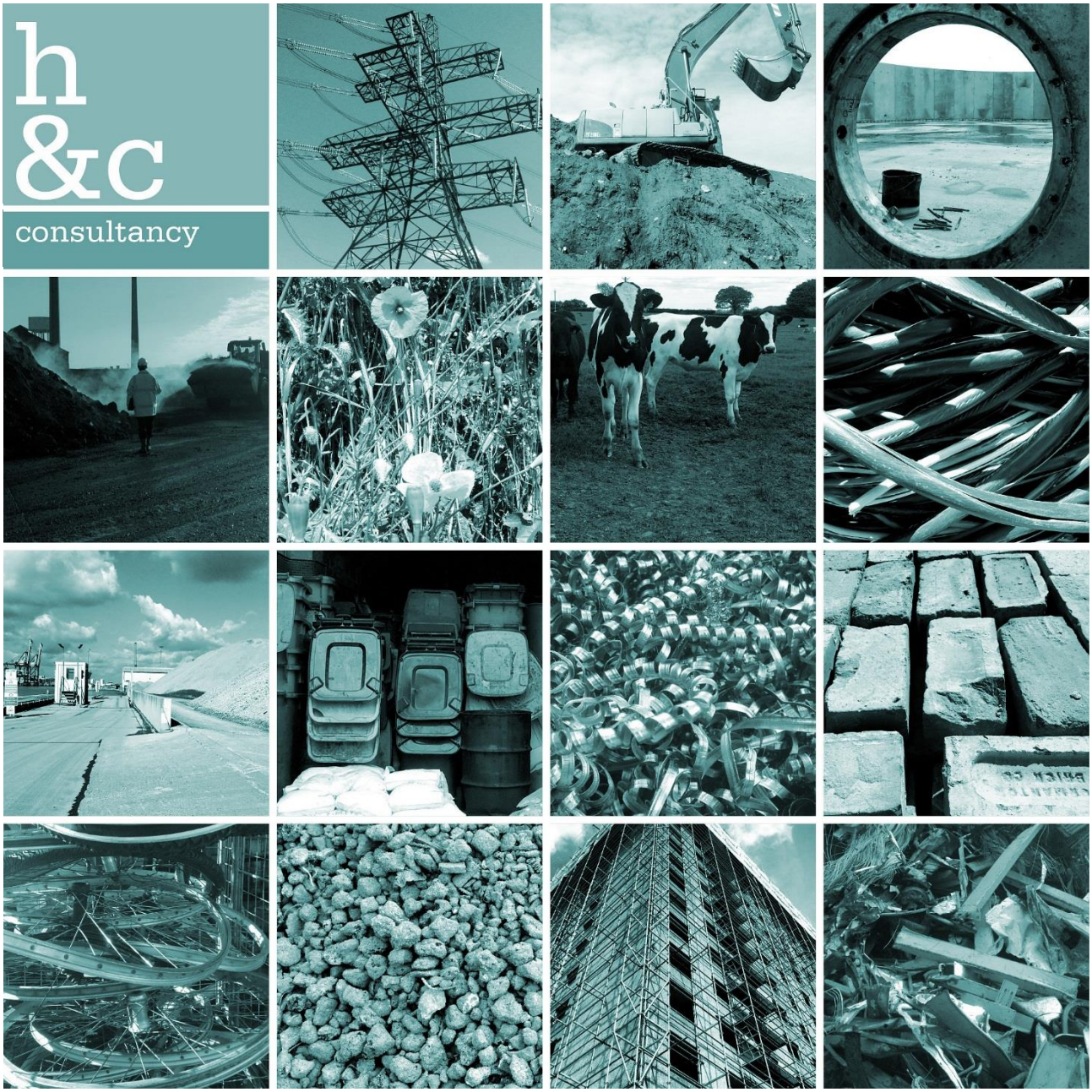
BROCKLESBY LIMITED
PERMIT VARIATION

Accident Management Plan

June 2021



BROCKLESBY
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REPORT SCHEDULE

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1. ACCIDENT MANGEMENT PLAN

1.1. Introduction

1.1.1. This document describes the preventative measures that will be implemented on site to minimise the risk of accidents and incidents that have the potential to cause an impact on the environment.

1.1.2. This procedure also outlines the actions that will be taken if such an incident should occur.

1.2. Scope

1.2.1. This procedure applies to the Brocklesby Limited Site and to all staff, contractors, and visitors attending the site.

1.3. Procedure

1.3.1. This Accident Management Plan has been produced in accordance with, The Environment Agency's Guidance 'Develop a Management System: Environmental Permits'.

1.3.2. This plan identifies potential incidents and how they would be managed to minimise their impact. For each potential incident, the following has been identified.

- Likelihood of the accident happening.
- Consequences of the accident happening.
- Measures taken to avoid the accident happening.
- Measures taken to minimise the impact if the accident does happen.
- Roles and Responsibilities for Incident Management.

1.3.3. The Accident Management Plan has been implemented and maintained as part of the company's Environmental Management System. All staff members are aware of the requirements of the Accident Management Plan and, as such, are fully trained should an incident take place.

1.3.4. The Accident Management Plan will be reviewed annually, or as required (for example, following an incident) and continuous improvement of the system will ensure that the measures put in place remain effective and fit for purpose.

1.3.5. Should an incident occur on site that may lead to adverse environmental impact, staff on site will;

- Immediately follow actions laid out by the AMP;
- Always ensure the health and safety of any site staff or external contractors are not compromised in responding to the incident;
- Take any other necessary action to reduce the environmental impact of the incident;
- Investigate the cause of the incident and provide mitigation measures to ensure the same accident does not recur, in accordance with the incident reporting procedures outlined in this EMS.

