HILL BARTON ENERGY GENERATION PLANT, EXETER

ENVIRONMENTAL RISK ASSESSMENT

Prepared for: Stuart Partners Limited

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BASIS OF REPORT

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1.0 INTRODUCTION

SLR Consulting Limited (SLR) have been instructed by Stuart Partners Limited (SPL) to prepare an Environmental Permit (EP) application for a proposed energy generation plant involving the gasification of Refuse Derived Fuel (RDF), municipal and industrial waste at Hill Barton Business Park, Stuart Way, Clyst St. Mary, Exeter, EX5 1DR to be operated by Exeter Waste to Energy Limited (EWEL).

This document comprises the Environmental Risk Assessment (ERA). The aim of the assessment is to identify risks to the environment and human health from the proposed operations and to ensure this risk is made acceptable through the implementation of control measures. This ERA has been completed in accordance Environment Agency (EA) guidance[1]. The EA Guidance requires all receptors that are near the site and could reasonably be affected by the activities to be identified. The aim of the ERA is to identify the relevant receptors and risks and to demonstrate that the risk of harm to receptors is acceptable through risk management.

This ERA assessment should be read in conjunction with the supplied Non-Technical Summary, Best Available Techniques and Operating Techniques, Air Quality Impact Assessment and Noise Impact Assessment.

The Site's boundary, layout and emission points are detailed on Drawing EP2 Site Layout Plan, whilst the drainage plan for the Site shown on Drawing PDL-01 Preliminary Drainage Layout. This ERA assesses general sensitive receptors such as residential, commercial and industrial within a 500m radius from the Site, nationally and locally designated sites within a 2km radius and European sites within 10km. Beyond these distances it is not expected that receptors could reasonably be affected by the proposed development.

The receptors are further listed in Table 1 of this report.

1.1 Methodology

This Environmental Risk Assessment (ERA) is an assessment of the risks to the environment and to human health that may be associated with the proposed operations at the Site.

The assessment has been completed in accordance with the Environment Agency (EA) Technical Guidance *'Risk Assessments for your Environment Permit'* dated February 2020. The aim of the assessment is to identify any significant risks and demonstrate that the risk of pollution or harm will be acceptable by taking the appropriate measures to manage these risks.

This ERA uses the following approach for identifying and assessing the risks from the proposed operation:

Step 1 Identify risks and sources of risk from your activity.

Step 2 Where risks are identified from Step 1 then identify the receptors that could be affected

Step 3 Identify potential pathways between the sources of risk and receptors

Step 4 Assess the risks and check that they are acceptable. Justify appropriate measures to control your risks, if necessary.

Step 5 Submit your assessment.

Section 2.0 of this document is a screening step to identify the risks requiring consideration as part of this assessment.

Section 4.0 identifies people or parts of the environment that could be harmed (at potentially significant risk) by the activity. The ERA for an EP application requires all receptors that are near the Site and could reasonably be affected by the activities to be identified and considered as part of the assessment.

[1] Environment Agency Guidance: Risk Assessment for your Environmental Permit, February 2020

Section 5.0 of this document presents the assessment and demonstrates that any risks of pollution or harm will be mitigated to manage the risk.

2.0 Identifying the Risks

Step 2 is a screening step to identify the potential risks to the environment from the development. The following are generally considered to require assessment for installation activities:

- Amenity and Accidents;
- Site Waste (Installations Only);
- Global Warming Potential;
- Odour;
- Noise; and
- Point source emissions to air, water and land.

3.0 SUMMARY OF PROPOSED OPERATIONS

The proposed Hill Barton Energy Generation Facility will process commercial and industrial waste in the form of RDF through gasification, at a capacity of up to 87,000 tonnes per annum. Waste will arrive to site pre-treated. The facility will consist of two independent lines comprising a step grate gasifier, a thermal oxidizer, a boiler, an economizer and a flue gas cleaning system. The plant will generate steam which is directed to a single turbine to produce electricity, providing a gross export of approximately 9.1MWe (8.2MWe net) to the national grid in electricity only mode or 3.2MWe (2.3 MWe net) to the national grid and 29.6MWth (24.2MWth net) in heat extraction mode. The process is illustrated in Figure 1.

3.1.1 Waste Reception and Storage

Up to 87,000 tonnes per annum of pre-treated commercial and industrial RDF will be received at the Site. Upon arrival at the Site, the waste will be weighed and inspected prior to offloading to confirm its contents. The inspection comprises visual monitoring and sampling. Only compliant waste will be accepted for offloading, whereas non-compliant waste will be rejected. Successful waste deliveries will be offloaded into the intake building which is maintained under negative pressure to prevent the emission of odours. Waste will be stored for a maximum of three days within a bunker in the waste intake building before being directed to the gasification process via an overhead grab crane.

3.1.2 Thermal Processing and Energy Recovery

The feed will be discharged into the feed hopper and primary combustion chamber using push floor systems. The feed hopper will be a vertical hopper with negative inclined sides.

Waste will be fed into the hopper by an overhead grab crane. Once it has been discharged into the hopper, a reciprocating stoker mechanism will push the waste fuel from the bottom of the hopper into the gasifier.

The gasifier comprises an insulated, refractory lined gasification step grate system which operates under negative pressure. Across the steps there are three zones which make up the main gasification process: drying, gasification and hold/discharge.

