Mitchell Laithes Sludge Treatment Facility: Accident Management Plan





Document Control

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Review Period:	 Every 4 years or sooner in the event of changes that may impact this plan, including (but not limited to): Changes to site activities, equipment or management / operational procedures. An accident or incident on this site, or other similar sites (whether or not these are YW sites) that prompts a review of accident risks, preventive controls and emergency responses measures.

Document Approval

Name	Name
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Policy and Assurance	
Document Owner (Author)	Document Approval Manager (Tier 3)

Document Revision History

Version	Date	Revised By	Reviewed By	Amendment Details
1	24/1/2024	David Shaw	Hazel Morgan	New document

Business areas affected by this document

This applies to colleagues that are operating or managing Mitchell Laithes STF.

1. Introduction

In accordance with the Environmental Permit for Mitchell Laithes Sludge Treatment Facility (STF) (permit reference: EPR/VP3730GB), this document presents the Accident Management Plan for the permitted facility.

This plan is established to identify, evaluate and prepare for potential incidents or events that could result in:

- Pollution; and / or
- not being able to comply with permit conditions.

This plan for accident prevention and management follows relevant Environment Agency guidance and includes the following sections:

- Overview of management controls (Section 2)
- Identification of relevant sensitive receptors (Section 3).
- Identification of potentially polluting substances held on site (Section 4).
- Identification potential accidents and incidents and assessment of the overall risk posed by these hazards (Section 5).
- The overall risk of each of the hazard is identified on the basis of the likelihood of the event occurring and the environmental consequence of that event, taking account of:
 - Preventive controls in place; and
 - Actions to be taken in the event of the accident / incident occurring.
- Summary of actions to be taken following an accident or incident occurring, including measures to record, investigate and respond to the incident (Section 6).
- List of emergency contacts (Section 7).

2. Overview of relevant management controls and procedures

YW has an established EMS, which is certified to the ISO 14001 standard. The EMS forms part of a wider corporate Integrated Management System (IMS) which also incorporates quality management, health and safety management, asset management, organisational resilience and business continuity requirements. The management system follows an asset life cycle approach, from design through to decommissioning. Corporate level management system processes are in place, which are supplemented by sitespecific documented procedures and processes.

YW has developed processes to identify, respond to and control emergency situations that may cause adverse environmental consequences. Spill kits are readily accessible at locations where there is a risk of spillage (e.g. delivery, storage and areas of use). Spill control toolbox talks are provided to staff. This includes information about how to prevent and control pollution incidents from accidental spills of oils, fuels, sludge and chemicals. Contingency plans help minimise potential environmental impacts; this includes emergencies arising from breakdowns, enforced shutdowns, abnormal circumstances such as flooding as well as major fire and spill/loss of containment events.

The YW Business Continuity Plan is in place to define and prioritise critical business functions, details the immediate response requirements for a critical incident and details strategies and actions to be taken to ensure business continuity. All Bioresources sites, including Mitchell Laithes STF, have the capability of remote monitoring and remote operation of key functions. A security guard is present on site 12 hours per day Monday to Friday and CCTV security cameras are located across the site with monitoring provided 24/7 by the YW Service Delivery Centre. All buildings are alarmed and high-risk equipment is provided with secondary fencing for added security.

3. Sensitive receptors

A summary of sensitive receptors relevant to Mitchell Laithes STF is provided in Table 1 below.

Receptor type	Receptor description and distance
Human	
Residential housing – North	Land immediately to the north of the installation boundary is largely woodland/fields with residential areas beyond (Chickenley area). Some closer residential properties are located to the northwest. The nearest of these properties are: Pump House Cottages approximately 240m; Mitchell Laithes Farmhouse approximately 330m; Scarr End Mill approximately 316m.
Residential housing – East/Northeast	The nearest residential properties are on the outskirts of Ossett, approximately 650m from the installation boundary (Silverwood Grange, Runtings Lane).
Residential housing – West	The nearest residential properties to the West are approximately 750m from the installation boundary (Double Lock House and houses adjacent to Paradise School).
Residential housing – Southwest	The nearest residential property is approximately 430m from the installation boundary. (Lodge Farm)
Residential housing – South	The nearest residential property is approximately 875m from the installation boundary. (Dwellings off Hall Lane)
Public amenity areas including public footpath/cycleway	Kirklees/Wakefield Way passes through woodland approximately 175m to the north-northeast of the digester area. The same paths run adjacent to the northern edge of the eastern digested sludge cake storage area, separated by a hedgerow.
Tennis club	There are tennis courts located approximately 760m to the south of the installation boundary.
Schools	There are 29 schools within approximately 2km of the site, and 5 sites within 1km. The nearest of these is 710m to the western boundary of the digested sludge cake storage area.
Hospitals/healthcare facilities	The nearest medical centre is approximately 1,820m from the northern edge of the installation boundary.

Table 1: Sensitive Receptors to site

Industrial/commercial sites	Scarr End Mill is the nearest industrial (vehicle refinishers) site located
	approximately 235m to the northwest of the digester area.
	The second nearest industrial area is located to the east of the
	eastern digested sludge cake storage area at approximately 273m.
Ecological	
Habitat sites – statutory	There is one internationally designated site approximately 4.5km
designations	south of the installation (Denby Grange Colliery Ponds, SAC/SSSI).
Habitat sites – local sites	The local nature reserve Sparrow Wood LNR is approximately 1,276m
and non statutory	to the west of the installation boundary. The site is designated for
designations	woodland habitat and associated flora and fauna.
Protected species	Possible presence of protected species on or off sites.
Environment – Other	
Global atmosphere	Local, regional and global atmosphere.
Ground/groundwater	Underlying groundwater classed as a Secondary A aquifer;
	groundwater vulnerability classed as high.
Surface water	River Calder directly adjacent to installation boundary.
	Likely hydraulic continuity between underlying groundwater and river.

4. Inventory of potentially polluting materials

In assessing potential accidents and incidents consideration has been given to the potentially polluting substances held on site, including review of their properties, toxicity and the volume stored. 0 details the raw materials stored on site, 0 details the sludge, sludge cake and process liquors stored on site and 0 details the waste materials stored on site.