1.3.6. A site identification board is positioned close to the site entrance. The board includes details of the permit holder's name/company, an emergency contact name and telephone number, a statement that the site is permitted by the Environment Agency and showing the 24-hour incident hotline (0800 80 70 60).

1.4. Site Emergency Contacts

1.4.1. Below is a list of internal and third-party emergency contacts.

Table 1 – Internal Emergency Contacts

Staff Name	Position	Contact Number
Reece Webb	Operations Manager and TCM (WAMITAB)	07763 836 374
Neil Taylor	Managing Director	07800 919 726
Stuart Spencer	Process Manager (WAMITAB)	07483 044 341 or 07584 857 447
Martin Wright	Technical Oils Manager	07894 594 417
Robert Brocklesby	Director	07775 021 564
Iain Jenninson	Finance Director	07483 048 651

Table 2 – Third Party Emergency Contacts

Name	Position	Contact Number
Environment Agency	24-hour emergency incident reporting hotline	0800 80 70 60
Emergency Tanker Company	Gary Lodge Tankers	07432 562 244
Yorkshire Water	Local Water Company	0345 1 24 24 24
Police	N/A	999
Fire Service		999
Electricity Mains Services	Eon – Northern power grid	105 then option 1
Gas Mains Services	CNG – National grid	0800 111 999
Emergency Generator Suppliers	Company name "Aggreko"	0333 016 3409
Local EA Officers	Richard Laverack – Technical Officer Oliver Smith – Regulatory officer	Richard – 01482 396 201 Oliver - External: 0208 4749109 Internal 02084729109|

Brocklesby AD Facility	Operations manager and out of hours contact (Karl Rayworth)	07377 626 733

1.5. Assessment of Risk

1.5.1. A Risk Estimation Matrix is shown below in Table 3. Identified accident/incident risks associated with the running of the site are given in Table 5. Each potential hazard has been analysed to determine the overall consequence and likelihood of the hazard causing an impact, to give an overall risk value.

Table 3 Risk Estimation Matrix

Consequences	**High**	Medium Risk	High Risk	High Risk
	Medium	Medium Risk	Medium Risk	High Risk
	Low	Low Risk	Medium Risk	Medium Risk
		Low	**Medium**	**High**
		Likelihood		

1.5.2. Low consequence/low probability risks, (green) are typically perceived as acceptable and therefore only require monitoring. In contrast, high-consequence / high-probability risks (red) are perceived as unacceptable, and a strategy is required to manage the risk to bring it within acceptable limits. Other risks (amber and/or yellow) may require structured risk assessment to better understand the features that contribute most to the risk and so to better inform further management measures.

1.5.3. Guidance for how to apply measurements of ‘high’ ‘medium’ and ‘low’ values to consequences and likelihood are given in Table 4 below.

Table 4 – Rating Scales for Consequence and Likelihood

Consequence		**Likelihood**	
High	Causing death, environmental event with detrimental effect, major financial loss, significant publicity, corporate criminal penalties, substantial financial loss, loss of major contract before contract termination date, loss/suspension of permit considered to be a major environmental incident (CAT 1) by Environment Agency, reportable event, substantial loss of production and/or service capacity, loss of production capacity.	**Low**	Unlikely or remote
Medium	Causing temporary disability e.g. unconsciousness, fracture, dislocation, release to environment contained with internal/external assistance, possibility of regulatory action. Regulator intervention (no escalation but cost), high financial cost, minor publicity, internal and external cost, reportable event, loss of production and/or service capacity, contract dispute.	**Medium**	Occasional or isolated occurrence during plant lifetime
Low	Causing minor injuries or no injuries, release to environment immediately contained. Small or no financial loss, minor or no loss of production and/or service capacity.	**High**	Likely to occur during the lifetime of the plant

1.5.4. The risk management measures that have been put in place to reduce the likelihood of an incident taking place and measures that will be taken should the incident occur are detailed below.

1.5.5. The location and nature of receptors as listed in the site risk assessment (HC1676-08) have been taken into account when rating consequences in the following assessment.

Table 5 – Risk Assessment, Mitigation Measures, and Incident Response

Parameter	Description
Hazard	Fires and Explosion
ID	**A**
How likely is the event to occur (Likelihood)?	LOW likelihood
What substances are released and how much of each (risk evaluation of the event)?	Smoke to atmosphere, chemicals and waste to ground or water Large release – Consequence HIGH.
Where do the released sources end up (emission prediction – what are the pathways and receptors)?	Smoke released to atmosphere and wastes, chemicals and fire waters released to ground or surface or ground water.
What are the consequences (consequence assessment – what are the effects on the receptors)?	Pollution to the atmosphere via greenhouse gas emissions. Impact on local air quality. Potential for odour complaints. Pollution of surface and ground water. Pollution of soils and ground.
What are the overall risks (determination of overall risk and its significant to the environment)?	MEDIUM
What can prevent or reduce the risk (risk management – measures to prevent accidents and/or reduce their environmental consequences)?	Fire risk assessment to be reviewed and updated once site works complete. DSEAR assessment for esterification plant to be updated and DSEAR assessment for new boiler building. Fire prevention plan to be completed and taken out of draft once FRA and DSEAR assessments updated and site works complete. Atex rated equipment in use in atex zones and controlled for outside contractors via permits to work system. New tank farm design excludes need for tank insulation which was action arising from previous incident review. Orientation and review visits undertaken at the site with the local fire service.

