



**APPLICATION FOR AN ENVIRONMENTAL PERMIT
UNDER THE ENVIRONMENTAL PERMITTING
(ENGLAND AND WALES) REGULATIONS 2016 (AS
AMENDED)**

ENVIRONMENTAL RISK ASSESSMENT



**Technical Development Area,
Wilton Centre - Pioneer Group,
Wilton,
Lazenby,
Redcar,
TS10 4RF**

**ECL Ref: DESC.01.01/ERA
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TABLE OF CONTENTS

1. INTRODUCTION	3
1.1. Overview	3
2. IDENTIFICATION OF RECEPTORS	4
2.1. Site Settings	4
2.2. Potentially Sensitive Ecological Receptors	4
2.3. Potentially Sensitive Human Receptors	6
2.4. Risk of Flooding	7
3. IDENTIFICATION OF THE RISKS	10
3.1. Amenity Risks	10
3.2. Accident Risks	10
4. ASSESSMENT OF RISKS	11
4.1. Methodology	11
5. SUMMARY	24
5.1. Results of the Assessment	24
5.2. Conclusion	24

LIST OF TABLES

Table 1: SAC, SPA and Ramsar sites within 10km of the Installation Permit Boundary	5
Table 2: Human Receptors within 2km of the Installation Permit Boundary	6
Table 3: Amenity Risk Assessment	12
Table 4: Accident Risk Assessment	15
Table 5: POPs Risk Assessment	20

LIST OF FIGURES

Figure 1: Indicative Site Location	4
Figure 2: SAC, SPA and Ramsar sites within 10km of the Installation Boundary	5
Figure 3: Sensitive Human Receptors Identified within 2km of the Installation	6
Figure 4: Long Term Flood Risk Map – Rivers and Seas	8
Figure 5: Long Term Flood Risk Map – Surface Water	9

ACRONYMS/TERMS USED IN THIS REPORT

AW	Ancient Woodland
BFR	Brominated Flame Retardants
CCTV	Closed Circuit Television
EA	Environment Agency
ECL	Environmental Compliance Limited
EMS	Environmental Management System
EP	Environmental Permit
EP Regulations	Environmental Permitting (England and Wales) Regulations 2016 as amended
ERA	Environmental Risk Assessment
FPP	Fire Prevention Plan
HEPA	High Efficiency Particulate Air
IBC	Intermediate Bulk Containers
LNR	Local Nature Reserve
LWS	Local Wildlife Site
MAGIC	Multi-Agency Geographical Information for the Countryside
NGR	National Grid Reference
NNR	National Nature Reserve
PFAS	Per- and Polyfluoroalkyl Substances)
POPs	Persistent Organic Pollutant
Ramsar	The Ramsar Convention on Wetlands of International Importance
SAC	Special Areas of Conservation
SPA	Special Protection Areas
SSSI	Sites of Special Scientific Interest
TDA	Technical Development Area
The Installation	DEScycle's Solvent-based Metal Recovery Installation, Technical Development Area, Wilton Centre, Redcar, TS10 4RF

1. INTRODUCTION

1.1. Overview

- 1.1.1. Environmental Compliance Limited (“ECL”) have been commissioned by DESCycle to prepare an Environmental Risk Assessment (“ERA”) to form part of the Environmental Permit (“EP”) application at their Solvent-based metal recovery installation located at the Technical Development Area (“TDA”), Wilton Centre, Redcar, TS10 4RF (“the Installation”).
- 1.1.2. The activities undertaken at the Installation will comprise two listed activities and a bespoke waste operation that fall under Schedule 1 and Schedule 9 of the Environmental Permitting (England and Wales) Regulations 2016 as amended (“EP Regulations”) respectively.
- 1.1.3. An ERA has been undertaken in accordance with the relevant requirements of the current version of the Environment Agency (“EA”) online risk assessment guidance¹, in order to:
 - identify potential risks that site operations may present to the environment;
 - screen out any insignificant risks;
 - assess potentially significant risks in detail; and
 - decide on the appropriate control measures.
- 1.1.4. Accordingly, the assessment has addressed the potential risks relating to the operation of the proposed Installation, namely:
 - amenity risks (e.g. point source and fugitive emissions to air, water/sewer, noise, etc); and
 - accidents (e.g. fire, loss of containment, loss of power, vandalism).
- 1.1.5. Issue 2 of the ERA has been updated to confirm that all process effluent will be contained and sent off site for hazardous waste disposal. DESCycle however, request that an improvement condition be added to any permit that the EA may be minded to issue, such that process effluents can be fully characterised, and alternative disposal methods investigated. Issue 2 also further risk assessments for persistent organic pollutants (“POPs”).

¹ EA online guidance – ‘Risk assessments for your environmental permit’. Available at <https://www.gov.uk/guidance/risk-assessments-for-your-environmental-permit>

2. IDENTIFICATION OF RECEPTORS

2.1. Site Settings

- 2.1.1. The Installation is located at the Wilton Centre's TDA, Redcar, TS10 4RF and is centred on National Grid Reference ("NGR") NZ 58221 20719. The Installation occupies an approximate area of 0.2 hectares.
- 2.1.2. Figure 1 provides the indicative location of the Installation with the proposed EP boundary outlined in green.