Substance (Contaminants)	Use	State	Storage Arrangements	Toxicity/ Fate/ Mobility
Polymer (powder)	Coagulant used for thickening undigested sludge and to assist in the dewatering process for digested sludge	Solid	750kg bags in dedicated hopper room within thickener and centrifuge buildings. In each location, the powder is mixed and then diluted, in a series of tanks, and applied to the sludge via a series of pumps and dosing pipework	Polluting to soil and watercourses in the event of a spillage/loss
Polymer (bulk storage of liquid coagulant)	Diluted coagulant used to aid digested sludge dewatering	Liquid	10m ³ bunded stainless steel tank within centrifuge building, located within concrete bund	Polluting to soil and watercourses in the event of a spillage/loss
Polymer (liquid coagulant stored in IBCs)	Coagulant used for thickening of digested sludge for dewatering	Liquid	Temporary use of liquid polymer for dewatering. IBC storage adjacent to centrifuge building, pumped to mixing tanks within dewatering building	Polluting to soil and watercourses in the event of a spillage/loss
Antifoam	Digester antifoaming	Liquid	IBCs (1m ³), decanting kiosk, dosing storage (stock tank of 1.2m ³) and associated pump and pipework located on hardstanding within and adjacent to digester compound	Polluting to soil and watercourses in the event of a spillage/loss
Water treatment chemicals	Boiler treatment	Liquid and solid	Brought to site by contractors for periodic maintenance. Limited storage on site within Gravity	Polluting to soil and watercourses in
Glycol	Antifreeze for use in CHP equipment	Liquid	Belt Thickener building (on hardstanding in a bunded area)	the event of a spillage/loss
Biogas	Generated within the AD	Gas	Transferred from AD to gas holder (1,350m ³) for use in the CHP	Volatile and unlikely to pollute watercourses or land in the event of escape

Table 2: Raw Materials Associated with the Facility and their Potential to Pollute

Substance (Contaminants)	Use St		Storage Arrangements	Toxicity/ Fate/ Mobility	
Gas oil	Back up boiler fuel	Liquid	Integrally bunded steel tank. Area surrounding drains to an interceptor. Fill panel and access within locked compartment	Polluting to soil and watercourses in the event of a spillage/loss	
Lubricating oil	For use in CHP and other equipment	Liquid	Small intermediary containers (20 litre) stored within designated areas on hardstanding	Polluting to soil and watercourses in the event of a spillage/loss	
Diesel	Fuelling of off-road vehicles	Liquid	Integrally bunded steel tank, located on hardstanding at central cake pad	Polluting to soil and watercourses in the event of a spillage/loss	
Transformer	Transformer only	Liquid	No storage other than volume in use	Polluting to soil and watercourses in the event of a spillage/loss	

Table 3: Bulk Storage of Sludge, Sludge Cake and Process Liquors and their Potential to Pollute

Material	Nature of material	Storage Arrangements	Nominal capacity (m³)	
Raw sludge (un-	Liquid	Incoming underground and overground pipes from WwTW	-	
thickened)	Liquid	Sludge screen feed tank, steel construction, uncovered, c.2009	165	
		Sludge feed primary storage tanks	-	
Screened sludge	Liquid	Primary storage tanks, No. 1 and No.2, concrete construction, covered, c. 2008	2 x 1,000	
		Sludge feed to Gravity Belt Thickeners (GBTs)	-	
	Liquid	Sludge feed to SAS tanks	-	
Surplus activated sludge (SAS)		SAS tanks, No.1 and No.2, concrete construction, uncovered, c.2010	2 x 1,960	
		Sludge feed to Gravity Belt Thickeners (GBTs)	-	
Thickened sludge –		Sludge feed to digester feed blending tank	-	
imported, indigenous primary and indigenous SAS		Digester feed blending tank, concrete construction, covered, c. 2008	1,530	
Sludge within digesters	Liquid	Sludge feed to digesters	-	

		Digesters x 2, concrete, covered, constructed c.1980 (asset refurbishment 2019).	2 x 5,114
		Sludge balance tank, concrete, uncovered, constructed 1979, refurbished 2019	334
Digested sludge	Liquid	Sludge feed to centrifuge feed tanks	-
		Centrifuge feed tanks x 2, concrete, uncovered, constructed 2008	1,885
		Sludge feed to centrifuges	-
	Liquid	Liquor return from GBT to discharge into WwTW	-
Thickening/dewatering		Liquor return from drum thickeners to discharge into WwTW	-
liquor		Centrate tank, concrete construction, beneath centrifuge building	279
		Centrate pumping station and transfer of liquors to centrate pumping sump	-
Cake	Solid	Concrete pad adjacent to centrifuges	(max) 2,000 tonnes
Run-off from concrete pad	Liquid	Western concrete pad	(max) 4,250 tonnes
		Eastern concrete pad	(max) 3,500 tonnes
		Return pipework (to WwTW)	-

Waste Type	Nature of material	Storage Arrangements	Storage and Disposal Method	
Sludge screenings	Non-hazardous	Stored within skips on hardstanding at waste import, prior to collection by approved waste contractors	Collected by approved waste contractor for off-site disposal	
Waste oil	Hazardous	Stored in small containers (<50 litres) within bunded areas/containers before removal by maintenance contractors	Collected by approved waste contractor for off-site disposal	
General waste	Non-hazardous	Dedicated skips and smaller containers, located on hardstanding at designated points within the installation	Collected by approved waste contractor for off-site disposal	
Metals	Non-hazardous	Stored within a skip in designated area	Collected by approved waste contractor for off-site disposal	
Empty IBCs	Hazardous	Stored in designated locations within the installation prior to removal	Collected by approved waste contractor for off-site disposal	
Oil contaminated absorbents	Hazardous	Dedicated containers (20 litre drum) within digester areas	Collected by approved waste contractor for off-site disposal	
Oil filters	Hazardous	Dedicated container (20 litre drum) within digester areas	Collected by approved waste contractor for off-site disposal	
Antifreeze	Hazardous	Removed from site when servicing requires (in small containers, <50 litres)	Collected by approved waste contractor for off-site disposal	

Table 4: Process Wastes and Potential to Pollute (Main app pp.260)

5. Accident Management Plan

The potential for accidental releases resulting from the activities proposed in this variation application are identified and assessed in Table 5 below. This includes a summary of measures in place to manage/reduce accident risks. Refer to Appendix 1 for the scoring mechanism.