	Waste packaging to be stored in skips with necessary exclusion zones from buildings and plant. Plant available for movement of burning materials to open spaces in emergency situations if needed. Staff on site 24/7 to undertake checks of waste storage areas. Skips emptied at least every 2 weeks. Site security measures in place to reduce likelihood of unauthorised personal accessing site. Spend carbon from odour abatement unit assessed for hazardous properties and stored in appropriate facilities pending disposal. There are two fire hydrants at the site that will supply water in the event of a fire. Nearest fire hydrant beyond the site itself is 80m away. Hot works permits in place and general permits to works system. All electrical work subject to electrical certificates which are checked and updated at required frequency. Firefighting equipment at the site and staff training in fire prevention and response measures. Equipment checked and maintained proactively. Site has emergency shut off valve on drainage system for use in event of need to retain fire waters at the site. Tertiary containment measures installed in recent refurbishment allow operator to achieve retention of firewater at the site for up to 4 hours, based on Ciria containment assessment. Site has own tanker facilities at the site which can be used to take off fire water as it accumulates. Should fir water for any reason bypass the shut of valve, the site drains to a swale which is a grassed area from which drainage slowly soaks away. Any liquid discharge could potentially be pumped out by tanker before significant amounts can soak away if required. Maintenance and inspection system for plant to ensure it is working within design parameters. Concrete surfaces and containment structures checked regularly for integrity and subject to routine proactive preventative maintenance schedule. Staff members are trained to carry out activities and their competency is monitored.

	SCADA control system to manage plant systems including temperatures and levels in tanks. Incident reporting procedures in place. Staff on site/call 24/7 who will respond to alarms and attend site for critical alarms.
Procedures to Respond to Incidents	Close receptors to be informed of any increased risks if applicable. Emergency response to be instigated if relevant (Section 2 and 3 below) Guidelines for relevant scenarios in section 2 and 3 below to be followed. Incident to be recorded and events evaluated. Any preventative/corrective measures identified as a result of incident review to be entered onto the incident tracking sheet and be subject to review until completion. Schedule 5 notification to be sent to the Environment Agency. Environment Agency to be notified via 24-hour incident reporting hotline if required. Internal reporting procedures to be followed.

Parameter	**Description**
Hazard	Loss of Containment of Delivery Vehicle
ID	**B**
How likely is the event to occur (Likelihood)?	LOW Likelihood
What substances are released and how much of each (risk evaluation of the event)?	Liquid or solid wastes from a HGV or tanker Odour release potential Consequence - LOW
Where do the released sources end up (emission prediction – what are the pathways and receptors)?	Spillages within the site will occur on impermeable concrete surfacing. Liquid spills will be contained in sealed drainage, secondary or tertiary containment structures at the site.
What are the consequences (consequence assessment – what are the effects on the receptors)?	Potential for odour complaints.

What are the overall risks (determination of overall risk and its significant to the environment)?	LOW
What can prevent or reduce the risk (risk management – measures to prevent accidents and/or reduce their environmental consequences)?	All vehicle deliveries to the site take place via a weighbridge. Site operates a one-way vehicle movement system with designated loading and offloading areas for liquid and solid materials and two separate weighbridges fr 'in' and 'out' vehicles. All deliveries supervised by trained staff. Impermeable concrete surfacing at the site and liquid delivery area has specifically engineered containment and catch pit system that is sized to contain the contents of a whole tanker. The site also has tertiary containment measures installed and so any liquid spills beyond this point will also be retained at the site. The area of surface water at the site that drains to the discharge point in the swale can be shut off via an emergency shut off valve and drains through an oil interceptor which will retain any oil spillages within the interceptor infrastructure. Sealed drainage area and sump system means that spills can be cleaned up quickly and efficiently. Spill kits are available at key areas throughout the site to facilitate this and jet wash/hoses available for washing down. Concrete surfaces and containment structures checked regularly for integrity and subject to routine proactive preventative maintenance schedule. Incident reporting procedures in place.
Procedures to Respond to Incidents	Close receptors to be informed of any increased odour risks if applicable. Emergency response to be instigated if relevant (Section 2 and 3 below) Guidelines for relevant scenarios in section 2 and 3 below to be followed. Incident to be recorded and events evaluated. Any preventative/corrective measures identified as a result of incident review to be recorded and tracked to completion. Schedule 5 notification to be sent to the Environment Agency if needed. Environment Agency to be notified via 24-hour incident reporting hotline if required. Internal reporting procedures to be followed.

Parameter	Description
Hazard	Loss of Containment of Liquid Storage Tank
ID	**C**
How likely is the event to occur (Likelihood)?	LOW likelihood
What substances are released and how much of each (risk evaluation of the event)?	Liquid wastes, and final product materials contained in tanks at the site. Raw materials/chemicals contained in tanks at the site Consequence LOW
Where do the released sources end up (emission prediction – what are the pathways and receptors)?	Spillages within the site will occur on impermeable concrete surfacing. Liquid spills will be contained in sealed drainage, secondary or tertiary containment structures at the site.
What are the consequences (consequence assessment – what are the effects on the receptors)?	Potential for odour complaints.
What are the overall risks (determination of overall risk and its significant to the environment)?	LOW
What can prevent or reduce the risk (risk management – measures to prevent accidents and/or reduce their environmental consequences)?	All large volume liquids are stored indoors in buildings with internal sealed drainage system, or outdoors in secondary contained bunded areas. Bunds and concrete surfaces are checked regularly for integrity. New tanks installed in new tank farm have been identified as fit for purpose following clarification by a suitably qualified person from the supply company, and via further tank thickness testing during installation. The site also has tertiary containment measures installed and so any liquid spills beyond this point will also be retained at the site. The area of surface water at the site that drains to the discharge point in the swale can be shut off via an emergency shut off valve and drains through an oil interceptor which will retain any oil spillages within the interceptor infrastructure. Incident reporting procedures in place. Staff on site/call 24/7 who will respond to alarms and incidents
Procedures to Respond to Incidents	Close receptors to be informed of any increased odour risks if applicable.