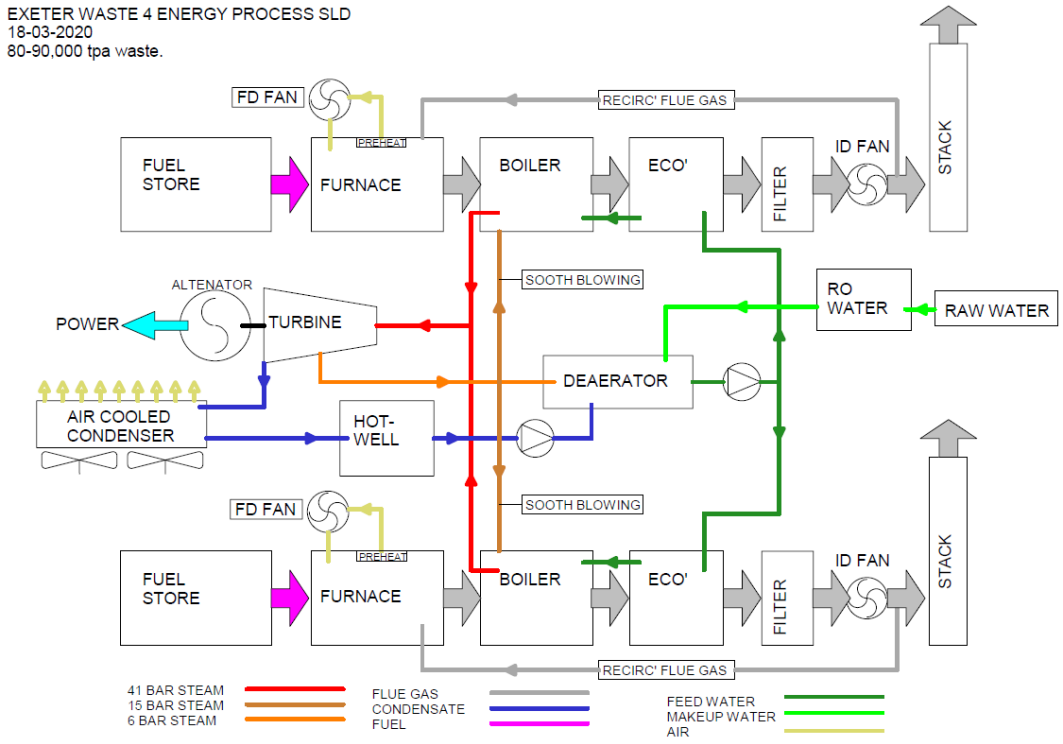

Figure 1 Process Flow Diagram

Radiant heat generated from the refractory is combined with turbulence from the recirculated flue gas in order to evaporate moisture from the incoming fuel feedstock. After this stage, the fuel feedstock undergoes pyrolysis at temperatures of 600°C – 800°C to produce syngas. The remaining fuel and ash is further agitated to release any remnant gas, before the ash is discharged. The syngas is directed to the thermal oxidation unit.

Under negative pressure, the syngas from the gasifier is processed the thermal oxidisation unit, which comprises an insulated refractory lined chamber. In this unit temperatures of 1,000°C -1,100°C are employed at 6%-10% oxygen. Flue gas is generated and directed to the heat recovery stage, whilst fly ash is discharged into a collection skip.

Flue gas is directed to the heat recovery unit, also under temperatures of 1,000°C -1,100°C. A waste heat recovery steam boiler is used to generate steam which is directed onwards, whilst flue gas is directed to a multi-bag filter and cleaning system before being discharged to atmosphere via a 28m high flue stack.

The steam is directed to a condensing steam turbine generator set which is connected to the national grid and uses the steam to generate energy. Exhaust steam passes through an air cooler before joining the boiler as condensate.

The key components of the technology will include but shall not be limited to:

- Feed hopper
- Primary combustion chamber;
- Reciprocating stoker mechanism;
- Secondary combustion chamber;
- Selective non-catalytic reduction (SNCR) for NO_x emissions management;
- Heat recovery boiler;

- Economiser;
- Dry flue gas treatment system using sodium bicarbonate, powdered activated carbon (PAC) and bag filters;
- Flue gas recirculation;
- Power generation in an impulse steam turbine;
- Steam condensation;
- Continuous emissions monitoring systems (CEMS).

3.1.3 Handling of Solid Residues

Incinerator Bottom Ash (IBA) will remain after the combustion of the waste and be discharged to ash collection skips. The IBA will be exported off site to a suitable re-processing facility for recovery as secondary aggregate.

Air pollution control residues (APCR) will be stored within silos prior to being sent off site for recovery.

4.0 SITE SETTING AND RECEPTORS

4.1 Site Setting

The Site is located on the northeast side of the industrial Hill Barton Business Park in a predominantly agricultural and industrial area with a small number of discreet residential properties. The Site is centred on National Grid Reference SY 00404 91236. The Site is located approximately 895m west of the village of Farringdon, 2km north of Woodbury Salterton and 2.4km east of Clyst St Mary city centre.

A small parcel of woodland lies immediately north of the Site, followed by a vast expanse of agricultural land. A storage yard lies immediately east of the Site, beyond which lies Stuart Way road, a landfill, biomass energy plant, waste transfer stations and soil recycling/remediation units. The Hill Barton Business Park extends south and southwest of the Site, with the land immediately south of the Site occupied by an E.M.S waste transfer station site. The land immediately west of the Site is an asphalt plant operated by Tarmac, beyond which lies agricultural land.

Hill Barton Energy Generation Plant is easily accessible due to its location within an industrial estate.

The Site's location is illustrated on Drawing 001. The surrounding land uses and local receptors within 1km are illustrated on Drawing 003. Designated habitats sites within relevant screening distances of the Site are identified in the EA's Nature and Heritage Conservation Screening Report.

The immediate surrounding land use is described in further detail below.

Commercial and Industrial

There are several commercial/industrial receptors in immediate proximity due to the Site's position within Hill Barton Business Park. Immediately to the east is a storage yard, to the south is E.M.S's waste transfer station and an asphalt plant to the west.

Residential

There are a number of discreet residential properties located within 1km of the Site's boundary. The closest are residential properties located 220m to the south, 320m to the north and 380m to the northwest.

Woodland/open ground/Agricultural

Areas surrounding the business park predominantly comprise agricultural land. Immediately adjacent to the north is an area of priority habitat woodland.

Open/Surface Water

There are a number of surface water features in proximity to the Site. The closest surface water receptor to the Site is a pond located approximately 40m east and a tributary to the River Clyst approximately 50m to the north of the Site.

Local Road Network

The local road network lies adjacent to the south of the Site. The Site is accessed by Mushroom Road, which leads out of the estate onto Blackmore road and then the A3052.

Recreational

Crealy Adventure Park is located approximately 570m to the south of the Site.

4.2 Ecology

The EA's Nature and Heritage Conservation Screening Report provided as Appendix 01 identifies the following designated habitats and protected species within relevant screening distances of the Site.

4.2.1 European/International Sites

The following European and Internationally designated sites are located within 10km of the Site:

- Exe Estuary – Ramsar and Special Protection Area (SPA): The Site is designated as a Ramsar site due to the large number of waterfowl present. The Site qualifies as a SPA because it regularly supports over 20,000 waterfowl over winter and is a site of strong scientific interest for the diverse array of waterfowl.
- East Devon Pebblebed Heath –Special Area of Conservation (SAC): The Site is designated as a SAC due to the range of habitats present within its extent including Northern Atlantic Wet Heaths and European Dry Heaths, as well as the presence of the Southern Damselfly.
- East Devon Heath – SPA: The Site is designated as an SPA due to the variety of bird species.

4.2.2 Nationally and Locally Designated Sites

Farringdon School Local Wildlife Site (LWS) is located approximately 1.4km to the northeast of the Site. Beautiport LWS is located approximate 2km to the north of the Site.

4.3 Cultural and Heritage

Searches on the MAGIC website[2] confirm that there are none of the following within 2km of the installation:

- Registered Battlefields;
- Scheduled Monuments;
- Registered Parks and Gardens; and
- National Trust Properties.