What harm can be Hazard	Receptor	Pathway	Managing the risk Risk management	Probability of	risk (after prevento Environmental	What is the
			, i i i i i i i i i i i i i i i i i i i	exposure	Consequence	overall risk?
What has the	What is at risk?	How can the	What measures will you take to reduce the risk?	How likely is	What is the	What is the
potential to	What do I wish	hazard get to	If it occurs – who is responsible for what?	this contact?	harm that can	risk that stil
cause harm?	to protect?	the receptor?			be caused?	remains?
Site Wide - genera	I					
Flooding leading	Ground /	Floodwaters /	Preventative controls	Likely	Medium	Moderate
to damage to site	groundwater /	Infiltration	• Mitchell Laithes STF is built on a hillside. The			risk
processes and/or	surface waters		majority of the sludge treatment assets are			
mobilisation of			towards the top of the hill and outside all			
polluting			flood zones.			
materials			• Flood risk review undertaken. A small area of			
			the STF installation lie within Flood Zone 2			
			(land having between a 1 in 100 and 1 in 1,000			
			annual probability of river flooding)			
			Flood mapping shows there is a risk cake			
			pads may be affected by flooding.			
			Materials are stored in appropriately sealed			
			 containers (preferably bulk or semi-bulk), or 			
			proprietary secondary containment cabinets,			
			such that the risk of contents being mobilised			
			or containers being washed away in a flood			
			event is low.			
			Vulnerable Asset Protection Plan details			
			flooding actions including how river levels			

What harm can be	caused and who c	an be harmed	e harmed Managing the risk	Assessing the risk (after preventative controls)		
Hazard	Receptor	Pathway	Risk management	Probability of	Environmental	What is the
				exposure	Consequence	overall risk?
What has the	What is at risk?	How can the	What measures will you take to reduce the risk?	How likely is	What is the	What is the
potential to	What do I wish	hazard get to	If it occurs – who is responsible for what?	this contact?	harm that can	risk that stil
cause harm?	to protect?	the receptor?			be caused?	remains?
			should be monitored and what actions are			
			required.			
			In the event of an incident/accident			
			Initiate site emergency plan.			
			Remove mobile fuel/ chemical sources away			
			from flood risk, if appropriate and safe to do			
			so			
Flooding due to	Ground /	Floodwaters /	Preventative controls	Unlikely	Mild	Low risk
drain blockages	groundwater /	Infiltration	Drains are monitored for blockages and			
and/or excessive	surface waters		cleaned as required.			
rainfall causing			Gradient of site means significant			
localised on-site			accumulation of surface water is unlikely.			
surface water			Materials are stored in appropriately sealed			
flooding leading			containers (preferably bulk or semi-bulk), or			
to damage to site			proprietary secondary containment cabinets,			
processes and/or			such that the risk of contents being mobilised			
mobilisation of			or containers being washed away in a flood			
polluting			event is low.			
materials			Vulnerable Asset Protection Plan specifically			
			details flooding actions.			
			Planned maintenance / inspection of site			
			drainage systems.			
			In the event of an incident/accident			
			Initiate site emergency plan.			
			Remove mobile fuel/ chemical sources away			
			from flood risk, if appropriate and safe to do			
			SO.			

What harm can be caused and who can be harmed			Managing the risk	Assessing the risk (after preventative controls)			
Hazard	Receptor	Pathway	Risk management	Probability of	Environmental	What is the	
				exposure	Consequence	overall risk?	
What has the	What is at risk?	How can the	What measures will you take to reduce the risk?	How likely is	What is the	What is the	
potential to	What do I wish	hazard get to	If it occurs – who is responsible for what?	this contact?	harm that can	risk that still	
cause harm?	to protect?	the receptor?			be caused?	remains?	
Fire	Nearby human	Air	Preventative controls	Highly unlikely	Severe	Low risk	
	receptors		Regular maintenance of equipment; LDAR				
		Overland	programme in place.				
	Local air quality	runoff /	• Fire alarms are fitted in CHP/boiler rooms.				
	and global	infiltration /	DSEAR assessment has been completed for				
	climate impacts	drainage	site and only appropriate ATEX rated				
		systems	equipment may be used in high-risk areas.				
	Ground /		Access controls in place for digester				
	groundwater /		compound and portable gas monitor use				
	surface waters		required when inside compound.				
			Site does not treat combustible wastes.				
			Sludge is wet.				
			• Gas slam shut valves on biogas feeds to the				
			CHP / boiler.				
			• Gas and fire detection in the boiler/CHP				
			rooms, and other key AD plant areas.				
			Lightning protection provided for biogas				
			storage.				
			In the event of an incident/accident				
			Follow site emergency procedure.				
			Hydrants connected to a final effluent supply				
			can be used by the fire service.				
			• Excess biogas created by the site will be				
			burnt through the flare.				
Failure to contain	Ground /	Floodwaters /	Preventative controls	Highly unlikely	Medium	Low risk	
firewater	groundwater /	Infiltration			Subject to	Subject to	
following fire /	surface waters				review	review	

What harm can be caused and who can be harmed		an be harmed	Managing the risk	Assessing the risk (after preventative controls)		
Hazard	Receptor	Pathway	Risk management	Probability of	Environmental	What is the
				exposure	Consequence	overall risk?
What has the	What is at risk?	How can the	What measures will you take to reduce the risk?	How likely is	What is the	What is the
potential to	What do I wish	hazard get to	If it occurs – who is responsible for what?	this contact?	harm that can	risk that still
cause harm?	to protect?	the receptor?			be caused?	remains?
explosion event			• Site drainage systems, hardstanding, sumps,			
leading to			storm tanks etc will minimise flow of firewater			
localised on site			to receptors.			
surface water			In the event of an incident/accident			
flooding leading			Initiate site emergency procedure.			
to damage to site						
processes and/or						
mobilisation of						
polluting						
materials						
Excessively low	Nearby human	Air	Preventative controls	Unlikely	Mild	Low risk
temperatures	receptors		'Winterisation' procedures.			
leading to		Overland	Bunding provided to environmentally critical			
blockages or	Local air quality	runoff /	plant and equipment.			
damage to	and global	infiltration /	Current YW technical standards include trace			
pipework, valves	climate impacts	drainage	heating for vulnerable pipework.			
or equipment		systems	In the event of an incident/accident			
and unplanned	Ground /		Isolate systems as appropriate and initiate			
release of gas	groundwater /		fire, spill and emergency response			
with fire /	surface waters		procedures, cleaning up spill and disposal of			
explosions risks			wastes appropriately.			
and/or release of			Carry out repairs (as required).			
potentially						
polluting liquids						
Generalised or	Nearby human	Air	Preventative controls	Unlikely	Mild	Low risk
localised power	receptors		Process for recovering from power failure has			
failure leading to			been planned and recorded.			

