. The waste treatment building will be provided with containment bunding to ensure spillages, leaks can be contained within the permitted area.

1.3 The Operation

The existing facility accepts hazardous and non-hazardous waste for transfer and treatment:

- WEE treatment, including:
  - Fridges
  - Other WEEE
- Waste bulking / repackaging
  - Waste paint treatment and
  - Repackaging of liquid wastes into intermediate bulk containers.
- Aerosol waste treatment – discharging aerosol and mechanical treatment of containers
- Airbag treatment – deployment and transfer of airbags
- Storage of hazardous wate
- Treatment and storage of non-hazardous waste

The proposed changes include:

- increase the maximum waste throughput from 24,999 tonnes per annum (tpa) to 29,999 tpa
- increase the permit boundary;
- amend WEEE treatment to:
  - add additional (WEEE) waste codes; and
  - inclusion treatment of non-hazardous WEEE waste in description.
- Add additional waste codes to treatment and storage of non-hazardous waste activity.

1.3.1 Relevant hazardous substances

The accompanying SCR included a list of Relevant Hazardous Substances (defined by the EPR as substances or mixtures as defined in Article 3 of the Hazardous Substances Regulation (EC No. 1272/2008)). Where a substance carries a hazard statement code as defined in these regulations it is categorised as hazardous. This definition applies if they are considered to present a potential physical (e.g., explosive), health (e.g., carcinogenic) or an environmental (e.g., hazardous to the aquatic environment) risk.

Due to the nature of the Installation activities and variety of wastes accepted, it is not possible to discount with any degree of certainty, the possibility that any of the accepted waste categories potentially contain substances which could be defined as RHS. It is therefore considered that ***all*** waste categories should be conservatively assumed to have the potential to give rise to RHS. A review of the waste categories and potential/'worst case' constituents has been undertaken to assist with the risk assessment. The substances identified as RHS are therefore noted within Appendix B.

This qualitative environmental risk assessment followed the following steps for the proposed changes;

- Identified and considered risks for the proposed site, and the sources of those risks.
- Identified the receptors (people, animals, property and anything else that could be affected by the hazard) at risk from the site.
- Identified the possible pathways from the sources of the risks to the receptors.

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- Assessed risks relevant to the specific activity and checked that they are acceptable and can be screened out.
- States the measures in place to control risks if they are too high.

A copy of the risk assessment will be contained within the management system.

1.4 Risks from the Site

The risk assessment identifies whether any of the following risks could occur and what the environmental impact could be:

- any discharge, for example sewage or trade effluent to surface or groundwater accidents;
- odour;
- noise and vibration;
- uncontrolled or unintended ('fugitive') emissions, e.g., dust, litter;
- point source emissions to air

Where these are not considered to be significant risks, this is stated in the permit application.

For each risk that applies, each actual or possible hazard was identified and stated:

- the hazard, e.g., dust, litter, type of visible emission.
- the process that causes the hazard, e.g., screening and crushing inert waste.
- the receptors, e.g., people, animals, property and anything else that could be affected by the hazard.
- the pathways, i.e., how the hazard may get to a receptor.
- the measures that will be taken to reduce any risks.
- Probability of exposure, for example whether a risk is unlikely or highly likely.
- consequences, i.e., what harm could be caused.
- what the overall risk is, based on what has already been stated in the table, e.g., 'low when management techniques are applied'.

1.5 Risks from noise and vibration

An assessment of predicted noise levels from the proposed following activities has been carried out for the planning permission and covered the following on-site operations;

- Receipt/ dispatch of waste (vehicle movements)
- Waste treatment

1.6 Identify risk of accidents

Examples of possible accidents include:

- Spillages during the transfer of substances, e.g., loading or unloading vessels.
- plant or equipment failure, e.g., over pressurised tanks and hydraulic pipework.
- vandalism
- flooding
- inadequate bunding around tanks.
- Acceptance of non-permitted waste types.

The risk of accidents was assumed that operator error will occur at least once every 100 times an operation is carried out[1], e.g.

- drop or damage a drum from a forklift.
- have a spillage from a tanker.

1.7 Identify Receptors

All the receptors that are potentially at risk from the site have been identified (Section 3.0:).

[1] Risk assessments for your environmental permit - GOV.UK (www.gov.uk)

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The main receptors that are potentially at risk were given the main focus, e.g., any groundwater beneath the site, and any other ecological and human receptors near the site were also considered.

These receptors included:

- residential receptors
- protected sites and species
- anywhere used to grow food or to farm animals or fish
- drain and sewer systems
- factories and other businesses
- fields and allotments used to grow food
- footpaths
- groundwater beneath the site
- homes, or groups of homes (such as villages or housing developments)
- playing fields and playgrounds
- private drinking water supplies
- regionally important geological sites
- schools, hospitals and other public buildings
- water, e.g., ponds, streams, rivers, lakes or the sea
- conservation and habitats protected areas and areas of scientific interest (SSSIs, SPA, SAC, RAMSAR sites)

The risk assessment includes a scale plan (included in Appendix A) that shows:

- the site boundary (green line)
- the nearby receptors identifed

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Section 2.0: Summary of key parameters

Table 1: Summary of Key Parameters

Parameter	Details
Facility	Four Ashes waste transfer station with treatment
Operator	Aqua Force Special Waste Ltd (Trading as Aquaforce Recycling)
Permit ref	EPR/XP3992FV
Location	Aqua Force Special Waste Ltd Unit 4a, Sprint Industrial Estate Four Ashes Wolverhampton, UK WV10 7ED
NGR	SJ 91777 08529
Location of key environmental sites	See section 3.0
Risk assessment carried out by	Rowena Maitland, Daniel Jones
Date	July 2024
Risk Criteria Summary	
Parameter 1	The site operates a hazardous and non-hazardous waste transfer station with treatment. Treatment consists of the crushing, screening, shredding and bulking plant to process and recycle received waste in the form of electrical and electronic equipment (WEEE) wastes, paint waste, oily rags and protective clothing, airbags, aerosols and minor quantities of asbestos (asbestos is transferred only). Waste is stored prior to and post-treatment before removal from site for onward recovery or disposal.
Parameter 2	Quantity of waste accepted at the facility 29,999 tonnes per annum.
Parameter 3	All waste will be stored and treated within a building, on an impermeable surface with a sealed drainage system (i.e. no access to sewer/ controlled waters).
Parameter 4	There are two licensed discharges to controlled waters recorded: trade discharges and miscellaneous discharges (surface waters) into the Saredon Brook southeast of the site at 485 m and 488m respectively. There are no point source discharges from the Site.
Parameter 5	The activities are carried out within a groundwater source protection zone (SPZ)3, but not within 500 m of any well, spring, borehole used for the supply of water for human consumption, including private water supplies.
Parameter 6	The treatment process is carried out within 250 m of the nearest sensitive receptor.
Parameter 7	The treatment activity is carried out within 500 m of a European Site or a Site of Special Scientific Interest (SSSI).
Parameter 8	Relevant Hazardous Substances (RHS). Due to the variety of wastes accepted, all wastes are conservatively assumed to have the potential to give rise to RHS.

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	A review of the waste categories and potential/'worst case' constituents have been undertaken to assist with the risk assessment. The substances identified as RHS are therefore noted within Appendix B.

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Section 3.0: Summary List of Environmental Receptors

Table 2: List of Environmental Receptors

Site	Distance from site	Details
Designated and non-designated habitats and wildlife sites		
SSSI	258m	There is one SSSI site (Four Ashes SSSI) within 2km of the Site. Four Ashes Pit is located 258 m southwest of the Site permit boundary. The SSSI is designated for its geological importance.
Nitrate Vulnerable Zone (NVZ)		
	0m	Two records, both indicated as being located on-Site, are held on-site for Nitrate Vulnerable Zone (NVZ) relating to River Trent (source to confluence with Derwent) for surface water and Staffordshire for groundwater. Four (4) additional records are presented for the same NVZs within 1 km of the Installation
Conservation Area		
	235m	One record is held for Conservation Areas relating to the Staffordshire and Worcester Canal located 235 m to the northeast of the site.
Priority habitat inventory		
		Deciduous woodland
Groundwater and abstractors		
		Shallow groundwater and bedrock groundwater
Groundwater vulnerability		
		Secondary superficial aquifer – high vulnerability
Source Protection Zones		
		SPZ 3
Water protection zone and status		
		n/a
Soil classification		
		Freely draining slightly acid loamy soils
Surface water		
	>250m	Three surface water features, an unnamed reservoir or lake (c. 164m S), Saredon Brook, a tributary of the River Penk (c. 172m S) and the Staffordshire Cala (c.253m NE).
Flood risk		
		Very low risk from surface water flooding, rivers and the sea. Moderate risk from groundwater flooding
Air Quality Management Area (AQMA)		
		The site is not located within an AQMA

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Section 4.0: Summary List of Sensitive Receptors

Table 3: Identified Sensitive Human Receptors

	Location	Type	Distance /direction from Site (m)	Distance (m)
1.	Industrial units/businesses north of site, north of Station Road	Industrial	0 – 915	N
2.	Industrial units/businesses south of Station Road, west of Enterprise Drive	Industrial	42 – 360	S
3.	Industrial units/businesses east of site, north of Station Road	Industrial	45 – 289	E
4.	Industrial units/businesses south of Station Road, east of Enterprise Drive	Industrial	79 – 588	E
5.	Residential properties along north side of Station Road	Residential	77 – 268	SW
6.	Industrial units/businesses south of Station Road, south of Enterprise Drive	Industrial	212 – 525	SE
7.	Residential properties east of Stafford Road/A449	Residential	317	W
8.	Barr Farm	Commercial	367	SW
9.	The Four Ashes	Commercial	370	SW
10.	Four Ashes Inn	Commercial	380	SW
11.	Four Ashes Substation	Industrial	409	NE
12.	Home Farm	Residential	445 – 561	NE
13.	Residential properties west of Stafford Road/A449	Residential	503	W
14.	Residential properties east of Stafford Road/A449	Residential	615	SW
15.	Residential properties between Vicarage Road and Straight Mile	Residential	636 – 803	NE
16.	Standeford Cafe	Commercial	665	SW
17.	Residential properties northeast of Old Stafford Road	Residential	767 – 890	SW
18.	Farm buildings northwest of Vicarage Road	Commercial	791	NE
19.	Standeford residential properties south of Saredon Brook	Residential	862 – 1000+	SW
20.	The Harrows Inn	Commercial	862	SW
21.	Standeford Christmas Trees	Commercial	884	SW
22.	Residential property west of Deepmore Lane	Residential	897	E

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	Location	Type	Distance /direction from Site (m)	Distance (m)
23.	Standeford Garden Construction	Commercial	916	SW
24.	Residential properties northeast of Old Stafford Road	Residential	920 – 957	SW
25.	Residential properties southwest of Old Stafford Road	Residential	925 – 984	SW
26.	Buildings east of Old Stafford Road	Commercial	960 – 988	SW
27.	Four Ashes Sludge Disposal Works	Industrial	966	E
28.	Property east of Nationwide Transmission Services	Residential	972	SW
29.	Nationwide Transmission Services	Industrial	978	SE
30.	Residential properties west of Deepmore Lane and south of Saredon Brook	Residential	992	E

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Section 5.0: Risk Criteria Rating

Risk ratings are based on the likelihood of an event occurring multiplied by the severity of potential impact. Ratings are made of residual risk following implementation of preventative measures on site. The following scale is applied to rate these parameters:

Table 4: Calculated Risk Criterium

Severity		Likelihood	
1	No environmental harm arising	1	Very unlikely to happen
2	Fleeting localised impacts	2	Low probability/occasional
3	Localised impacts medium term	3	Likely to occur
4	Wider scale impacts of a fleeting nature, or localised impacts of a more persistent nature	4	Highly likely to occur
5	Widespread/persistent impacts on high amenity/sensitive sites	5	Inevitable

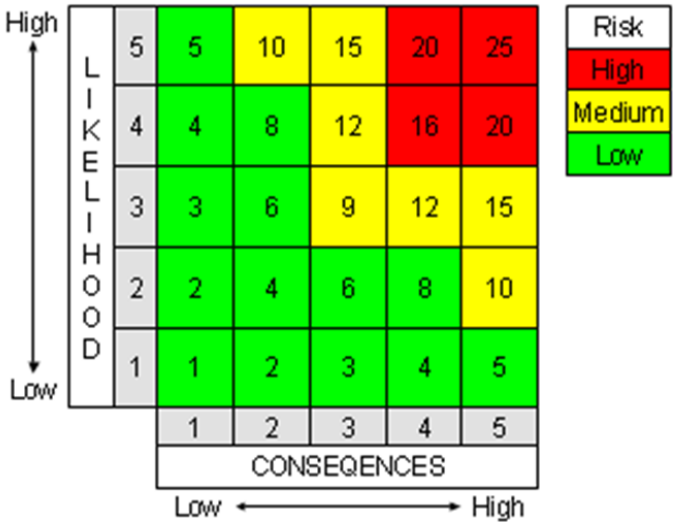

Figure 1: Risk Assessment Matrix

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Table 5: Final Calculated Risk Levels

What do you do that can harm and what could be harmed?			Managing the risk	Assessing the risk		
Hazard	**Receptor**	**Pathway**	**Risk Management**	**Probability of exposure**	**Consequence**	**What is the overall risk?**
What has the potential to cause harm?	***What is at risk? What do I want to protect?***	***How can the hazard get to the receptor?***	***What measures will you take to reduce the risk? Who is responsible for what?***	***How likely is contact (1-5)***	***What is the harm that can be caused? (1-5)***	***What is the risk that still remains?*** ***(Likelihood x Severity)***
Release of dust / particulates (treatment activities)	Local human and ecological receptors	Air – windblown dispersion in the atmosphere	Waste types are not inherently dusty. Wastes will be delivered in sealed containers and unloaded within a building. Treatment activities are undertaken within enclosed plant within a building. Treatment plant with the potential to emit particulates to atmosphere are fitted with particulate filters. The Operator implements a Dust and Emissions Management Plan, which forms part of the EMS. Plant and site will regularly be cleaned, to remove/prevent accumulation of dust and debris. All personnel employed on site will undertake visual monitoring for dust and general housekeeping in accordance with the EMS. Any observed problems will be reported to the Site Manager (SM) who will investigate the cause and implement any necessary remedial action.	Very unlikely to happen 1	Nuisance – dust on cars, clothing and inhalation of dusts 1	**Very low** **1**

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What do you do that can harm and what could be harmed?			Managing the risk	Assessing the risk		
Hazard	**Receptor**	**Pathway**	**Risk Management**	**Probability of exposure**	**Consequence**	**What is the overall risk?**
What has the potential to cause harm?	***What is at risk? What do I want to protect?***	***How can the hazard get to the receptor?***	***What measures will you take to reduce the risk? Who is responsible for what?***	***How likely is contact (1-5)***	***What is the harm that can be caused? (1-5)***	***What is the risk that still remains?*** ***(Likelihood x Severity)***
Mud on roads /surfaces from the movement of vehicles to and from the site	Local human population	Deposited on the ground by vehicles entering and exiting the site	Incoming vehicles unlikely to track mud. Housekeeping practices implemented by the EMS ensure any mud or excessive dust will be cleared up / road sweer hired if required.	Very unlikely to happen 1	No environmental harm arising 1	**Low** **1**
Input material may contain litter.	Local human population	Air – windblown dispersion in the atmosphere	Input material does not typically contain litter. Implementation of waste acceptance procedures control waste inputs. Any office waste generated on site will be stored in sealed bins and removed from site on a regular basis to ensure that volumes of all types of waste do not accumulate on site. Any litter is cleared from any affected areas outside the site as soon as possible. All personnel employed on site will undertake visual monitoring for dust and general housekeeping throughout the working day. Any observed problems will be reported to the SM who will investigate the cause and implement any necessary remedial action.	Very unlikely to happen 1	Nuisance – dust on cars, clothing and inhalation of dusts 1	**Low** 1
	Adjacent land					