Figure 1: Indicative Site Location



- 2.1.3. The immediate surroundings encompassing the Installation are made up of industrial and commercial activities. The wider site setting consists of Wilton Industrial Estate to the north and northwest, housing within 1km to the south and southwest and a golf course, reservoirs, open countryside and farmland within 1km to the east and south of the EP boundary.
- 2.1.4. The Lower River Tees and the North Sea are sited approximately 4.7km northwest and 5km north to northeast of the Installation, respectively.

2.2. Potentially Sensitive Ecological Receptors

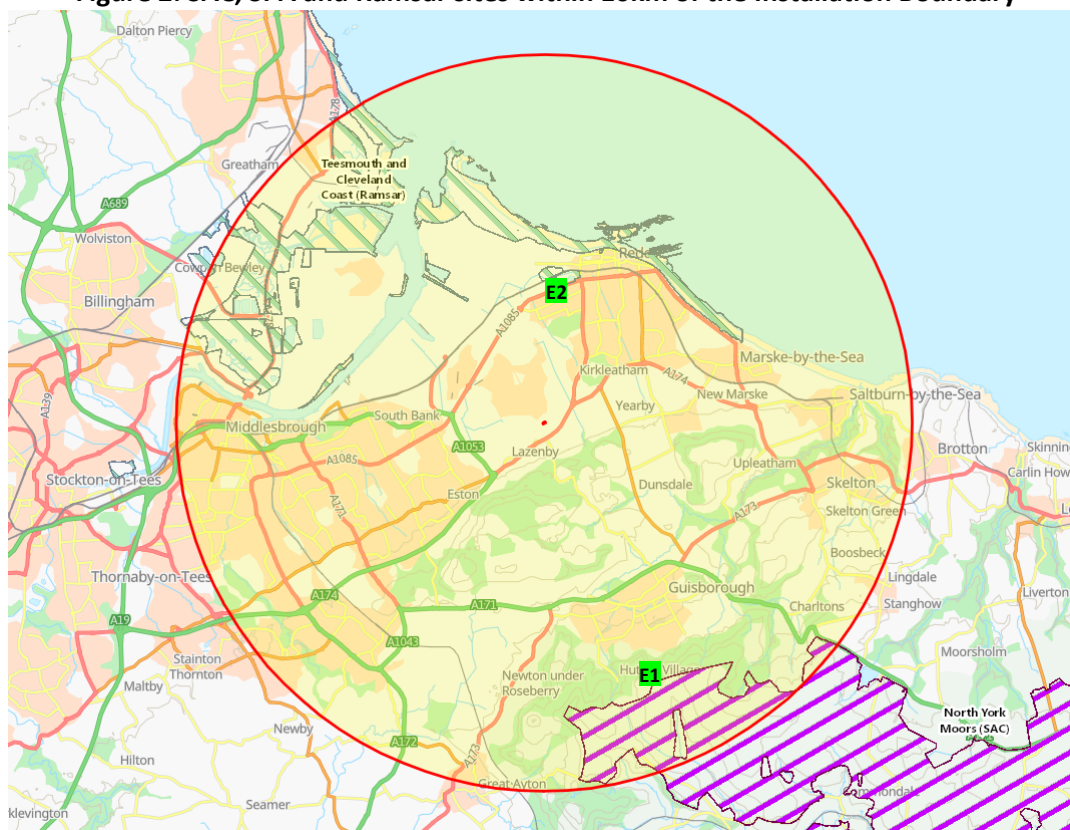
- 2.2.1. A review of the area using Multi-Agency Geographic Information for the Countryside ("MAGIC")² mapping tool identified that the Installation is located within 10km of one Special Area of Conservation ("SAC"), one Special Protection Area ("SPA") and one Ramsar Convention on Wetlands of International Importance ("Ramsar") site – details of which are outlined in Table 1, with a visual representation provided as Figure 2.

² Magic Map Online Mapping Tool, available at: <https://magic.defra.gov.uk/>

Table 1: SAC, SPA and Ramsar sites within 10km of the Installation Permit Boundary

Ref.	Name and Designation(s)	Easting (X)	Northing (Y)	Distance from EP Boundary (km)	Heading (°)
E1	North York Moors (SAC, SPA)	461306	513660	7.7	156
E2	Teessmouth And Cleveland Coast (Ramsar)	458739	524460	3.8	8

Figure 2: SAC, SPA and Ramsar sites within 10km of the Installation Boundary



- 2.2.2. A search using MAGIC was undertaken to identify Sites of Special Scientific Interest (“SSSI”), National Nature Reserve (“NNR”) and Local Nature Reserves (“LNR”) within 2km of the Installation. The search revealed that there are no SSSIs, NNRs or LNRs.
- 2.2.3. A search using MAGIC was undertaken to identify Ancient Woodland (“AW”) sites. No AW sites were identified within 1km of the Installation boundary. A review of Local Wildlife Sites (“LWS”) in Redcar and Cleveland Council was undertaken. No LWS have been identified within 1km of the Installation boundary.
- 2.2.4. In addition to the searches undertaken for SACs, SPAs, Ramsars, SSSIs, NNRs, LNRs, AWs and LWSs, other potentially sensitive land uses within 1km of the Installation were also considered. A review of the area using MAGIC indicated that none of the following sensitive land uses are located within a 1km radius of the Installation:
- Areas of Outstanding Natural Beauty;
 - Groundwater Source Protection Zones;

- Marine Conservation Zones;
- Nitrate Vulnerability Zone; and
- Scheduled Monuments.

