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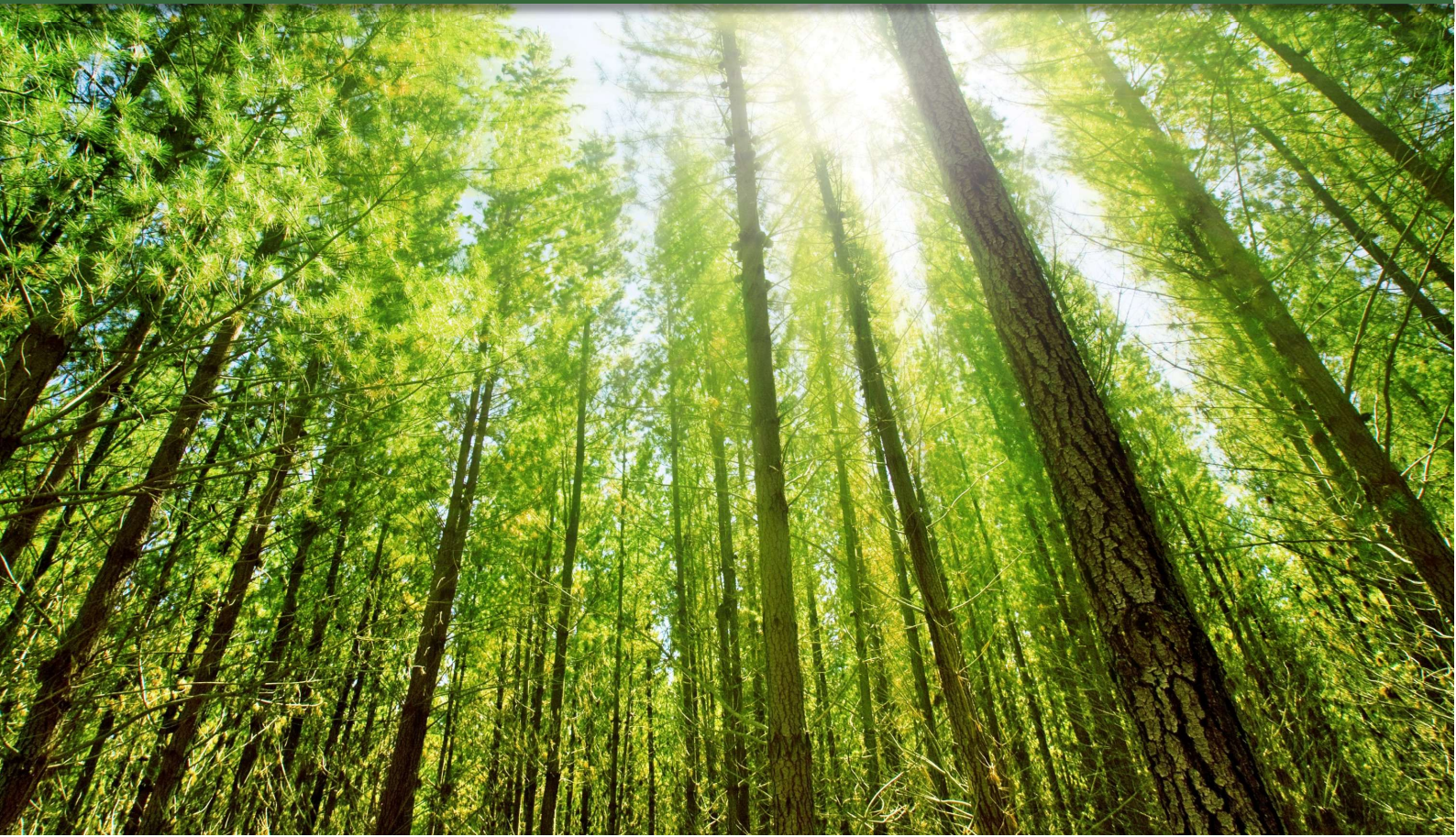
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## Environmental Risk Assessment

v1.0

Environmental and sustainability solutions provided to  
Haworth Scouring Company Limited



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## REVISION LOG

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1.0	Version for submission	12/02/2026

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## 1.0 INTRODUCTION

The Environment Agency and DEFRA Guidance 'Risk Assessments for Your Environmental Permit' gives a five-step process for assessing the site activity and the risk to local amenity to successfully produce an Environmental Risk Assessment:

1. Identify and consider risks for your site, and the sources of the risks.
2. Identify the receptors (people, animals, property and anything else that could be affected by the hazard) at risk from your site.
3. Identify the possible pathways from the sources of the risks to the receptors.
4. Assess risks relevant to your specific activity and check they're acceptable and can be screened out.
5. State what you'll do to control the risks if they're too high.