Parameter	Description
	Emergency response to be instigated if relevant (Section 2 and 3 below) Guidelines for relevant scenarios in section 2 and 3 below to be followed. Incident to be recorded and events evaluated. Any preventative/corrective measures identified as a result of incident review to be recorded and tracked to completion. Schedule 5 notification to be sent to the Environment Agency if needed. Environment Agency to be notified via 24-hour incident reporting hotline if required. Internal reporting procedures to be followed.
Parameter	**Description**
Hazard	Loss of Containment from Pipework (during transfer operations)
ID	**D**
How likely is the event to occur (Likelihood)?	LOW likelihood
What substances are released and how much of each (risk evaluation of the event)?	Loss of waste material or chemicals/raw materials during delivery and transfer. Risk of release of odours.
Where do the released sources end up (emission prediction – what are the pathways and receptors)?	Spillages within the site will occur on impermeable concrete surfacing. Liquid spills will be contained in sealed drainage, secondary or tertiary containment structures at the site.
What are the consequences (consequence assessment – what are the effects on the receptors)?	Potential for odour complaints.
What are the overall risks (determination of overall risk and its significant to the environment)?	LOW
What can prevent or reduce the risk (risk management – measures to prevent accidents and/or reduce their environmental consequences)?	Liquids are stored indoors in buildings with internal sealed drainage system, or outdoors in secondary contained bunded areas. Bunds and concrete surfaces are checked regularly for integrity. Pipework is contained within bunded areas or has additional bunding supplied for stretches of pipework that transfer liquids from the tank farm to the main process building.

Parameter	Description
	Vehicle movements at the site are controlled and supervised and limited to designated roadway access points and tanker loading areas to reduce likelihood of collisions. Secondary containment measures provided for pipeline spillages in liquid tanker delivery and offtake area. If bulk chemical deliveries are undertaken to storage via pipeline, these are carried out in accordance with a site and activity specific risk assessment which takes into account any additional controls to be implemented during delivery operations. The site has tertiary containment measures installed and so any liquid spills beyond this point will also be retained at the site. The area of surface water at the site that drains to the discharge point in the swale can be shut off via an emergency shut off valve and drains through an oil interceptor which will retain any oil spillages within the interceptor infrastructure. Spill kits are provided in the main delivery area and for any areas where bulk chemical deliveries take place via pipeline. Incident reporting procedures in place. Staff on site/call 24/7 who will respond to alarms and incidents
Procedures to Respond to Incidents	Close receptors to be informed of any increased odour risks if applicable. Emergency response to be instigated if relevant (Section 2 and 3 below) Guidelines for relevant scenarios in section 2 and 3 below to be followed. Incident to be recorded and events evaluated. Any preventative/corrective measures identified as a result of incident review to be recorded and tracked to completion. Schedule 5 notification to be sent to the Environment Agency if needed. Environment Agency to be notified via 24-hour incident reporting hotline if required. Internal reporting procedures to be followed.

Parameter	Description
Hazard	Unauthorised Site Access
ID	**E**
How likely is the event to occur (Likelihood)?	LOW likelihood
What substances are released and how much of each (risk evaluation of the event)?	Will depend on the actions carried out during unauthorised access. Worst case scenario is consequence could be HIGH
Where do the released sources end up (emission prediction – what are the pathways and receptors)?	Will depend on situation. Could result in releases to atmosphere, release of odours, or releases to ground or ground and surface water via the drainage system.
What are the consequences (consequence assessment – what are the effects on the receptors)?	Impact due to odours. Pollution of ground, water, groundwater, or air. Bodily harm to public or staff.
What are the overall risks (determination of overall risk and its significant to the environment)?	Worst case scenario - MEDIUM
What can prevent or reduce the risk (risk management – measures to prevent accidents and/or reduce their environmental consequences)?	Site is surrounded by a perimeter fence with a closed/locked access gate. Visitors must press a buzzer phone to access the site and be let in by a controller. CCTV in operation at the site. Security lighting external to buildings. Signage displayed on site showing hazardous zones and materials. Tanks, valves, and buildings to be locked off when not in use to prevent unauthorised access. Incident reporting procedures in place. Staff on site 24/7 and at adjacent associated AD site.
Procedures to Respond to Incidents	Close receptors to be informed of any increased risks if applicable. Contact to be made with local police service to report unauthorised access. Emergency response to be instigated if relevant (Section 2 and 3 below) Guidelines for relevant scenarios in section 2 and 3 below to be followed.

Parameter	Description
	Incident to be recorded and events evaluated. Any preventative/corrective measures identified as a result of incident review to be recorded and tracking until completion. Schedule 5 notification to be sent to the Environment Agency if needed. Environment Agency to be notified via 24-hour incident reporting hotline if required. Internal reporting procedures to be followed.
Parameter	**Description**
Hazard	Vandalism
ID	**F**
How likely is the event to occur (Likelihood)?	LOW likelihood
What substances are released and how much of each (risk evaluation of the event)?	Will depend on the actions carried out during event. Worst case scenario is consequence could be HIGH
Where do the released sources end up (emission prediction – what are the pathways and receptors)?	Will depend on situation. Could result in releases to atmosphere, release of odours, or releases to ground or ground and surface water via the drainage system.
What are the consequences (consequence assessment – what are the effects on the receptors)?	Impact due to odours. Pollution of ground, water, groundwater, or air. Bodily harm to public or staff.
What are the overall risks (determination of overall risk and its significant to the environment)?	MEDIUM
What can prevent or reduce the risk (risk management – measures to prevent accidents and/or reduce their environmental consequences)?	Site is surrounded by a perimeter fence with a closed/locked access gate. Visitors must press a buzzer phone to access the site and be let in by a controller. CCTV in operation at the site. Security lighting in place externally. Signage displayed on site showing hazardous zones and materials. Tanks, valves, and buildings to be locked off when not in use to prevent unauthorised access. Incident reporting procedures in place.