2.3. Potentially Sensitive Human Receptors

2.3.1. Nine potentially sensitive human receptors have been identified within 2km of the Installation. Table 2 outlines these, with a visual representation provided as Figure 3 (in Figure 3 the red arrow indicates the approximate location of the Installation).

Table 2: Human Receptors within 2km of the Installation Permit Boundary

Ref.	Name	Easting (X)	Northing (Y)	Distance from Permit Boundary (m)	Heading (°)
H1	Commercial activity - Wilton Centre (North)	458195	520741	34	310
H2	Commercial activity - Wilton Centre (South)	458250	520674	54	147
H3	Commercial activity - Wilton Centre (East)	458310	520735	90	80
H4	The Faraday Training Centre	458478	520689	259	97
H5	Wilton Golf Club	458032	519944	798	194
H6	Castle Dene Retirement home	458529	519764	1,003	162
H7	Residential properties off Grange Estate	457389	520060	1,061	232
H8	Kirkleatham Park and Museum	459081	521637	1,258	43
H9	Residential properties off Yearby Road	459799	520888	1,587	84

Figure 3: Sensitive Human Receptors Identified within 2km of the Installation



2.4. Risk of Flooding

- 2.4.1. The nearest major water course is the River Tees, located approximately 4.7km to the northwest of the Installation. The River Tees is heavily modified and stretches approximately 137km in length and flows from the North Pennines eastwards to meet the North Sea between Hartlepool and Redcar. The Tees waterbody is classified as being of moderate ecological potential and possesses a poor chemical status³.
- 2.4.2. As shown on the EA's mapping service for flood risk from rivers or the sea⁴, the Installation is not covered by a flood risk category for rivers or the sea and is therefore deemed to have a very low probability of flooding (meaning that the potential of flooding is less than 0.1% each year).
- 2.4.3. As shown on the EA's mapping service for flood risk from surface waters⁴, the Installation is covered by a low chance of flooding (meaning that the potential of flooding is between 0.1% to 1% each year).
- 2.4.4. Figures 4 and 5 have been provided to reproduce the information displayed via the EA's mapping service for rivers and the sea and for surface waters, respectively. In Figures 4 and 5, the approximate location of the Installation has been outlined in red.

³ EA's Catchment Data Explorer, available online at: <https://environment.data.gov.uk/catchment-planning/WaterBody/GB510302509900?cycle=3>

⁴ EA's Long Term Flood Risk Map, available online at: <https://check-long-term-flood-risk.service.gov.uk/map>