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What harm can be caused and who can be harmed		an be harmed	Managing the risk	Assessing the risk (after preventative controls)		
Hazard	Receptor	Pathway	Risk management	Probability of	Environmental	What is the
				exposure	Consequence	overall risk?
What has the	What is at risk?	How can the	What measures will you take to reduce the risk?	How likely is	What is the	What is the
potential to	What do I wish	hazard get to	If it occurs – who is responsible for what?	this contact?	harm that can	risk that stil
cause harm?	to protect?	the receptor?			be caused?	remains?
failure of pumps /	Local air quality	Overland	• In the event of power failure, sludge transfers			
control systems	and global	runoff /	will stop but this will not affect security of			
and escape of	climate impacts	infiltration /	containment e.g., tanks will not overflow.			
sludge and/or		drainage	In the event of an incident/accident			
biogas	Ground /	systems	Halt sludge imports to site.			
-	groundwater /		Confirm backup power supply is online.			
	surface waters		Confirm that all systems are operating			
			normally.			
Vandalism / site	Nearby human	Air	Preventative controls	Highly unlikely	Mild	Negligible
security failure	receptors		High level of security on site with 24 hr			risk
leading to		Overland	security monitoring, secure entry gate			
unplanned	Local air quality	runoff /	systems and locked cabs and control units.			
release of gas	and global	infiltration /	In addition to perimeter fencing around site,			
with fire /	climate impacts	drainage	key digestion equipment sits within a			
explosions risks		systems	separate fenced area.			
and/or release of	Ground /		Storage containers bunded.			
potentially	groundwater /		In the event of an incident/accident			
polluting liquids	surface waters		Isolate systems as appropriate and initiate			
(chemicals, oils,			fire, spill and emergency response			
sludges)			procedures, cleaning up spill and disposal of			
			wastes appropriately.			
			Carry out repairs (as required).			
			Review security measures on site.			
Cyber security	Nearby human	Air	Preventative controls	Highly unlikely	Mild	Negligible
, incident which	receptors	Overland	YW operates an information security			risk
leads to		runoff /	management system to provide cyber			
unauthorised site		infiltration /	security protection and response.			

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What harm can be caused and who can be harmed		an be harmed	Managing the risk	Assessing the risk (after preventative controls)			
Hazard	Receptor	Pathway	Risk management	Probability of	Environmental	What is the	
				exposure	Consequence	overall risk?	
What has the	What is at risk?	How can the	What measures will you take to reduce the risk?	How likely is	What is the	What is the	
potential to	What do I wish	hazard get to	If it occurs – who is responsible for what?	this contact?	harm that can	risk that stil	
cause harm?	to protect?	the receptor?			be caused?	remains?	
access and	Local air quality	drainage	High level of security on site with 24 hr				
unplanned	and global	systems	security monitoring, secure entry gate				
release of gas	climate impacts		systems and locked cabs and control units.				
with fire /	Ground /		Storage containers bunded.				
explosions risks	groundwater /		In the event of an incident/accident				
and/or release of	surface waters		Isolate systems as appropriate and initiate				
potentially			fire, spill and emergency response				
polluting liquids			procedures, cleaning up spill and disposal of				
(chemicals, oils,			wastes appropriately.				
sludges)			Carry out repairs (as required).				
			Review cyber security measures.				
Failure of	Ground /	Overland	Preventative controls	Unlikely	Mild	Low risk	
chemical or oil	groundwater /	runoff /	• All oil storage and waste oil storage tanks are				
containment due	surface waters	infiltration /	fully bunded (using either fixed or mobile				
to deterioration of		drainage	bunds).				
storage		systems	Joints external to containment minimised				
containers,			and fully welded.				
pipework or			Tank and pipework inspections undertaken				
valves leading to			as part of routine maintenance.				
spillage			Operational procedures for refilling oil and				
			chemical storage tanks. Spill kit to be				
			available at tanks.				
			Any oil spilt around engines during				
			maintenance will be cleaned up and				
			disposed of appropriately.				
			In the event of an incident/accident				

What harm can be	e caused and who a	an be harmed	Managing the risk	Assessing the I	risk (after prevente	ative controls)
Hazard What has the	Receptor What is at risk?	Pathway How can the	Risk management What measures will you take to reduce the risk?	Probability of exposure How likely is	Environmental Consequence What is the	What is the overall risk? What is the
potential to	What do I wish	hazard get to	If it occurs – who is responsible for what?	this contact?	harm that can	risk that still
cause harm?	to protect?	the receptor?	in it occurs – who is responsible for what:	this contact:	be caused?	remains?
Failure of chemical or oil containment during delivery	Ground / groundwater / surface waters	Overland runoff / infiltration / drainage systems	 Isolate systems as appropriate and initiate spill response procedure, cleaning up spill and disposal of wastes appropriately. Carry out repairs (as required). Review systems to prevent recurrence. Preventative controls Delivery procedures inc. supervision by site staff, check on space available in receiving tank. Storage containers bunded. Chemical/oil storage only in area surrounded by hardstanding 	Unlikely	Mild	Low risk
			Follow incident plan.			
Vehicle impact leading to loss of pressurised gas and explosion / fire risk or loss of liquid containment (chemicals, oils, sludges)	Nearby human receptors Contribution to local air pollution and global warming Ground / groundwater / surface waters	Air	 Preventative controls Site speed limits in place to reduce chance and consequence of collision. Tanker discharge point and access to this area are controlled by manned security point at main site entrance. Key areas including barriers to prevent collision with equipment. Key digestion assets including digestion tanks are set back from road and surrounded by a fence. 	Unlikely	Mild Subject to review	Low risk Subject to review

Hazard	Receptor	Pathway	Risk management	Probability of	Environmental	tive controls) What is the
		· · · · · · · · · · · · · · · · · · ·		exposure	Consequence	overall risk?
What has the	What is at risk?	How can the	What measures will you take to reduce the risk?	How likely is	What is the	What is the
potential to	What do I wish	hazard get to	If it occurs – who is responsible for what?	this contact?	harm that can	risk that stil
cause harm?	to protect?	the receptor?			be caused?	remains?
			 Site drainage will capture spills related to pipe failure and return this to the WwTW for treatment. In the event of an incident/accident Isolate systems as appropriate and initiate fire, spill and emergency response procedures, cleaning up spill and disposal of wastes appropriately. 			
			Carry out repairs (as required)			
Excessive noise from plant or equipment e.g., due to equipment deterioration or failure	Nearby human receptors	Air	 Preventative controls Procurement controls mean plant are selected to comply with relevant noise limits. Regular maintenance completed to ensure equipment operates within normal noise parameters. Acoustic enclosures / controls on some noise generating plan (e.g. compressors) Sensitive receptors not located within close proximity to the site. Refer to Table 1 for summary of sensitive receptors. In the event of an incident/accident Investigate cause and implement preventive measures, which may include system maintenance interventions. 	Unlikely	Mild	Low risk