The search on MAGIC revealed 29 listed buildings within a 2km radius from the Site's boundary. The closest listed building identified was 'The Thatch' which is located approximately 310m to the south of the Site.

[2] https://magic.defra.gov.uk/, accessed May 2020.

4.4 Identified Receptors

Drawings 003 and EA Nature and Heritage Conservation Screening Maps illustrate the locations of receptors that have been identified as being potentially sensitive and could reasonably be affected by activities at the Site. The receptors identified are summarised in Table 1 below.

Table 1 Identified Receptors

Receptor Name	Receptor Type	Direction from Site	Approximate Distance from Site Boundary at closest point (in metres)
Local receptors located within 1km of the EP boundary as shown on Drawing 003			
Woodland/agricultural/open ground	**Ecological**	**North, east, south and west**	**Adjacent**
Redwood Travels	Industrial	East	Adjacent
Hill Barton Business Park	Industrial & Commercial	South and west	Adjacent
Tarmac Ltd Site	Industrial	West	Adjacent
Local Road Network	Local Road Network	West and south	Adjacent
Ponds, Streams & Drains	**Surface Water**	**North east, south and west**	**40**
Landfill	Landfill	East	200
Residential Properties associated with Stuart Way	Residential	South	220
Hill Farm	Commercial	West	310
Cluster of Residential Properties associated with Denbow Farm	**Residential**	**North**	**500**
Caravan Site	Commercial	Southwest and west	550
Crealy Adventure Park	Recreational	South	570
Ecology and Cultural and Natural Heritage identified within 10km of the EP boundary as shown on EA Nature and Heritage Conservation Screening Maps			
Farringdon School	**LWS**	**Northeast**	**1400**
Beautiport	**LWS**	**North**	**2000**
Exe Estuary	Ramsar, SPA	South	4100
East Devon Pebblebed Heaths	SAC	East	4500
East Devon Heaths	SPA	East	4500

4.5 Geology, Hydrogeology and Hydrology

A review of the British Geological Survey (BGS) map[3] reveals that the Site is underlain by a bedrock of Exmouth Mudstone and Sandstone Formation. the bedrock is indicative of an area previously dominated by rivers. There are no superficial deposits recorded for the Site.

4.5.1 Aquifer Designations

The bedrock underlying the Site is classified as a Secondary B Aquifer on the Multi-Agency Information for the Countryside (MAGIC)[4] website. The superficial head deposits in the north of the Site are classified as Secondary A Aquifer.

The Groundwater Vulnerability layer on the MAGIC map reveals that the northern tip of the Site lies within an area known for groundwater vulnerability classified as a Minor Aquifer Intermediate. The remainder of the Site is not within a Groundwater Vulnerability Zone.

4.5.2 Source Protection Zones

The Site is not located within a Source Protection Zone (SPZ) but is within 500m of a SPZ classified as Zone II, Outer Protection Zone.

4.5.3 Hydrology

The Site lies within Flood Zone 1; therefore, the Site has a very low probability of flooding[5].

5.0 Environment Risk Assessment

5.1 Amenity Risk Assessment

The following tables in this section assess the Site in terms of potential hazards posed to local amenity, the associated receptors and pathways, along with measures to manage the identified risks.

The probability of exposure is the likelihood of the receptors being exposed to the hazard, and is defined as low, medium or high. These terms are qualified as follows;

Low: exposure is unlikely, barriers in place to mitigate against exposure.

Medium: exposure is fairly probable, barriers to exposure less controllable.

High: exposure is probable, direct exposure likely with few barriers.

The methodology outline in Section 1.1 of this report is the basis on which it is determined whether the proposed operations will lead to significant impacts on the surrounding environment. Where a conclusion of 'not significant' has been reached, it is proposed that the mitigation and management measures that will be in place at the Site will be sufficient to ensure that there will be no impact at the surrounding environment.

[3] British Geological Survey, Available at www.bgs.ac.uk, accessed in November 2019.
[4] Multi-Agency Information for the Countryside – Available at: http://www.magic.gov.uk, accessed November 2019.
[5] Flood Map for Planning https://flood-map-for-planning.service.gov.uk, accessed November 2019

Table 2 Odour Risk Assessment and Management Plan

What do you do that can harm and what could be harmed			Managing the Risk	Assessing the Risk		
Hazard	**Receptor**	**Pathway**	**Risk management**	**Probability of exposure**	**Consequence**	**What is the overall risk**
What has the potential to cause harm?	What is at risk what do I wish to protect?	How can the hazard get to the receptor?	What measures will you take to reduce the risk? – Who is responsible for what?	How likely is this contact?	What is the harm that can be caused?	What is the risk that still remains? The balance of probability and consequence
Delivery of waste Unloading of waste Storage of waste	Sensitive Receptors included in Table 2	Air	The site is located within an industrial setting. The nearest residential receptors are located approximately 500m to the north of the site. No putrescible or degradable wastes will be received at the site. Waste acceptance checks including an assessment of odour will be undertaken prior to acceptance of any waste on to site. All receipt, handling and treatment of waste at the Hill Barton Generation Plant will take place in fully enclosed buildings. RDF waste will be transferred from the Waste Intake Building to the bunker and from the bunker into the process on a first in, first out basis to reduce the chance of odour. The Waste Intake Building will benefit from fast acting roller shutter doors to ensure prompt enclosure of the building. This	Low	Odour Annoyance	Not Significant.

What do you do that can harm and what could be harmed			Managing the Risk	Assessing the Risk		
Hazard	**Receptor**	**Pathway**	**Risk management**	**Probability of exposure**	**Consequence**	**What is the overall risk**
What has the potential to cause harm?	What is at risk what do I wish to protect?	How can the hazard get to the receptor?	What measures will you take to reduce the risk? – Who is responsible for what?	How likely is this contact?	What is the harm that can be caused?	What is the risk that still remains? The balance of probability and consequence
			will reduce the potential for odour to leave the building. Waste will be stored for a maximum of 3 days within the waste intake building before being processed. Once fed into the process, the combustion chambers are airtight chambers enclosed within a building. Incinerator bottom ash and air pollution control resides produced by the process will not be odorous. The site will be kept clean and tidy by way of a regularised housekeeping regime. Daily checks will be undertaken by the Site Manager or designated individual of odour at the site boundary. Neighbours will be engaged to ensure a 'good neighbour approach' is employed. In the event that odours are detected, investigations will be			

What do you do that can harm and what could be harmed			Managing the Risk	Assessing the Risk		
Hazard	**Receptor**	**Pathway**	**Risk management**	**Probability of exposure**	**Consequence**	**What is the overall risk**
What has the potential to cause harm?	What is at risk what do I wish to protect?	How can the hazard get to the receptor?	What measures will you take to reduce the risk? – Who is responsible for what?	How likely is this contact?	What is the harm that can be caused?	What is the risk that still remains? The balance of probability and consequence
			undertaken to determine the cause and appropriate remedial action. In the event that non-conforming wastes are delivered to site, they will be rejected on the delivery vehicle or quarantined. The Site Manager will be responsible for implementing risk management measures in accordance with this environment risk assessment.			