Figure 4: Long Term Flood Risk Map – Rivers and Seas

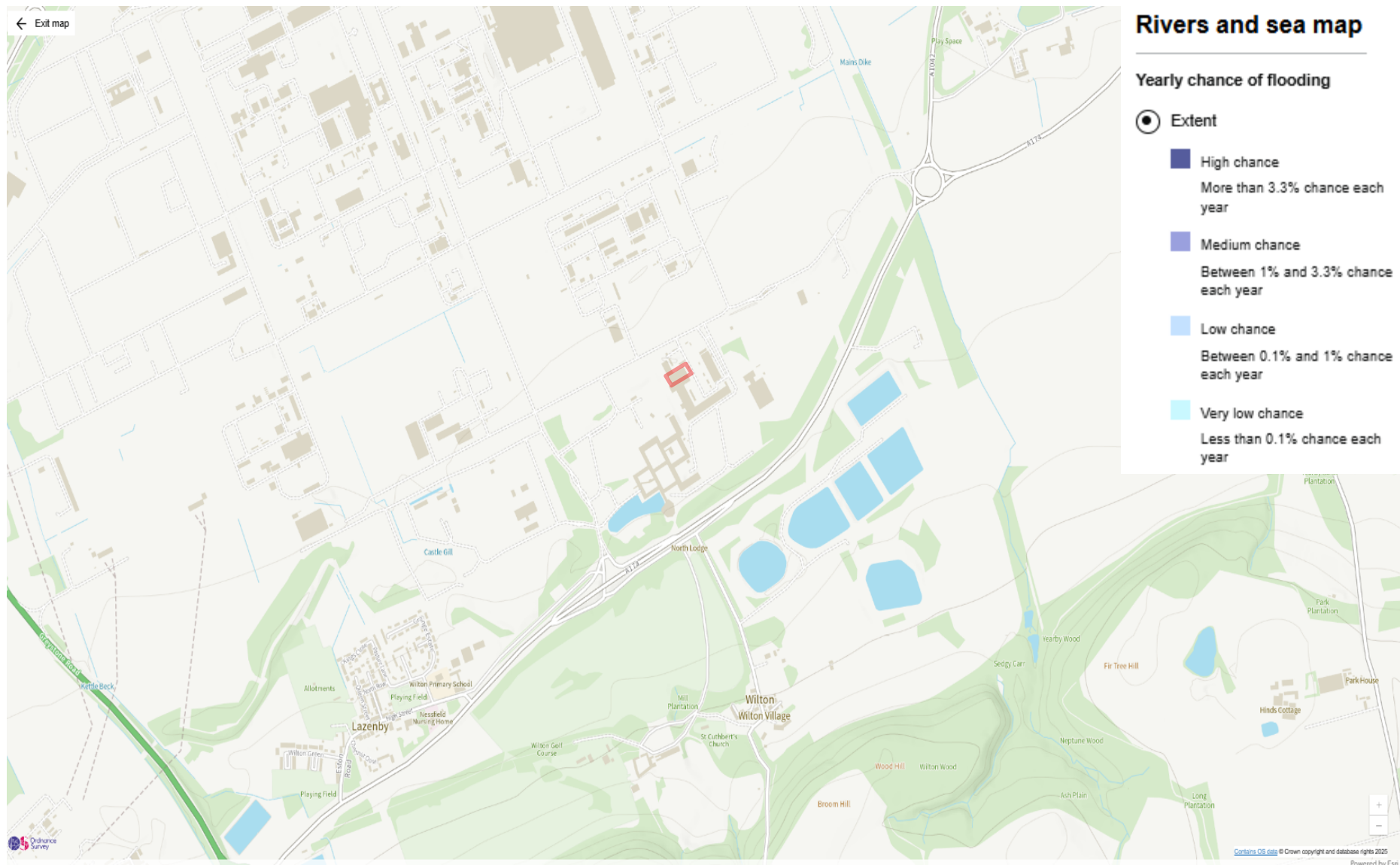
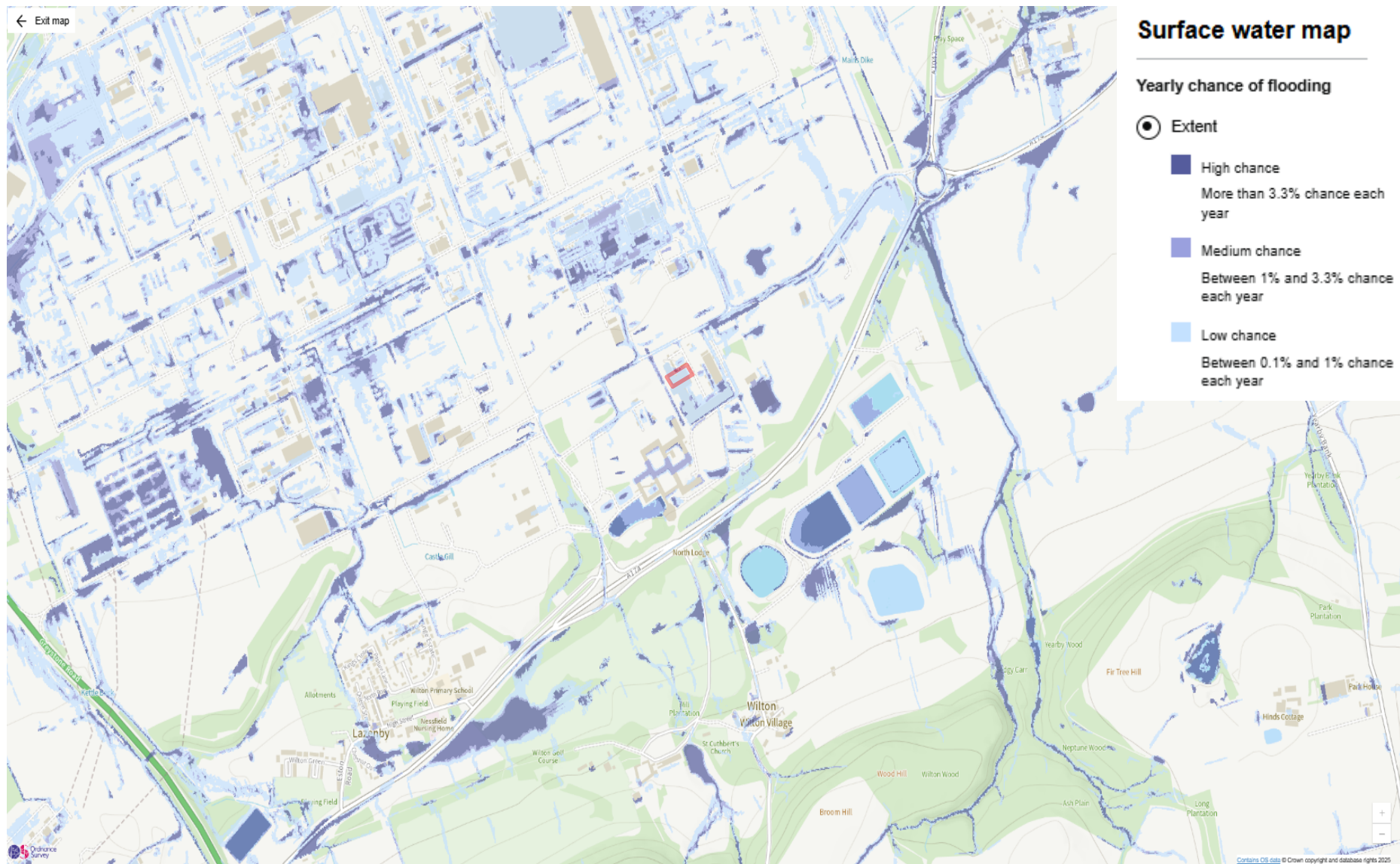