This risk assessment will identify people or parts of the environment that could be harmed by the effluent treatment and small-scale Anaerobic Digestion activities carried out by Haworth Scouring Company Ltd (hereon referred to as "HSC") and carry out risk assessments for:

- Odour from the AD Process
- Site Flooding
- Noise and Vibration
- Process or Plant Failure
- Fugitive Emissions
- Other Potential Nuisance Effects

Assessment of potential accidents at the facility and the consequential effects on sensitive receptors have been accounted for within this risk assessment.

### 1.1 Assessment Criteria

Each specific risk has been explored as part of the review with a risk rating being assigned based upon WRM's analysis.

Risk has been considered in terms of likelihood of occurrence and consequences in terms of the impact it will have on the environment or receptor.

Table 1 presents the risk scoring criteria used throughout this assessment with the Risk Rating being based on the information provided by WRM in the 'justification of magnitude' column.

Table 1 - Risk Assessment Criteria

Likelihood of risk arising		Significance of a resulting risk	
1	<b>Rare</b> - Will only occur in exceptional circumstances.	1	<b>Negligible</b> - Minimal impact or no discernible impact at all.
2	<b>Unlikely</b> - Unlikely to occur but definite potential exists.	2	<b>Minor</b> - Impact of risk materialising is unlikely to have any permanent or significant effect on local area/sensitive receptors.
3	<b>Possible</b> - Reasonable chance of occurring – has happened before at an industry level on occasions.	3	<b>Moderate</b> - Impact of risk materialising will have a significant effect on local area/sensitive receptors in the short term.
4	<b>Likely</b> - Likely to occur – strong possibility.	4	<b>Major</b> - Impact of risk materialising will have a serious effect on local area/sensitive receptors in the medium term.
5	<b>Almost certain</b> - The event will occur in most circumstances.	5	<b>Catastrophic</b> - Impact of risk materialising will have a serious effect on local area/sensitive receptors in the long term.

The application of likelihood and significance scores enables an overall rating to be assigned to each risk. Each risk score has been calculated by multiplying the likelihood score with the significance score with the resulting value indicating the overall level of risk (Figure 1).

		Significance				
		1	2	3	4	5
Likelihood	1	1	2	3	4	5
	2	2	4	6	8	10
	3	3	6	9	12	15
	4	4	8	12	16	20
	5	5	10	15	20	25

Figure 1 - Risk Grading Matrix

Risk ratings identified in the matrix include:

- **Low risk (1-5)** – minor risks that are unlikely to have an impact on the local environment/sensitive receptors in any significant way. Aspects with this rating are considered to have adequate management systems or mitigation measures to address any identified risks.
- **Medium risk (6-14)** – moderate risks that have potential to impact on the local environment/sensitive receptors. The proactive implementation of described mitigation measures will enable risk level to be reduced to an acceptable level.
- **High risk (15-25)** – Major risks that have the potential to impact on the local environment/sensitive receptors.

## 1.2 Mitigation Measure and Residual Risk

Where appropriate, WRM has proposed mitigation measures that seek to reduce the risk level, improve best practice and operational performance of the operation. Where proposed, mitigation measures are justified with an indication of the intended outcome.

The assessment includes a residual risk column which provides an indication of the risk level that could be achieved if all mitigation measures are implemented comprehensively.

## 2.0 RISK ASSESSMENT

This section considers the risks associated with the operation of the anaerobic digestion facility.