What harm can be caused and who can be harmed		can be harmed	Managing the risk	Assessing the risk (after preventative controls)			
Hazard	Receptor	Pathway	Risk management	Probability of	Environmental	What is the	
				exposure	Consequence	overall risk?	
What has the	What is at risk?	How can the	What measures will you take to reduce the risk?	How likely is	What is the	What is the	
potential to	What do I wish	hazard get to	If it occurs – who is responsible for what?	this contact?	harm that can	risk that still	
cause harm?	to protect?	the receptor?			be caused?	remains?	
Spillage of sludge	Ground /	Overland	Preventative controls	Likely	Minor /	Low risk	
during transfer /	groundwater /	runoff /	Staff training on system operation.		negligible	Subject to	
handling	surface waters	infiltration /	Hardstanding in key/high risk areas.		Subject to	review	
activities		drainage	• Surface water runoff from all areas of the site		review		
		systems	returns to the WwTW for treatment, other				
			than very small areas with low or no risk of				
			sludge spillage.				
			In the event of an incident/accident				
			Isolate systems as appropriate and initiate				
			spill response procedure, cleaning up spill				
			and disposal of wastes appropriately.				
Failure (cracks,	Ground /	Infiltration	Preventative controls	Unlikely	Medium	Moderate /	
splitting) of	groundwater /		Existing underground pipework will be			Low risk	
underground	surface waters		periodically surveyed using in-pipe crack				
pipework (e.g.			detection technology.				
fuel, chemicals,			Where new pipework at the site has to be				
sludge, site			underground, the containment provision will				
drains)			be risk assessed and appropriate design				
			specification implemented, which may				
			include secondary containment and leak				
			detection.				
			In the event of an incident/accident				
			Damaged pipe will be isolated.				
			Spill management procedure will be				
			followed.				
			Repairs to damaged pipework will be				
			arranged.				

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What harm can be caused and who can be harmed		an be harmed	Managing the risk	Assessing the risk (after preventative controls)		
Hazard	Receptor	Pathway	Risk management	Probability of	Environmental	What is the
				exposure	Consequence	overall risk?
What has the	What is at risk?	How can the	What measures will you take to reduce the risk?	How likely is	What is the	What is the
potential to	What do I wish	hazard get to	If it occurs – who is responsible for what?	this contact?	harm that can	risk that still
cause harm?	to protect?	the receptor?			be caused?	remains?
Minor failure of	Ground /	Overland	Preventative controls	Likely	Minor /	Minor risk
sludge storage	groundwater /	runoff /	• High level probes to prevent overfilling of		negligible	
tanks / digester	surface waters	infiltration /	tanks.			
tanks e.g., tank		drainage	• Trace heating is provided to tank level gauges			
overtopping,		systems	to prevent freezing and reduce the risk of false			
pipework leaks			readings.			
			Site is monitored on a daily basis.			
			Infrastructure maintenance and inspections.			
			• Protective measures as for sludge spillage.			
			• Surface water runoff from all areas of the site			
			returns to the WwTW for treatment, other than			
			very small areas with low or no risk of sludge			
			spillage.			
			Refer to Secondary Containment Report for			
			details of risk assessment			
			In the event of an incident/accident			
			Isolate systems as appropriate and initiate			
			spill response procedure, cleaning up spill and			
			disposal of wastes appropriately.			
			Arrange repairs.			
Major failure of	Ground /	Overland	Preventative controls	Highly unlikely	Severe	Moderate /
digester or other	groundwater /	runoff /	Design and construction of assets is			Low risk
sludge storage	surface waters	infiltration /	governed by relevant YW technical			
tank or		drainage	standards to ensure it is fit for purpose.			
associated		systems	Infrastructure maintenance and inspections.			
pipework leading						
to large scale						

What harm can be caused and who can be harmed		an be harmed	Managing the risk	Assessing the risk (after preventative controls)		
Hazard	Receptor	Pathway	Risk management	Probability of exposure	Environmental Consequence	What is the overall risk?
What has the	What is at risk?	How can the	What measures will you take to reduce the risk?	How likely is	What is the	What is the
potential to	What do I wish	hazard get to	If it occurs – who is responsible for what?	this contact?	harm that can	risk that still
cause harm?	to protect?	the receptor?			be caused?	remains?
sludge loss/spillage			 Existing and planned bunding / secondary containment (Refer to Secondary Containment Report). Surface water runoff from all areas of the site returns to the WwTW for treatment, other than very small areas with low or no risk of sludge spillage. In the event of an incident/accident Cancel all sludge deliveries to site. Isolate systems as appropriate and initiate spill response procedure, cleaning up spill and disposal of wastes appropriately. 			
Biogas pipework, v	alves, vents	1		1	1	1
Failure of biogas pipework, valves and biogas holder (corrosion, cracks, material defects etc) leading to minor release of biogas and slight fire / explosion risk	Nearby human receptors Local air quality and global climate impacts	Air	 Preventative controls Design and construction of pipework is governed by relevant YW technical standards to ensure it is fit for purpose. Most biogas pipework operates at low pressures. Pipework/gas holders protected from excessive pressure by pressure relief valves. Pipework is above ground where possible to facilitate inspection and maintenance. Maintenance schedule defined as part of LDAR strategy at site. 	Unlikely	Minor / negligible	Negligible risk

What harm can be caused and who can be harmed		an be harmed	Managing the risk	Assessing the risk (after preventative controls)		
Hazard	Receptor	Pathway	Risk management	Probability of	Environmental	What is the
				exposure	Consequence	overall risk?
What has the	What is at risk?	How can the	What measures will you take to reduce the risk?	How likely is	What is the	What is the
potential to	What do I wish	hazard get to	If it occurs – who is responsible for what?	this contact?	harm that can	risk that still
cause harm?	to protect?	the receptor?			be caused?	remains?
			ATEX requirements and use of rated			
			equipment control risk of leak leading to			
			fire/explosion.			
			In the event of an incident/accident			
			Consider need to isolate pipework.			
			Consider need to initiate emergency			
			response procedures.			
			Arrange repair to affected asset.			
Failure of biogas	Nearby human	Air	Preventative controls	Highly Unlikely	Medium	Low risk
pipework, valves	receptors		Design and construction of pipework is			
and biogas			governed by relevant YW technical			
holder (corrosion,	Local air quality		standards to ensure it is fit for purpose.			
cracks, material	and global		Most biogas pipework operates at low			
defects etc)	climate impacts		pressures. Pipework/gas holders protected			
leading to major			from excessive pressure by pressure relief			
release of biogas			valves.			
and fire/			Pipework is above ground where possible to			
explosion risk			facilitate inspection and maintenance.			
			Maintenance schedule defined as part of			
			LDAR strategy at site.			
			Standard operational H&S requires staff to			
			wear personal gas monitors at all times,			
			these will detect large scale leakage from			
			pipes. (PPE and personal gas detectors			
			represent the final layer of protection from a			
			safety perspective and are not relied upon			
			for detection).			