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What do you do that can harm and what could be harmed?			Managing the risk	Assessing the risk		
Hazard	**Receptor**	**Pathway**	**Risk Management**	**Probability of exposure**	**Consequence**	**What is the overall risk?**
What has the potential to cause harm?	***What is at risk? What do I want to protect?***	***How can the hazard get to the receptor?***	***What measures will you take to reduce the risk? Who is responsible for what?***	***How likely is contact (1-5)***	***What is the harm that can be caused? (1-5)***	***What is the risk that still remains?*** ***(Likelihood x Severity)***
Odour from delivered input material	Local human population	Air – windblown dispersion in the atmosphere	Input material has a low propensity to produce, or release, odour. All waste with a potential to release odour will arrive in sealed containers.	Odours are unlikely to impact on local receptors as materials are non-odourous. 1	Localised impacts medium term 1	**Low** **1**
Odour from the treatment process	Local human population	Air – windblown dispersion in the atmosphere	Treatment process has a low propensity to produce, or release, odour. Treatment/ repackaging activities are carried out within a building and/or within enclosed plant.	Odours are unlikely to impact on local receptors as materials due to enclosure and low sensitivity of nearby receptors. 1	Localised impacts medium term 1	**Low** 1
Scavenging birds and animals, pests.	Local human and wildlife population	Over land and through the air	Wastes are stored and treated within a building. Operator will undertake housekeeping in line with EMS to keep site clean and tidy.	Waste types typically unattractive to scavengers and pests. Low receptor sensitivity. 1	Nuisance – unlikely 1	Low 1

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What do you do that can harm and what could be harmed?			Managing the risk	Assessing the risk		
Hazard	**Receptor**	**Pathway**	**Risk Management**	**Probability of exposure**	**Consequence**	**What is the overall risk?**
What has the potential to cause harm?	***What is at risk? What do I want to protect?***	***How can the hazard get to the receptor?***	***What measures will you take to reduce the risk? Who is responsible for what?***	***How likely is contact (1-5)***	***What is the harm that can be caused? (1-5)***	***What is the risk that still remains?*** ***(Likelihood x Severity)***
Noise from vehicle movements/ deliveries	Users of highway, local workplaces, and local dwellings.	Air	Vehicles will be turned around efficiently, with least impact on the neighbouring properties and that vehicles are removed from the surrounding roads quickly. Plant (and site surfaces) to be maintained in good order and operated in a manner conducive to not generating unnecessary noise. Reversing alarm sounders on site-based mobile plant to be of the non-tonal type, unless otherwise dictated by health & safety considerations.	Industrial park location is designed for industrial vehicle deliveries. 2	Nuisance from noise. Temporary/ short duration 1	Low 2
Noise/vibration from plant	Local human and wildlife population	Air	All treatment plant sited within building. Plant to be maintained in good order and operated in a manner conducive to not generating unnecessary noise.	Low probability, Site setting within industrial estate is considered not to be sensitive to noise. 2	Nuisance – from noise vibration 1	**Low** 2

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What do you do that can harm and what could be harmed?			Managing the risk	Assessing the risk		
Hazard	**Receptor**	**Pathway**	**Risk Management**	**Probability of exposure**	**Consequence**	**What is the overall risk?**
What has the potential to cause harm?	***What is at risk? What do I want to protect?***	***How can the hazard get to the receptor?***	***What measures will you take to reduce the risk? Who is responsible for what?***	***How likely is contact (1-5)***	***What is the harm that can be caused? (1-5)***	***What is the risk that still remains?*** ***(Likelihood x Severity)***
Delivery of liquid wastes	Ground/groundwater/ surface water	Spillage through ground	All deliveries will be supervised and will take place during normal working hours. Deliveries take place only on a sealed, impermeable concrete area. State of repair of the surface is monitored on a regular basis, and proactive maintenance carried out if necessary.	Low as supervised delivery procedure in place within sealed system. 1	Pollution of watercourse groundwater/land 3	**Low** 3
Storage of fuel/ oil/ chemicals (Relevant Hazardous Substances)	Ground/groundwater/ surface water	Spillage during treatment or transfer - to drain/ground	All chemicals stored with secondary containment (see Appendix C for storage area details) No drains within building. No pathway to ground, surface or ground water. Entrance and exit points to and from buildings protected and bounded by a lipped bund to ensure containment of any leaks or spillages. Risk of spillage/response to spillage dealt with in incident response plan. Tailored spill kit to be kept on site in the locality of deliveries. Tanks inspected on a daily basis by trained personnel.	Very unlikely to happen 1	Pollution of watercourse / groundwater/land 4	**Low** **4**

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What do you do that can harm and what could be harmed?			Managing the risk	Assessing the risk		
Hazard	**Receptor**	**Pathway**	**Risk Management**	**Probability of exposure**	**Consequence**	**What is the overall risk?**
What has the potential to cause harm?	***What is at risk? What do I want to protect?***	***How can the hazard get to the receptor?***	***What measures will you take to reduce the risk? Who is responsible for what?***	***How likely is contact (1-5)***	***What is the harm that can be caused? (1-5)***	***What is the risk that still remains?*** ***(Likelihood x Severity)***
			Emergency Spillage Procedure in place for the case of small and large-scale fuel spills, as described in EMS. Storage plan in place, including matrix describing measures for flammable liquids and gases and their exposure to water, oxidising, etc., as described in EMS.			
Flooding of site	Local human population and local environment	Contaminated flood waters	Site is in an area at very low risk of flooding (Zone 1). Building where waste and dangerous substances are stored is lipped to prevent ingress/egress of liquids. Spill and leak prevention measures as mentioned above are in place.	No history of flooding in the area. Site is within an area identified at very low risk of flooding. 1	Contamination of buildings / natural habitats downstream 1	**Low** **1**
Accidental fire causing the release of polluting materials to air (smoke or fumes), water or land.	Local human population and local environment	Air transport of smoke and combustion products. Firewater runoff from site.	Permitted activities do not include the burning of waste. Plant and equipment are fitted with particulate filters to prevent the occurrence of fire from the presence of combustible dusts within the system. All plant and equipment are modern and are fitted with fire suppression systems.	Low probability / occasional due to waste types and presence of unpermitted batteries within waste received 2	Respiratory irritation, illness and nuisance to local population. Injury to staff, firefighters or vandals. Pollution of water or land. 3	**Low** **6**

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What do you do that can harm and what could be harmed?			Managing the risk	Assessing the risk		
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What has the potential to cause harm?	***What is at risk? What do I want to protect?***	***How can the hazard get to the receptor?***	***What measures will you take to reduce the risk? Who is responsible for what?***	***How likely is contact (1-5)***	***What is the harm that can be caused? (1-5)***	***What is the risk that still remains?*** ***(Likelihood x Severity)***
			Emergency Spillage Procedure in place for the case of small and large-scale fuel spills. Storage plan in place, including matrix describing measures for flammable liquids and gases and their exposure to water, oxidising, etc. Site employs waste pre-acceptance and acceptance procedures to screen for non-permitted wastes and prevent acceptance of batteries or other non-permitted wastes. See measures above for chemical storage and delivery.			
Unauthorised access to site	Bodily injury to person or animal entering site	Direct physical contact	The site is located within a busy industrial estate and encloses a lockable building. Site office entrance is security controlled and kept locked when staff are not present on site. The site is to be fitted with CCTV system so staff are alerted to the presence of intruders. All vehicles/people entering the site will be received by the main reception operator who will be present in the area while the site is open.	Low as site is locked and fenced when not manned. Access to the site is controlled during operating hours. 1	Bodily injury/damage to plant 3	**Low** **3**

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What do you do that can harm and what could be harmed?			Managing the risk	Assessing the risk		
Hazard	**Receptor**	**Pathway**	**Risk Management**	**Probability of exposure**	**Consequence**	**What is the overall risk?**
What has the potential to cause harm?	***What is at risk? What do I want to protect?***	***How can the hazard get to the receptor?***	***What measures will you take to reduce the risk? Who is responsible for what?***	***How likely is contact (1-5)***	***What is the harm that can be caused? (1-5)***	***What is the risk that still remains?*** ***(Likelihood x Severity)***
Arson and / or vandalism causing the release of polluting material to air (smoke or fumes), water or land.	Local human population, staff, firefighters, vandals or local environment.	Air transport of smoke. Firewater runoff from site.	The site is located within a busy industrial estate and encloses a lockable building. Site office entrance is security controlled and kept locked when staff are not present on site. The site is to be fitted with CCTV system so staff are alerted to the presence of intruders. All vehicles/people entering the site will be received by the main reception operator who will be present in the area while the site is open.	Site is secure 1	Respiratory irritation, illness and nuisance to local population. Injury to staff, firefighters or vandals. Pollution of water or land. 3	**Low** **3**
Harm to protected site through, contaminated surface water run-off, smothering, disturbance or predation.	Protected sites - European sites and SSSIs protected species/habitats and other nature conservation sites (LWS)(LNR). Four Ashes SSSI (geological importance)	Any	No pathway between waste and drains and wastes/ stored liquids. All waste storage and treatment activities carried out within building. Waste types do not encourage the presence of pests.	Very unlikely to happen 1	No environmental harm arising 3	**Low** **3**

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Section 6.0: Impact on the Environment

This environmental risk assessment (ERA) has been carried out to assess the environmental risks posed by the proposed variations to the Permit.

It is considered that additional risk posed are predominately related to an increase in throughputs over a larger area. Improvements are planned for the infrastructure on site which aims to reduce, prevent and minimise the risk of adverse impact on the environment as a result of the proposed changes.

The risks identified within this risk assessment (and accompanying Site Condition Report) are considered to be LOW/MODERATE.

The environmental risks of the substances relevant to the proposed Installation have been assessed. The chemistry properties, hazard phrases, mammalian effects, eco-toxicity, bioaccumulation potential and environmental fate have been taken into consideration during the risk assessment.

Operational procedures at the site will monitor and manage amenity and accident risks from the proposed activities and includes provision for the monitoring of odour, noise, and fugitive emissions.

The impact of the proposed development on surrounding human and environmental receptors has been assessed in the ERA.

As the management measures detailed in the risk assessment will be in place from commencement of operations, the conclusion has been reached that the proposed waste materials and treatment activities, are unlikely to result in a significant accident risk or risk to the local environment, including from odour, noise, or pollution of surface or ground waters.

Further work associated with the present activities have been recommended in the Site Condition Report, see Section 8.

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Section 7.0: Site Management

Site management will comprise of the following staff members;

- A Technically Competent Manager (TCM); who will manage the operation and regularly attend site in compliance with the defined attendance requirement.
- A site supervisor; who will be responsible for the ongoing operation who may also undertake office and plant operation duties.
- Other trained plant operators as required.

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Section 8.0: Site Condition Report

The Site Condition Report (SCR), produced as a part of this application for the proposed operation will be focused in its scope on the areas within the newly expanded Installation boundary as well as within the existing Installation boundary.

The proposed facility will operate with due regard to the conditions of the environmental permit and all relevant environmental legislation to ensure that land and groundwater is protected during the lifetime of the site and that the land is in a satisfactory state when the permit is eventually surrendered.

The possibility of any significant releases to the ground occurring during the lifetime of the permit is therefore limited. Minor spillages, if they occur, will be dealt with immediately by trained staff using appropriate spill response procedure and spill kits located around the site.

Based on the data presented within this ASCR the current condition of the Installation and the operations are indicated to present an overall **LOW/MODERATE** pollution risk. However, the Paint and Aerosol Plant which was damaged in a recent fire is considered to represent a **MODERATE/HIGH** risk due to the uncontrolled nature of potential pollutant release.

It is considered that following implementation of environmental management actions as outlined in the recommendations below, the likelihood of pollution can be reduced to **LOW:**

- It is recommended that a program of intrusive investigation works is designed and undertaken to determine the current condition of soil and groundwater within the Existing Installation Area and to gather baseline data for future comparison within the Additional Installation Area.
- It is recommended that a Surface Integrity Risk Assessment is undertaken across the Site.
- It is recommended that a CCTV Survey is undertaken to confirm the condition of the drainage network

A series of recommendations are contained within the Site Condition Report to reduce any potential risk to environment as a result of the Paint and Aerosol Plant fire. It is considered that this risk is separate from the proposed changes going forward and will be dealt with separately.