No.	Pollutant Model				Judgement				Action	
	Source	Harm / Outcome	Pathway	Receptor at Risk	Likelihood (1-5)	Significance (1-5)	Risk Rating	Justification	Risk Management	Residual Risk
1	Releases of NOx (Oxides of Nitrogen) from CHPs.	Harm to human health – through respiratory irritation and illness.	Air transport then Inhalation.	Local human population.	2	3	6	There is a potential for exposure to surrounding residential receptors or at locations where members of the public are exposed.	<ul style="list-style-type: none"> <li>• Operation of the plant shall be managed and operated in accordance with a management system, including inspection and maintenance of plant equipment and engine management systems.</li> <li>• CHPs designed to keep NOx emissions less than 190mg/m<sup>3</sup>.</li> <li>• The H1 Assessment undertaken for the site incorporates the CHP engines.</li> </ul>	3

No.	Pollutant Model				Judgement				Action	
	Source	Harm / Outcome	Pathway	Receptor at Risk	Likelihood (1-5)	Significance (1-5)	Risk Rating	Justification	Risk Management	Residual Risk
2	Releases of NOx (Oxides of Nitrogen) from the boiler.	Harm to human health – through respiratory irritation and illness.	Air transport then Inhalation.	Local human population.	2	3	6	There is a potential for exposure to surrounding residential receptors or at locations where members of the public are exposed.	<ul style="list-style-type: none"> <li>• Operation of the plant shall be managed and operated in accordance with a management system, including inspection and maintenance of plant equipment and engine management systems.</li> <li>• The boiler is designed to keep NOx emissions less than 250mg/m<sup>3</sup>.</li> <li>• The H1 Assessment undertaken for the site incorporates the boiler.</li> </ul>	3

No.	Pollutant Model				Judgement				Action	
	Source	Harm / Outcome	Pathway	Receptor at Risk	Likelihood (1-5)	Significance (1-5)	Risk Rating	Justification	Risk Management	Residual Risk
3	Releases of CO (Carbon Monoxide) from CHPs.	Harm to human health – through respiratory irritation and illness.	Air transport then inhalation	Local Human Population	2	3	6	There is a potential for exposure to surrounding residential receptors or at locations where members of the public are exposed.	<ul style="list-style-type: none"> <li>• Operation of the plant shall be managed and operated in accordance with a management system, including inspection and maintenance of plant equipment and engine management systems.</li> <li>• There is no emission limit set for CO.</li> <li>• The H1 Assessment undertaken for the site incorporates the CHP engines.</li> </ul>	3
4	Releases of CO (Carbon	Harm to human health – through respiratory	Air transport then inhalation	Local Human Population	2	3	6	There is a potential for exposure to	<ul style="list-style-type: none"> <li>• Operation of the plant shall be managed and operated in</li> </ul>	3

No.	Pollutant Model				Judgement				Action	
	Source	Harm / Outcome	Pathway	Receptor at Risk	Likelihood (1-5)	Significance (1-5)	Risk Rating	Justification	Risk Management	Residual Risk
	Monoxide) from the boiler.	irritation and illness.						surrounding residential receptors or at locations where members of the public are exposed.	<p>accordance with a management system, including inspection and maintenance of plant equipment and engine management systems.</p> <ul style="list-style-type: none"> <li>• There is no emission limit set for CO.</li> <li>• The H1 Assessment undertaken for the site incorporates the boiler.</li> </ul>	
5	Releases of SO <sub>2</sub> (Sulphur Dioxide) from CHPs.	Harm to human health – through respiratory irritation and illness.	Air transport then inhalation	Local Human Population	2	3	6	There is a potential for exposure to surrounding residential receptors or at locations	<ul style="list-style-type: none"> <li>• Operation of the plant shall be managed and operated in accordance with a management system, including inspection and</li> </ul>	3

No.	Pollutant Model				Judgement				Action	
	Source	Harm / Outcome	Pathway	Receptor at Risk	Likelihood (1-5)	Significance (1-5)	Risk Rating	Justification	Risk Management	Residual Risk
								where members of the public are exposed.	maintenance of plant equipment and engine management systems. <ul style="list-style-type: none"> <li>• CHPs designed to keep SO<sub>2</sub> emissions less than 40mg/m<sup>3</sup>.</li> <li>• The H1 Assessment undertaken for the site incorporates the CHP engines.</li> </ul>	
6	Release of microorganisms (bioaerosols).	Harm to human health – through respiratory irritation and illness.	Air transport then inhalation	Local Human Population	2	3	6	There is a potential for exposure to surrounding residential receptors or at locations where members of	<ul style="list-style-type: none"> <li>• Waste treated in AD site is liquid waste only and reception occurs in a sealed tank which minimises the release of bioaerosols and odour to the atmosphere.</li> </ul>	3