Parameter	Description
	Staff on site 24/7 and at adjacent associated AD site.
Procedures to Respond to Incidents	Close receptors to be informed of any increased risks if applicable. Contact to be made with local police service to report event. Emergency response to be instigated if relevant (Section 2 and 3 below) Guidelines for relevant scenarios in section 2 and 3 below to be followed. Incident to be recorded and events evaluated. Any preventative/corrective measures identified as a result of incident review to be recorded and tracking until completion. Schedule 5 notification to be sent to the Environment Agency if needed. Environment Agency to be notified via 24-hour incident reporting hotline if required.
Parameter	**Description**
Hazard	Failure of Mains Services
ID	**G**
How likely is the event to occur (Likelihood)?	Loss of services is likely to disrupt the operation rather than lead to unauthorised emissions. Boilers served by mains gas, site served by mains electric, and additional heat and power provided by CHP boiler from adjacent site. Therefore power outage of one service will not disrupt entire plant operations. LOW likelihood
What substances are released and how much of each (risk evaluation of the event)?	Loss of services is likely to disrupt the operation rather than lead to unauthorised emissions. Boilers served by mains gas, site served by mains electric, and additional heat and power provided by CHP boiler from adjacent site. Therefore power outage of one service will not disrupt entire plant operations. Consequence LOW.

Parameter	Description
Where do the released sources end up (emission prediction – what are the pathways and receptors)?	Potential short term odour impact if loss of power to abatement equipment and build up of unprocessed material at the site if operations have to cease.
What are the consequences (consequence assessment – what are the effects on the receptors)?	Release of odours from the site
What are the overall risks (determination of overall risk and its significant to the environment)?	LOW
What can prevent or reduce the risk (risk management – measures to prevent accidents and/or reduce their environmental consequences)?	Power to the site is achieved by a range of different means including mains electric, solar panels at the site, mains gas, and heat and power provided by the CHP associated with the adjacent AD site. The boiler units have the capacity to be modified to operate on diesel/oil if power is anticipated to be out for long periods, and in this instance a mobile bower would be brought to the site to store fuel on a temporary as needs basis. The site is close to good road networks and is on the edge of a large built-up area and so access to temporary generator services is also likely to be facilitated by this. In the event of extended down time due to power outage, deliveries to the site will cease, and any material moved off site to mitigate against the potential impacts from odour abatement equipment that needs a power source to operate being unavailable. The operator also commits to additional odour monitoring for impacts in the odour management plan during incidents of this nature.
Procedures to Respond to Incidents	Close receptors to be informed of any increased risks if applicable. Emergency response to be instigated if relevant (Section 2 and 3 below) Guidelines for relevant scenarios in section 2 and 3 below to be followed. Incident to be recorded and events evaluated. Any preventative/corrective measures identified as a result of incident review to be recorded and tracking until completion. Schedule 5 notification to be sent to the Environment Agency if needed. Environment Agency to be notified via 24-hour incident reporting hotline if required.

Parameter	Description
Hazard	Over Filling of Vessels
ID	**H**
How likely is the event to occur (Likelihood)?	LOW likelihood
What substances are released and how much of each (risk evaluation of the event)?	Release of liquid wastes and final products to surrounding environment. Consequence LOW.
Where do the released sources end up (emission prediction – what are the pathways and receptors)?	Material could potentially reach surface of ground water if containment measures were not effective. Release of odours.
What are the consequences (consequence assessment – what are the effects on the receptors)?	Potential for odour complaints. Pollution of surface and ground water. Pollution of soils and ground.
What are the overall risks (determination of overall risk and its significant to the environment)?	LOW
What can prevent or reduce the risk (risk management – measures to prevent accidents and/or reduce their environmental consequences)?	Tanks are fitted with level transmitters that will have a high-level set point that sounds an alarm. A level switch system will automatically close the feed valve if the level in the tank reaches the highest point. Both control measures can be viewed on the SCADA interface page. All deliveries by tanker to the tank farm are supervised by a member of staff. The tanks in the tank farm are surrounded by a secondary containment bund. Deliveries are made from an impermeable concreted area with catch pit facilities for management of small spills and additional containment kerbing in the immediate area. The whole site is surfaced with impermeable concrete and provision made for tertiary containment within the site as a whole via a tertiary containment structure around the perimeter of the site. The surface water drainage system drains via an oil interceptor which has a shut off valve downstream to achieve a sealed system if material needs to be retained on site.

Parameter	Description
Procedures to Respond to Incidents	Close receptors to be informed of any increased risks if applicable. Emergency response to be instigated if relevant (Section 2 and 3 below). Guidelines for relevant scenarios in section 2 and 3 below to be followed. Incident to be recorded and events evaluated. Any preventative/corrective measures identified as a result of incident review to be recorded and tracking until completion. Schedule 5 notification to be sent to the Environment Agency if needed. Environment Agency to be notified via 24-hour incident reporting hotline if required.