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Section 9.0: Sources of information

- 315994 Aquaforce Site Condition Report (0.1) [Mabbett Ltd July 2024]
- CE-FA-1921-RP01-EMS-Final v2 [Crestwood Environmental June 2023]
- CE-FA-1921-RP06-DMP-Final v2 [Crestwood Environmental November 2022]

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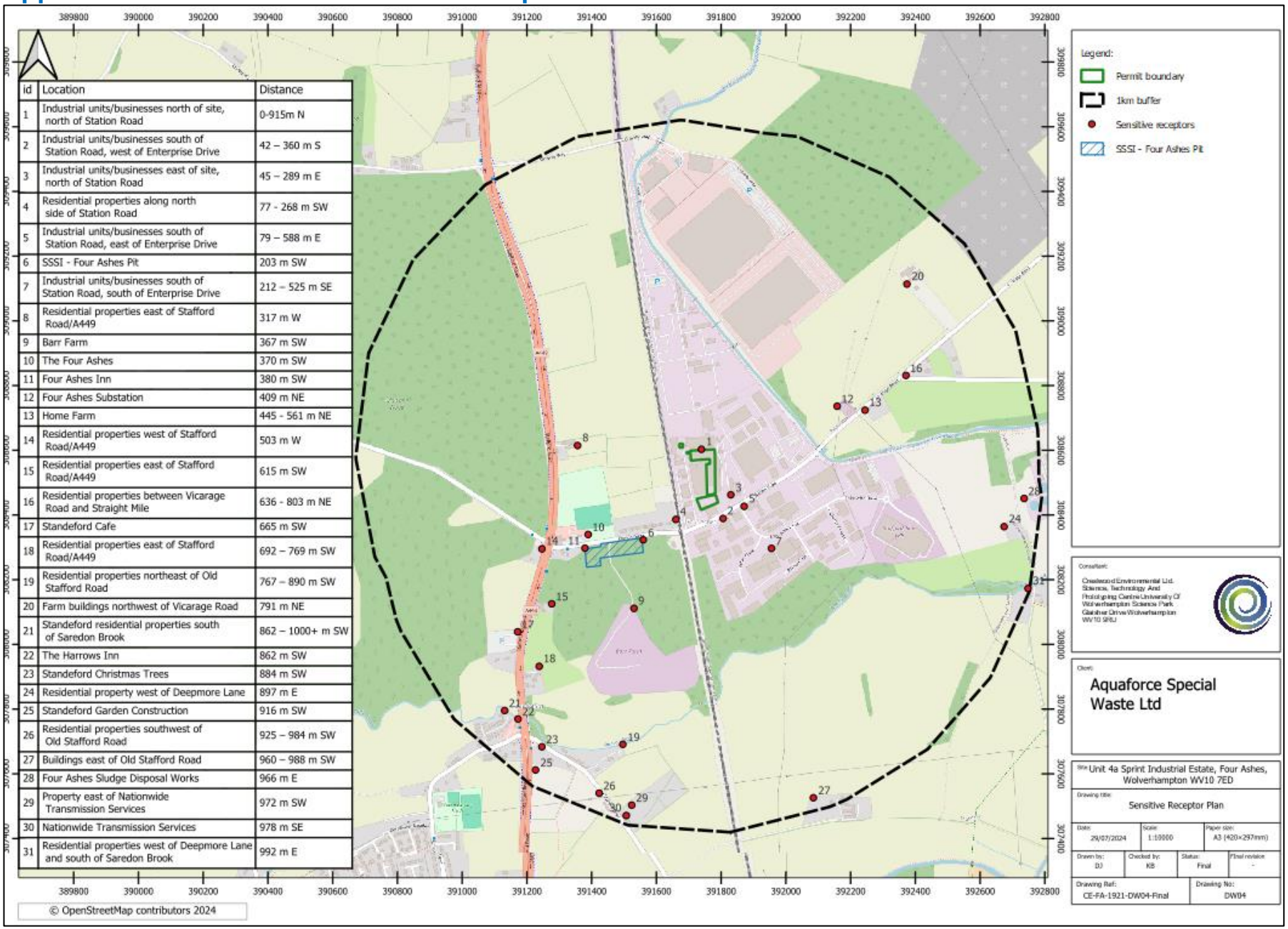
Appendix A: Identified Sensitive Receptor Plan



id	Location	Distance
1	Industrial units/businesses north of site, north of Station Road	0-915m N
2	Industrial units/businesses south of Station Road, west of Enterprise Drive	42 – 360 m S
3	Industrial units/businesses east of site, north of Station Road	45 – 289 m E
4	Residential properties along north side of Station Road	77 - 268 m SW
5	Industrial units/businesses south of Station Road, east of Enterprise Drive	79 – 588 m E
6	SSSI - Four Ashes Pit	203 m SW
7	Industrial units/businesses south of Station Road, south of Enterprise Drive	212 – 525 m SE
8	Residential properties east of Stafford Road/A449	317 m W
9	Barr Farm	367 m SW
10	The Four Ashes	370 m SW
11	Four Ashes Inn	380 m SW
12	Four Ashes Substation	409 m NE
13	Home Farm	445 - 561 m NE
14	Residential properties west of Stafford Road/A449	503 m W
15	Residential properties east of Stafford Road/A449	615 m SW
16	Residential properties between Vicarage Road and Straight Mile	636 - 803 m NE
17	Standeford Cafe	665 m SW
18	Residential properties east of Stafford Road/A449	692 – 769 m SW
19	Residential properties northeast of Old Stafford Road	767 – 890 m SW
20	Farm buildings northwest of Vicarage Road	791 m NE
21	Standeford residential properties south of Saredon Brook	862 – 1000+ m SW
22	The Harrows Inn	862 m SW
23	Standeford Christmas Trees	884 m SW
24	Residential property west of Deepmore Lane	897 m E
25	Standeford Garden Construction	916 m SW
26	Residential properties southwest of Old Stafford Road	925 – 984 m SW
27	Buildings east of Old Stafford Road	960 – 988 m SW
28	Four Ashes Sludge Disposal Works	966 m E
29	Property east of Nationwide Transmission Services	972 m SW
30	Nationwide Transmission Services	978 m SE
31	Residential properties west of Deepmore Lane and south of Saredon Brook	992 m E

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Appendix B: List of Relevant Hazardous Substances

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Chemicals/Substances Handled	Chemical Characteristics and Toxicity										Site Specific Risk		
Substance	**Composition (where available/indicative)**	**Physical state**	**Hazard Code (estimation based on professional judgement)**	**Relevant Hazardous Substance (RHS) (EC Regulation No 1272/2008)**	**Environmental Fate and Behaviour**	**Substance Poses Potential Pollution Risk?**	**Maximum Storage at any One Time Across Facility (Aggregated). May contain wastes from any permitted activity.**	**Maximum Annual Usage/Throughput of Installation**	**Storage arrangements**	**Handling and usage**	**Risk mitigation measures**	**Residual risk? (Chemical of Concern)**	**Substance(s) of Concern Yes/No**
A1 Treatment of Waste Refrigeration Equipment													
Refrigeration Equipment	Chlorofluorocarbons, Hydrochlorofluorcarbons, Hydrofluorocarbons	Gas	H318 Causes serious eye irritation H410 Toxic to aquatic life with long lasting effects H420 Harms public health and the environment by destroying ozone in the upper atmosphere	Likely	Known toxicity to fish. Some bioaccumulation potential.	Yes	5,000 tonnes	11,250 tonnes	Stored directly on area of hardstanding within Existing Installation Area before being manually broken down (partially) and entered into the Fridge Plant. CFC gases stored in tanks before emissions from point A1.	Fridges are partially broken down manually within the Fridge Storage Area to remove shelves, castors etc before entering the Fridge Plant. In a series of stages this removes Compressor Oil, degasses and shreds the carcass into non-hazardous plastic, metal and foam.	Substance stored in appropriate tanks.	Gas is expected to disperse upon accidental release to the environment and is unlikely to impact soil or groundwater. The substance is therefore not considered a chemical of concern.	No
Refrigeration Equipment	Ammonia	Gas	H221 – Flammable gas H280 – Contains gas under pressure; may explode if heated H331 – Toxic if inhaled H314 – Causes severe skin burns and eye damage H318 – Causes serious eye damage H410 – Very toxic to aquatic life with long lasting effects H411 – Toxic to aquatic life with long lasting effects	Likely	Toxicity to aquatic organisms is noted. Substance is biodegradable. Not considered to be bioaccumulative or persistent.	Yes	5,000 tonnes		Stored directly on area of hardstanding within Existing Installation Area before being manually broken down (partially) and entered into the Fridge Plant. CFC gases stored in tanks before emissions from point A1.	Fridges are partially broken down manually within the Fridge Storage Area to remove shelves, castors etc before entering the Fridge Plant. In a series of stages this removes Compressor Oil, degasses and shreds the carcass into non-hazardous plastic, metal and foam.	Substance stored in appropriate tanks.	Gas is expected to disperse upon accidental release to the environment and is unlikely to impact soil or groundwater. The substance is therefore not considered a chemical of concern.	No
Refrigeration Equipment	Compressor Oil	Liquid	H304 – May be fatal if swallowed and enters airways H373 – May cause damage to organs H400 – Very toxic to aquatic life H410 – Very toxic to aquatic life with long lasting effects	Likely	Non readily biodegradable components. Contains bioaccumulative components. Contains components that adsorb onto soils.	Yes	1000 Litres	Unknown	Stored directly on area of hardstanding within Existing Installation Area before being manually broken down (partially) and entered into the Fridge Plant Compressor oil stored in 1000 L IBC adjacent to Fridge Plant once removed from refrigerator equipment.	Fridges are partially broken down manually within the Fridge Storage Area to remove shelves, castors etc before entering the Fridge Plant. In a series of stages this removes Compressor Oil, degasses and shreds the carcass into non-hazardous plastic, metal and foam.	The Installation comprises/will comprise tertiary bunding from the concrete floor and walls and spillages within will be contained and managed using spill kits. However, integrity of hardstanding is currently noted to be variable across the Existing Installation.	Spillages could occur during transport and enter the environment through drains or comprised ground surfacing. The potential maximum quantity and nature of the substance, combined with potential for release to the environment, make this a chemical of concern.	Yes
A2 WEEE Treatment other than waste refrigeration equipment													
Oils containing Polychlorinated Biphenyls (PCBs)	Hydrocarbons PCBs	Liquid	H304 – May be fatal if swallowed and enters airways H373 – May cause damage to organs H400 – Very toxic to aquatic life H410 – Very toxic to aquatic life with long lasting effects	Likely	Non readily biodegradable components. Contains bioaccumulative components. Contains components that adsorb onto soils.	Yes	5,000 tonnes	11,250 tonnes	Will be stored in a designated area and transferred off-site for recovery. No treatment undertaken within the Installation.	Handling and process are undertaken by appropriately trained staff with materials stored in designated areas within the Installation.	The Installation comprises/will comprise tertiary bunding from the concrete floor and walls and spillages within will be contained and managed using spill kits. However, integrity of hardstanding is currently noted to be variable across the Existing Installation.	Spillages could occur during transport and enter the environment through drains or comprised ground surfacing. The potential maximum quantity and nature of the substance, combined with potential for release to the environment, make this a chemical of concern.	Yes
Asbestos containing Equipment	Asbestos	Solid	H350 – May cause cancer H372 – Causes damage to organs	Likely	Known to be stable within the environment and not subject to biodegradation. Not likely to be soluble.	Yes	5,000 tonnes		Asbestos waste will be wrapped and stored in enclosed roll on off bins. Mechanical equipment will not be used to move asbestos waste.	Handling and process are undertaken by appropriately trained staff with materials stored in designated areas within the Installation.	In case of any potential release the spillage will be decontaminated by the suitably licensed asbestos contractor responsible for depositing the waste.	Spillages could occur during transport and enter the environment through comprised ground surfacing. It is considered likely that spillages will be appropriately managed prior to release to the environment therefore not making this a chemical of concern.	No
Fluorescent Tubes and other mercury-containing wastes	Mercury	Liquid	H330 – Fatal if inhaled H360D – May damage the unborn child H370 – Causes damage to organs H410 – Very toxic to aquatic life with long lasting effects	Likely	Known toxicity to fish. Some bioaccumulation potential.	Yes	5,000 tonnes		Will be stored in a designated area and transferred off-site for recovery. No treatment undertaken within the Installation.	Handling and process are undertaken by appropriately trained staff with materials stored in designated areas within the Installation.	The Installation comprises/will comprise tertiary bunding from the concrete floor and walls and spillages within will be contained and managed using spill kits. However, integrity of hardstanding is currently noted to be variable across the Existing Installation.	Spillages could occur during transport and enter the environment through drains or comprised ground surfacing. The potential maximum quantity and nature of the substance, combined with potential for release to the environment, make this a chemical of concern.	Yes
A3 Waste Paint Treatment													
Organic Solvents (either individually received, mixtures or within substances e.g. paints or varnishes)	Conservative/'worst case' can include: Benzene Carbon tetrachloride Trichloroethylene	Liquid	H225 – Highly flammable liquid and vapour H301 – Toxic if swallowed H315 – Causes skin irritation H336 – May cause drowsiness or dizziness H319 – Causes serious eye irritation H340 – May cause genetic defects H350 – May cause cancer H372 – Causes damage to organs H304 – May be fatal if swallowed and enters airways H412 – Harmful to aquatic life with long lasting effects H420 – Harms public health and the environment by destroying ozone in the upper atmosphere	Likely	Substances typically may not biodegrade and may bioaccumulate. Toxicity within the aquatic environment is probable.	Yes	5,000 tonnes	12,500 tonnes	Will be stored in a designated area and transferred off-site for recovery. Water based paints are stored in a bunded storage tank prior to removal from the Site for treatment. Solvent based paints will be transferred to a suitably authorised facility via a bulk tanker.	All paints will be de-packaged and shredded by either the attritor plant for non-hazardous waste or by shredding and crushing of the paint containers in the paint or aerosol/waste plant. Solvent-based paints are bulked for recovery of the solvents for secondary fuels for use in the kilns for the cement industry whilst water-based paints are bulked for treatment off-Site at an authorised facility	The Installation comprises/will comprise tertiary bunding from the concrete floor and walls and spillages within will be contained and managed using spill kits. However, integrity of hardstanding is currently noted to be variable across the Existing Installation. Attritor will also have its own secondary containment capable of containing 110% maximum capacity.	Spillages could occur during transport and enter the environment through drains or comprised ground surfacing. The potential maximum quantity and nature of the substance, combined with potential for release to the environment, make this a chemical of concern.	Yes
Isocyanates	Can include substances such as: Phenyl diisocyanate Toluene diisocyanate Hexamethylene diisocyanate	Liquid	H226 – Flammable liquid and vapour H302 – Harmful if swallowed H330 – Fatal if inhaled H314 – Causes severe skin burns and eye damage H318 – Causes serious eye damage H334 – May cause allergy or asthma symptoms or breathing difficulties if inhaled H317 – May cause an allergic skin reaction H335 – May cause respiratory irritation H400 – Very toxic to aquatic life H410 – Very toxic to aquatic life with long lasting effects	Likely	Substances of this type may exhibit aquatic toxicity and varying degrees of biodegradability. Bioconcentration may occur.	Yes	5,000 tonnes		Will be stored in a designated area and transferred off-site for recovery. Water based paints are stored in a bunded storage tank prior to removal from the Site for treatment. Solvent based paints will be transferred to a suitably authorised facility via a bulk tanker.	All paints will be de-packaged and shredded by either the attritor plant for non-hazardous waste or by shredding and crushing of the paint containers in the paint or aerosol/waste plant. Solvent-based paints are bulked for recovery of the solvents for secondary fuels for use in the kilns for the cement industry whilst water-based paints are bulked for treatment off-Site at an authorised facility	The Installation comprises/will comprise tertiary bunding from the concrete floor and walls and spillages within will be contained and managed using spill kits. However, integrity of hardstanding is currently noted to be variable across the Existing Installation. Attritor will also have its own secondary containment capable of containing 110% maximum capacity.	Spillages could occur during transport and enter the environment through drains or comprised ground surfacing. The potential maximum quantity and nature of the substance, combined with potential for release to the environment, make this a chemical of concern.	Yes