No.	Pollutant Model				Judgement				Action	
	Source	Harm / Outcome	Pathway	Receptor at Risk	Likelihood (1-5)	Significance (1-5)	Risk Rating	Justification	Risk Management	Residual Risk
								the public are exposed.	<ul style="list-style-type: none"> <li>Liquid waste treated by the AD plant is solely the wash water from the scouring plant therefore likelihood of presence of bioaerosols is reduced due to low organic matter content.</li> <li>A filter is fitted on the CHP's intake line to which serves to reduce potential bioaerosol emissions to atmosphere.</li> <li>Following completion of the digestion process, the effluent is</li> </ul>	

No.	Pollutant Model				Judgement				Action	
	Source	Harm / Outcome	Pathway	Receptor at Risk	Likelihood (1-5)	Significance (1-5)	Risk Rating	Justification	Risk Management	Residual Risk
									<p>transferred to the existing effluent treatment plant on site where dewatering takes place. The solid sludge/digestate is deposited in a roll-on roll-off skip which is removed from site daily.</p> <ul style="list-style-type: none"> <li>A Bioaerosols Risk Assessment has been undertaken for the site.</li> </ul>	
7	Odour from waste activities.	Nuisance, loss of amenity.	Air transportation, then inhalation.	Local Human Population	3	3	9	Local residents are often sensitive to odour. There are residential properties in close proximity of the site.	<ul style="list-style-type: none"> <li>Activities shall be managed and operated in accordance with a management system (will include</li> </ul>	5

No.	Pollutant Model				Judgement				Action	
	Source	Harm / Outcome	Pathway	Receptor at Risk	Likelihood (1-5)	Significance (1-5)	Risk Rating	Justification	Risk Management	Residual Risk
								Liquid wastes typically have a lower odour potential than solids given the lower organic matter content.	inspection and maintenance). <ul style="list-style-type: none"> <li>Material is stored within a waste reception tank with vent. The tank is equipped with an electronic pressure measurement gauge, linked to a control system and Supervisory Control and Data Acquisition (SCADA).</li> <li>The potential for odour emissions is low given the nature of the material and the monitoring procedures that</li> </ul>	

No.	Pollutant Model				Judgement				Action	
	Source	Harm / Outcome	Pathway	Receptor at Risk	Likelihood (1-5)	Significance (1-5)	Risk Rating	Justification	Risk Management	Residual Risk
									HSC have in place. <ul style="list-style-type: none"> <li>Material is digested within 7 enclosed digestion tanks with no free venting to atmosphere under normal operation.</li> <li>Following completion of the digestion process, the effluent is transferred to the existing effluent treatment plant on site where dewatering takes place and the solid sludge/digestate is deposited into</li> </ul>	

No.	Pollutant Model				Judgement				Action	
	Source	Harm / Outcome	Pathway	Receptor at Risk	Likelihood (1-5)	Significance (1-5)	Risk Rating	Justification	Risk Management	Residual Risk
									a covered roll-on roll-off skip which is removed from site daily. <ul style="list-style-type: none"> <li>An odour complaints and action procedure will be used.</li> <li>The site has implemented a full Odour Management Plan.</li> </ul>	
8	Noise and vibration.	Nuisance, loss of amenity, loss of sleep	Noise through the air and vibration through the ground.	Local human population.	3	2	6	Local residents often sensitive to noise and vibration.	<ul style="list-style-type: none"> <li>Measures to minimise noise and vibration from AD operations are detailed in the Noise Impact Assessment.</li> <li>To limit the incidence of noise and</li> </ul>	2

No.	Pollutant Model				Judgement				Action	
	Source	Harm / Outcome	Pathway	Receptor at Risk	Likelihood (1-5)	Significance (1-5)	Risk Rating	Justification	Risk Management	Residual Risk
									vibration potentially affecting nearby sensitive receptors, all vehicles and plant will be switched off when not in use. <ul style="list-style-type: none"> <li>All vehicles, plant and machinery operated at the site are maintained in accordance with the manufacturer's specification and site's maintenance schedule and are fitted with effective</li> </ul>	