Table 3 Noise Risk Assessment and Management Plan

What do you do that can harm and what could be harmed			Managing the Risk	Assessing the Risk		
Hazard	**Receptor**	**Pathway**	**Risk management**	**Probability of exposure**	**Consequence**	**What is the overall risk**
What has the potential to cause harm?	What is at risk what do I wish to protect?	How can the hazard get to the receptor?	What measures will you take to reduce the risk? – Who is responsible for what?	How likely is this contact?	What is the harm that can be caused?	What is the risk that still remains? The balance of probability and consequence
Vehicular Deliveries Transfer of waste by moving floor grate Operation of the plant Removal of waste from the Site	Sensitive Receptors Identified in Table 2	Air.	A noise assessment has been undertaken which concluded that the predicted rating levels from are equal to or below the background sound levels at all the nearest noise-sensitive receptors and that the site will have no impact on the nearest-noise sensitive receptors. The noise assessment is included in Section 8 of the EP application. The site is located within an industrial setting. The nearest residential receptors are located approximately 500m to the north of the site. Care will be taken during the unloading and loading of wastes in to the feed hoppers. For example, drop heights will be kept to a minimum. All waste treatment will occur within enclosed buildings. The combustion chambers, boiler and turbine are all located	Low	Noise Nuisance	Not Significant

What do you do that can harm and what could be harmed			Managing the Risk	Assessing the Risk		
Hazard	**Receptor**	**Pathway**	**Risk management**	**Probability of exposure**	**Consequence**	**What is the overall risk**
What has the potential to cause harm?	What is at risk what do I wish to protect?	How can the hazard get to the receptor?	What measures will you take to reduce the risk? – Who is responsible for what?	How likely is this contact?	What is the harm that can be caused?	What is the risk that still remains? The balance of probability and consequence
			within the confines of the building. Delivery of waste to the Site is restricted to the hours of 07:00 to 18:00 Monday to Saturday. No deliveries to the Site are permitted on Sundays or Bank Holidays. The Waste Intake Building will benefit from fast acting roller shutter doors to ensure prompt enclosure of the building. This will reduce the potential for noise to leave the building. Opening of doors to buildings will be kept to a minimum. Speed limits will be in place on Site, to reduce vehicular noise. All drivers will be made aware of the commitments to minimise noise. Site surfacing will be maintained and repaired to minimise the emissions of noise due to poor and uneven surfacing. Plant will be selected and operated to minimise noise. Vehicles will be operated to minimise noise and if alarms are considered			

What do you do that can harm and what could be harmed			Managing the Risk	Assessing the Risk		
Hazard	**Receptor**	**Pathway**	**Risk management**	**Probability of exposure**	**Consequence**	**What is the overall risk**
What has the potential to cause harm?	What is at risk what do I wish to protect?	How can the hazard get to the receptor?	What measures will you take to reduce the risk? – Who is responsible for what?	How likely is this contact?	What is the harm that can be caused?	What is the risk that still remains? The balance of probability and consequence
			to be too loud, alternative technologies will be explored. Plant and equipment will be maintained regularly to minimise noise resulting from deterioration and inefficient operation. All buildings will be constructed with materials which have sound reduction properties. Quiet plant options will be used wherever possible to ensure noise is kept to a minimum. Plant & equipment will be maintained regularly to minimise noise resulting from deterioration & inefficient operation. Auditory inspections will be carried out regularly and in response to complaints. A record of the inspection findings and any complaints will be made in the site diary. The Site Manager will be responsible for implementing risk management measures in accordance with this environmental			

What do you do that can harm and what could be harmed			Managing the Risk	Assessing the Risk		
Hazard	**Receptor**	**Pathway**	**Risk management**	**Probability of exposure**	**Consequence**	**What is the overall risk**
What has the potential to cause harm?	What is at risk what do I wish to protect?	How can the hazard get to the receptor?	What measures will you take to reduce the risk? – Who is responsible for what?	How likely is this contact?	What is the harm that can be caused?	What is the risk that still remains? The balance of probability and consequence
			risk assessment. All site personnel will be trained in the need to minimise site noise and will be responsible for monitoring and reporting excessive noise when carrying out their everyday duties. In the event that noise becomes problematic, if required, the equipment will be shut down, replaced, serviced or repaired to reduce the noise levels; & plant will be modified to incorporate noise suppression equipment.			

Table 4 Fugitive Emissions Risk Assessment and Management Plan

What do you do that can harm and what could be harmed			Managing the Risk	Assessing the Risk		
Hazard	**Receptor**	**Pathway**	**Risk management**	**Probability of exposure**	**Consequence**	**What is the overall risk**
What has the potential to cause harm?	What is at risk what do I wish to protect?	How can the hazard get to the receptor?	What measures will you take to reduce the risk? – Who is responsible for what?	How likely is this contact?	What is the harm that can be caused?	What is the risk that still remains? The balance of probability and consequence
To Air:						
Vehicular Movements Delivery of waste to the Site Storage of waste Transport of Incinerator Bottom Ash Removal of Air Pollution Control Residue	Sensitive Receptors Identified in Table 2	Air	The site is located within an industrial setting. The nearest residential receptors are located approximately 500m to the north of the site. No dusty wastes will be received at the site. Speed limits will be implemented for vehicles on Site. Traffic calming measures are implemented to enforce speed limits and reduce emissions of dust. Site surfacing will be maintained and repaired to minimise the mobilisation of dust particles. Waste acceptance checks including an assessment of fines content will be undertaken prior to acceptance of any waste on to site.	Low	Dust Nuisance, Visual Nuisance	Not Significant

What do you do that can harm and what could be harmed			Managing the Risk	Assessing the Risk		
Hazard	**Receptor**	**Pathway**	**Risk management**	**Probability of exposure**	**Consequence**	**What is the overall risk**
What has the potential to cause harm?	What is at risk what do I wish to protect?	How can the hazard get to the receptor?	What measures will you take to reduce the risk? – Who is responsible for what?	How likely is this contact?	What is the harm that can be caused?	What is the risk that still remains? The balance of probability and consequence
			Care will be taken during the unloading and loading of materials on site. For example, drop heights will be kept to a minimum. Once fed into the process, the combustion chambers are airtight chambers enclosed within the building. Conveyors between the Waste Intake Building and Process Building will be covered. Incinerator bottom ash will be quenched and stored within enclosed skips prior to removal off-site. Air Pollution Control Residues will be stored within an enclosed silo. The site will be kept clean and tidy by way of a regularised housekeeping regime. Daily checks will be undertaken by the site manager or designated individual of dust on site and at the site boundary. In the event that dust is detected, investigations will be			