Figure 5: Long Term Flood Risk Map – Surface Water



3. IDENTIFICATION OF THE RISKS

3.1. Amenity Risks

3.1.1. Taking into account the nature of the activities that will be undertaken at the Installation, the main amenity risks identified are as follows:

- point source emissions to air;
- fugitive emissions to air;
- point source emissions to surface water and sewer;
- fugitive emissions to water/sewer; and
- noise.

3.1.2. Fugitive releases to land will be prevented by conducting all operations in areas sealed with an impervious barrier to prevent a pathway for migration to land. Consequently, no further assessment has been undertaken.

3.1.3. There are no point source emissions to land. Consequently, no further assessment has been undertaken.

3.2. Accident Risks

3.2.1. The main potential accident risks have been identified as:

- fire;
- loss of containment of potentially polluting materials;
- loss of power/system failure; and
- human error or vandalism.

4. ASSESSMENT OF RISKS

4.1. Methodology

4.1.1. The risk assessments have been undertaken using the following approach for amenity and accident risks:

- identification of hazards associated with the risk that have the potential to cause harm;
- identification of potential receptors i.e. what is at risk (for the purposes of this assessment, typical potential receptors have been identified?);
- pathway i.e. how can the hazard get to the receptor?;
- risk management measures employed to reduce the risk to an acceptable level;
- probability of exposure i.e. how likely is this contact?;
- consequence i.e. what is the harm that can be caused?; and
- assessment of overall risk.

4.1.2. The assessments for the amenity, accident and POPs risks identified above are presented in Tables 3, 4 and 5 respectively. It should be noted that in Table 5 POPs is used to refer to POPs, PFAS and/or any BFRs that may be present.

Table 3: Amenity Risk Assessment

Hazard	Receptors	Pathway	Risk Management	Probability of Exposure	Consequence	Overall Risk
Emissions to Air						
<i>Point Source Emissions to Air</i>						
Point source emissions from proposed emission points A1 and A2	Ecological and human sensitive receptors in surrounding area (see Section 2.2 and 2.3 of this ERA).	Release to Air.	The H1 Air Emissions Risk Assessment (DESC.01.01/H1), which is contained in Section 7 of this EP application submission, has demonstrated that the predicted impacts of all pollutants assessed (for both scenarios) screen out as insignificant following stage one screening.	Low Risk management measures should prevent unauthorised releases from reaching the identified receptors.	Air Pollution.	Not significant if risk management measures are strictly adhered to.
<i>Fugitive Emissions to Air</i>						
Fugitive emissions from shredding activities	Ecological and human sensitive receptors in surrounding area (see Section 2.2 and 2.3 of this ERA).	Release to Air.	Diffuse emissions to air are minimised by: <ul style="list-style-type: none"> carrying out the shredding and Microniser operations using enclosed equipment. Both activities are also undertaken within an enclosed building/shipping container under an appropriate pressure; the shredder is equipped with a dust extraction and High Efficiency Particulate Air ("HEPA") filtration system to prevent emission of dusts from the shredding chamber. Particulate matter on the filter is removed via a positive pressure cleaning system to dislodge retained dusts. The shredder is a fully enclosed system with no point source emission to air; and a vacuum transfer system is in place to convey shredded materials to drums and in and out of the Microniser. The vacuum system is fitted with HEPA filters to prevent dust escape, and a positive pressure cleaning system to dislodge retained dusts. 	Low Risk management measures should prevent unauthorised releases from reaching the identified receptors.	Air Pollution.	Not significant if risk management measures are strictly adhered to.

Table 3: Amenity Risk Assessment (cont.)

Hazard	Receptors	Pathway	Risk Management	Probability of Exposure	Consequence	Overall Risk
Emissions to Water						
<i>Point Source Emissions to Water – Surface Water and Foul Sewer</i>						
Process effluent and contaminated surface water	Controlled waters.	Via internal site drainage and surface water drainage system.	<p>The Installation benefits from a combined sealed drainage system which is part of the wider Sembcorp drainage system. Point source releases will therefore be contained within this system and captured by the Sembcorp effluent treatment plant. A penstock valve will also be installed to ensure any fugitive emissions are retained within DESCycle's process areas.</p> <p>All proposed activities will be undertaken in areas sealed with an impervious barrier to prevent a pollution pathway to controlled waters.</p> <p>It is understood that the Sembcorp drainage network has sufficient capacity and buffer storage to contain surges and storm water flows.</p> <p>Surface water and drainage from welfare (sinks/toilets etc) will be disposed of through the Wilton site discharge.</p> <p>All process related liquid waste will be collected and disposed of through a licensed waste contractor.</p> <p>Wastewater will be held in Intermediate Bulk Containers ("IBCs") or the wastewater holding tank.</p>	Low	Contamination of controlled waters.	Not significant if risk management measures are strictly adhered to.