What harm can be	caused and who can be harmed		Managing the risk	Assessing the risk (after preventative controls)		
Hazard	Receptor	Pathway	Risk management	Probability of	Environmental	What is the
				exposure	Consequence	overall risk?
What has the	What is at risk?	How can the	What measures will you take to reduce the risk?	How likely is	What is the	What is the
potential to	What do I wish	hazard get to	If it occurs – who is responsible for what?	this contact?	harm that can	risk that stil
cause harm?	to protect?	the receptor?			be caused?	remains?
			Requirements around use of ATEX rated			
			equipment control risk of leak leading to			
			fire/explosion.			
			In the event of an incident/accident			
			Immediately follow safety control			
			mechanisms in place to isolate pipework /			
			equipment.			
			Consider need to initiate emergency			
			response procedures.			
Breakdown or	Nearby human	Air	Preventative controls	Unlikely	Mild	Low risk
other damage to	receptors		Site is designed to minimise risk of			
on site gas			uncontrolled release to air.			
consumers e.g.	Local air quality		Operational and maintenance controls in			
CHP/boiler	and global		place to ensure reliability of equipment and			
leading to	climate impacts		minimise requirement to send biogas to flare.			
disposal of			• There are three CHP engines and two steam			
biogas without			boilers with biogas firing capability, therefore			
energy recovery			flaring rarely occurs.			
			In the event of an incident/accident			
			Any remaining capacity on on-site gas			
			storage will fill.			
			Once gas storage is full flare will operate,			
			ensuring proper combustion of biogas.			
			• If flare fails, gas will vent through PRVs to			
			prevent damage to site gas system.			
Failure of flare	Nearby human	Air	Preventative controls	Unlikely	Mild	Low risk
leading to release	receptors					

What harm can be	caused and who c	an be harmed	Managing the risk	Assessing the r	isk (after prevento	itive controls)
Hazard	Receptor	Pathway	Risk management	Probability of	Environmental	What is the
				exposure	Consequence	overall risk?
What has the	What is at risk?	How can the	What measures will you take to reduce the risk?	How likely is	What is the	What is the
potential to	What do I wish	hazard get to	If it occurs – who is responsible for what?	this contact?	harm that can	risk that still
cause harm?	to protect?	the receptor?			be caused?	remains?
of unburnt biogas			Flare only used as backup in event of			
to atmosphere	Local air quality		problems elsewhere on site.			
	and global		• Flare selected to give minimum 0.3s retention			
	climate impacts		at 1,000 deg. C ensuring full combustion of			
			biogas.			
			Operational and maintenance controls in			
			place to minimise requirement to send			
			biogas to flare.			
			• Flare has control system that ensures ignition			
			e.g., flame detection.			
			Maintenance programme in place to ensure			
			that flare is always in good operational			
			condition.			
			In the event of an incident/accident			
			Raise urgent maintenance request for repairs			
			to flare.			
			If flare fails, valve will automatically shut			
			down flow of gas to flare.			
			Once all site gas containment is full, pressure			
			will release through PRVs to prevent damage			
			to equipment and uncontrolled release of			
			biogas.			
Incorrect setting	Local air quality	Air	Preventative controls	Unlikely	Minor /	Negligible
or damage to	and global		Inspection and maintenance of PRVs carried	,	negligible	risk
emergency	climate impacts		out on a routine basis to ensure they are set			
pressure relief			and operate correctly.			
valves leads to			. ,			

What harm can be	caused and who c	an be harmed	Managing the risk	Assessing the r	isk (after preventa	tive controls)
Hazard	Receptor	Pathway	Risk management	Probability of	Environmental	What is the
				exposure	Consequence	overall risk?
What has the	What is at risk?	How can the	What measures will you take to reduce the risk?	How likely is	What is the	What is the
potential to	What do I wish	hazard get to	If it occurs – who is responsible for what?	this contact?	harm that can	risk that still
cause harm?	to protect?	the receptor?			be caused?	remains?
premature			Checks on PRVs part of normal operational			
release of gas or			routine.			
valve fails to			Over-pressure alarms in control system will			
reseat after			alert site staff to incidents that could trigger			
release leading to			PRV release.			
uncontrolled			In the event of an incident/accident			
release of biogas			Follow management procedures to ensure			
to atmosphere			that the valves are re-seated/pressure			
			setting adjusted rapidly and without putting			
			staff at risk.			
Digester foaming	Local air quality	Air	Preventative controls	Unlikely	Mild	Low risk
blocks gas lines,	and global		• Feed rate to digesters is controlled to prevent			
leading to release	climate impacts		organic overloading.			
of biogas and/or			• Digester mixing is regularly assessed as part			
foam through			of operational checks to ensure that it is			
PRVs			functioning effectively.			
			Feedstock assessment ensures that nature			
			and quality of feedstock is understood.			
			Anti-foam system is fitted to digesters to			
			control foaming.			
			In the event of an incident/accident			
			Follow site procedures for dealing with			
			foaming.			
			Investigate cause and implement preventive			
			measures.			
			Ensure that PRVs are not blocked with foam			
			and operating correctly to protect tanks.			

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What harm can be	e caused and who a	can be harmed	Managing the risk	Assessing the risk (after preventative controls		
Hazard	Receptor	Pathway	Risk management	Probability of	Environmental	What is the
				exposure	Consequence	overall risk?
What has the	What is at risk?	How can the	What measures will you take to reduce the risk?	How likely is	What is the	What is the
potential to	What do I wish	hazard get to	If it occurs – who is responsible for what?	this contact?	harm that can	risk that still
cause harm?	to protect?	the receptor?			be caused?	remains?
			Ensure PRVs reseat once pressure in			
			headspace returns to normal levels.			
Spillage / loss of	Ground /	Overland	Preventative controls	Unlikely	Minor /	Negligible
containment of	groundwater /	runoff /	Checks on condensate traps and valves are		negligible	risk
liquids	surface waters	infiltration /	part of regular operational routine.			
		drainage	Condensate runs to site drainage for			
		systems	treatment.			
			Digester operation is controlled to minimise			
			risk of foaming, which could lead to			
			blockages on condensate system.			
			In the event of an incident/accident			
			Clear up any spills.			
			Ensure all valves are operating correctly.			
Sludge treatment	processes					
Import of sludge	Ground	Spread to land	Preventative controls	Unlikely	Minor /	Negligible
which does not		as part of	YW control all sites supplying sludge to the		negligible	risk
meet waste		disposal	STF. Only YW sewage waste is imported to			
acceptance			Mitchell Laithes STF, this has a consistent			
criteria leading to			composition and comes from carefully			
disruption to			controlled treatment processes.			
sludge treatment			• JRP – WaSP system records the dry solids,			
processes			volume and origin of every import brought to			
			site.			
			• Site operators and tanker drivers are trained			
			to identify problem sludges and divert them			
			to alternative sites for treatment.			
			In the event of an incident/accident			