What do you do that can harm and what could be harmed			Managing the Risk	Assessing the Risk		
Hazard	**Receptor**	**Pathway**	**Risk management**	**Probability of exposure**	**Consequence**	**What is the overall risk**
What has the potential to cause harm?	What is at risk what do I wish to protect?	How can the hazard get to the receptor?	What measures will you take to reduce the risk? – Who is responsible for what?	How likely is this contact?	What is the harm that can be caused?	What is the risk that still remains? The balance of probability and consequence
			undertaken to determine the cause and appropriate remedial action. In the event that non-conforming wastes are delivered to site, they will be returned on the delivery vehicle. The Site Manager will be responsible for implementing risk management measures in accordance with this environment risk assessment.			
To Land & Water:						
Run-Off from Site Surfaces and Stored Wastes in the Bunker	Surrounding Land and Waterbodies.	Over Land	The Site drainage system is shown on Drawing PDL-301 Preliminary Drainage Layout. Waste water streams on the site will be segregated and handled appropriately. Clean surface water (rainwater) from roofs will be captured and stored in tanks within the main building for use on site. Clean surface water from roadways will be passed via silt and oil interceptors to a surface water attenuation pond, prior to reuse on site and discharge to a tributary to the River Clyst. A	Low	Contamination of Land or Water	Not Significant
Percolation of Contaminated Water through Site Surfaces	Secondary A & B Aquifers underlying the Site	Through Ground		Low	Contamination of Land or Water	Not Significant

What do you do that can harm and what could be harmed			Managing the Risk	Assessing the Risk		
Hazard	**Receptor**	**Pathway**	**Risk management**	**Probability of exposure**	**Consequence**	**What is the overall risk**
What has the potential to cause harm?	What is at risk what do I wish to protect?	How can the hazard get to the receptor?	What measures will you take to reduce the risk? – Who is responsible for what?	How likely is this contact?	What is the harm that can be caused?	What is the risk that still remains? The balance of probability and consequence
			surface water attenuation lagoon is proposed to the north of the site as shown on Drawing PDL-301. Runoff within waste handling areas will drain to the sealed waste storage bunker. It is not expected that this would routinely need emptying as the feedstock will be dry and non-degradable. If emptying is required, this would be undertaken by a tanker to a suitably licensed facility. The only waste water produced by the process will be boiler blow down. A foul sewer connection will service this boiler blow down and the Site's domestic facilities.			
Leaks or Spillages from Stored Liquids	Surrounding Land and Waterbodies.	Over Land	Operational areas of the site will benefit from impermeable surfacing and engineered drainage systems. Tanks will be constructed so that any leaks/spillages will be contained. Tanks will be surrounded by a leakage containment bund capable of containing at least 110% of the volume of the largest tank within the bund or 25% of the total contents, whichever is largest. Storage tanks will be constructed to the appropriate British	Low	Contamination of Land or Water	Not Significant
Leaks or Spillages from the Process e.g. Boiler, Steam Turbine and Pipes.	Surrounding Land and Waterbodies.	Over Land		Low	Contamination of Land or Water	Not Significant

What do you do that can harm and what could be harmed			Managing the Risk	Assessing the Risk		
Hazard	**Receptor**	**Pathway**	**Risk management**	**Probability of exposure**	**Consequence**	**What is the overall risk**
What has the potential to cause harm?	What is at risk what do I wish to protect?	How can the hazard get to the receptor?	What measures will you take to reduce the risk? – Who is responsible for what?	How likely is this contact?	What is the harm that can be caused?	What is the risk that still remains? The balance of probability and consequence
			Standards. Tanks will be inspected visually on a regular basis by the site staff to ensure the continued integrity of the tanks and identify the requirement for any remedial action. Materials suitable for absorbing and containing minor spillages will be maintained on site. As detailed above, the areas in which potentially polluting materials will be located will drain directly to a foul drainage system. Alongside regular visual inspections, any tanks will be fitted with level indicators to prevent overfilling. The site staff will undertake regular monitoring for evidence of spillage and leakage. The Site Manager will be responsible for implementing the measures above.			
Pests						

What do you do that can harm and what could be harmed			Managing the Risk	Assessing the Risk		
Hazard	**Receptor**	**Pathway**	**Risk management**	**Probability of exposure**	**Consequence**	**What is the overall risk**
What has the potential to cause harm?	What is at risk what do I wish to protect?	How can the hazard get to the receptor?	What measures will you take to reduce the risk? – Who is responsible for what?	How likely is this contact?	What is the harm that can be caused?	What is the risk that still remains? The balance of probability and consequence
Flies and Vermin in Biodegradable Waste	Sensitive Receptors identified in Table 2	Land & Air.	Wastes with the potential to attract pests will not be received at the site. Waste acceptance checks including an assessment of the potential to attract pests will be undertaken prior to acceptance of any waste on to site. All waste will be stored, handled and treated within enclosed buildings and machinery. The Waste Intake Building benefits from fast acting roller shutter doors to ensure prompt enclosure of the building. This will reduce the potential for pests to reach the stockpiles. Waste stockpiles and the general site will be inspected daily by the Site Manager for Pests. Site Personnel will also be responsible for visually monitoring the site during normal operations. Waste will be stored for a maximum of 3 days within the waste intake building before being processed.	Low	Nuisance	Not Significant

What do you do that can harm and what could be harmed			Managing the Risk	Assessing the Risk		
Hazard	**Receptor**	**Pathway**	**Risk management**	**Probability of exposure**	**Consequence**	**What is the overall risk**
What has the potential to cause harm?	What is at risk what do I wish to protect?	How can the hazard get to the receptor?	What measures will you take to reduce the risk? – Who is responsible for what?	How likely is this contact?	What is the harm that can be caused?	What is the risk that still remains? The balance of probability and consequence
			If pests are discovered on site the waste attracting them will be identified and removed from site as soon as is possible and within a maximum of 12 hours or prioritised for processing. A pest contractor for the control and monitoring of pests will be appointed. The Site will be inspected by the Site Manager and operatives for infestations of pests on a regular basis. The Site will be inspected daily for signs of pests. If pests are encountered, appropriate remedial action will be undertaken. A nominated sub-contractor for the control and monitoring of pests will be appointed. The Site Manager will be responsible for monitoring the Site. Records will be maintained of monitoring, complaints and remedial actions taken.			
Mud and Litter						