Parameter	Description
Hazard	Emissions from Plant and Equipment
ID	**I**
How likely is the event to occur (Likelihood)?	LOW likelihood
What substances are released and how much of each (risk evaluation of the event)?	Wastes, VOC's, Exhaust Emissions, Odours, Noise. Consequence LOW
Where do the released sources end up (emission prediction – what are the pathways and receptors)?	Air – (exhausts, odours and VOC's). Local residential receptors – noise and odours Surface water, ground water and soils/ground – liquid wastes
What are the consequences (consequence assessment – what are the effects on the receptors)?	Pollution to the atmosphere via greenhouse gas emissions. Impact on local air quality. Potential for odour and noise complaints. Pollution of surface and ground water. Pollution of soils and ground.
What are the overall risks (determination of overall risk and its significant to the environment)?	LOW
What can prevent or reduce the risk (risk management –	Operator has carried out a full updated environmental risk assessment for the site following site refurbishment and

Parameter	Description
measures to prevent accidents and/or reduce their environmental consequences)?	considering learning points from the fire incident. Areas of risk from plant and equipment have been identified and where further, more detailed assessment is needed, this has been identified and such assessments carried out or commissioned for completion when possible. Areas of risk have been identified and mitigation measures applied in accordance with BAT to manage potential emissions. The site EMS has been updated to take into account the new plant configuration following refurbishment, and specific management plans have been updated to take into account site changes and new BAT conclusions issued in recent months/years. This includes an updated feedstock acceptance procedure, noise assessment and management plan, odour assessment and management plan, site drainage plan, site layout plan, site emissions points plan, plan for management of fugitive emissions and benchmark standards for water quality testing/monitoring/release. The management plans and procedures in the EMS outline measure to be implemented and include measures for monitoring of emissions, responding to complaints, responding to incidents, and ensuring maintenance of equipment and staff competence.
Procedures to Respond to Incidents	A range of responses may be required depending on the type of incident concerned. Close receptors to be informed of any increased risks if applicable. Emergency response to be instigated if relevant (Section 2 and 3 below). Guidelines for relevant scenarios in section 2 and 3 below to be followed. Incident to be recorded and events evaluated. Any preventative/corrective measures identified as a result of incident review to be recorded and tracking until completion. Schedule 5 notification to be sent to the Environment Agency if needed. Environment Agency to be notified via 24-hour incident reporting hotline if required.

Parameter	Description
Hazard	Wrong Connections
ID	**J**
How likely is the event to occur (Likelihood)?	LOW likelihood
What substances are released and how much of each (risk evaluation of the event)?	Domestic sewage, trade effluent (boiler blowdown), wastes, waste effluent streams. Consequence LOW.
Where do the released sources end up (emission prediction – what are the pathways and receptors)?	Foul sewer, surface water drainage system to swale, process tanks or vessels.
What are the consequences (consequence assessment – what are the effects on the receptors)?	Unsuitable materials discharged to foul sewer with impact on performance of local sewage treatment works. Pollution of surface/ground water. Impact on quality of processed materials.
What are the overall risks (determination of overall risk and its significant to the environment)?	LOW
What can prevent or reduce the risk (risk management – measures to prevent accidents and/or reduce their environmental consequences)?	Trade effluent discharge consent agreed with local water company including sample/monitoring point. Domestic sewage and trade effluent discharge to same sewage with public sewer connection. Monitoring checks will identify any non-confirming discharges under the trade effluent consent. Regular visual and monitoring checks undertaken of water quality on the surface water drainage system. Any wrong connections into surface water system will be identified through these monitoring checks. Pipework containing process materials are labelled for content and direction of flow which will aid with detection of wrong connections. Final process materials all subject to regular monitoring/analysis for quality/characteristics of material and any impacts on quality from wrong connections will be identified this way. Also pipework plans available on record in site EMS.
Procedures to Respond to Incidents	Water company and any close receptors to be informed as required. Customers/final users of end products to be informed if impacts on quality of outputs found.

Parameter	Description
	Any further discharge of material wrongly connected to be stopped immediately. Works to be instigated to correct connections as soon as possible. Incident to be recorded and events evaluated. Any preventative/corrective measures identified as a result of incident review to be recorded and tracking until completion. Schedule 5 notification to be sent to the Environment Agency if needed. Environment Agency to be notified via 24-hour incident reporting hotline if required.
Parameter	**Description**
Hazard	Contact between Incompatible Substances
ID	**K**
How likely is the event to occur (Likelihood)?	LOW likelihood
What substances are released and how much of each (risk evaluation of the event)?	Chemicals, wastes, raw materials Consequence LOW.
Where do the released sources end up (emission prediction – what are the pathways and receptors)?	Lab based materials only stored in small volumes and so releases to the environment not anticipated to be significant volumes. All raw material in esterification is introduced into the process at set points via fixed static pipework and under the control of the SCADA system. Consequences - LOW
What are the consequences (consequence assessment – what are the effects on the receptors)?	Small releases in indoor environment predicted. Potential for increase in releases of VOC's
What are the overall risks (determination of overall risk and its significant to the environment)?	LOW
What can prevent or reduce the risk (risk management – measures to prevent accidents and/or reduce their environmental consequences)?	All lab chemicals stored with labels in fit for purpose containers in indoor lab. Material storage arranged in view of MSDS and COSHH assessments. Trained staff oversee storage and use of materials in lab setting, in accordance with lab and analysis procedures.

Parameter	Description
	All raw materials stored at the site in accordance with MSDS and with full COSHH assessment. All raw material in esterification is introduced into the process at set points via fixed static pipework and under the control of the SCADA system. Spent carbon media arising from servicing of odour abatement equipment is assessed for potentially hazardous characteristics and stored pending dispatch from site in a suitable manner.
Procedures to Respond to Incidents	Close receptors to be informed of any increased risks if applicable. Emergency response to be instigated if relevant (Section 2 and 3 below). Guidelines for relevant scenarios in section 2 and 3 below to be followed. Incident to be recorded and events evaluated. Any preventative/corrective measures identified as a result of incident review to be recorded and tracking until completion. Schedule 5 notification to be sent to the Environment Agency if needed. Environment Agency to be notified via 24-hour incident reporting hotline if required.
Parameter	**Description**
Hazard	Abatement System Failures
ID	**L**
How likely is the event to occur (Likelihood)?	LOW likelihood
What substances are released and how much of each (risk evaluation of the event)?	Odours and VOC's Consequence LOW
Where do the released sources end up (emission prediction – what are the pathways and receptors)?	Residential receptors near the site
What are the consequences (consequence assessment – what are the effects on the receptors)?	Impact on local air quality. Potential for odour complaints.