Chemicals/Substances Handled	**Chemical Characteristics and Toxicity**										**Site Specific Risk**		
Substance	**Composition (where available/indicative)**	**Physical state**	**Hazard Code (estimation based on professional judgement)**	**Relevant Hazardous Substance (RHS) (EC Regulation No 1272/2008)**	**Environmental Fate and Behaviour**	**Substance Poses Potential Pollution Risk?**	**Maximum Storage at any One Time Across Facility (Aggregated). May contain wastes from any permitted activity.**	**Maximum Annual Usage/Throughput of Installation**	**Storage arrangements**	**Handling and usage**	**Risk mitigation measures**	**Residual risk? (Chemical of Concern)**	**Substance(s) of Concern Yes/No**
Halogented Solvents	Category most commonly includes: Methylene Chloride Trichloroethylene Trichlorofluoroethane 1,1,1-trichloroethane	Liquid	H315 – Causes skin irritation H319 – Causes serious eye irritation H336 – May cause drowsiness or dizziness H341 – Suspected of causing genetic defects H350 – May cause cancer H412 – Harmful to aquatic life with long lasting effects. H351 – Suspected of causing cancer	Likely	Substances of this type may exhibit aquatic toxicity and varying degrees of biodegradability. Bioconcentration may occur.	Yes	5,000 tonnes		Will be stored in a designated area and transferred off-site for recovery. Water based paints are stored in a bunded storage tank prior to removal from the Site for treatment. Solvent based paints will be transferred to a suitably authorised facility via a bulk tanker.	All paints will be de-packaged and shredded by either the attritor plant for non-hazardous waste or by shredding and crushing of the paint containers in the paint or aerosol/waste plant. Solvent-based paints are bulked for recovery of the solvents for secondary fuels for use in the kilns for the cement industry whilst water-based paints are bulked for treatment off-Site at an authorised facility	The Installation comprises/will comprise tertiary bunding from the concrete floor and walls and spillages within will be contained and managed using spill kits. However, integrity of hardstanding is currently noted to be variable across the Existing Installation. Attritor will also have its own secondary containment capable of containing 110% maximum capacity.	Spillages could occur during transport and enter the environment through drains or comprised ground surfacing. The potential maximum quantity and nature of the substance, combined with potential for release to the environment, make this a chemical of concern.	Yes
Inks, printer toners	May contain trace amounts of metals and organic or aqueous solvents	Solid (Powders)/ Liquid	H315 – Causes skin irritation H319 – Causes serious eye irritation	Likely	Discharge to the aquatic environment should be avoided however readily available data on environmental behaviour is limited.	Yes	5,000 tonnes		Will be stored in a designated area and transferred off-site for recovery. Water based paints are stored in a bunded storage tank prior to removal from the Site for treatment. Solvent based paints will be transferred to a suitably authorised facility via a bulk tanker.	All paints will be de-packaged and shredded by either the attritor plant for non-hazardous waste or by shredding and crushing of the paint containers in the paint or aerosol/waste plant. Solvent-based paints are bulked for recovery of the solvents for secondary fuels for use in the kilns for the cement industry whilst water-based paints are bulked for treatment off-Site at an authorised facility	The Installation comprises/will comprise tertiary bunding from the concrete floor and walls and spillages within will be contained and managed using spill kits. However, integrity of hardstanding is currently noted to be variable across the Existing Installation. Attritor will also have its own secondary containment capable of containing 110% maximum capacity.	Spillages could occur during transport and enter the environment through drains or comprised ground surfacing. The potential maximum quantity and nature of the substance, combined with potential for release to the environment, make this a chemical of concern.	Yes
A4 Waste Repackaging													
Agrochemical Wastes	May include: Pesticides Herbicides Fungicides	Liquids	**The wide variety of substances potentially within this category means a large number of Hazard Codes are likely to apply**	Likely	Variable degradation and bioaccumulation potential. Potentially readily absorbed into soils.	Yes	5,000 tonnes	11,250 tonnes	Repackaging will only occur in the waste reception area when the bulking bund (bunded pallet) is available for that particular waste type. Wastes bulked in IBC. After repackaging wastes will be transported into appropriate separate storage areas.	Bulking and repackaging of liquid wastes into intermediate bulk containers (IBCs) for disposal off site.	Bulking takes place on a secondary bunded pallet and the Installation comprises tertiary bunding from the concrete floor and walls and spillages within will be contained and managed using spill kits. However, integrity of hardstanding is currently noted to be variable across the Existing Installation where Waste Reception is located.	Spillages could occur during transport and enter the environment through drains or comprised ground surfacing. The potential maximum quantity and nature of the substance, combined with potential for release to the environment, make this a chemical of concern.	Yes
Solvents from Paints or Varnishes/ Organic Solvents	Conservative/'worst case' can include: Benzene Carbon tetrachloride Trichloroethylene	Liquid	H225 – Highly flammable liquid and vapour H301 – Toxic if swallowed H315 – Causes skin irritation H336 – May cause drowsiness or dizziness H319 – Causes serious eye irritation H340 – May cause genetic defects H350 – May cause cancer H372 – Causes damage to organs H304 – May be fatal if swallowed and enters airways H412 – Harmful to aquatic life with long lasting effects H420 – Harms public health and the environment by destroying ozone in the upper atmosphere	Likely	Substances typically may not biodegrade and may bioaccumulate. Toxicity within the aquatic environment is probable.	Yes	5,000 tonnes	11,250 tonnes	Repackaging will only occur in the waste reception area when the bulking bund (bunded pallet) is available for that particular waste type. Wastes bulked in IBC. After repackaging wastes will be transported into appropriate separate storage areas.	Bulking and repackaging of liquid wastes into intermediate bulk containers (IBCs) for disposal off site.	Bulking takes place on a secondary bunded pallet and the Installation comprises tertiary bunding from the concrete floor and walls and spillages within will be contained and managed using spill kits. However, integrity of hardstanding is currently noted to be variable across the Existing Installation where Waste Reception is located.	Spillages could occur during transport and enter the environment through drains or comprised ground surfacing. The potential maximum quantity and nature of the substance, combined with potential for release to the environment, make this a chemical of concern.	Yes
Isocyanates	Can include substances such as: Phenyl diisocyanate Toluene diisocyanate Hexamethylene diisocyanate	Liquid	H226 – Flammable liquid and vapour H302 – Harmful if swallowed H330 – Fatal if inhaled H314 – Causes severe skin burns and eye damage H318 – Causes serious eye damage H334 – May cause allergy or asthma symptoms or breathing difficulties if inhaled H317 – May cause an allergic skin reaction H335 – May cause respiratory irritation H400 – Very toxic to aquatic life H410 – Very toxic to aquatic life with long lasting effects	Likely	Substances of this type may exhibit aquatic toxicity and varying degrees of biodegradability. Bioconcentration may occur.	Yes	5,000 tonnes	11,250 tonnes	Repackaging will only occur in the waste reception area when the bulking bund (bunded pallet) is available for that particular waste type. Wastes bulked in IBC. After repackaging wastes will be transported into appropriate separate storage areas.	Bulking and repackaging of liquid wastes into intermediate bulk containers (IBCs) for disposal off site.	Bulking takes place on a secondary bunded pallet and the Installation comprises tertiary bunding from the concrete floor and walls and spillages within will be contained and managed using spill kits. However, integrity of hardstanding is currently noted to be variable across the Existing Installation where Waste Reception is located.	Spillages could occur during transport and enter the environment through drains or comprised ground surfacing. The potential maximum quantity and nature of the substance, combined with potential for release to the environment, make this a chemical of concern.	Yes
Total Petroleum Hydrocarbons (TPHs)	E.g. Gasoline, Petroleum naphtha fraction	Liquid	H224 – Extremely flammable liquid and vapour H304 – May be fatal if swallowed and enters airways H315 – Causes skin irritation H340 – May cause genetic defects H350 – May cause cancer H361fd – Suspected of damaging fertility. Suspected of damaging the unborn child H336 – May cause drowsiness or dizziness H410 – Very toxic to aquatic life with long lasting effects	Likely	Very toxic to aquatic life with long lasting effects. Has the potential to be inherently biodegradable. Known to lie on water (Light Non-aqueous phase liquid (LNAPL)) and will partly evaporate from water or soil surfaces. Large volumes may penetrate soil and could contamination groundwater. Films formed on water may affect oxygen transfer and damage organisms.	Yes	5,000 tonnes	11,250 tonnes	Repackaging will only occur in the waste reception area when the bulking bund (bunded pallet) is available for that particular waste type. Wastes bulked in IBC. After repackaging wastes will be transported into appropriate separate storage areas.	Bulking and repackaging of liquid wastes into intermediate bulk containers (IBCs) for disposal off site.	Bulking takes place on a secondary bunded pallet and the Installation comprises tertiary bunding from the concrete floor and walls and spillages within will be contained and managed using spill kits. However, integrity of hardstanding is currently noted to be variable across the Existing Installation where Waste Reception is located.	Spillages could occur during transport and enter the environment through drains or comprised ground surfacing. The potential maximum quantity and nature of the substance, combined with potential for release to the environment, make this a chemical of concern.	Yes
TPHs containing PCBs	Hydrocarbons PCBs	Liquid	H304 – May be fatal if swallowed and enters airways H373 – May cause damage to organs H350 – May cause cancer H361d – Suspected of damaging the unborn child H372 – Causes damage to organs H400 – Very toxic to aquatic life H410 – Very toxic to aquatic life with long lasting effects	Likely	Non readily biodegradable components. Contains bioaccumulative components. Contains components that adsorb onto soils.	Yes	5,000 tonnes	11,250 tonnes	Repackaging will only occur in the waste reception area when the bulking bund (bunded pallet) is available for that particular waste type. Wastes bulked in IBC. After repackaging wastes will be transported into appropriate separate storage areas.	Bulking and repackaging of liquid wastes into intermediate bulk containers (IBCs) for disposal off site.	Bulking takes place on a secondary bunded pallet and the Installation comprises tertiary bunding from the concrete floor and walls and spillages within will be contained and managed using spill kits. However, integrity of hardstanding is currently noted to be variable across the Existing Installation where Waste Reception is located.	Spillages could occur during transport and enter the environment through drains or comprised ground surfacing. The potential maximum quantity and nature of the substance, combined with potential for release to the environment, make this a chemical of concern.	Yes

Chemicals/Substances Handled	**Chemical Characteristics and Toxicity**										**Site Specific Risk**		
Substance	**Composition (where available/indicative)**	**Physical state**	**Hazard Code (estimation based on professional judgement)**	**Relevant Hazardous Substance (RHS) (EC Regulation No 1272/2008)**	**Environmental Fate and Behaviour**	**Substance Poses Potential Pollution Risk?**	**Maximum Storage at any One Time Across Facility (Aggregated). May contain wastes from any permitted activity.**	**Maximum Annual Usage/Throughput of Installation**	**Storage arrangements**	**Handling and usage**	**Risk mitigation measures**	**Residual risk? (Chemical of Concern)**	**Substance(s) of Concern Yes/No**
Organic Laboratory Chemicals	**The wide variety of substances potentially within this category means it is not possible to define with certainty a conclusive list of potential components. This likely variety should be accounted for in corresponding risk assessments.**	Liquid	**The wide variety of substances potentially within this category means a large number of Hazard Codes are likely to apply**	Likely	Substances can be dangerous to aquatic life and the environment. May not be biodegradable with potential for bioaccumulation. Fate and behaviour of individual substances may vary.	Yes	5,000 tonnes	11,250 tonnes	Repackaging will only occur in the waste reception area when the bulking bund (bunded pallet) is available for that particular waste type. Wastes bulked in IBC. After repackaging wastes will be transported into appropriate separate storage areas.	Bulking and repackaging of liquid wastes into intermediate bulk containers (IBCs) for disposal off site.	Bulking takes place on a secondary bunded pallet and the Installation comprises tertiary bunding from the concrete floor and walls and spillages within will be contained and managed using spill kits. However, integrity of hardstanding is currently noted to be variable across the Existing Installation where Waste Reception is located.	Spillages could occur during transport and enter the environment through drains or comprised ground surfacing. The potential maximum quantity and nature of the substance, combined with potential for release to the environment, make this a chemical of concern.	Yes
Inorganic Laboratory Chemicals	**The wide variety of substances potentially within this category means it is not possible to define with certainty a conclusive list of potential components. This likely variety should be accounted for in corresponding risk assessments.**	Liquid	**The wide variety of substances potentially within this category means a large number of Hazard Codes are likely to apply**	Likely	Substances can be dangerous to aquatic life and the environment. May not be biodegradable with potential for bioaccumulation. Fate and behaviour of individual substances may vary.	Yes	5,000 tonnes	11,250 tonnes	Repackaging will only occur in the waste reception area when the bulking bund (bunded pallet) is available for that particular waste type. Wastes bulked in IBC. After repackaging wastes will be transported into appropriate separate storage areas.	Bulking and repackaging of liquid wastes into intermediate bulk containers (IBCs) for disposal off site.	Bulking takes place on a secondary bunded pallet and the Installation comprises tertiary bunding from the concrete floor and walls and spillages within will be contained and managed using spill kits. However, integrity of hardstanding is currently noted to be variable across the Existing Installation where Waste Reception is located.	Spillages could occur during transport and enter the environment through drains or comprised ground surfacing. The potential maximum quantity and nature of the substance, combined with potential for release to the environment, make this a chemical of concern.	Yes
Acids/Alkalis	pH	Liquid	H290 – May be corrosive to metals H314 – Causes severe skin burns and eye damage H318 – Causes serious eye damage H335 – May cause respiratory irritation	Likely	Variation in the pH levels of soils and waters can affect soil fertility and lead to a decline in fish populations. Aquatic plants and insects forming part of the aquatic food chain may also be negatively affected.	Yes	5,000 tonnes	11,250 tonnes	Repackaging will only occur in the waste reception area when the bulking bund (bunded pallet) is available for that particular waste type. Wastes bulked in IBC. After repackaging wastes will be transported into appropriate separate storage areas.	Bulking and repackaging of liquid wastes into intermediate bulk containers (IBCs) for disposal off site.	Bulking takes place on a secondary bunded pallet and the Installation comprises tertiary bunding from the concrete floor and walls and spillages within will be contained and managed using spill kits. However, integrity of hardstanding is currently noted to be variable across the Existing Installation where Waste Reception is located.	Spillages could occur during transport and enter the environment through drains or comprised ground surfacing. The potential maximum quantity and nature of the substance, combined with potential for release to the environment, make this a chemical of concern.	Yes
Wood Preservatives	Can include substances such as: Organometallics (copper naphthenate) Ammonium phosphates Zinc chloride Boric acid	Liquid	H302 – Harmful if swallowed H315 – Causes skin irritation H319 – Causes serious eye irritation H335 – May cause respiratory irritation H400 – Very toxic to aquatic life	Likely	Substances may contribute to the eutrophcation of drinking water supplies.	Yes	5,000 tonnes	11,250 tonnes	Repackaging will only occur in the waste reception area when the bulking bund (bunded pallet) is available for that particular waste type. Wastes bulked in IBC. After repackaging wastes will be transported into appropriate separate storage areas.	Bulking and repackaging of liquid wastes into intermediate bulk containers (IBCs) for disposal off site.	Bulking takes place on a secondary bunded pallet and the Installation comprises tertiary bunding from the concrete floor and walls and spillages within will be contained and managed using spill kits. However, integrity of hardstanding is currently noted to be variable across the Existing Installation where Waste Reception is located.	Spillages could occur during transport and enter the environment through drains or comprised ground surfacing. The potential maximum quantity and nature of the substance, combined with potential for release to the environment, make this a chemical of concern.	Yes
Pigments, dyes, etc	May contain trace amounts of metals and organic or aqueous solvents	Liquid	**The wide variety of substances potentially within this category means a large number of Hazard Codes are likely to apply**	Likely	Discharge to the aquatic environment should be avoided however readily available data on environmental behaviour is limited.	Yes	5,000 tonnes	11,250 tonnes	Repackaging will only occur in the waste reception area when the bulking bund (bunded pallet) is available for that particular waste type. Wastes bulked in IBC. After repackaging wastes will be transported into appropriate separate storage areas.	Bulking and repackaging of liquid wastes into intermediate bulk containers (IBCs) for disposal off site.	Bulking takes place on a secondary bunded pallet and the Installation comprises tertiary bunding from the concrete floor and walls and spillages within will be contained and managed using spill kits. However, integrity of hardstanding is currently noted to be variable across the Existing Installation where Waste Reception is located.	Spillages could occur during transport and enter the environment through drains or comprised ground surfacing. The potential maximum quantity and nature of the substance, combined with potential for release to the environment, make this a chemical of concern.	Yes
Wastes containing metals	Including heavy metals, metal oxides, etc	Liquids	**The wide variety of substances potentially within this category means a large number of Hazard Codes are likely to apply**	Likely	Substances can be dangerous to aquatic life and the environment. May not be biodegradable with potential for bioaccumulation. Fate and behaviour of individual substances may vary.	Yes	5,000 tonnes	11,250 tonnes	Repackaging will only occur in the waste reception area when the bulking bund (bunded pallet) is available for that particular waste type. Wastes bulked in IBC. After repackaging wastes will be transported into appropriate separate storage areas.	Bulking and repackaging of liquid wastes into intermediate bulk containers (IBCs) for disposal off site.	Bulking takes place on a secondary bunded pallet and the Installation comprises tertiary bunding from the concrete floor and walls and spillages within will be contained and managed using spill kits. However, integrity of hardstanding is currently noted to be variable across the Existing Installation where Waste Reception is located.	Spillages could occur during transport and enter the environment through drains or comprised ground surfacing. The potential maximum quantity and nature of the substance, combined with potential for release to the environment, make this a chemical of concern.	Yes
Oil containing drilling mud/waste	Hydrocarbons	Liquid	H224 – Extremely flammable liquid and vapour H304 – May be fatal if swallowed and enters airways H315 – Causes skin irritation H340 – May cause genetic defects H350 – May cause cancer H361fd – Suspected of damaging fertility. Suspected of damaging the unborn child H336 – May cause drowsiness or dizziness H410 – Very toxic to aquatic life with long lasting effects	Likely	Very toxic to aquatic life with long lasting effects. Has the potential to be inherently biodegradable. Known to lie on water (Light Non-aqueous phase liquid (LNAPL)) and will partly evaporate from water or soil surfaces. Large volumes may penetrate soil and could contamination groundwater. Films formed on water may affect oxygen transfer and damage organisms.	Yes	5,000 tonnes	11,250 tonnes	Repackaging will only occur in the waste reception area when the bulking bund (bunded pallet) is available for that particular waste type. Wastes bulked in IBC. After repackaging wastes will be transported into appropriate separate storage areas.	Bulking and repackaging of liquid wastes into intermediate bulk containers (IBCs) for disposal off site.	Bulking takes place on a secondary bunded pallet and the Installation comprises tertiary bunding from the concrete floor and walls and spillages within will be contained and managed using spill kits. However, integrity of hardstanding is currently noted to be variable across the Existing Installation where Waste Reception is located.	Spillages could occur during transport and enter the environment through drains or comprised ground surfacing. The potential maximum quantity and nature of the substance, combined with potential for release to the environment, make this a chemical of concern.	Yes