No.	Pollutant Model				Judgement				Action	
	Source	Harm / Outcome	Pathway	Receptor at Risk	Likelihood (1-5)	Significance (1-5)	Risk Rating	Justification	Risk Management	Residual Risk
									<p>silencers where possible.</p> <ul style="list-style-type: none"> <li>• Digestate moving through the process will be pumped in enclosed pipework.</li> <li>• A noise complaints and action procedure will be used.</li> </ul>	
9	Flare Stack Emissions	Harm to human health – through respiratory irritation and illness.	Air transport then inhalation	Local Human Population	1	3	3	<p>There is a potential for exposure to surrounding residential receptors or at locations where members of the public are exposed.</p> <p>The flare is only utilised in the</p>	<ul style="list-style-type: none"> <li>• Emissions from the flare stack shall only require monitoring from should it run for more than 10% of the year.</li> <li>• Operation of the plant shall be managed and operated in accordance with</li> </ul>	2

No.	Pollutant Model				Judgement				Action	
	Source	Harm / Outcome	Pathway	Receptor at Risk	Likelihood (1-5)	Significance (1-5)	Risk Rating	Justification	Risk Management	Residual Risk
								case of an emergency.	a management system, including inspection and maintenance of plant equipment and engine management systems.	
10	Pressure Relief Valves (PRVs) Emissions.	Harm to human health – through respiratory irritation and illness.	Air transport then inhalation	Local Human Population	1	3	3	There is a potential for exposure to surrounding residential receptors or at locations where members of the public are exposed. The PRVs are only utilised in the case of an emergency as a contingency measure.	<ul style="list-style-type: none"> <li>Operation of the plant shall be managed and operated in accordance with a management system, including inspection and maintenance of plant equipment and engine management systems.</li> <li>Under normal operation, PRVs remain sealed and do not</li> </ul>	2

No.	Pollutant Model				Judgement				Action	
	Source	Harm / Outcome	Pathway	Receptor at Risk	Likelihood (1-5)	Significance (1-5)	Risk Rating	Justification	Risk Management	Residual Risk
									contribute to diffuse emissions. <ul style="list-style-type: none"> <li>Pressure control is maintained through automated systems, ensuring gas remains within the closed system.</li> <li>The site has implemented a full Leak Detection and Repair Plan (LDAR) which incorporates the inspection of PRVs.</li> </ul>	
11	All on-site hazards: machinery.	Bodily injury.	Direct physical contact.	Local human population after gaining	1	5	5	Bodily injury.	<ul style="list-style-type: none"> <li>Feedstock is transferred into the AD plant via</li> </ul>	3

No.	Pollutant Model				Judgement				Action	
	Source	Harm / Outcome	Pathway	Receptor at Risk	Likelihood (1-5)	Significance (1-5)	Risk Rating	Justification	Risk Management	Residual Risk
				unauthorised access to the installation.				The AD process is a closed system.	sealed pipework from a sealed effluent tank. <ul style="list-style-type: none"> <li>Material is transferred throughout the AD process via sealed pipework.</li> <li>Digestion activity carried out within enclosed digesters.</li> <li>Operation of the plant shall be managed and operated in accordance with the site management system.</li> <li>All operatives and visitors to the site have to wear PPE when going on to</li> </ul>	

No.	Pollutant Model				Judgement				Action	
	Source	Harm / Outcome	Pathway	Receptor at Risk	Likelihood (1-5)	Significance (1-5)	Risk Rating	Justification	Risk Management	Residual Risk
									<p>operational areas.</p> <ul style="list-style-type: none"> <li>• Facility includes site security measures to prevent unauthorised access, such as a walled / fenced perimeter.</li> </ul>	
12	Arson and / or Vandalism causing the release of polluting materials to air (smoke or fumes), water or land.	Respiratory irritation, illness and nuisance to local population. Injury to staff, fire fighters or arsonists/vandals. Pollution of water or land.	Air transport of smoke. Spillages of digestate and contaminated firewater by direct run-off from site and via surface water drains and ditches.	Local human population and local environment.	2	5	10	Biogas is flammable and could cause significant harm in certain circumstances. Risk of direct contact is reduced by activity being carried out within enclosed systems.	<ul style="list-style-type: none"> <li>• Site implements full Environmental Management System which details how to deal with fire and spillages.</li> <li>• Operation of the plant shall be managed and operated in accordance with the site</li> </ul>	5