What do you do that can harm and what could be harmed			Managing the Risk	Assessing the Risk		
Hazard	**Receptor**	**Pathway**	**Risk management**	**Probability of exposure**	**Consequence**	**What is the overall risk**
What has the potential to cause harm?	What is at risk what do I wish to protect?	How can the hazard get to the receptor?	What measures will you take to reduce the risk? – Who is responsible for what?	How likely is this contact?	What is the harm that can be caused?	What is the risk that still remains? The balance of probability and consequence
Litter from Waste	Sensitive Receptors identified in Table 2	Airborne Litter	The site will be kept clean and tidy by way of a regularised housekeeping regime. Vehicles making deliveries to the Site will be required to be enclosed or sheeted to mitigate the risk of litter arising. The Intake Building will benefit from fast acting roller shutter doors to ensure prompt enclosure of the building. This will reduce the potential for litter to leave the building. Once fed into the process, the processes will be undertaken within airtight chambers enclosed within the building. Conveyors between the Intake Building and Process Building will be covered. Incinerator bottom ash will be quenched and stored within enclosed skips prior to removal off-site. Air Pollution Control Residues will be stored within an enclosed silo. Daily monitoring will be carried out by the Site Manager or a	Low	Nuisance	Not Significant

What do you do that can harm and what could be harmed			Managing the Risk	Assessing the Risk		
Hazard	**Receptor**	**Pathway**	**Risk management**	**Probability of exposure**	**Consequence**	**What is the overall risk**
What has the potential to cause harm?	What is at risk what do I wish to protect?	How can the hazard get to the receptor?	What measures will you take to reduce the risk? – Who is responsible for what?	How likely is this contact?	What is the harm that can be caused?	What is the risk that still remains? The balance of probability and consequence
			designated individual. Litter picking will be undertaken as necessary in response. Fences surrounding the Site will reduce the chance of litter blowing off Site. If necessary, additional netting will be erected to reduce the escape of wind-blown litter. Litter arising from the activities will be cleared from affected areas outside the site as soon as practicable. The Site Manager is responsible for monitoring the Site and maintain it free of litter. Records will be maintained of monitoring, complaints and remedial actions taken.			
Mud on Roads and Entry	Public Roads surrounding the site, within the Hill Barton Business Park.	Transferral of mud on vehicle wheels.	The Site is surfaced such that there will be no areas with the potential to generate mud on site. This removes the possibility of vehicles tracking dirt or mud off Site. Daily monitoring will be conducted by the Site Manager or a designated individual.	Low	Nuisance	Not Significant

What do you do that can harm and what could be harmed			Managing the Risk	Assessing the Risk		
Hazard	**Receptor**	**Pathway**	**Risk management**	**Probability of exposure**	**Consequence**	**What is the overall risk**
What has the potential to cause harm?	What is at risk what do I wish to protect?	How can the hazard get to the receptor?	What measures will you take to reduce the risk? – Who is responsible for what?	How likely is this contact?	What is the harm that can be caused?	What is the risk that still remains? The balance of probability and consequence
			The site will be kept clean and tidy by way of a regularised housekeeping regime. Areas of hard standing will be maintained free of significant quantities of mud & debris. The Site Manager will be responsible for monitoring the Site. Records will be maintained of monitoring, complaints and remedial actions taken.			

5.2 Accidents Risk Assessment and Management Plan

This section presents the results of an initial assessment of the risks posed to the environment by the energy generation in the event of abnormal operating conditions and accidents for the purposes of this environmental permit application. It will be further developed following conclusion of a detailed Hazard and Operability Risk Assessment process which is yet to be completed at the time of writing.

This initial risk assessment carried out includes an estimate, for each potential environmental accident scenario, of:

- Likelihood – the probability of the event taking place;
- Severity – the potential environmental impact as a result of the event occurring; and
- Overall risk to the environment – through a combination of likelihood and severity.

A ranking system has been used that attempts to objectively quantify each of these parameters. Tables 5, 6 and 7 describe the ranking systems for the likelihood, severity and overall risk, respectively.

Table 5 Likelihood Scoring System

Score	Category	Range
1	Extremely unlikely	Incident occurs less than once in a million years
2	Very unlikely	Incident occurs between once per million and once every 10,000 years
3	Unlikely	Incident occurs between once per 10,000 years and once every 100 years
4	Somewhat unlikely	Incident occurs between once per hundred years and once every 10 years
5	Fairly probable	Incident occurs between once per 10 years and once per year
6	Probable	Incident occurs at least once per year

Table 6 Severity Scoring System

Score	Category	Definition
1	Minor	nuisance on site only (no off-site effects) no outside complaint
2	Noticeable	noticeable nuisance off-site e.g. discernible odours minor breach of permitted emission limits, but no environmental harm one or two complaints from the public
3	Significant	severe and sustained nuisance, e.g. strong offensive odours or noise disturbance

Score	Category	Definition
		major breach of Permitted emissions limits with possibility of prosecution numerous public complaints
4	Severe	hospital treatment required public warning and off-site emergency plan invoked hazardous substance releases into water course with ½ mile effect
5	Major	evacuation of local populace temporary disabling and hospitalisation serious toxic effect on beneficial or protected species widespread but not persistent damage to land significant fish kill over 5 mile range
6	Catastrophic	major airborne release with serious offsite effects site shutdown serious contamination of groundwater or watercourse with extensive loss of aquatic life

Table 7 Risk Magnitude Scoring System

Likelihood	Severity of consequence					
	Minor	Noticeable	Significant	Severe	Major	Catastrophic
Extremely unlikely	1	2	3	4	5	6
Very unlikely	2	4	6	8	10	12
Unlikely	3	6	9	12	15	18
Somewhat unlikely	4	8	12	16	20	24
Fairly probable	5	10	15	20	25	30
Probable	6	12	18	24	30	36

Following the scoring system identified, the scenarios have been placed in the following categories:

- Acceptable (or low risk) – unshaded;
- Acceptable if the risk is controlled as far as is practicable (medium risk) – pink; and
- Unacceptable (high risk) – red.

The estimated overall risks are assessed to determine the appropriate measures to be

undertaken, such as design and development of operating procedures used, to reduce the risk of accidents and minimise any resulting environmental impact.

The management programme emerging from this analysis is focused on addressing the highest risk scenarios as a priority.

5.2.1 Techniques to Reduce Risks

Table 8 presents the principal accidents scenarios for the installation that have the potential to cause significant environmental harm, together with the measures that the site implements to minimise the risks and to control the consequences.

Henceforth, this accident assessment will be revisited on at least an annual basis. This review will include a review of the BAT guidance for identifying hazards and identifying techniques necessary to reduce the risks and take into account any significant changes to the operations/ process conducted on site.

