



**FOYLE MEATS
MELTON RD
SIX HILLS
MELTON MOWBRAY
LE14 3PR**

Environmental Permit Application

H1 Environmental Risk Assessment

Document Ref: Attachment B.2.5.A

H1 ENVIRONMENTAL RISK ASSESSMENT
FOYLE MEATS, SIX HILLS, MELTON MOWBRAY, UK

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1.0 INTRODUCTION

Foyle Food Group operates a slaughtering facility on a 24,000 M² site located at Six Hills, Melton Mowbray, LE14 3PD, United Kingdom. Activities at the site include the slaughter of cattle and the dressing, chilling and quartering of beef carcasses, the harvesting of offal, cod fat and the packing of beef offal and cod fat into vacuum pouches and lined cardboard boxes.

The northern and eastern site boundaries are bounded by green-fields, which contains an operational farmstead. The northeast of the site is bounded by a green-field, beyond which is the Six Hills Leisure facility and golf course. At its closest point, this golf course comes within c.125m of the site boundary.

The west boundary is bounded by two industrial units and associated carpark, beyond which is the A46 road. The south of the site is mostly bounded by a local access roadway into the adjacent industrial units and partially bounded by the B676 road.

The closest residential properties to the site are located on the A46 Road, c.220m south-west of the site boundary.

Prior to being acquired by the Foyle Food Group, the site was a privately owned beef slaughtering facility.

The company's customer base is split between commercial and retail. The site produces primal frozen quarters which are dispatched to other Foyle Foods site for further processing. Boning is not carried out at the site.

The site employs approximately 77 staff, including office and admin personnel.

The actual tonnage of finished product produced in 2023 was 14,809.90 tonnes, which is an average of 284.81 tonnes per week.

The plant operates production shifts on a five-day basis between 07:00-15:00, while cleaning occurs during evening & night-time hours. Weekend work may occur at peak production times and the engineering team provide 24/7 cover.

No effluent treatment occurs at the site. Effluent is stored in the Effluent Storage Sump and the Truck-Wash Sump, which are emptied daily by road tanker for further treatment off-site.

All water is sourced from a main supply, while the site contains a single hot water boiler.

All waste is segregated on-site for removal to offsite waste facilities as appropriate.

The site holds the following accreditations: BRCGS, Red Tractor, AHDB Beef and Lamb (formally EBLEX), Organic Soil Association, ISO 14001 and is USDA Approved.

Under the 2016 Environmental Permitting Regulations for England and Wales, the site is required to submit a H1 Environmental Risk Assessment in support of its application for a Bespoke Environmental Permit.

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2.0 BRIEF FOR CONSULTANCY

In order to satisfy its obligations under the 2016 Environmental Permitting Regulations for England and Wales, Panther Environmental Solutions Ltd were contracted by Foyle – Melton Mowbray to carry out this H1 Environmental Risk Assessment in support of their application for a Bespoke Environmental Permit.

The risk assessment covers current and previous site operations and management. The risk assessment involved discussions with the main environmental and operational managers in a facilitated workshop in the identification and quantification of risks.

H1 Environmental Risk Assessment Objectives

The objectives of this assessment are to:

- Identify all potential environmental risks posed by operations at the Foyle facility;
- Identify all potentially significant environmental risks, including environmental risks arising from unexpected events, posed by operations at the facility;
- Assess potentially significant risks in more detail by way of assigning a significance value to the potentially significant environmental risks;
- Present the risk assessment: and outline the implementation of the appropriate control or mitigation measures for the significant risks.

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3.0 SUMMARY OF SITE OPERATIONS

This section gives a summary account of the manufacturing process and supporting operations at Foyle - Melton Mowbray to allow potential environmental risks to be conceptualised in detail. An in-depth description of site operations and the manufacturing process can be found in Attachment B.3.13.1 and B.3.13.2 – Site Operations.

3.1 MANUFACTURING PROCESS

The manufacturing process is divided into the following stages:

Lairage

Cattle scheduled for slaughter are delivered to the site by road. The animals are placed in livestock holding pens in the lairage area.

Slaughter Lines

Cattle are stunned / killed and hung by their back legs on an overhead rail system. The cattle then have the main arteries in their throats cut by trained slaughter operatives.

Blood from slaughtered animals is collected by means of a dedicated collection system. Blood is then transferred from the blood trough to the blood storage tank.

Head, Horn and Hoof Removal

Heads, horns and hooves are manually removed from cattle carcasses using hydraulically operated cropping shears and are sent to Specified Risk Material (SRM) skips for staining with blue dye.

Hide Removal

After bleeding, cattle have the mask and ears manually removed. After removal, the mask, which is classed as SRM, is stored in dedicated storage areas and stained with blue dye before disposal.

Trimming and Evisceration

Green offal (lungs, trachea) are collected and taken for further processing at an off-site facilities. Gut (paunch) contents is also removed at this stage and stored for collection by a contractor for land-spreading.