Parameter	Description
What are the overall risks (determination of overall risk and its significant to the environment)?	LOW
What can prevent or reduce the risk (risk management – measures to prevent accidents and/or reduce their environmental consequences)?	Odour management plan in place which outlines measures for monitoring performance of abatement equipment and carrying out proactive maintenance before the performance of the equipment drops. Plan also outlines measures for daily site boundary odour sniff tests and for responding to and managing complaints. VOC adsorber is also subject to proactive preventative maintenance and sniff test monitoring. Emissions from this point are for short periods once a day only.
Procedures to Respond to Incidents	Measures outlined in the odour management plan for the site to be implemented.
Parameter	**Description**
Hazard	Operator Error
ID	**M**
How likely is the event to occur (Likelihood)?	LOW likelihood
What substances are released and how much of each (risk evaluation of the event)?	Will depend on the situation presenting – potentially odours, noise, smoke, wastes, exhaust gases, VOC's. Worst Case Scenario - Consequence HIGH.
Where do the released sources end up (emission prediction – what are the pathways and receptors)?	Will depend on the situation presenting Air quality. Nuisance to local residents Ground/soils Groundwater and surface water Public sewer networks and treatment facilities
What are the consequences (consequence assessment – what are the effects on the receptors)?	Pollution to the atmosphere via greenhouse gas emissions. Impact on local air quality. Potential for odour and noise complaints. Pollution of surface and ground water. Pollution of soils and ground. Impact on water company sewage treatment works downstream and subsequent impacts on water quality and operator compliance.

Parameter	Description
What are the overall risks (determination of overall risk and its significant to the environment)?	MEDIUM
What can prevent or reduce the risk (risk management – measures to prevent accidents and/or reduce their environmental consequences)?	Staff recruitment and selection process in place to select staff who have the skills to carry out tasks required. Two full time members of staff onsite have suitable WAMITAB training, and a further member of staff scheduled to undertake the award in the near future. One of these staff is the operations manager. Staff with specific training recruited to key skilled areas such as lab staff and maintenance staff. Outside specialist contractors used for specialist tasks as required, and all contract work carried out according to permit to work system and agreed and signed off RAMS. Training needs analysis undertaken, and staff training needs identified for their given role. This is reviewed on a regular basis by senior management. Documented training records in place for all staff including external course, and internal toolbox talks and 'on the job' training. Documented SOP's in place in site management system specifying how particular work streams are to be undertaken. New SOP's created on an ongoing basis as new work streams identified. Site induction in place for all visitors, staff, and contractors. Incident reporting and complaints procedures in place to review incidents when they occur and identify any preventative and corrective measures to be carried out. These are documented and tracked to completion. Corrective actions may include staff training. Grievance and disciplinary procedure in place.
Procedures to Respond to Incidents	Close receptors to be informed of any increased risks if applicable. Emergency response to be instigated if relevant (Section 2 and 3 below). Guidelines for relevant scenarios in section 2 and 3 below to be followed. Incident to be recorded and events evaluated. Any preventative/corrective measures identified as a result of incident review to be recorded and tracking until

Parameter	Description
	completion. Staff re-training to be considered as potential corrective measure, along with review of SOP's if required. Schedule 5 notification to be sent to the Environment Agency if needed. Environment Agency to be notified via 24-hour incident reporting hotline if required.

2. INCIDENT RESPONSE

2.1. Information Available for Response

2.1.1. The site office will contain an incident response file containing documents relating to the following:

- An up-to-date inventory of all substances used on site, likely volumes stored, and any key MSDS sheets (e.g. Methanol and Sulphuric Acid);
- A list of all tanks and their contents;
- A site layout plan showing site infrastructure, location of tanks and chemical stores etc;
- Safe shut down procedures;
- The contact details for emergency services, regulating authorities and utilities providers, emergency tanker operator, specialist technology providers, gas/electricity service providers, known receptors (including the adjacent AD site), and any other relevant parties.;
- A list of key receptors;
- A site drainage plan and plan showing the location of utilities supply connection points and duct work;
- Plans of tanker access points on the surface water system outside (swale);
- A list of spill kits and their contents; and
- A copy of the various emergency response procedures for the site.

2.1.2. In addition to this, the following key measures will be in place:

- The site is secured by means of exterior fencing, CCTV and security lighting;
- Operational staff will be present on site 24 hours a day;
- A record of all incidents, near misses, abnormal events, changes to procedures, significant findings of maintenance inspections will be held in the site office and be regularly updated in line with site management systems;
- Staff training will be in line with site management systems. Toolbox talks will be used to keep site personnel up to date with procedures to respond to and learn from incidents; and
- Briefings will be required between staff at shift change to ensure continuity of approach to managing any issues presenting at the site.

3. PROCEDURES TO RESPOND TO SPECIFIC EVENTS

3.1. Fire/Explosion

3.1.1. In the event of a fire/explosion, the person finding the fire should:

- Immediately raise the alarm and implement the fire response plan for the site.

3.1.2. Contact should be made with the fire service, and details given of the nature of the site, and any reference made to any information shared with the service during proactive orientation visits.