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What harm can be	e caused and who a	can be harmed	Managing the risk	Assessing the risk (after preventative controls		
Hazard	Receptor	Pathway	Risk management	Probability of	Environmental	What is the
				exposure	Consequence	overall risk?
What has the	What is at risk?	How can the	What measures will you take to reduce the risk?	How likely is	What is the	What is the
potential to	What do I wish	hazard get to	If it occurs – who is responsible for what?	this contact?	harm that can	risk that still
cause harm?	to protect?	the receptor?			be caused?	remains?
			 Digester health will be investigated to understand cause of problem and best route to resolution. Digestate being removed from digesters will be subject to enhanced monitoring to ensure that there is no environmental risk. Note this is also a HACCP requirement. Where relevant the Environment Agency will be alerted that a problem has occurred. The root cause of the problem will be investigated and procedures updated in order to minimise reoccurrence. 			
Failure/blockage of sludge screening facility leading to spillage and excess odour emissions	Ground Air	Overland runoff / infiltration / drainage systems Odour to air	 Preventative controls Design and construction controls ensure equipment is correctly specified for task. Maintenance to ensure reliable operation of equipment. Imports are from YW sites which gives control over content/ Hardstanding around import facility prevents spills travelling to land. Site drainage will collect spills and return to WwTW for treatment. In the event of an incident/accident Stop imports. Clean up spill. Unblock screens. 	Likely	Minor / negligible	Low risk

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What harm can be	e caused and who a	an be harmed	Managing the risk	Assessing the r	isk (after prevento	itive controls)
Hazard	Receptor	Pathway	Risk management	Probability of	Environmental	What is the
				exposure	Consequence	overall risk?
What has the	What is at risk?	How can the	What measures will you take to reduce the risk?	How likely is	What is the	What is the
potential to	What do I wish	hazard get to	If it occurs – who is responsible for what?	this contact?	harm that can	risk that still
cause harm?	to protect?	the receptor?			be caused?	remains?
Sludge	Ground	Spread to land	Preventative controls	Highly Unlikely	Medium	Low risk
contamination		as part of	Management controls to identify potentially			
leading to		disposal	problematic sludges at source.			
inhibition of			• All sludge imports are from YW sites where			
microbial activity			sludge characteristics are considered stable.			
/ process			Contamination levels would need to be very			
disruption and			severe to significantly impact digestion			
insufficient			processes due to the very large digester			
digestion and			volume.			
build up of H2S			In the event of an incident/accident			
and CO ₂			Assess digester content to decide best route			
			to normal digester health.			
			Sample cake prior to export from site to			
			confirm it is safe to spread to land.			
			Review acceptance procedures.			
Excessive feeding	Ground /	Spread to land	Preventative controls	Highly Unlikely	Medium	Low risk
of digester leads	groundwater /	as part of	Staff training			
to reduced	surface waters	disposal	Digesters have a maximum feed interlock			
retention time			ensuring that a set daily feed volume cannot			
and failure to			be exceeded. This limit has been calculated			
meet pathogen			to ensure digester stability and			
kill requirements			environmental safety.			
			HACCP monitoring.			
			In the event of an incident/accident			
			Turn off digester feed.			
			Stop additional sludge imports until normal			
			operational situation returns.			

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What harm can be	caused and who c	an be harmed	Managing the risk	Assessing the r	isk (after preventa	(after preventative controls)	
Hazard	Receptor	Pathway	Risk management	Probability of exposure	Environmental Consequence	What is the overall risk?	
What has the	What is at risk?	How can the	What measures will you take to reduce the risk?	How likely is	What is the	What is the	
potential to	What do I wish	hazard get to	If it occurs – who is responsible for what?	this contact?	harm that can	risk that still	
cause harm?	to protect?	the receptor?			be caused?	remains?	
Failure of	Ground /	Overland	Preventative controls	Unlikely	Minor/negligible	Negligible	
dewatering	groundwater /	runoff /	Liquid runoff from sludge cake pad collected			risk	
process leading	surface waters	infiltration /	and directed to WwTW for treatment. System				
to discharge to		drainage	has large storage and handling capacity.				
cake pad of cake		systems	In the event of an incident/accident				
with high water			Switch off centrifuge and identify cause of				
content			problem.				
Temporary	Local air quality	Air	Preventative controls	Likely	Minor/negligible	Low risk	
cessation of land	and global		• There is significant contingency capacity on				
spreading e.g.	climate impacts		cake storage pads at Mitchell Laithes.				
due to extreme			Additional storage is available at nearby YW				
weather			sites.				
conditions,			In the event of an incident/accident				
leading to build			• Monitor available storage on cake pad and				
up of digested			reduce/stop sludge imports as required.				
sludge cake			• Divert sludge imports to alternative YW sites				
			for storage.				

What harm can be	caused and who c	an be harmed	Managing the risk	Assessing the r	risk (after preventa	tive controls)
Hazard	Receptor	Pathway	Risk management	Probability of	Environmental	What is the
				exposure	Consequence	overall risk?
What has the	What is at risk?	How can the	What measures will you take to reduce the risk?	How likely is	What is the	What is the
potential to	What do I wish	hazard get to	If it occurs – who is responsible for what?	this contact?	harm that can	risk that still
cause harm?	to protect?	the receptor?			be caused?	remains?
Very warm	Local air quality	Air	Preventative controls	Likely	Minor/negligible	Low risk
weather leading			Only likely to happen during a prolonged of			
to increase in			extreme weather event.			
odour generation			Sensitive receptors not located within close			
from sludge cake			proximity to the site. Refer to Table 1 for			
			summary of sensitive receptors.			
			In the event of an incident/accident			
			Initial response would be to review operating			
			times and avoid cake generation during			
			problematic weather events, considering			
			both temperature and wind.			
			If this was not sufficient, YW would look to			
			remove cake from site and store elsewhere.			
Odour extraction a	Ind dispersal					
Failure of	Nearby human	Air	Preventative controls	Unlikely	Mild	Low risk
components	receptors		• Regular operational checks on systems (e.g.			
within odour			fan operation).			
extraction and	Local air quality		Inspection and maintenance schedule to			
dispersal systems	and global		ensure reliability of extraction system.			
leading to	climate impacts		Sensitive receptors not located within close			
reduced			proximity to the site. Refer to Table 1 for			
dispersion of			summary of sensitive receptors.			
odorous			In the event of an incident/accident			
emissions to air			Follow operational procedures to minimise			
			generation of emissions until system is			
			repaired.			

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What harm can be	e caused and who c	an be harmed	Managing the risk	Assessing the risk (after preventative controls		
Hazard	Receptor	Pathway	Risk management	Probability of exposure	Environmental Consequence	What is the overall risk?
What has the	What is at risk?	How can the	What measures will you take to reduce the risk?	How likely is	What is the	What is the
potential to	What do I wish	hazard get to	If it occurs – who is responsible for what?	this contact?	harm that can	risk that still
cause harm?	to protect?	the receptor?			be caused?	remains?
CHPs, Boiler and o	ther gas consumer	S				
Excessive	Nearby human	Air	Preventative controls	Unlikely	Mild	Low risk
emissions to air	receptors		Planned preventative maintenance in place			
from boilers and			for equipment to ensure assets continue to			
CHP e.g., due to	Local air quality		meet original specification on emissions.			
equipment	and global		Site operational knowledge supported			
failure, poor	climate impacts		through contracts with specialist providers.			
performance or			• Regular emissions monitoring timetable in			
malfunction			operation to confirm required performance			
leading to			level is maintained.			
incomplete or			In the event of an incident/accident			
inefficient			Investigate cause and implement preventive			
combustion			measures, which may include system			
			maintenance interventions.			