Chemicals/Substances Handled	Chemical Characteristics and Toxicity										Site Specific Risk		
Substance	**Composition (where available/indicative)**	**Physical state**	**Hazard Code (estimation based on professional judgement)**	**Relevant Hazardous Substance (RHS) (EC Regulation No 1272/2008)**	**Environmental Fate and Behaviour**	**Substance Poses Potential Pollution Risk?**	**Maximum Storage at any One Time Across Facility (Aggregated). May contain wastes from any permitted activity.**	**Maximum Annual Usage/Throughput of Installation**	**Storage arrangements**	**Handling and usage**	**Risk mitigation measures**	**Residual risk? (Chemical of Concern)**	**Substance(s) of Concern Yes/No**
Acid Alkyl Sludge	Heavy hydrocarbons sulfuric acid	Viscous Liquid	H224 – Extremely flammable liquid and vapour H304 – May be fatal if swallowed and enters airways H315 – Causes skin irritation H340 – May cause genetic defects H350 – May cause cancer H361fd – Suspected of damaging fertility. Suspected of damaging the unborn child H336 – May cause drowsiness or dizziness H410 – Very toxic to aquatic life with long lasting effects	Likely	Very toxic to aquatic life with long lasting effects. Has the potential to be inherently biodegradable. Known to lie on water (Light Non-aqueous phase liquid (LNAPL)) and will partly evaporate from water or soil surfaces. Large volumes may penetrate soil and could contamination groundwater. Films formed on water may affect oxygen transfer and damage organisms.	Yes	5,000 tonnes	11,250 tonnes	Repackaging will only occur in the waste reception area when the bulking bund (bunded pallet) is available for that particular waste type. Wastes bulked in IBC. After repackaging wastes will be transported into appropriate separate storage areas.	Bulking and repackaging of liquid wastes into intermediate bulk containers (IBCs) for disposal off site.	Bulking takes place on a secondary bunded pallet and the Installation comprises tertiary bunding from the concrete floor and walls and spillages within will be contained and managed using spill kits. However, integrity of hardstanding is currently noted to be variable across the Existing Installation where Waste Reception is located.	Spillages could occur during transport and enter the environment through drains or comprised ground surfacing. The potential maximum quantity and nature of the substance, combined with potential for release to the environment, make this a chemical of concern.	Yes
Wastes containing/comprising Mercury	Mercury	Liquid	H330 – Fatal if inhaled H360D – May damage the unborn child H372 – Causes damage to organs H400 – Very toxic to aquatic life H410 – Very toxic to aquatic life with long lasting effects	Likely	Known toxicity to fish. Some bioaccumulation potential.	Yes	5,000 tonnes	11,250 tonnes	Repackaging will only occur in the waste reception area when the bulking bund (bunded pallet) is available for that particular waste type. Wastes bulked in IBC. After repackaging wastes will be transported into appropriate separate storage areas.	Bulking and repackaging of liquid wastes into intermediate bulk containers (IBCs) for disposal off site.	Bulking takes place on a secondary bunded pallet and the Installation comprises tertiary bunding from the concrete floor and walls and spillages within will be contained and managed using spill kits. However, integrity of hardstanding is currently noted to be variable across the Existing Installation where Waste Reception is located.	Spillages could occur during transport and enter the environment through drains or comprised ground surfacing. The potential maximum quantity and nature of the substance, combined with potential for release to the environment, make this a chemical of concern.	Yes
Acids	Sulphuric acid Hydrochloric acid Hydrofluoric acid	Liquid	H290 – May be corrosive to metals H314 – Causes severe skin burns and eye damage H318 – Causes serious eye damage H335 – May cause respiratory irritation	Likely	Variation in the pH levels of soils and waters can affect soil fertility and lead to a decline in fish populations. Aquatic plants and insects forming part of the aquatic food chain may also be negatively affected.	Yes	5,000 tonnes	11,250 tonnes	Repackaging will only occur in the waste reception area when the bulking bund (bunded pallet) is available for that particular waste type. Wastes bulked in IBC. After repackaging wastes will be transported into appropriate separate storage areas.	Bulking and repackaging of liquid wastes into intermediate bulk containers (IBCs) for disposal off site.	Bulking takes place on a secondary bunded pallet and the Installation comprises tertiary bunding from the concrete floor and walls and spillages within will be contained and managed using spill kits. However, integrity of hardstanding is currently noted to be variable across the Existing Installation where Waste Reception is located.	Spillages could occur during transport and enter the environment through drains or comprised ground surfacing. The potential maximum quantity and nature of the substance, combined with potential for release to the environment, make this a chemical of concern.	Yes
PFAS/PFOS containing wastes (the ubiquity of these substances means they may be found in a large proportion of wastes including, but not limited to wastes from fabric industries, soil and sludges, municipal wastes, sludges from urban waste water treatment)	PFAS/PFOS potentially including: Perfluorooctanoic acid	Liquid	H351 – Suspected of causing cancer H360 – May damage fertility or the unborn child H372 – Causes damage to organs	Likely	Known to persist within the environment. Wide variety of substances within this classification exhibit a range of environmental behaviours.	Yes	5,000 tonnes	11,250 tonnes	Repackaging will only occur in the waste reception area when the bulking bund (bunded pallet) is available for that particular waste type. Wastes bulked in IBC. After repackaging wastes will be transported into appropriate separate storage areas.	Bulking and repackaging of liquid wastes into intermediate bulk containers (IBCs) for disposal off site.	Bulking takes place on a secondary bunded pallet and the Installation comprises tertiary bunding from the concrete floor and walls and spillages within will be contained and managed using spill kits. However, integrity of hardstanding is currently noted to be variable across the Existing Installation where Waste Reception is located.	Spillages could occur during transport and enter the environment through drains or comprised ground surfacing. The potential maximum quantity and nature of the substance, combined with potential for release to the environment, make this a chemical of concern.	Yes
A6 Airbag Waste Treatment													
Substances arising from waste airbags	Sodium azide	Solid	H300 – Fatal if swallowed H310 – Fatal in contact with skin H330 – Fatal if inhaled H400 – Very toxic to aquatic life H410 – Very toxic to aquatic life with long lasting effects	Likely	Known toxicity to aquatic environment.	Yes	5,000 tonnes	2,500 tonnes	Stored in a 15 m2 waste storage bay within IBCs placed on pallets or directly onto hardstanding.	Handling and process are undertaken by appropriately trained staff with materials stored in designated areas within the Installation.	The Installation comprises/will comprise tertiary bunding from the concrete floor and walls and spillages within will be contained and managed using spill kits. However, integrity of hardstanding is currently noted to be variable across the Existing Installation.	Spillages could occur during transport however as the substance is a solid spillages should be easily managed and contained. This is therefore not considered a chemical of concern.	No
A7 Storage and transfer of Hazardous Waste													
Agrochemical Wastes	May include: Pesticides Herbicides Fungicides	Solid/ Liquids	**The wide variety of substances potentially within this category means a large number of Hazard Codes are likely to apply**	Likely	Variable degradation and bioaccumulation potential. Potentially readily absorbed into soils.	Yes	5,000 tonnes		Hazardous wastes will be strictly segregated from each other to avoid the mixing of the two. Additionally, hazardous wastes will be stored and treated separately from all other waste streams accepted at the Installation.	Handling and process are undertaken by appropriately trained staff with materials stored in designated areas within the Installation such as specific waste storage bays and bunded 800 litre cages.	The Installation comprises/will comprise tertiary bunding from the concrete floor and walls and spillages within will be contained and managed using spill kits. However, integrity of hardstanding is currently noted to be variable across the Existing Installation.	Spillages could occur during transport and enter the environment through drains or comprised ground surfacing. The potential maximum quantity and nature of the substance, combined with potential for release to the environment, make this a chemical of concern.	Yes
Total Petroleum Hydrocarbons (TPHs)	E.g. Gasoline, Petroleum naphtha fraction	Liquid	H224 – Extremely flammable liquid and vapour H304 – May be fatal if swallowed and enters airways H315 – Causes skin irritation H340 – May cause genetic defects H350 – May cause cancer H361fd – Suspected of damaging fertility. Suspected of damaging the unborn child H336 – May cause drowsiness or dizziness H410 – Very toxic to aquatic life with long lasting effects	Likely	Very toxic to aquatic life with long lasting effects. Has the potential to be inherently biodegradable. Known to lie on water (Light Non-aqueous phase liquid (LNAPL)) and will partly evaporate from water or soil surfaces. Large volumes may penetrate soil and could contamination groundwater. Films formed on water may affect oxygen transfer and damage organisms.	Yes	5,000 tonnes		Hazardous wastes will be strictly segregated from each other to avoid the mixing of the two. Additionally, hazardous wastes will be stored and treated separately from all other waste streams accepted at the Installation.	Handling and process are undertaken by appropriately trained staff with materials stored in designated areas within the Installation such as specific waste storage bays and bunded 800 litre cages.	The Installation comprises/will comprise tertiary bunding from the concrete floor and walls and spillages within will be contained and managed using spill kits. However, integrity of hardstanding is currently noted to be variable across the Existing Installation.	Spillages could occur during transport and enter the environment through drains or comprised ground surfacing. The potential maximum quantity and nature of the substance, combined with potential for release to the environment, make this a chemical of concern.	Yes
Asbestos containing Equipment	Asbestos	Solid	H350 – May cause cancer H372 – Causes damage to organs	Likely	Known to be stable within the environment and not subject to biodegradation. Not likely to be soluble.	Yes	5,000 tonnes		Asbestos waste will be wrapped and stored in enclosed roll on off bins. Mechanical equipment will not be used to move asbestos waste.	Handling and process are undertaken by appropriately trained staff with materials stored in designated areas within the Installation.	In case of any potential release the spillage will be decontaminated by the suitably licensed asbestos contractor responsible for depositing the waste.	Spillages could occur during transport and enter the environment through comprised ground surfacing. It is considered likely that spillages will be appropriately managed prior to release to the environment therefore not making this a chemical of concern.	No