3.1.3. Staff should collect a copy of the emergency response file in case this will be needed for reference during the management of the incident.

3.1.4. The manager at the adjacent Brocklesby AD Biogas site is to be contacted so emergency response procedures can be implemented at that site if needs be.

3.1.5. If the operations manager is not on site, they must be contacted on their mobile. The company director and managing director should also be contacted.

3.1.6. Implement safe shut down procedures for the site and leave the process operations in a safe state.

3.1.7. The drainage system shut off valve is to be closed in case fire fighting equipment needs to be brought to the site and fire water needs to be contained.

3.1.8. The site tanker is to be taken to the location of the Klargester so that fire water can be tankered off from this point if needed.

3.2. Power Failure

3.2.1. Assessment of site operations to be undertaken to see which parts of the site are affected by the outage. Process areas to be returned to safe state during battery backup life period of control system.

3.2.2. Any potential impact monitoring required during downtime to be identified and planned (e.g. odour monitoring in the event of abatement equipment downtime).

3.2.3. If extended downtime anticipated, alternative power supply source to be identified and sourced.

3.2.4. Consider suspension of acceptance of loads to the site if required to manage impacts.

3.3. Spillage

3.3.1. In the case of any small spills (< 1 m^3) the site employee finding the spill should:

- Ensure that any personnel affected by the spillage are removed to a safe area and receive appropriate medical attention including using the emergency showers and eye wash bottles if necessary.

- Close any valves or
  taps as the situation dictates if safe to do so in order to stop the spill from occurring.
- Summon medical assistance if necessary (first aider and emergency services 999)
- Consult COSHH, MSDS and spill procedure, immediately contain the spill using spill kits and drain covers if necessary.
- Use spill kit material and drain blockers to contain the spillage on a surface or in a drainage system.
- Close the shut off valve on the drainage system upstream of the Klargester to prevent loss of spills from the site.
- Arrange for emergency tanker or specialist services to remove spilled material.
- Inform the Site Manager and give full details of the nature of the incident and chemicals involved. If the Site Manager is not on site, they may be contacted on their mobile. If no response from the Site Manager further emergency contacts are given in section 1 and in the emergency response file.
- Manage the spill according to COSHH and MSDS guidance.
- Inform Operations Manager of the incident and also fill out incident report form and report.

3.3.2. Do not wash the spill down the drain unless agreed with the Site Manager.

3.3.3. For larger spills, the Site Manager shall initiate a clean-up of spill depending on the nature of the chemical and the extent of the spill. MSDS or COSHH assessments need to be referenced for clean-up procedures. The Site Manager will contact the emergency services or Environment Agency if required.

3.3.4. The drainage shut off valve upstream of the Klargester should be closed to retain spills at the site. Checks should be made to see if the spilled material has reached the swale, and actions taken to remove standing material from the swale if needs be/possible.

3.3.5. A programme of impact monitoring will be set up and agreed with the Environment Agency to monitor any post incident impacts.

3.3.6. In the event of any large spill the clean-up should include the following steps:

- Ensure that any personnel affected by the spillage are removed to a safe area and receive appropriate medical attention including using the emergency showers and eye wash bottles if necessary.
- Close any valves or taps as the situation dictates if safe to do so.
- Summon medical assistance if necessary (first aider and emergency services 999)
- Evacuate and isolate the area and post warning notices to prevent unauthorised access.
- All personnel involved in the clean-up must wear suitable PPE worn as identified in the COSHH assessment related to the chemical involved.
- Where possible, the chemical must be prevented from entering any drainage system using appropriate containment equipment in spillage kit including drain covers.

- Any chemical
  contained should be transferred into spare IBCs of the same chemical and/or to a suitable bund.
- Contaminated kit must then be transferred into plastic containers, sealed, identified and disposed of as appropriate.
- Any spill kit used must be replaced.
- Once the spill has been completely cleaned up, the Managing Director should be notified.
- In the event of a major spill, an internal investigation should be carried out in line with the incident reporting procedures.

3.4. Injury/Illness on Site

3.4.1. In the case of any employee or any associated visitor and/or subcontractor suffering an injury or becoming ill, the person should:

- Take necessary actions to make the area/site safe.
- If required and appropriate training received, administer immediate first aid.
- Report the incident to the Site Manager. If the Site Manager is not on site, and the injury or illness requires medical attention, then they should either call emergency services, or if injury/illness not serious arrange transport to nearest hospital A&E.
- Complete an injury report in accident book.
- Consult Health and Safety Manager on any further reporting requirements.
- As soon as possible following the incident, either Site Manager and/or Managing Director shall carry out an internal investigation.

3.5. Extreme Weather

3.5.1. In the event of an extreme weather scenario; lightening, gale force winds, torrential rain or any event deemed unsafe by Site Manager/Supervisor, all staff, visitors and contractors will be required to seek refuge. Loading/unloading will be suspended, and all vehicle engines should be switched off.

3.5.2. Additional monitoring for site impacts to be implemented during period of extreme weather if required.

3.6. Release to Surface Water Drain

3.6.1. In the event that material which is unsuitable is allowed to enter the surface water drain, the outlet to the swale will be blocked using the shut off valve upstream of the Klargester oil interceptor. A tanker will be deployed to remove the material from the drainage system for suitable disposal or re-processing.

3.6.2. If material leaves the site that is unsuitable the Environment Agency will be notified accordingly, and the event will be recorded according to internal incident reporting procedures.

3.6.3. Measures to be taken to remove standing material from the swale if possible.

3.6.4. Post incident monitoring plan for impacts to be agreed with the Environment Agency.

3.6.5. Additional monitoring for odours to be undertaken during incident management.

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