No.	Pollutant Model				Judgement				Action	
	Source	Harm / Outcome	Pathway	Receptor at Risk	Likelihood (1-5)	Significance (1-5)	Risk Rating	Justification	Risk Management	Residual Risk
									<p>management system which will include site security measures to prevent unauthorised access.</p> <ul style="list-style-type: none"> <li>• Facility includes site security measures to prevent unauthorised access, such as walled / fenced perimeter.</li> <li>• The main feedstock of the plant are not combustible.</li> </ul>	
13	Accidental explosion of biogas.	Respiratory irritation, illness and nuisance to local population. Injury to staff, fire	Air transport of smoke. Spillages of digestate and contaminated firewater by	Local human population and local environment.	1	5	5	Unlikely to happen, reduced by effective	<ul style="list-style-type: none"> <li>• Biogas storage chamber, PRVs and associated pipework are</li> </ul>	3

No.	Pollutant Model				Judgement				Action	
	Source	Harm / Outcome	Pathway	Receptor at Risk	Likelihood (1-5)	Significance (1-5)	Risk Rating	Justification	Risk Management	Residual Risk
		fighters or arsonists/vandals. Pollution of water or land. Death / bodily injury.	direct run-off from site and via surface water drains and ditches. Direct contact.					management system.	regularly inspected (please see the site's LDAR plan). <ul style="list-style-type: none"> <li>Operation of the plant shall be managed and operated in accordance with the site management system.</li> <li>Biogas storage chamber and associated pipework are sealed.</li> </ul>	
14	Accidental fire causing the release of polluting materials to air (smoke or fumes), water or land.	Respiratory irritation, illness and nuisance to local population. Injury to staff or fire fighters. Pollution of water or land.	Air transport of smoke. Spillages of digestate and contaminated firewater by direct run-off from site and via surface water	Local human population and local environment.	1	5	5	Risk of accidental combustion of waste is low due to quick processing time and the	<ul style="list-style-type: none"> <li>Site management system details bunding of tanks.</li> <li>Operation of the plant shall be managed and operated in</li> </ul>	3

No.	Pollutant Model				Judgement				Action	
	Source	Harm / Outcome	Pathway	Receptor at Risk	Likelihood (1-5)	Significance (1-5)	Risk Rating	Justification	Risk Management	Residual Risk
			drains and ditches.					nature of effluent.	accordance with the site management system. <ul style="list-style-type: none"> <li>• Following completion of the digestion process, the effluent is transferred to the existing effluent treatment plant on site where dewatering takes place and the solid sludge/digestate is conferred to a roll-on roll-off skip which is removed from site daily.</li> <li>• Site implements full Environmental</li> </ul>	

No.	Pollutant Model				Judgement				Action	
	Source	Harm / Outcome	Pathway	Receptor at Risk	Likelihood (1-5)	Significance (1-5)	Risk Rating	Justification	Risk Management	Residual Risk
									Management System which details how to deal with fire and spillages.	
15	Spillage of liquids, including oil.	Chronic effects: deterioration of water quality, Aquatic toxicity, contamination of groundwater, requiring treatment of water or closure of borehole.	Indirect run-off via the soil layer, Direct run-off from site across ground surface, via surface water drains, ditches etc, Transport through soil/groundwater then extraction at borehole.	All surface waters close to and downstream of site, groundwater	2	3	6	Potential for spillage from digestions tanks and storage vessels.  The site is built on an impermeable concrete surface covered by a membrane.	<ul style="list-style-type: none"> <li>The site has a drainage system in place. The point at which the effluent plant discharges to the public sewer is adjacent to the effluent plant (S1). Domestic foul water is discharged to the same sewer at a different point. There is a freshwater abstraction point along with</li> </ul>	3

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	Source	Harm / Outcome	Pathway	Receptor at Risk	Likelihood (1-5)	Significance (1-5)	Risk Rating	Justification	Risk Management	Residual Risk
									chemical storage areas. <ul style="list-style-type: none"> <li>• Waste storage area on impermeable surface</li> <li>• Individual tanks for the storage of oil and other liquids will be built on individual impermeable bunded areas.</li> <li>• Site implements full Environmental Management System which details how to deal with fire and spillages.</li> <li>• The site has an engineered fall which ensures</li> </ul>	

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	Source	Harm / Outcome	Pathway	Receptor at Risk	Likelihood (1-5)	Significance (1-5)	Risk Rating	Justification	Risk Management	Residual Risk
									<p>that all rainwater is directed into a rainwater drainage channel which will be integrated in the wall of the catastrophic failure retention bund that will surround the AD tanks.</p> <ul style="list-style-type: none"> <li>Collected rainwater is then captured within a rainwater sump equipped with a sump pump for pumping collected rainwater to the site's integrated drainage system.</li> </ul>	