Chemicals/Substances Handled	**Chemical Characteristics and Toxicity**										**Site Specific Risk**		
Substance	**Composition (where available/indicative)**	**Physical state**	**Hazard Code (estimation based on professional judgement)**	**Relevant Hazardous Substance (RHS) (EC Regulation No 1272/2008)**	**Environmental Fate and Behaviour**	**Substance Poses Potential Pollution Risk?**	**Maximum Storage at any One Time Across Facility (Aggregated). May contain wastes from any permitted activity.**	**Maximum Annual Usage/Throughput of Installation**	**Storage arrangements**	**Handling and usage**	**Risk mitigation measures**	**Residual risk? (Chemical of Concern)**	**Substance(s) of Concern Yes/No**
Inorganic and Organic Wastes	**The wide variety of substances potentially within this category means it is not possible to define with certainty a conclusive list of potential components. This likely variety should be accounted for in corresponding risk assessments.**	Solid/ Liquids	**The wide variety of substances potentially within this category means a large number of Hazard Codes are likely to apply**	Likely	Substances can be dangerous to aquatic life and the environment. May not be biodegradable with potential for bioaccumulation. Fate and behaviour of individual substances may vary.	Yes	5,000 tonnes	29,999 tonnes	Hazardous wastes will be strictly segregated from each other to avoid the mixing of the two. Additionally, hazardous wastes will be stored and treated separately from all other waste streams accepted at the Installation. Stored in bunded bays within IBCs or drums.	Handling and process are undertaken by appropriately trained staff with materials stored in designated areas within the Installation such as specific waste storage bays and bunded 800 litre cages.	The Installation comprises/will comprise tertiary bunding from the concrete floor and walls and spillages within will be contained and managed using spill kits. However, integrity of hardstanding is currently noted to be variable across the Existing Installation.	Spillages could occur during transport and enter the environment through drains or comprised ground surfacing. The potential maximum quantity and nature of the substance, combined with potential for release to the environment, make this a chemical of concern.	Yes
Laboratory Chemicals	**The wide variety of substances potentially within this category means it is not possible to define with certainty a conclusive list of potential components. This likely variety should be accounted for in corresponding risk assessments.**	Solid/ Liquids	**The wide variety of substances potentially within this category means a large number of Hazard Codes are likely to apply**	Likely	Substances can be dangerous to aquatic life and the environment. May not be biodegradable with potential for bioaccumulation. Fate and behaviour of individual substances may vary.	Yes	5,000 tonnes		Hazardous wastes will be strictly segregated from each other to avoid the mixing of the two. Additionally, hazardous wastes will be stored and treated separately from all other waste streams accepted at the Installation. Stored in bunded bays within IBCs or drums.	Handling and process are undertaken by appropriately trained staff with materials stored in designated areas within the Installation such as specific waste storage bays and bunded 800 litre cages.	The Installation comprises/will comprise tertiary bunding from the concrete floor and walls and spillages within will be contained and managed using spill kits. However, integrity of hardstanding is currently noted to be variable across the Existing Installation.	Spillages could occur during transport and enter the environment through drains or comprised ground surfacing. The potential maximum quantity and nature of the substance, combined with potential for release to the environment, make this a chemical of concern.	Yes
Waste arising from Batteries	Lead, Nickel, Cadmium, Mercury	Solid/Liquids	May include: H302 – Harmful if swallowed H332 – Harmful if inhaled H350 – May cause cancer H360 – May damage fertility or the unborn child H373 – May cause damage to organs H400 – Very toxic to aquatic life H410 – Very toxic to aquatic life with long lasting effects	Likely	Substances can be dangerous to aquatic life and the environment. May not be biodegradable with potential for bioaccumulation. Fate and behaviour of individual substances may vary.	Yes	5,000 tonnes		All batteries are segregated and stored according to type. This includes the segregation of Nickel Cadmium, Lithium, Lithium ion, etc based upon the chemical and hazardous nature of each unit. As lithium batteries contain flammable lithium metal, they are considered to be a potential fire risk. It is necessary to segregate these in poly-lined containers to avoid potential sparking and discharge.	No battery treatment takes place on the Site. Segregated batteries are stored prior to the transfer to an Authorised Battery Treatment Operator (ABTO).Handling and process are undertaken by appropriately trained staff with materials stored in designated areas within the Installation.	The Installation comprises/will comprise tertiary bunding from the concrete floor and walls and spillages within will be contained and managed using spill kits. However, integrity of hardstanding is currently noted to be variable across the Existing Installation.	Spillages could occur during transport and enter the environment through drains or comprised ground surfacing. The potential maximum quantity and nature of the substance, combined with potential for release to the environment, make this a chemical of concern.	Yes
Wood Preservatives	Can include substances such as: Organometallics (copper naphthenate) Ammonium phosphates Zinc chloride Boric acid	Liquid/Solid	H302 – Harmful if swallowed H315 – Causes skin irritation H319 – Causes serious eye irritation H335 – May cause respiratory irritation H400 – Very toxic to aquatic life	Likely	Substances may contribute to the eutrophcation of drinking water supplies.	Yes	5,000 tonnes		Hazardous wastes will be strictly segregated from each other to avoid the mixing of the two. Additionally, hazardous wastes will be stored and treated separately from all other waste streams accepted at the Installation. Stored in bunded bays within IBCs or drums.	Handling and process are undertaken by appropriately trained staff with materials stored in designated areas within the Installation such as specific waste storage bays and bunded 800 litre cages.	The Installation comprises/will comprise tertiary bunding from the concrete floor and walls and spillages within will be contained and managed using spill kits. However, integrity of hardstanding is currently noted to be variable across the Existing Installation.	Spillages could occur during transport and enter the environment through drains or comprised ground surfacing. The potential maximum quantity and nature of the substance, combined with potential for release to the environment, make this a chemical of concern.	Yes
Tars, Ash	PAHs	Solid	H350 – May cause cancer H317 – May cause an allergic skin reaction H340 – May cause genetic defects H360 – May damage fertility or the unborn child H410 – Very toxic to aquatic life with long lasting effects	Likely	Known toxicity of substances to aquatic environment. Aquatic Fate: When deposited in water PAHs sink to the bottom of lakes and rivers. Some will move though the soil to contaminate groundwater. PAHs are ubiquitous in the marine environment, occurring at their highest environmental concentrations around urban centres. The availability of organic carbon controls, to a large extent, the partitioning behaviour of PAHs in sediment. Mixed microbial populations in sediment/water systems may degrade some PAHs, with degradation progressively decreasing with increasing molecular weight. Terrestrial Fate: The rate of degradation is dependent on nutrient content and the bacterial community in soil. PAHs in soils undergo a weathering process such that the lighter chain fractions are removed (primarily by volatilization). Heavier fractions bind to soil organic matter and remain behind in the top soil horizon. As the mixture of PAHs age, bioavailability changes as the fraction remaining bind more tightly. In general, the more soluble a PAH, the higher the uptake by plants while the reverse is true for uptake by earthworms and uptake in the gastrointestinal tract of animals. Persistence and bioaccumulative potential ranges from low to high. Mobility in soil is generally low.	Yes	5,000 tonnes		Hazardous wastes will be strictly segregated from each other to avoid the mixing of the two. Additionally, hazardous wastes will be stored and treated separately from all other waste streams accepted at the Installation. Stored in bunded bays within IBCs or drums.	Handling and process are undertaken by appropriately trained staff with materials stored in designated areas within the Installation such as specific waste storage bays and bunded 800 litre cages.	The Installation comprises/will comprise tertiary bunding from the concrete floor and walls and spillages within will be contained and managed using spill kits. However, integrity of hardstanding is currently noted to be variable across the Existing Installation.	Spillages could occur during transport and enter the environment through drains or comprised ground surfacing. The potential maximum quantity and nature of the substance, combined with potential for release to the environment, make this a chemical of concern.	Yes
Wastes containing/comprising Mercury	Mercury	Liquid	H330 – Fatal if inhaled H360D – May damage the unborn child H372 – Causes damage to organs H400 – Very toxic to aquatic life H410 – Very toxic to aquatic life with long lasting effects	Likely	Known toxicity to fish. Some bioaccumulation potential.	Yes	5,000 tonnes		Hazardous wastes will be strictly segregated from each other to avoid the mixing of the two. Additionally, hazardous wastes will be stored and treated separately from all other waste streams accepted at the Installation. Stored in bunded bays within IBCs or drums.	Handling and process are undertaken by appropriately trained staff with materials stored in designated areas within the Installation such as specific waste storage bays and bunded 800 litre cages.	The Installation comprises/will comprise tertiary bunding from the concrete floor and walls and spillages within will be contained and managed using spill kits. However, integrity of hardstanding is currently noted to be variable across the Existing Installation.	Spillages could occur during transport and enter the environment through drains or comprised ground surfacing. The potential maximum quantity and nature of the substance, combined with potential for release to the environment, make this a chemical of concern.	Yes
Acids	Sulphuric acid, Hydrochloric acid, Hydrofluoric acid	Liquid	H290 – May be corrosive to metals H314 – Causes severe skin burns and eye damage H318 – Causes serious eye damage H335 – May cause respiratory irritation	Likely	Variation in the pH levels of soils and waters can affect soil fertility and lead to a decline in fish populations. Aquatic plants and insects forming part of the aquatic food chain may also be negatively affected.	Yes	5,000 tonnes		Hazardous wastes will be strictly segregated from each other to avoid the mixing of the two. Additionally, hazardous wastes will be stored and treated separately from all other waste streams accepted at the Installation. Stored in bunded bays within IBCs or drums.	Handling and process are undertaken by appropriately trained staff with materials stored in designated areas within the Installation such as specific waste storage bays and bunded 800 litre cages.	The Installation comprises/will comprise tertiary bunding from the concrete floor and walls and spillages within will be contained and managed using spill kits. However, integrity of hardstanding is currently noted to be variable across the Existing Installation.	Spillages could occur during transport and enter the environment through drains or comprised ground surfacing. The potential maximum quantity and nature of the substance, combined with potential for release to the environment, make this a chemical of concern.	Yes
Wastes containing/comprising Heavy metals	Can include: Lead Arsenic mercury cadmium Zinc Copper Silver Iron Chromium Nickel	Solid/liquid	H302 – Harmful if swallowed H332 – Harmful if inhaled H350 – May cause cancer H360 – May damage fertility or the unborn child H373 – May cause damage to organs H400 – Very toxic to aquatic life H410 – Very toxic to aquatic life with long lasting effects	Likely	Substances can be dangerous to aquatic life and the environment. May not be biodegradable with potential for bioaccumulation. Fate and behaviour of individual substances may vary.	Yes	5,000 tonnes		Hazardous wastes will be strictly segregated from each other to avoid the mixing of the two. Additionally, hazardous wastes will be stored and treated separately from all other waste streams accepted at the Installation. Stored in bunded bays within IBCs or drums.	Handling and process are undertaken by appropriately trained staff with materials stored in designated areas within the Installation such as specific waste storage bays and bunded 800 litre cages.	The Installation comprises/will comprise tertiary bunding from the concrete floor and walls and spillages within will be contained and managed using spill kits. However, integrity of hardstanding is currently noted to be variable across the Existing Installation.	Spillages could occur during transport and enter the environment through drains or comprised ground surfacing. The potential maximum quantity and nature of the substance, combined with potential for release to the environment, make this a chemical of concern.	Yes

Chemicals/Substances Handled	Chemical Characteristics and Toxicity									Site Specific Risk		
Substance	**Composition (where available/indicative)**	**Physical state**	**Hazard Code (estimation based on professional judgement)**	**Relevant Hazardous Substance (RHS) (EC Regulation No 1272/2008)**	**Environmental Fate and Behaviour**	**Substance Poses Potential Pollution Risk?**	**Maximum Storage at any One Time Across Facility (Aggregated). May contain wastes from any permitted activity.**	**Maximum Annual Usage/Throughput of Installation**	**Storage arrangements**	**Handling and usage**	**Risk mitigation measures**	**Residual risk? (Chemical of Concern)**	**Substance(s) of Concern Yes/No**
Wastes containing Chlorosilanes	Substances may include: Methylvinyldichlorosilane	Liquid	H225 – Highly flammable liquid and vapour H302 – Harmful if swallowed H331 – Toxic if inhaled H314 – Causes severe skin burns and eye damage	Likely	Not biodegradable.	Yes	5,000 tonnes		Hazardous wastes will be strictly segregated from each other to avoid the mixing of the two. Additionally, hazardous wastes will be stored and treated separately from all other waste streams accepted at the Installation. Stored in bunded bays within IBCs or drums.	Handling and process are undertaken by appropriately trained staff with materials stored in designated areas within the Installation such as specific waste storage bays and bunded 800 litre cages.	The Installation comprises/will comprise tertiary bunding from the concrete floor and walls and spillages within will be contained and managed using spill kits. However, integrity of hardstanding is currently noted to be variable across the Existing Installation.	Spillages could occur during transport and enter the environment through drains or comprised ground surfacing. The potential maximum quantity and nature of the substance, combined with potential for release to the environment, make this a chemical of concern.	Yes
Halogented Solvents	Category most commonly includes: Methylene Chloride Trichloroethylene Trichlorofluoroethane 1,1,1-trichloroethane	Liquid	H315 – Causes skin irritation H319 – Causes serious eye irritation H336 – May cause drowsiness or dizziness H341 – Suspected of causing genetic defects H350 – May cause cancer H412 – Harmful to aquatic life with long lasting effects. H351 – Suspected of causing cancer	Likely	Substances of this type may exhibit aquatic toxicity and varying degrees of biodegradability. Bioconcentration may occur.	Yes	5,000 tonnes		Hazardous wastes will be strictly segregated from each other to avoid the mixing of the two. Additionally, hazardous wastes will be stored and treated separately from all other waste streams accepted at the Installation. Stored in bunded bays within IBCs or drums.	Handling and process are undertaken by appropriately trained staff with materials stored in designated areas within the Installation such as specific waste storage bays and bunded 800 litre cages.	The Installation comprises/will comprise tertiary bunding from the concrete floor and walls and spillages within will be contained and managed using spill kits. However, integrity of hardstanding is currently noted to be variable across the Existing Installation.	Spillages could occur during transport and enter the environment through drains or comprised ground surfacing. The potential maximum quantity and nature of the substance, combined with potential for release to the environment, make this a chemical of concern.	Yes
Organic Solvents	Conservative/'worst case' can include: Benzene Carbon tetrachloride Trichloroethylene	Liquid	H225 – Highly flammable liquid and vapour H301 – Toxic if swallowed H315 – Causes skin irritation H336 – May cause drowsiness or dizziness H319 – Causes serious eye irritation H340 – May cause genetic defects H350 – May cause cancer H372 – Causes damage to organs H304 – May be fatal if swallowed and enters airways H412 – Harmful to aquatic life with long lasting effects H420 – Harms public health and the environment by destroying ozone in the upper atmosphere	Likely	Substances typically may not biodegrade and may bioaccumulate. Toxicity within the aquatic environment is probable.	Yes	5,000 tonnes		Hazardous wastes will be strictly segregated from each other to avoid the mixing of the two. Additionally, hazardous wastes will be stored and treated separately from all other waste streams accepted at the Installation. Stored in bunded bays within IBCs or drums.	Handling and process are undertaken by appropriately trained staff with materials stored in designated areas within the Installation such as specific waste storage bays and bunded 800 litre cages.	The Installation comprises/will comprise tertiary bunding from the concrete floor and walls and spillages within will be contained and managed using spill kits. However, integrity of hardstanding is currently noted to be variable across the Existing Installation.	Spillages could occur during transport and enter the environment through drains or comprised ground surfacing. The potential maximum quantity and nature of the substance, combined with potential for release to the environment, make this a chemical of concern.	Yes
Isocyanates	Can include substances such as: Phenyl diisocyanate Toluene diisocyanate Hexamethylene diisocyanate	Liquid	H226 – Flammable liquid and vapour H302 – Harmful if swallowed H330 – Fatal if inhaled H314 – Causes severe skin burns and eye damage H318 – Causes serious eye damage H334 – May cause allergy or asthma symptoms or breathing difficulties if inhaled H317 – May cause an allergic skin reaction H335 – May cause respiratory irritation H400 – Very toxic to aquatic life H410 – Very toxic to aquatic life with long lasting effects	Likely	Substances of this type may exhibit aquatic toxicity and varying degrees of biodegradability. Bioconcentration may occur.	Yes	5,000 tonnes		Hazardous wastes will be strictly segregated from each other to avoid the mixing of the two. Additionally, hazardous wastes will be stored and treated separately from all other waste streams accepted at the Installation. Stored in bunded bays within IBCs or drums.	Handling and process are undertaken by appropriately trained staff with materials stored in designated areas within the Installation.	The Installation comprises/will comprise tertiary bunding from the concrete floor and walls and spillages within will be contained and managed using spill kits. However, integrity of hardstanding is currently noted to be variable across the Existing Installation.	Spillages could occur during transport and enter the environment through drains or comprised ground surfacing. The potential maximum quantity and nature of the substance, combined with potential for release to the environment, make this a chemical of concern.	Yes
Wastes containing/comprising bleach	Sodium hypochlorite	Liquid	H315 – Causes skin irritation. H318 – Causes serious eye damage H400 – Very toxic to aquatic life H410 – Very toxic to aquatic life with long lasting effects	Likely	Known toxicity to aquatic environment. Soluble in water and therefore likely to be highly mobile within the environment. Unlikely to bioaccumulate.	Yes	5,000 tonnes		Hazardous wastes will be strictly segregated from each other to avoid the mixing of the two. Additionally, hazardous wastes will be stored and treated separately from all other waste streams accepted at the Installation. Stored in bunded bays within IBCs or drums.	Handling and process are undertaken by appropriately trained staff with materials stored in designated areas within the Installation.	The Installation comprises/will comprise tertiary bunding from the concrete floor and walls and spillages within will be contained and managed using spill kits. However, integrity of hardstanding is currently noted to be variable across the Existing Installation.	Spillages could occur during transport and enter the environment through drains or comprised ground surfacing. The potential maximum quantity and nature of the substance, combined with potential for release to the environment, make this a chemical of concern.	Yes
Cyanides	Conservative/'worst case' can include: Sodium Cyanide	Solid	H290 – May be corrosive to metals H300 – Fatal if swallowed H310 – Fatal in contact with skin H330 – Fatal if inhaled H400 – Very toxic to aquatic life H410 – Very toxic to aquatic life with long lasting effects	Likely	Expected to be biodegradable, soluble in water, unlikely to be persistent, known to be environmentally hazardous or not degradable in waste water treatment plants. Will likely be mobile in the environment and highly mobile in soils.	Yes	5,000 tonnes		Hazardous wastes will be strictly segregated from each other to avoid the mixing of the two. Additionally, hazardous wastes will be stored and treated separately from all other waste streams accepted at the Installation. Stored in bunded bays within IBCs or drums.	Handling and process are undertaken by appropriately trained staff with materials stored in designated areas within the Installation.	The Installation comprises/will comprise tertiary bunding from the concrete floor and walls and spillages within will be contained and managed using spill kits. However, integrity of hardstanding is currently noted to be variable across the Existing Installation.	Spillages could occur during transport and enter the environment through drains or comprised ground surfacing. The potential maximum quantity and nature of the substance, combined with potential for release to the environment, make this a chemical of concern.	Yes
TPHs containing PCBs	Hydrocarbons PCBs	Liquid	H304 – May be fatal if swallowed and enters airways H373 – May cause damage to organs H350 – May cause cancer H361d – Suspected of damaging the unborn child H372 – Causes damage to organs H400 – Very toxic to aquatic life H410 – Very toxic to aquatic life with long lasting effects	Likely	Non readily biodegradable components. Contains bioaccumulative components. Contains components that adsorb onto soils.	Yes	5,000 tonnes		Hazardous wastes will be strictly segregated from each other to avoid the mixing of the two. Additionally, hazardous wastes will be stored and treated separately from all other waste streams accepted at the Installation. Stored in bunded bays within IBCs or drums.	Handling and process are undertaken by appropriately trained staff with materials stored in designated areas within the Installation.	The Installation comprises/will comprise tertiary bunding from the concrete floor and walls and spillages within will be contained and managed using spill kits. However, integrity of hardstanding is currently noted to be variable across the Existing Installation.	Spillages could occur during transport and enter the environment through drains or comprised ground surfacing. The potential maximum quantity and nature of the substance, combined with potential for release to the environment, make this a chemical of concern.	Yes
Peroxides	E.g. Hydrogen Peroxide	Liquid	H272 - May intensify fire H302 – Harmful if swallowed H318 – Causes serious eye damage H332 - Harmful if inhaled	Likely	Known to pose a risk to the aquatic environment. Readily biodegradable and unlikely to persist. Soluble in water and therefore mobile within the environment and highly mobile within soils.	Yes	5,000 tonnes		Hazardous wastes will be strictly segregated from each other to avoid the mixing of the two. Additionally, hazardous wastes will be stored and treated separately from all other waste streams accepted at the Installation. Stored in bunded bays within IBCs or drums.	Handling and process are undertaken by appropriately trained staff with materials stored in designated areas within the Installation.	The Installation comprises/will comprise tertiary bunding from the concrete floor and walls and spillages within will be contained and managed using spill kits. However, integrity of hardstanding is currently noted to be variable across the Existing Installation.	Spillages could occur during transport and enter the environment through drains or comprised ground surfacing. The potential maximum quantity and nature of the substance, combined with potential for release to the environment, make this a chemical of concern.	Yes