Table 3: Amenity Risk Assessment (cont.)

Hazard	Receptors	Pathway	Risk Management	Probability of Exposure	Consequence	Overall Risk
Noise						
Noise emissions from site operations	Ecological and human sensitive receptors in surrounding area (see Section 2.2 and 2.3 of this ERA).	Release to Air. Installation is close enough to human sensitive receptors for noise to be potentially audible	<p>The Installation is located within an industrial setting and is surrounded by other site activities. The site operations and equipment are either conducted within a building or enclosed within a shipping container, thus helping to mitigate and attenuate any noise generated by the site's activities.</p> <p>The maintenance requirements of site equipment will be contained in the site's Environmental Management System ("EMS"). The maintenance regime will be devised in accordance with the manufacturer's handbook and recommendations to ensure all plant and equipment is in good working order.</p> <p>In the event of elevated noise being experienced at the Installation, the Incident Report Form will be completed. An investigation will be undertaken to establish the root cause and implement corrective actions. The relevant risk assessment will also be updated where necessary.</p>	Low/Medium The risk management measures should prevent noise reaching the identified receptors	Possible noise nuisance	Not significant if risk management measures are strictly adhered to

Table 4: Accident Risk Assessment

Hazard	Receptors	Pathway	Risk Management	Probability of Exposure	Consequence	Overall Risk
Fire						
Fire at the site.	Ecological and human sensitive receptors in surrounding area (see Section 2.2 and 2.3 of this ERA).	Release to air – windblown dispersion in atmosphere.	<p>A Fire Prevention Plan (“FPP”) (DESC.01.01/FPP) has been prepared and submitted as Section 8 of this EP application submission.</p> <p>Emergency drills will be undertaken every six months to ensure all staff are aware of the emergency procedures. Any findings and actions will be documented.</p> <p>Fire extinguishers will be located in strategic locations and inspected and maintained periodically. All employees are made aware of the location of fire-fighting equipment and are conversant with their appropriate usage.</p> <p>Preventative maintenance on all equipment will be undertaken to prevent any faults occurring as detailed in the manufacturer’s manual and handbook.</p> <p>Designated smoking areas are in place away from the proposed activities.</p>	<p>Low</p> <p>The risk management measures should prevent any release from reaching the identified receptors.</p>	Combustion gases (smoke) and localised nuisance.	Not significant if risk management measures are strictly adhered to.

Table 4: Accident Risk Assessment (cont.)

Hazard	Receptors	Pathway	Risk Management	Probability of Exposure	Consequence	Overall Risk
Fire (Cont.)						
Releases of potentially contaminated firewater.	Ecological and human sensitive receptors in surrounding area (see Section 2.2 and 2.3 of this ERA).	Via drainage network or overland flow.	Any potentially contaminated firewater runoff will be contained and prevented from reaching sensitive receptors and causing pollution to the environment as the penstock valve will be closed to contain all firewater on-site.	Low	Contamination of controlled waters.	Not significant if risk management measures are strictly adhered to.
	Controlled waters.		All waste will be stored within the Installation boundary, all areas of which benefit from impermeable surfacing. Therefore, no downward migration of potentially contaminated firewater to either land or groundwater will occur.	Risk management measures should prevent any release from reaching the identified receptors.		
			The Installation will benefit from impermeable surfacing and kerbing to create a firewater containment bunded area. All potentially contaminated firewater will remain in the containment area until contamination testing has been carried out and the firewater can be removed off-site to an appropriately licenced facility or installation.			
			All site personnel will be trained in the use of firewater containment measures. The FPP exercise drills will include differing fire scenarios.			

Table 4: Accident Risk Assessment (cont.)

Hazard	Receptors	Pathway	Risk Management	Probability of Exposure	Consequence	Overall Risk
Spillage of Potentially Polluting Substances						
Loss of containment during handling and storage of waste and site materials.	Controlled waters.	Via site drainage network or via overland flow.	<p>The Installation benefits from impermeable surfacing to prevent any downward migration of potentially polluting substances entering the ground or groundwater. The Installation also benefits from a sealed combined drainage network which can be isolated via a penstock valve to contain any potentially polluting substances on-site.</p> <p>Site Staff and the delivery driver are responsible for ensuring the supervision of deliveries and unloading at all times and storage vessel levels are checked prior to unloading to prevent overfilling.</p> <p>All waste storage areas and stored equipment will be subject to frequent inspection to make sure that any leaks, spillages of liquids, dust or loose material are identified and managed appropriately, and fire breaks are maintained. A written record of such inspections is maintained in accordance with the EMS.</p> <p>All containers stored externally are closed or stored under cover to prevent the accumulation of rainwater. All containers are also clearly labelled to identify their contents.</p> <p>All potentially polluting liquids will be appropriately banded providing a minimum capacity of either 110% of the capacity of the largest storage vessel or 25% of the total capacity of all the storage vessels within the bund, whichever is greater.</p> <p>A spill management procedure is in place as part of the Installation's EMS. All staff are trained in the spill management procedure and the appropriate deployment of spill kits contents.</p>	<p>Low</p> <p>Risk management measures should prevent any release from reaching the identified receptors.</p>	Contamination of controlled waters.	Not significant if risk management measures are strictly adhered to.