The following general measures are undertaken to minimise the risk and effects of accidents:

- Procedures are in place to record all accidents and to mitigate their consequences. These include procedures to:
    - Manage and control raw materials, waste feedstocks and wastes generated;
    - Control operations including start up;
    - Address non-conformances (including emergencies) and implement corrective or preventative actions; and
    - Control and respond to leaks, spills and emergencies;
    - Address Accident reporting;
    - Carry out audits including environmental elements; and
    - Implement fire prevention and control and evacuation procedures.
- Specialised training needs are reviewed and identified on an annual basis which includes selected personnel being trained in emergency preparedness and response. This covers incident response techniques, including liquid spill containment, firefighting, control of releases to air and all activities with potentially significant environmental effects;
- Routine safety inspections are undertaken to ensure that equipment is suitable for use;
- A preventative maintenance programme is also implemented at the installation to minimise the risk of unplanned stoppages and potentially serious incidents; and
- Internal audits are undertaken of all emergency and spill procedures.

5.2.2 Safety

Safe working practices are ensured by adherence to company procedures and systems. Pertinent features of these are summarised below:

- Hazardous Materials – All materials used on site are assessed and controlled under the Control of Substance Hazardous to Health (COSHH) Regulations.
- Operators – Training is conducted and supervised by experienced senior staff.
- Process Control – Process equipment is designed and operated to ensure that process

parameters are controlled within acceptable limits. There are safe shutdown procedures for key processes.

- Communication – Procedures exist to avoid incidents occurring as a result of poor communication among operations staff during shift changes, maintenance or other engineering work that may be being performed.
- Incidents – Abnormal occurrences resulting in injury, loss of material, damage to buildings or equipment and 'near misses' are subject to a reporting and investigating procedure that is designed to establish the basic cause and to prevent future recurrence.
- Process Modifications – Proposed changes to plant and processes are assessed for potential health, safety and environmental impact by a Management of Change Procedure.
- Site Security – The site maintains a high level of security to reduce the risk of vandalism.

Table 8 Accident Risk Assessment and Management Plan

Accident or abnormal release scenario	Likelihood of occurrence	Consequences of occurrence	Severity of occurrence	Risk Rating	Actions taken or proposed to minimise the chances of it happening	Actions planned if the event does occur
Generic - Site Wide						
Failure of site surfacing resulting in ground contamination	2	Potential Ground Contamination (Oils, Soluble Raw Materials)	3	Low	Inspection and maintenance of site surfacing, both internal and external.	Implementation of Spill containment procedures. Use of spill kits. Resurfacing.
Vehicle Collision	3	Release of Material into Drainage System, Fuel Leakage, Contamination, Harm to Human Health.	3	Medium	The Site benefits from low levels of traffic and clearly visible sign posts. A one-way traffic flow system will be in place.	Clean Up and Driver Training.
Major Fire	2	Releases to atmosphere, Noise and odour releases.	4	Medium	Fire alarm systems installed, maintained and tested according to Fire and Rescue service recommendations. Fire Prevention Plan procedures will be in place and reviewed. Designated smoking areas.	Implementation of emergency procedures as identified in Fire Prevention Plan in Section 11 of the application.
Minor Fire	3	Releases to atmosphere, Noise and odour releases.	3	Medium		

					Preventative maintenance on all electrical systems. Firefighting training. Provision of manual extinguishers. Further measures identified in Fire Prevention Plan provided in Section 9 of the application.	
Asphyxiation and toxicity	1	Loss of life	6	Low	The site will operate a permit to work system to ensure entry into confined space is controlled and appropriate inspections, monitoring and other safety measures as appropriate are carried out prior to entry into enclosed spaces. Employee training will ensure awareness of risks associated with working alongside biogas. The Site Manager will be responsible for implementing the training and permit to work system.	Notify Health and Safety Executive. Investigate incident. Put in place remedial measures and amend procedures to ensure incident does not happen again.
Flood	1	Stoppage of processing.	2	Low	The Site is located in an area of very low probability of	Improved Drainage. Repair of damaged machinery and

		Contamination. Damage to Machinery.			flooding. On-site drainage aims to minimise the risk of flooding and its impact	clean up.
Failure to Contain Firewater	2	Contaminated waters from fire control entering drainage system and surrounding land/water.	3	Low	Fire prevention measures mentioned above, including drainage system.	As detailed in Fire Prevention Plan provided in Section 11 of the application.
Vandalism	3	Range of damage to equipment e.g. machinery and building with consequent release to air / ground / surface water / sewer.	2	Low	Site security measures are in place including 2m high perimeter fence with controlled access gates. Site will be manned 24 hours a day, 7 days a week. Regular inspection of perimeter fences. Fencing & gates will be maintained and repaired to ensure their continued integrity. In the event that damage is sustained repairs will be made by the end of the working day. If this is	Site security including fences and lockable gates. 24/7 CCTV.

					not possible, suitable measures will be taken to prevent any unauthorised access to the site & permanent repairs will be affected as soon as practicable. All visitors to the site will sign in and out. Operational procedures, including regular inspections, ensure continual monitoring of security provision at the site. CCTV security surveillance will be provided. Security lighting will be provided 24hrs a day. The Site Manager will be responsible for maintenance of site security.	

Fuel spills from Vehicles	3	Uncontrolled release to drainage system.	3	Medium	Proper maintenance of vehicles, easy access spill kits, supervised off-loading.	Implement procedures for spill containment including usage of spill kits. Close pollution control valve. Contain and clean up. Dispose to a suitably licence facility.
Explosion	1	Stoppage of processing. Contamination. Damage to Machinery. Harm to human health.	5	Medium	An assessment to comply with the Dangerous substances and Explosive Atmosphere's Regulations 2002 (DSEAR) will be carried out and a zoning study will be undertaken. All electrical and mechanical equipment located in zoned areas will be compliant with DSEAR regulations (as required). 'Flammable gas' and 'No smoking' signs will be erected, as appropriate. Electrical equipment will be CE marked to conform with applicable legislation and regulations.	Address incident and inform EA. Clean-up site and implement emergency response procedures.