Chemicals/Substances Handled	**Chemical Characteristics and Toxicity**									**Site Specific Risk**		
Substance	**Composition (where available/indicative)**	**Physical state**	**Hazard Code (estimation based on professional judgement)**	**Relevant Hazardous Substance (RHS) (EC Regulation No 1272/2008)**	**Environmental Fate and Behaviour**	**Substance Poses Potential Pollution Risk?**	**Maximum Storage at any One Time Across Facility (Aggregated). May contain wastes from any permitted activity.**	**Maximum Annual Usage/Throughput of Installation**	**Storage arrangements**	**Handling and usage**	**Risk mitigation measures**	**Residual risk? (Chemical of Concern)**	**Substance(s) of Concern Yes/No**
Ammonia	Ammonia	Gas	H221 – Flammable gas H280 – Contains gas under pressure; may explode if heated H331 – Toxic if inhaled H314 – Causes severe skin burns and eye damage H318 – Causes serious eye damage H410 – Very toxic to aquatic life with long lasting effects H411 – Toxic to aquatic life with long lasting effects	Likely	Toxicity to aquatic organisms is noted. Substance is biodegradable. Not considered to be bioaccumulative or persistent.	Yes	5,000 tonnes		Hazardous wastes will be strictly segregated from each other to avoid the mixing of the two. Additionally, hazardous wastes will be stored and treated separately from all other waste streams accepted at the Installation. Stored in bunded bays within IBCs or drums.	Handling and process are undertaken by appropriately trained staff with materials stored in designated areas within the Installation.	The Installation comprises/will comprise tertiary bunding from the concrete floor and walls and spillages within will be contained and managed using spill kits. However, integrity of hardstanding is currently noted to be variable across the Existing Installation.	Gas is expected to disperse upon accidental release to the environment and is unlikely to impact soil or groundwater. The substance is therefore not considered a chemical of concern.	No
A12 Treatment and storage of non-hazardous waste for the purpose of disposal or recovery.													
Waste paints and Varnishes, Inks & Toners	May contain trace amounts of metals and organic or aqueous solvents	Solid (Powders)/ Liquid	H315 – Causes skin irritation H319 – Causes serious eye irritation	Likely	Discharge to the aquatic environment should be avoided however readily available data on environmental behaviour is limited.	Yes	5,000 tonnes	29,999 tonnes	Will be stored in a designated area and transferred off-site for recovery. Water based paints are stored in a bunded storage tank prior to removal from the Site for treatment. Solvent based paints will be transferred to a suitably authorised facility via a bulk tanker.	All paints will be de-packaged and shredded by either the attritor plant for non-hazardous waste or by shredding and crushing of the paint containers in the paint or aerosol/waste plant. Solvent-based paints are bulked for recovery of the solvents for secondary fuels for use in the kilns for the cement industry whilst water-based paints are bulked for treatment off-Site at an authorised facility	The Installation comprises/will comprise tertiary bunding from the concrete floor and walls and spillages within will be contained and managed using spill kits. However, integrity of hardstanding is currently noted to be variable across the Existing Installation. Attritor will also have its own secondary containment capable of containing 110% maximum capacity.	Spillages could occur during transport and enter the environment through drains or comprised ground surfacing. The potential maximum quantity and nature of the substance, combined with potential for release to the environment, make this a chemical of concern.	Yes
Machining sludges	May contain metals and low concentrations of hydrocarbons	Solid/Liquid	**The wide variety of substances potentially within this category means a large number of Hazard Codes are likely to apply**	Likely	Substances can be dangerous to aquatic life and the environment. May not be biodegradable with potential for bioaccumulation. Fate and behaviour of individual substances may vary.	Yes	5,000 tonnes		Stored in designated non-hazardous waste storage bays in IBC or drums.	Handling and process are undertaken by appropriately trained staff with materials stored in designated areas within the Installation.	The Installation comprises/will comprise tertiary bunding from the concrete floor and walls and spillages within will be contained and managed using spill kits. However, integrity of hardstanding is currently noted to be variable across the Existing Installation.	Spillages could occur during transport and enter the environment through drains or comprised ground surfacing. The potential maximum quantity and nature of the substance, combined with potential for release to the environment, make this a chemical of concern.	Yes
Drilling muds and wastes	**The wide variety of substances potentially within this category means it is not possible to define with certainty a conclusive list of potential components. This likely variety should be accounted for in corresponding risk assessments.**	Solid/Liquid	**The wide variety of substances potentially within this category means a large number of Hazard Codes are likely to apply**	Likely	Substances can be dangerous to aquatic life and the environment. May not be biodegradable with potential for bioaccumulation. Fate and behaviour of individual substances may vary.	Yes	5,000 tonnes		Stored in designated non-hazardous waste storage bays in IBC or drums.	Handling and process are undertaken by appropriately trained staff with materials stored in designated areas within the Installation.	The Installation comprises/will comprise tertiary bunding from the concrete floor and walls and spillages within will be contained and managed using spill kits. However, integrity of hardstanding is currently noted to be variable across the Existing Installation.	Spillages could occur during transport and enter the environment through drains or comprised ground surfacing. The potential maximum quantity and nature of the substance, combined with potential for release to the environment, make this a chemical of concern.	Yes
Wastes containing Calcium Carbonate	Calcium carbonate	Solid	None	Unlikely	Insoluble in water and therefore not considered likely to be mobile within the environment.	Yes	5,000 tonnes		Stored in designated non-hazardous waste storage bays in IBC or drums.	Handling and process are undertaken by appropriately trained staff with materials stored in designated areas within the Installation.	The Installation comprises/will comprise tertiary bunding from the concrete floor and walls and spillages within will be contained and managed using spill kits. However, integrity of hardstanding is currently noted to be variable across the Existing Installation.	Spillages could occur during transport and enter the environment through drains or comprised ground surfacing. The potential maximum quantity and nature of the substance, combined with potential for release to the environment, make this a chemical of concern.	Yes
Wates containing sulphur	Sulphur and Sulphur compounds	Solid	H315 – Causes skin irritation.	Likely	Substances can be dangerous to aquatic life and the environment. May not be biodegradable with potential for bioaccumulation. Fate and behaviour of individual substances may vary.	Yes	5,000 tonnes		Stored in designated non-hazardous waste storage bays in IBC or drums.	Handling and process are undertaken by appropriately trained staff with materials stored in designated areas within the Installation.	The Installation comprises/will comprise tertiary bunding from the concrete floor and walls and spillages within will be contained and managed using spill kits. However, integrity of hardstanding is currently noted to be variable across the Existing Installation.	Spillages could occur during transport and enter the environment through drains or comprised ground surfacing. The potential maximum quantity and nature of the substance, combined with potential for release to the environment, make this a chemical of concern.	Yes
Wastes containing PAHs	PAHs	Solid/Liquid	H350 – May cause cancer H317 – May cause an allergic skin reaction H340 – May cause genetic defects H360 – May damage fertility or the unborn child H410 – Very toxic to aquatic life with long lasting effects	Likely	Known toxicity of substances to aquatic environment. Aquatic Fate: When deposited in water PAHs sink to the bottom of lakes and rivers. Some will move though the soil to contaminate groundwater. PAHs are ubiquitous in the marine environment, occurring at their highest environmental concentrations around urban centres. The availability of organic carbon controls, to a large extent, the partitioning behaviour of PAHs in sediment. Mixed microbial populations in sediment/water systems may degrade some PAHs, with degradation progressively decreasing with increasing molecular weight. Terrestrial Fate: The rate of degradation is dependent on nutrient content and the bacterial community in soil. PAHs in soils undergo a weathering process such that the lighter chain fractions are removed (primarily by volatilization). Heavier	Yes	5,000 tonnes		Stored in designated non-hazardous waste storage bays in IBC or drums.	Handling and process are undertaken by appropriately trained staff with materials stored in designated areas within the Installation.	The Installation comprises/will comprise tertiary bunding from the concrete floor and walls and spillages within will be contained and managed using spill kits. However, integrity of hardstanding is currently noted to be variable across the Existing Installation.	Spillages could occur during transport and enter the environment through drains or comprised ground surfacing. The potential maximum quantity and nature of the substance, combined with potential for release to the environment, make this a chemical of concern.	Yes