Table 4: Accident Risk Assessment (cont.)

Hazard	Receptors	Pathway	Risk Management	Probability of Exposure	Consequence	Overall Risk
Loss of Power						
Major system failure/loss of process control.	Ecological and human sensitive receptors in surrounding area (see Section 2.2 and 2.3 of this ERA). Controlled waters.	Release to Air. Via drainage network or overland flow.	<p>Documented procedures as part of the EMS (i.e. an Accident Management Plan) will be in place covering emergency preparedness and response; these will cover such incidents as major plant failures and loss of mains electrical power etc.</p> <p>The process equipment benefits from alarms and controls which enable any malfunctions to be identified immediately.</p> <p>The Installation is capable of identifying, holding and preventing the release of any materials should equipment fail. The Installation also benefits from impermeable surfacing to prevent any downward migration of potentially polluting substances entering the ground or groundwater. The Installation possesses a sealed combined drainage network which can be isolated via a penstock valve to contain any potentially polluting substances on-site.</p> <p>The documented planned maintenance regime will detail the required maintenance and inspection of all process equipment to ensure good working order to reduce the risk of complete system failure.</p> <p>All operations are designed to possess fail-safe mechanisms (for example, should a major system failure or loss of power occur). Faults will be addressed, and repairs undertaken where necessary using specialist contractors. Competent personnel will then check all areas prior to recommencing operations.</p>	Low Risk management measures should prevent any release from reaching the identified receptors.	Air pollution	Not significant if risk management measures are strictly adhered to.

Table 4: Accident Risk Assessment (cont.)

Hazard	Receptors	Pathway	Risk Management	Probability of Exposure	Consequence	Overall Risk
Vandalism						
Any of the above.	Any of the above.	Any of the above.	<p>The Installation is located within a large industrial estate. There is perimeter fencing to a height of 2.4 metres in place to prevent unauthorised or accidental access to the Installation.</p> <p>The Installation is covered by closed-circuit television (“CCTV”), and the industrial estate has four gatehouses, two of which are manned 24/7 to control access.</p> <p>All visitors must sign in and staff are trained in site security procedures and are encouraged to report unidentified or unknown visitors.</p>	<p>Low</p> <p>Risk management measures should prevent any release from reaching the identified receptors.</p>	Any of the above.	Not significant if risk management measures are strictly adhered to.

Table 5: POPs Risk Assessment

Hazard	Receptors	Pathway	Risk Management	Probability of Exposure	Consequence	Overall Risk
POPs Release to Air						
Fugitive releases to air from:	Ecological and human sensitive receptors in surrounding area (see Section 2.2 and 2.3 of this ERA).	Release to Air.	<p>All shredding/micronisation and powder transfer is conducted in sealed units equipped with HEPA filter equipped dust extraction systems to prevent particulate emission.</p> <p>All dust extraction units on these systems are cleaned using positive pressure displacement, ensuring dusts are forced into collection vessels and not emitted into the environment.</p> <p>Transfer of powders into storage drums for storage will be undertaken into double lined containers equipped with air filtration, to prevent particulate emissions.</p> <p>It is not anticipated that process gas outputs will contain substantial quantities of particulates, nor POP materials.</p> <p>Process gases will be condensed in a knock-out pot followed by passing through a carbon filter. This includes gaseous outputs from vacuum ovens.</p> <p>Stack emissions will be monitored regularly, including measurement of particulates to ensure compliance.</p>	<p>Low</p> <p>Risk management measures should prevent unauthorised releases.</p>	Air Pollution.	Not significant if risk management measures are strictly adhered to.
<ul style="list-style-type: none"> Shredding Micronisation Powder transfer for storage Powder transfer into reactor Open trays / containers of PCB e-waste will be present in the downflow booth 						
POPS Release to Water and Effluent						
Direct and fugitive releases from washing of reactor vessels and generation of process effluent	Controlled waters.	Via internal site drainage, surface water drainage system and 3 rd Party disposal site.	<p>Limited water is used in the DES process. Principally water will be used for washing of process solids and cleaning of reactor vessels.</p> <p>For washing of process solids, the waters will be recombined with process solvents and then removed through evaporation. The water is recovered as a condensate.</p>	<p>Low</p> <p>Risk management measures should prevent any release.</p>	Contamination of controlled waters.	Not significant if risk management measures are strictly adhered to.