					Exposed pipelines will be marked in accordance with BS 1710. Buried pipes and cables will be marked with an appropriate warning tape. No 'hot' work will be permitted unless it is proved that the atmosphere is free from explosive gases.	
Material Receipt and Storage						
Spillage of waste materials during delivery	6	Uncontrolled release of waste.	1	Low	Supervised offloading of materials.	Clean up Spillage.
Spillage of liquid raw materials	3	Release to drainage system/land /water.	3	Medium	Supervised offloading of materials. Drip trays and bunding. Spill Kits located around site.	Contain and clean up Spillage.
Unauthorised waste receipt and processing	4	Odour nuisance Dust nuisance Damage to plant equipment	2	Medium	Only waste authorised by the permit will be accepted at the site. Upon delivery, waste will be	In the event that unauthorised waste is accepted at the site, the waste will be segregated and will be stored in a

		Abnormal emissions			subject to strict waste acceptance procedures to identify, reject and / or segregate potentially non-conforming wastes. All waste will be subject to inspection and checking against the declaration on the waste transfer note.	designated quarantine / isolation area prior to export from site. A quarantine area will be provided in the form of a skip situated on impermeable surfacing with containment to prevent any leakage to drains.
Processing						
Incorrect dosing of raw materials	4	Waste generation.	2	Medium	Process Control System. Suitably trained staff.	Controlled disposal of waste. Review procedure and training. Fix machinery if fault caused by machinery.
Failure of machinery	5	Loss of production.	1	Low	Preventative Maintenance System.	Review and modify maintenance programme.
Failure of abatement technology	5	Loss of production. Exceedance of compliance limits. Uncontrolled release of particulate matter.	1	Low	Preventative Maintenance System.	Continuous emissions monitoring system (CEMS) analysers will be located on stacks in compliance with the IED and the Environmental Permit. The CEMS analysers shall be certified under the

						Environment Agency's monitoring certification scheme (MCERTS) with adequate spans to allow for accurate emissions monitoring and future calibrations, in line with quality assurance levels (QAL3) and annual surveillance tests (AST). The CEMS will feed live emission data to the plant control system to ensure that emissions are compliant with the environmental permit by adjusting the combustion control process and chemical dosing. Emissions during abnormal operating conditions are detailed in the Air Emissions Risk Assessment provided in Section 7 of this application. Should any problems,

						malfunctions or breakdowns occur within the treatment process, treatment will be stopped until such time as the problems are rectified. Waste will be diverted to alternative facilities. Review and modify maintenance programme.
Despatch						
Spillage or damage of solid fuel product	5	Waste Generation.	1	Low	Personnel Training.	Cease loading and recover product. Dispose to a suitably licenced facility if necessary.
Utilities						
Boiler Failure	5	Loss of production.	1	Low	Preventative Maintenance.	Review and modify maintenance programme. Controlled disposal of residual waste
Failure of Equipment	5	Loss of production.	1	Low		Review and modify maintenance programme. Controlled disposal of residual waste
Power Failure	5	Loss of production.	2	Medium		Review and modify

		Exceedance of compliance limits. Uncontrolled release of particulate matter.				maintenance programme. Controlled disposal of residual waste
Waste charging failure	5	A failure with the waste charging system has the potential to upset combustion conditions within the chamber and lead to unfavourable emissions to air.	2	Medium	Use of an automatic system to prevent waste feed at start-up, if temperature within the combustion chamber were to not be maintained at 850ºc and where continuous monitors identify that an emission limit is exceeded. Interlocking waste charging and auxiliary fuel firing with furnace conditions. Ensuring that the charging operation is as airtight as possible and control of the induction fan in relation to pressure within the furnace during charging, to avoid the escape of fumes or excess air flows.	Review and modify maintenance programme. Should any problems, malfunctions or breakdowns occur within the treatment process, treatment will be stopped until such time as the problems are rectified. Waste will be diverted to alternative facilities. Review procedure and training. Fix machinery if fault caused by machinery.

					Interlocking the loading of the feed hopper with regard to conditions in the combustion chamber. Mass throughput rates will be adjusted to ensure optimum conditions are maintained for combustion and wastes are retained within the chamber to ensure sufficient residence. The application of a planned preventative maintenance programme The inspection of wastes to ensure their suitability for treatment.	
Furnace control failure	5	A failure to control combustion within the furnace has the potential to lead to suboptimal combustion conditions within the chamber leading to unfavourable	2	Medium	Combustion control will take place using a number of different plant features. The main features will include the following; • primary air system; • waste feed system;	Review and modify maintenance programme. Should any problems, malfunctions or breakdowns occur within the treatment process, treatment will be stopped until such time as the

		emissions to air and possible plant shutdown.			• additive dosing system; and • auxiliary fuel firing system.	problems are rectified. Waste will be diverted to alternative facilities. Review procedure and training. Fix machinery if fault caused by machinery.
Air pollution control equipment failure	5	There are a number of potential sources of failure of FGT systems including power failure, reagent shortage, blockage and equipment damage. Failure of the air pollution control equipment can lead to its ineffectiveness at flue gas treatment and a resultant exceedance of emission limits and plant shutdown.	2	Medium	Low level reagent alarms fitted to the reagent storage containers A programme of preventative maintenance will be employed Suitable redundancy will be made in the event of a failure.	Review and modify maintenance programme. Should any problems, malfunctions or breakdowns occur within the treatment process, treatment will be stopped until such time as the problems are rectified. Waste will be diverted to alternative facilities. Review procedure and training. Fix machinery if fault caused by machinery.

5.3 Site Waste

An assessment of wastes to be generated by the activities, their harmfulness and identification of routes for disposal or recovery off-site is presented within the BATOT document in Section 6 of the EP Application.

5.4 Global Warming Potential

A Global Warming Potential (GWP) Assessment has been undertaken to support the EP application. A copy of the GWP Assessment is included in Section 12 of the application.

5.5 Point Source Emissions to Air, Water And Land

5.5.1 Point Source Emissions to Air

An Air Quality Assessment and Human Health Risk Assessment has been undertaken to assess the impact of point source emissions to air from the proposed facility. A copy of these is provided in Section 7 and Section 10 of the EP application, respectively.

5.5.2 Point Source Emissions to Water

The Site drainage system is shown on Drawing PDL-301 Preliminary Drainage Layout.

Waste water streams on the site will be segregated and handled appropriately.

Clean surface water (rainwater) from roofs will be captured and stored in tanks within the main building for use on site.

Clean surface water from roadways will be passed via silt and oil interceptors to a surface water attenuation pond, prior to reuse on site and discharge to a tributary to the River Clyst. A surface water attenuation lagoon is proposed to the north of the site as shown on Drawing PDL-301.

Runoff within waste handling areas will drain to the sealed waste storage bunker. It is not expected that this would routinely need emptying as the feedstock will be dry and non-degradable. If emptying is required, this would be undertaken by a tanker to a suitably licensed facility.

The only waste water produced by the process will be boiler blow down.

A foul sewer connection will service this boiler blow down and the Site's domestic facilities.

The points of discharge off-site for the surface water and foul sewer are illustrated on Drawing 002 as SW1 and S1 respectively.

5.5.3 Point Source Emissions to Land

There will be no point source emissions to land from the facility.

6.0 Conclusion

It is concluded that with the implementation of the risk management measures detailed in this document, the potential hazards associated with the Hill Barton Energy Generation Plant are not likely to be significant.

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