Risk Assessment Methodology

The risk assessment methodology employed for the accident management plan is summarised in Tables A to D below.

The overall risk rating for each of the identified risk scenarios is determined on the basis of the probability of the scenario occurring (the probability/likelihood score) and the environmental consequence(s) if the scenario were to occur (the consequence score). The probability and consequence categories used in this methodology are provided in Tables A and B below.

Classification	Definition
Severe	 Acute risks to human health Short-term risk of pollution of sensitive water resource (e.g. major spillage into controlled waters) Impact on controlled waters e.g. large-scale pollution or very high levels of contamination Catastrophic damage to buildings or property (e.g. explosion causing building collapse) Ecological system effects – irreversible adverse changes to a protected location. Immediate risks
Medium	 Chronic risks to human health Pollution of sensitive water resources (e.g. leaching of contaminants into controlled waters) Ecological system effects – substantial adverse changes to a protected location Significant damage to buildings, structures and services (e.g. damage rendering a building unsafe to occupy, such as foundation damage)
Mild	 Non-permanent health effects to human health Pollution of non-sensitive water resources (e.g. pollution of non-classified groundwater) Damage to buildings, structures and services (e.g. damage rendering a building unsafe to occupy, such as foundation damage) Substantial damage to non-sensitive environments (unprotected ecosystems e.g. crops)
Minor/Negligible	 Non-permanent health effects to human health (easily prevented by appropriate use of PPE) Minor pollution to non-sensitive water resources Minor damage to non-sensitive environments (unprotected ecosystems e.g. crops) Easily repairable effects of damage to buildings, structures, services or the environment (e.g. discoloration of concrete, loss of plants in a landscaping scene)

Table A: Classification of (Consequences
------------------------------	--------------

Table B: Classification of probability / Likelihood

Classification	Definition
High Likelihood	An event is very likely to occur in the short term, and is almost inevitable over the long term OR there is evidence at the receptor of harm or pollution
Likely	It is probable that an event will occur. It is not inevitable, but possible in the short term and likely over the long term
Unlikely	Circumstances are possible under which an event could occur. It is by no means certain that even over a longer period such an event would take place, and less likely in the short term
Highly Unlikely	Probability is so low that it is close to zero; It is improbable that an event would occur even in the very long term

Table C below provides the matrix used to identify the overall risk category using these consequence and probability categories.

Table C: Risk Matrix and Terminology Used for Risk Assessments
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		Consequence			
		Severe	Medium	Mild	Minor/Negligi ble
Probability (Likelihood)	High Likelihood	Very high risk	High risk	Moderate risk	Moderate/Lo w risk
	Likely	High risk	Moderate risk	Moderate/Low risk	Low risk
	Unlikely	Moderate risk	Moderate/Low risk	Low risk	Negligible risk
	Highly Unlikely	Moderate/Low risk	Low risk	Negligible risk	Negligible risk

The overall risk categories are described in Table D below.

Table D: Description of Risk Categories

Term	Description	
Very high risk	Severe harm to a receptor may already be occurring OR a high likelihood that severe harm will arise to a receptor, unless immediate remedial action works / mitigation measures are undertaken.	
High risk	Harm is likely to arise to a receptor, and is likely to be severe, unless appropriate remedial actions / mitigation measures are undertaken.	

	Remedial works may be required in the short term, but likely to be required over the long term.
Moderate risk	Possible that harm could arise to a receptor but low likelihood that such harm would be severe. Harm is likely to be medium. Some remedial works may be required in the long term.
Moderate / low risk	Possible that harm could arise to a receptor, but where a combination of likelihood and consequence results in a risk that is above low, but is not of sufficient concern to be classified as medium. It can be driven by cases where there is an acute risk which carries a severe consequence, but where the exposure is unlikely.
Low risk	Possible that harm could arise to a receptor. Such harm would at worse normally be mild.
Negligible risk	Low likelihood that harm could arise to a receptor. Such harm unlikely to be any worse than mild.

6. Accident and Incident Response

Accidents and Incidents are managed in accordance with the Incident Management policy and procedures and Emergency Planning manual.

YW utilises the Nintex app to report, record, manage and assess incidents and accidents. This is available on phones and handheld devices of YW staff and provides an auditable record for every incident. Relevant forms used to record accidents are available electronically via this system.

In the event of a significant incident a root cause analysis is conducted. Actions are identified, reported, recorded and communicated to prevent reoccurrence.

Complaints are typically received by YW central Customer Services team, where all complaints are logged on the ICE system. Complaints relevant to Mitchell Laithes STF are passed on to the Site Manager for further investigation. The Site Manager is responsible for ensuring that any complaint is investigated and, if found to be justified, that work is undertaken to resolve the issue, including liaising with the relevant regulatory bodies where appropriate. The Customer Service Team ensure an appropriate response to the complainant in a timely manner including, if and as appropriate, detailing the reason behind the issue and the actions taken to resolve the matter.

All complaints information is recorded on the ICE system in order that this can be monitored, reviewed and analysed.

If an incident with potentially significant environmental consequences occurs, YW will notify the Environment Agency without delay, and in accordance with the procedures and requirements specified in the site environmental permit.

7. Emergency contacts

Area	Contact	
Mitchell Laithes STF Contacts	Site Manager: Mick Flanagan – 07790 617673	
	Site Optimiser: John Bullivant – 07790 617692	
Barnsley Council	01226 787787	
Environment Agency	0800 807060	

8. Definitions

Definitions of Terms Used:

Yorkshire Water	Yorkshire Water is used in this document to refer to Yorkshire Water Services Limited and all other subsidiary companies within Kelda Holdings.
Anaerobic Digestion	AD is used to refer to anaerobic digestion. The process which imported waste is subject to at this sewage treatment facility.
СНР	Combined Heat and Power

9. Compliance with this document

Colleagues shall comply with the requirements of this document, in line with the company Conduct Policy.

10. Assurance

Regular monitoring of compliance with these requirements shall be undertaken by the assurance providers documented as part of the Assurance Framework.

Any sampling that is undertaken will be taken in accordance with sampling procedures as documented in the internal guidance document Operator Self-Monitoring, which can be found on the Integrated Management System. Samples must be tested at a UKAS accredited laboratory.

11. Related Documents

N/A