Table 5: POPs Risk Assessment (cont)

Hazard	Receptors	Pathway	Risk Management	Probability of Exposure	Consequence	Overall Risk
POPs Release to Water and Effluent (cont)						
Direct and fugitive releases from washing of reactor vessels and generation of process effluent (cont)	Controlled waters.	Via internal site drainage, surface water drainage system and 3 rd Party disposal site.	<p>This process has a negligible risk of POPs passing into the environment as the solid polymers which may contain POPs would be removed in the filtration steps. Consequently, there would be no POPs present in the evaporation stage and therefore not collected in the condensate either.</p> <p>For cleaning of reactor vessels, there is potential for POPs polymers to be collected in the reactor wash waters. This is due to residual particulate PCB resin material being unintentionally retained in the reactor post leach.</p> <p>Wash waters will be collected and reused prior to being tankered and disposed of by an appropriately permitted waste contractor. Prior to disposal, effluent will be filtered to remove any particulates minimising POPs emissions risks. Effluent will be tested as part of regular monitoring to ensure correct treatment and compliance. Detailed testing procedures will be submitted to the EA for approval prior to the commencement of operation.</p>	<p>Low</p> <p>Risk management measures should prevent any release.</p>	Contamination of controlled waters.	Not significant if risk management measures are strictly adhered to.
POPs Release to Soil and Groundwater						
Loss of containment of storage and handling of PCB waste	Underlying ground and groundwater	Downward migration through soil	<p>It is not anticipated that there will be substantial risk of POPs contamination of soil or groundwater through standard operations.</p> <p>Almost all e-waste manipulation will be undertaken inside the building.</p>	<p>Low</p> <p>Risk management measures should prevent any release.</p>	Contamination of soil and groundwater	Not significant if risk management measures are strictly adhered to.

Table 5: POPs Risk Assessment (cont)

Hazard	Receptors	Pathway	Risk Management	Probability of Exposure	Consequence	Overall Risk
POPs Release to Soil and Groundwater (cont)						
Loss of containment of storage and handling of PCB waste (cont)	Underlying ground and groundwater	Downward migration through soil	<p>Micronisation, is undertaken in a container outside the main building on impermeable hardstanding. PCB waste will be transferred into the microniser using a HEPA filtered vacuum transfer system, minimising release of POPs to ground.</p> <p>The micronisation chamber itself is a sealed unit that emits no particulates, and is equipped with a full dust extraction and capture system to prevent any particulate emission to atmosphere.</p> <p>All shredded/micronized materials will be stored inside, again minimising risk of external contamination.</p> <p>Operations are not anticipated to have any emissions to ground water. All liquid and solid waste streams will be collected and disposed of through appropriately permitted waste contractors. Bunding will be in place to capture any unforeseen release, which will be collected and stored using existing Wilton site containment infrastructure and, if not re-usable, disposed through suitable waste disposal pathways</p>	<p>Low</p> <p>Risk management measures should prevent any release.</p>	Contamination of soil and groundwater	Not significant if risk management measures are strictly adhered to.
POPs in Process Waste						
Presence of POPs in PCB Waste	All identified receptors	Air/land and/or water	The residual metal depleted PCB waste will be treated as hazardous POPs waste and will be sent for high temperature destruction to a suitably permitted waste destruction facility/installation.	<p>Low</p> <p>Risk management measures will prevent release.</p>	Any of the above.	Not significant if risk management measures are strictly adhered to.

Table 5: POPs Risk Assessment (cont)

Hazard	Receptors	Pathway	Risk Management	Probability of Exposure	Consequence	Overall Risk
POPs in Process Waste (cont)						
Presence of POPs in other process wastes	All identified receptors	Air/land and/or water	<p>All other process wastes are not anticipated to contain POPs compounds. However, regular testing will be undertaken to confirm this, and they will be treated as hazardous POPs containing until it is confirmed that hazardous POPs are not present in each waste.</p> <p>Detailed testing procedures will be submitted to the EA for approval prior to the commencement of operation.</p>	<p>Low</p> <p>Risk management measures will prevent release.</p>	Any of the above.	Not significant if risk management measures are strictly adhered to.
POPs in Contaminated Packaging						
Presence of POPs in plastic liners	All identified receptors	Air/land and/or water	Plastic liners used during storage of shredded, micronized, intermediate and post process PCB-wastes may retain particulates following use and pose a risk of POPs release. All liners will be sealed following use to prevent particulate release, and if not being re-used will be disposed of via an appropriately permitted waste contractor.	<p>Low</p> <p>Risk management measures will prevent release.</p>	Any of the above.	Not significant if risk management measures are strictly adhered to.

5. SUMMARY

5.1. Results of the Assessment

- 5.1.1. The results of both the amenity, accident and POPs risk assessments (Tables 3, 4 and 5) indicate that none of the risks relating to proposed variation will be significant if the Installation is operated and managed in accordance with the risk management measures detailed.

5.2. Conclusion

- 5.2.1. The risks in terms of accident, amenity and POPs risk can be considered not significant providing all risk management measures are implemented and strictly adhered to.