Chemicals/Substances Handled	**Chemical Characteristics and Toxicity**										**Site Specific Risk**		
Substance	**Composition (where available/indicative)**	**Physical state**	**Hazard Code (estimation based on professional judgement)**	**Relevant Hazardous Substance (RHS) (EC Regulation No 1272/2008)**	**Environmental Fate and Behaviour**	**Substance Poses Potential Pollution Risk?**	**Maximum Storage at any One Time Across Facility (Aggregated). May contain wastes from any permitted activity.**	**Maximum Annual Usage/Throughput of Installation**	**Storage arrangements**	**Handling and usage**	**Risk mitigation measures**	**Residual risk? (Chemical of Concern)**	**Substance(s) of Concern Yes/No**
Wastes containing metals	Can include: Lead Arsenic mercury cadmium Zinc Copper Silver Iron Chromium Nickel	Liquid/Solid	**The wide variety of substances potentially within this category means a large number of Hazard Codes are likely to apply**	Likely	Substances can be dangerous to aquatic life and the environment. May not be biodegradable with potential for bioaccumulation. Fate and behaviour of individual substances may vary.	Yes	5,000 tonnes		Stored in designated non-hazardous waste storage bays in IBC or drums.	Handling and process are undertaken by appropriately trained staff with materials stored in designated areas within the Installation.	The Installation comprises/will comprise tertiary bunding from the concrete floor and walls and spillages within will be contained and managed using spill kits. However, integrity of hardstanding is currently noted to be variable across the Existing Installation.	Spillages could occur during transport and enter the environment through drains or comprised ground surfacing. The potential maximum quantity and nature of the substance, combined with potential for release to the environment, make this a chemical of concern.	Yes
Sludges from soil or groundwater remediation	May contain traces of metals, hydrocarbons PAHs, VOC, PFAS/PFOS, etc.	Liquid/Solid	**The wide variety of substances potentially within this category means a large number of Hazard Codes are likely to apply**	Likely	Substances can be dangerous to aquatic life and the environment. May not be biodegradable with potential for bioaccumulation. Fate and behaviour of individual substances may vary.	Yes	5,000 tonnes		Stored in designated non-hazardous waste storage bays in IBC or drums.	Handling and process are undertaken by appropriately trained staff with materials stored in designated areas within the Installation.	The Installation comprises/will comprise tertiary bunding from the concrete floor and walls and spillages within will be contained and managed using spill kits. However, integrity of hardstanding is currently noted to be variable across the Existing Installation.	Spillages could occur during transport and enter the environment through drains or comprised ground surfacing. The potential maximum quantity and nature of the substance, combined with potential for release to the environment, make this a chemical of concern.	Yes
Maintenance Chemicals													
Ad-Blue	Water and urea (32.5 %)	Liquid	Not classified	No	Expected to be biodegradable.	Yes	1,000 litres	unknown	Stored in 1,000 litre IBC on a bunded pallet within maintenance room	Handling and process are undertaken by appropriately trained staff with materials stored in designated areas within the Installation.	IBC located in bunded pallet with 110% capacity and the Installation comprises/will comprise tertiary bunding from the concrete floor and walls and spillages within will be contained and managed using spill kits. However, integrity of hardstanding is currently noted to be variable across the Existing Installation.	The nature of the substance, combined with potential for release to the environment, make this not a chemical of concern.	No
Assorted Oils	Various petroleum-derived oils	Liquid	Hazardous Substances	Yes	Non soluble. Moderate bioaccumulation potential. Release may result in significant short and long-term environmental impact.	Yes	<2,000 litres	unknown	Stored in 205 l drums on bunded pallets within maintenance room	Handling and process are undertaken by appropriately trained staff with materials stored in designated areas within the Installation.	IBC located in bunded pallet with 110% capacity and the Installation comprises/will comprise tertiary bunding from the concrete floor and walls and spillages within will be contained and managed using spill kits. However, integrity of hardstanding is currently noted to be variable across the Existing Installation.	Spillages could occur during transport and enter the environment through drains or comprised ground surfacing. The potential maximum quantity and nature of the substance, combined with potential for release to the environment, make this a chemical of concern.	Yes
Diesel	Diesel	Liquid	H226: Flammable liquid and vapor; H304: May be fatal if swallowed and enters airways; H315: Causes skin irritation; H319: Causes serious eye irritation; H332: Harmful if inhaled; H350: May cause cancer; H351: Suspected of causing cancer (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard); H373: Causes damage to organs through prolonged or repeated exposure; H412: Harmful to aquatic life with long lasting effects	Yes	Toxic to aquatic organisms and may cause long-term adverse effects in the aquatic environment.: This material is not expected to be readily biodegradable.	Yes	3,500 litres	unknown	Stored within 1,350 litre double skinned tank	Upon delivery, materials are directly transferred to storage area. Dispensing only occurs when materials are required for use. All process utilisation is carefully monitored by trained staff.	All material transfers are undertaken in appropriately-surfaced and/ or internal areas, are supervised by trained staff and are subject to careful in-process control. Spills are promptly managed and recovered or disposed of. Spill kits are available throughout the installation.	Spillages could occur during transport and enter the environment through drains or comprised ground surfacing. The potential maximum quantity and nature of the substance, combined with potential for release to the environment, make this a chemical of concern.	Yes
Cleaning Chemicals (alkaline cleaner, pota	Sodium Hydroxids Disodium metasilicate Trisodium nitrilotriacetate Ethylene glycol monobutyl ether (2-Butoxyethanol) Potassium Hydroxide Sodium Gluconate	Liquid	H314 Causes severe skin burns and eye damage.	Likely	The product may affect the acidity (pH) of water which may have hazardous effects on aquatic organisms.	Yes	<100 litres	unknown	Smaller containers stored within metal container within maintenance room	Upon delivery, materials are directly transferred to storage area. Dispensing only occurs when materials are required for use. All process utilisation is carefully monitored by trained staff.	All material transfers are undertaken in appropriately-surfaced and/ or internal areas, are supervised by trained staff and are subject to careful in-process control. Spills are promptly managed and recovered or disposed of. Spill kits are available throughout the installation.	Spillages could occur during transport and enter the environment through drains or comprised ground surfacing. The potential maximum quantity and nature of the substance, combined with potential for release to the environment, make this a chemical of concern.	Yes
Acid Bulk (brick acid, acid descaler and bat	Hydrochloric Acid Phosphoric Acid 40% Sulphuric Acid	Liquid	H290 May be corrosive to metals. H314 Causes severe skin burns and eye damage. H335 May cause respiratory irritation.	Likely	Although not classified as harmful to the environment the material should not be discharged to land or water systems, this may have an impact on the organisms in the local area. The product is miscible with water and will spread in water systems. The product may produce a local pH change in water systems which can have an effect on aquatic organisms.	Yes	1 x 1,000 litre IBC bulked from smaller containers by supervised site chemist	unknown	Smaller containers stored within metal container within maintenance room	Upon delivery, materials are directly transferred to storage area. Dispensing only occurs when materials are required for use. All process utilisation is carefully monitored by trained staff.	All material transfers are undertaken in appropriately-surfaced and/ or internal areas, are supervised by trained staff and are subject to careful in-process control. Spills are promptly managed and recovered or disposed of. Spill kits are available throughout the installation.	Spillages could occur during transport and enter the environment through drains or comprised ground surfacing. The potential maximum quantity and nature of the substance, combined with potential for release to the environment, make this a chemical of concern.	Yes

Chemicals/Substances Handled	**Chemical Characteristics and Toxicity**										**Site Specific Risk**		
Substance	**Composition (where available/indicative)**	**Physical state**	**Hazard Code (estimation based on professional judgement)**	**Relevant Hazardous Substance (RHS) (EC Regulation No 1272/2008)**	**Environmental Fate and Behaviour**	**Substance Poses Potential Pollution Risk?**	**Maximum Storage at any One Time Across Facility (Aggregated). May contain wastes from any permitted activity.**	**Maximum Annual Usage/Throughput of Installation**	**Storage arrangements**	**Handling and usage**	**Risk mitigation measures**	**Residual risk? (Chemical of Concern)**	**Substance(s) of Concern Yes/No**
Solvents/Paint (gloss, white spirit and thin	Hydrocarbons C9-C11 Naphtha Hydrocarbons C11-C14 methanol toluene xylene hexane methyl acetate	Liquid	H225 Highly flammable liquid and vapour. H226 Flammable liquid and vapour. H304 May be fatal if swallowed and enters airways. H315 Causes skin irritation. H318 Causes serious eye damage. H332 Harmful if inhaled H336 May cause drowsiness or dizziness. H361fd Suspected of damaging fertility. Suspected of damaging the unborn child. H372 Causes damage to organs through prolonged or repeated exposure. H373 May cause damage to organs through prolonged or repeated exposure. H411 Toxic to aquatic life with long lasting effects	Likely	Substances typically may not biodegrade and may bioaccumulate. Toxicity within the aquatic environment is probable.	Yes	1 x 1,000 litre IBC bulked from smaller containers by supervised site chemist	unknown	Smaller containers stored within metal container within maintenance room	Upon delivery, materials are directly transferred to storage area. Dispensing only occurs when materials are required for use. All process utilisation is carefully monitored by trained staff.	All material transfers are undertaken in appropriately-surfaced and/ or internal areas, are supervised by trained staff and are subject to careful in-process control. Spills are promptly managed and recovered or disposed of. Spill kits are available throughout the installation.	Spillages could occur during transport and enter the environment through drains or comprised ground surfacing. The potential maximum quantity and nature of the substance, combined with potential for release to the environment, make this a chemical of concern.	Yes
Wet solvents including insecticide and scr	Permethrin Petroleum distillates Nonylphenol ethoxylate Ethanol methanol	Liquid	H226 Flammable liquid and vapour; H227: Combustible Liquid; H304: May be fatal if swallowed and enters airways; H315: Causes skin irritation;	Likely	The product components are not classified as environmentally hazardous. However, large or frequent spills may have hazardous effects on the environment.	Yes	1 x 1,000 litre IBC bulked from smaller containers by supervised site chemist	unknown	Smaller containers stored within metal container within maintenance room	Upon delivery, materials are directly transferred to storage area. Dispensing only occurs when materials are required for use. All process utilisation is carefully monitored by trained staff.	All material transfers are undertaken in appropriately-surfaced and/ or internal areas, are supervised by trained staff and are subject to careful in-process control. Spills are promptly managed and recovered or disposed of. Spill kits are available throughout the installation.	Spillages could occur during transport and enter the environment through drains or comprised ground surfacing. The potential maximum quantity and nature of the substance, combined with potential for release to the environment, make this a chemical of concern.	Yes

Appendix C: Storage and handling of relevant hazardous substances

Table C1: Existing Installation Area: Observed Storage and Handling of Substances (SCR report[2])

Location	Description
Waste Reception	▪ Waste reception noted to comprise the first waste storage bay on entry to the Existing Installation Area and comprises an area of concrete hardstanding used for the storage of chemicals, contained absorbents/packaging (arriving in skips), fridges/WEEE wastes, commercial fridges and other WEEE wastes and paint cans. ▪ Three (3) 1,000 litre IBCs of bulking agents noted to be stored on bunded pallet at back of the bay. ▪ Waste containers observed to be stored during Site reconnaissance visit were noted to comprise IBCs and steel/plastic drums sitting on pallets or directly on hardstanding (Photograph 12). ▪ Chemicals/wastes are stored before being transferred to designated areas throughout the Installation by trained forklift operators. All chemical transfers are undertaken in internal areas supervised by trained staff and are subject to control measures as described in Aquaforce's Environmental Management System (EMS). ▪ Aquaforce report that all a log of waste quantities currently held at this location is compiled on a Monday for the Installation and updated daily.Spill kits comprising Polyurethane (PU) foam located in vicinity. ▪ No evidence of leaks or potential containment failure noted.
Waste Chemical Storage Bays	▪ IBCs, drums and other sealed containers are stored in discrete engineered bays for the storage of hazardous, flammable and non-hazardous substances stored in reported accordance with the Health and Safety Executive (HSE) Guidance HSG 51[3] and HSG 71[4] in drums, containers and IBC's. ▪ The bays are segregated by 180 mm thick preformed concrete walls sealed with intumescent sealant which are reported to be fire resistant for 1.50 hours and impervious to liquids. The base of the bays comprise of concrete flooring which extends across the entire surface of the existing Installation. ▪ Only two (2) bays noted to have 'sleeping policeman' bunding at entrance. ▪ Some wear to concrete hardstanding within bays noted. ▪ Waste containers observed to be stored during Site reconnaissance visit were noted to comprise IBCs and steel/plastic drums sitting on pallets or directly on hardstanding. ▪ Chemicals/wastes are stored before being transferred to designated areas throughout the Installation by trained forklift operators. All chemical transfers are undertaken in internal areas supervised by trained staff and are subject to control measures as described in Aquaforce's EMS. ▪ Aquaforce report that all a log of waste quantities currently held at this location is compiled on a Monday for the Installation and updated daily. ▪ Spill kits comprising PU foam located in vicinity. ▪ Evidence of minor leaks or spills noted (Photograph 26).

[2] Site Condition Report, Mabbett & Associates, July 2024, 315994
[3] Health and Safety Executive, Storage of Flammable Liquids in Containers: HSG 51, Third Edition, September 2015
[4] Health and Safety Executive, Chemical Warehousing - The Storage of Packaged Dangerous Substances: HSG 71, Forth Edition, September 2009

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Location	Description
Fridge Plant Area	▪ 1,000 litre capacity IBC noted to contain compressor oil and a cylinder of compressor gas removed from fridges processed through plant. Both noted to sit directly onto hardstanding. ▪ Two (2) sealed 4.00 m^3 absorber tanks containing carbon filter for chlorofluorocarbon (CFC) and cyclopentane blowing agent located in the north of the Installation. ▪ Plastic, metal and granulated PU foam from shredding of fridge carcasses collected in metal containers/bags for removal off-Site. PU also used as absorptive material for on-Site spill kits. ▪ Fridges to be processed stored adjacent to the fridge plant directly on the hardstanding. ▪ Spill kits comprising PU foam located in vicinity. ▪ Evidence of minor leaks or spills noted. ▪ Dust from breakdown of foam noted across the Fridge Plant Area.
Waste for Dispatch Area	▪ **Freon Store:** Closed refrigerated Freon Store containing two (2) 205 litre drums sitting on concrete hardstanding (Photograph 19) ▪ **Toxic/Oxidiser Cages:** Closed 800 litre waste cages noted to contain drums and containers for removal off-Site. Containers sitting directly on pallets within bunded cages (Photograph 17). ▪ **Cylinder Storage:** Closed gas cylinder store containing gas cylinders and drums containing smaller gas canisters/cylinders noted to sit directly on hardstanding (Photograph 18). ▪ **Asbestos Storage:** Asbestos waste sealed in plastic bags/wrappings stored in enclosed roll on/off skip. ▪ Aquaforce report that all a log of waste quantities currently held at this location is compiled on a Monday for the Installation and updated daily. ▪ Waste containers observed to be stored during Site reconnaissance visit were noted to comprise IBCs, bags, steel/plastic drums and skips sitting on pallets or directly on hardstanding. ▪ Wastes are either loaded into vehicles for off-Site removal by trained forklift operators or skips are directly loaded onto vehicles for offsite removal. All chemical transfers are supervised by trained staff and are subject to control measures as described in Aquaforce's EMS. ▪ Concrete hardstanding across this area was noted to be significantly degraded in places. ▪ Evidence of leaks or spills noted (Photograph 21).

Table C2: Additional Installation Area: Observed/Proposed Storage and Handling of Substances (SCR report)

Location	Description
Boiler Room	▪ Double skinned 1,135 litre capacity Gas Oil tank sited on platform above concrete hardstanding connected to Steam Boiler via copper pipework. ▪ Tanks checked by staff on a daily basis as part of routine maintenance checks across the Installation. ▪ No evidence of leaks or potential containment failure noted.
Maintenance Room	▪ Upon delivery assorted oils (205 litre drums) and Ad-Blue (1,000 litre IBC and 205 litre drum) are transferred by trained staff to the Maintenance Room where they are stored on bunded pallets (Photographs 9, 10 and 11). Storage, usage and handling procedures are subject to control measures as described in Aquaforce's EMS. ▪ Chemicals are stored in the primary packaging, i.e. drums or IBC's and dispensing only occurs when required. ▪ Spill kits noted within vicinity.

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Location	Description
	▪ Low volume of lubricants (Wd-40) and cleaning supplies in liquid form are stored within the workshop in an ad hoc manner, with some stored in metal containers/cupboards and some with no specific storage location. Poor housekeeping was acknowledged by Aquaforce in this area. ▪ No evidence of leaks or potential containment failure noted. ▪ Containers and bunding by staff on a daily basis as part of routine maintenance checks across the Installation.
Diesel Tank	▪ Double skinned 1,135 litre capacity diesel tank sited on platform above concrete hardstanding with filler hose connected. ▪ Tanks reported to be checked by staff on a daily basis as part of routine maintenance checks across the Installation. ▪ No evidence of leaks or potential containment failure noted.
Waste Chemical Storage Bays	▪ Proposed to be constructed within the central area of the Additional Installation Area ▪ Proposal includes for the construction of new storage bays fitted with 150 mm wide precast concrete bund walls 2,400 mm high and sealed at the bottom to prevent leaking into adjacent bunds. ▪ Mabbett understands proposals also include for the additional construction of internal bunding across the building footprint occupied by the Additional Installation area.
Attritor Plant	▪ Proposed to be constructed within the southern area of the Additional Installation area ▪ An attritor plant is proposed be installed to facilitate in the treatment of non-hazardous waste containers such as plastics and cans. ▪ The plant is designed to remove residual liquids from the containers which are released into a container beneath the drum. Liquids will be stored in IBC's or drums as appropriate in designated bays according to the substance type pending transferal off-Site for disposal or recovery at an authorised facility. ▪ Dry packaging is to be crushed, passed through paddles and centrifuged before being conveyed out of the drum and bulked up prior to transferral for recovery or disposal to a facility licenced to do so according to packaging type. ▪ Bunding will encompass the plant and will comprise of a 22 cm 'sleeping policeman' capable of containing 110 % of the maximum capacity of the attritor contents i.e. 10 m^3. The walls of the building will additionally serve as tertiary containment for any spillages from the plant.
Dirty Lab and Sample Store	▪ Proposed to be located within the north area of the Additional Installation area. ▪ Considered likely to comprise low volume chemical storage in accordance with Control of Substances Hazardous to Health (COSHH) requirements and regulations.

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