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	Source	Harm / Outcome	Pathway	Receptor at Risk	Likelihood (1-5)	Significance (1-5)	Risk Rating	Justification	Risk Management	Residual Risk
									<ul style="list-style-type: none"> <li>• Within the main bund that will surround the AD tanks, there will be two drainage channels: one that runs between the two rows of AD tanks, and one that runs alongside the site's pump system.</li> <li>• The tanks will be located in an area of the site that is bunded and contained in line with the CIRIA C736 Guidance.</li> <li>• The bunded areas are designed to hold a minimum of</li> </ul>	

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	Source	Harm / Outcome	Pathway	Receptor at Risk	Likelihood (1-5)	Significance (1-5)	Risk Rating	Justification	Risk Management	Residual Risk
									25% of the total tankage, and 110% capacity of the largest tank. The AD tanks are also fitted with overflow detectors. <ul style="list-style-type: none"> <li>• Captured liquid comprises process effluent, which is re-circulated back into the front of the process.</li> <li>• Any solids that accumulate in the grit sump are dug out for subsequent disposal.</li> <li>• In the event of a catastrophic failure, the grit sump will fill and</li> </ul>	

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	Source	Harm / Outcome	Pathway	Receptor at Risk	Likelihood (1-5)	Significance (1-5)	Risk Rating	Justification	Risk Management	Residual Risk
									<p>activate a float switch which will cut power to the rainwater sump pump thereby preventing process liquid from being pumped out of the bund.</p> <ul style="list-style-type: none"> <li>Daily inspection of the site's drainage system to ensure its efficient operation at all times.</li> </ul>	
16	Any, but principally NOx.	Harm to protected site through toxic contamination, nutrient enrichment, disturbance etc.	Any.	Protected nature conservation sites - European	2	3	6	Emissions to air may cause harm to and deterioration of nature	<ul style="list-style-type: none"> <li>Operation of the plant shall be managed and operated in accordance with the site</li> </ul>	3

No.	Pollutant Model				Judgement				Action	
	Source	Harm / Outcome	Pathway	Receptor at Risk	Likelihood (1-5)	Significance (1-5)	Risk Rating	Justification	Risk Management	Residual Risk
				sites and SSSIs.				conservation sites. The nearest SSSI – Leeds – Liverpool Canal, is 5.8km away.	management system, including inspection and maintenance of plant equipment and engine management systems. <ul style="list-style-type: none"> <li>• CHPs designed to keep NOx emissions less than 190mg/m<sup>3</sup>.</li> <li>• Boiler designed to keep NOx emissions less than 250mg/m<sup>3</sup>.</li> <li>• A H1 Assessment has been undertaken for the site which incorporates the existing CHPs, boiler and new CHP.</li> </ul>	

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	Source	Harm / Outcome	Pathway	Receptor at Risk	Likelihood (1-5)	Significance (1-5)	Risk Rating	Justification	Risk Management	Residual Risk
17	Material being transported to and from site.	Dust and mud.	Air: windblown.	Local atmosphere, amenity of local public.	2	1	2	The nature of the waste feedstock to site is not dusty.	<ul style="list-style-type: none"> <li>Liquid effluent is conferred to the AD plant via sealed pipework and is stored in sealed tanks and as such, dust is not considered an issue on site.</li> <li>The solid sludge/digestate removed from the effluent treatment plant is stored within covered roll-on roll-off skips.</li> </ul>	1
18	Material being transported to and from site.	Litter.	Air: Windblown.	Local Amenity.	2	1	2	Waste feedstock (liquid effluent) will be transferred through sealed pipework.	<ul style="list-style-type: none"> <li>Liquid effluent is conferred to the AD plant via sealed pipework and is stored in sealed tanks</li> </ul>	2

No.	Pollutant Model				Judgement				Action	
	Source	Harm / Outcome	Pathway	Receptor at Risk	Likelihood (1-5)	Significance (1-5)	Risk Rating	Justification	Risk Management	Residual Risk
									<p>and as such, dust is not considered an issue on site.</p> <ul style="list-style-type: none"> <li>The solid sludge/digestate removed from the effluent treatment plant is stored within covered roll-on roll-off skips.</li> </ul>	
19	Flooding of site.	Flooding, surface water contamination.	Flood waters.	Human Population.  Local environment.	2	3	6	Waste feedstock (liquid effluent) will be transferred through sealed pipework. Feedstock could potentially pollute surface water.	<ul style="list-style-type: none"> <li>There is a low risk of surface water flooding to occur across most of the site, although there are small areas to the north and western boundary of the site where the risk is higher. These areas are classified as</li> </ul>	3

No.	Pollutant Model				Judgement				Action	
	Source	Harm / Outcome	Pathway	Receptor at Risk	Likelihood (1-5)	Significance (1-5)	Risk Rating	Justification	Risk Management	Residual Risk
									being located in Flood Zone 2 and 3. <ul style="list-style-type: none"> <li>• Effluent will be stored in sealed storage tanks.</li> <li>• Effluent processing will occur in sealed digestors.</li> <li>• The site has an engineered fall which ensures that all rainwater is directed into a rainwater drainage channel which will be integrated in the wall of the catastrophic failure retention bund that will surround the AD tanks.</li> </ul>	

No.	Pollutant Model				Judgement				Action	
	Source	Harm / Outcome	Pathway	Receptor at Risk	Likelihood (1-5)	Significance (1-5)	Risk Rating	Justification	Risk Management	Residual Risk
									<ul style="list-style-type: none"> <li>Collected rainwater is then captured within a rainwater sump equipped with a sump pump for pumping collected rainwater to the site's integrated drainage system.</li> <li>Within the main bund that will surround the AD tanks, there will be two drainage channels: one that runs between the two rows of AD tanks, and one that runs alongside the site's pump</li> </ul>	

No.	Pollutant Model				Judgement				Action	
	Source	Harm / Outcome	Pathway	Receptor at Risk	Likelihood (1-5)	Significance (1-5)	Risk Rating	Justification	Risk Management	Residual Risk
									system. Captured liquid comprises process effluent, which is re-circulated back into the front of the process. Any solids that accumulate in the grit sump are dug out for subsequent disposal. In the event of a catastrophic failure, the grit sump will fill and activate a float switch which will cut power to the rainwater sump pump thereby preventing	

No.	Pollutant Model				Judgement				Action	
	Source	Harm / Outcome	Pathway	Receptor at Risk	Likelihood (1-5)	Significance (1-5)	Risk Rating	Justification	Risk Management	Residual Risk
									process liquid from being pumped out of the bund.	
20	Emissions to sewer.	Surface and Groundwater contamination.	Surface water flow.	Local Environment	2	3	6	Emissions to sewer and associated Emission Limit Values is already documented within the existing Environmental Permit. The addition of the AD process will not impact this negatively.	<ul style="list-style-type: none"> <li>• Effluent will be stored in sealed storage tanks.</li> <li>• Effluent processing will occur in sealed digestors.</li> <li>• The site has an engineered fall which ensures that all rainwater is directed into a rainwater drainage channel which will be integrated in the wall of the catastrophic failure retention bund</li> </ul>	3

No.	Pollutant Model				Judgement				Action	
	Source	Harm / Outcome	Pathway	Receptor at Risk	Likelihood (1-5)	Significance (1-5)	Risk Rating	Justification	Risk Management	Residual Risk
									that will surround the AD tanks. <ul style="list-style-type: none"> <li>Collected rainwater is then captured within a rainwater sump equipped with a sump pump for pumping collected rainwater to the site's integrated drainage system.</li> <li>Within the main bund that will surround the AD tanks, there will be two drainage channels: one that runs between the two rows of AD tanks, and one that runs</li> </ul>	

No.	Pollutant Model				Judgement				Action	
	Source	Harm / Outcome	Pathway	Receptor at Risk	Likelihood (1-5)	Significance (1-5)	Risk Rating	Justification	Risk Management	Residual Risk
									alongside the site's pump system. Captured liquid comprises process effluent, which is re-circulated back into the front of the process. Any solids that accumulate in the grit sump are dug out for subsequent disposal. In the event of a catastrophic failure, the grit sump will fill and activate a float switch which will cut power to the rainwater sump pump thereby	

No.	Pollutant Model				Judgement				Action	
	Source	Harm / Outcome	Pathway	Receptor at Risk	Likelihood (1-5)	Significance (1-5)	Risk Rating	Justification	Risk Management	Residual Risk
									preventing process liquid from being pumped out of the bund.	