The respiratory, pulmonary and digestive organs are then removed and sent for disposal or further processing as required. Red offal (heart, liver and kidneys) are removed and sent to the Red Offal processing area.

Red Offal Further Processing

Further to being initially chilled, red offal is trimmed, packed, labelled and weighed and sent to the chill for storage.

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Carcass Quartering

The cattle carcasses are split along the spine using purpose designed electric saws. The spinal cord is then removed from the carcass using a vacuum suction system. Each side is cut, resulting in beef quarters.

Chilling

The beef quarters are placed in chilled storage prior to dispatch.

Dispatch

Chilled beef quarters are removed off-site in refrigerated trailer, by a registered haulier, to other Foyle Meat facilities for further processes (i.e. cuts, de-boning, packaging etc.).

Cleaning

Procedures ensure that residual material is removed from floors, water is used efficiently and employees are trained.

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3.2 SUPPORTING SERVICES

3.2.1 Boiler

Hot Water is supplied to the site by a single Babcock Wanson HW3P Series Boilers, which has a thermal input of 1.26 MW.

This LPG fuelled boiler is located within a small structure off the main facility to the front of the site.

The site LPG tanks have a maximum potential capacity of 27,600-litres.

LPG is not toxic to flora, fauna or soil organisms. LPG gas leak effects will not cause long term adverse effects in the environment and is not dangerous to the ozone layer. LPG is not persistent, does not bio-accumulate and unlikely to cause long term adverse effects in the environment. Spillages are unlikely to penetrate the soil. The product is likely to volatilise rapidly into the air.

Further details on boiler specifications can be found in Attachment B.3.2 – Emission to Atmosphere.

An Air Quality Assessment was also carried out in 2024 (see Attachment B2-5.2).

3.2.2 Refrigeration

The site contains 424kg of R404A refrigerant within the main pack and 125kg of R448A refrigerant within the new chill.

There are a number of procedures in place to mitigate against fugitive emissions:

- External contact, SK Heating and Cooling, in place where all leaks in the systems are being identified and repaired.
- There is a gas monitoring system on each of the packs to detect any leaks.

The refrigeration is monitored on the Tek-troniks Refrigerant Gas Leak Detection System and alarms for any faults, while also sends email alerts to relevant personnel.

3.2.3 Offices

The site's main offices are located on the first floor of the admin building and typically have 18 personnel employed there at any one time.

3.2.4 Effluent Treatment Plant

Effluent treatment does not occur on-site.

Effluent is stored in two separate underground concrete sumps: the Effluent Sump or the Truck-Wash Sump.

Further details on effluent can be found in Attachment B.3.4 – Effluent Transferred Off-Site

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4.0 INITIAL SCREENING AND OPERATIONAL RISK ASSESSMENT

The initial step involved in categorising the likely environmental risks associated with a facility is to undertake a high-level screening of the site based on its complexity, environmental sensitivity and record of compliance with environmental legislation.

All aspects of the previous operation and current site operation that pose a plausible threat to the environment are covered in this H1 Risk Assessment.

This H1 Environmental Risk Assessment is based on the Environmental Agency's H1 Guidance Document, last updated December 2014, and the associated annexes therein applicable to a facility of this nature, namely:

- H1 Annex A – Amenity & accident risk from installations and waste activities
- H1 Annex D – Discharges to surface waters
- H1 Annex E – Surface Water Discharges (complex)
- H1 Annex F – Air Emissions
- H1 Annex G – Disposal or recovery of waste produced on site
- H1 Annex H – Global warming potential
- H1 Annex J – Groundwater
- H1 Annex K – Cost benefit analysis

Upon satisfactory addressing of the company's activities under each of these annexes, it can be demonstrated that the facility would not pose an unacceptable risk to the environment throughout its life cycle.

For each of the above environmental aspects, the approach to the assessment has followed the following four stage processes:

1. Identify the risks
2. Assess the risks (assuming those control measures proposed are in place)
3. Choose appropriate further measures to control these (if required); and
4. Present the assessment.

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5.0 RISK IDENTIFICATION

5.1 Methodology

Risk identification was initially undertaken during the Risk Management Workshop in October 2021 with the sites SHE Coordinator. The risk identification process involved:

- The identification of potential environmental receptors at the site.
- The identification of production processes that posed potential hazards to the environment.
- The identification of any other site operations that posed potential hazards to the environment.
- The identification and quantification of the risks using a Failure Mode Effect Analysis (FMEA) worksheet.

5.2 Operator Performance

Assessing operator performance is crucial when seeking to assess the environmental risks posed by the Melton Mowbray. As detailed above, the large-scale slaughtering of cattle, processing of packaging is being carried out, along with the application of cleaning chemicals, the operation refrigeration plant, boiler plant, and effluent storage.

Poor operator performance can pose a significant risk to the environment. The implementation of industry best practices and BAT for all processes in the facility significantly minimises environmental risk factors. The operation of all equipment and plant should have a Standard Operating Procedure and a Contingency Operating Procedure where necessary (i.e. EMS OP03 - Energy Management Procedure).

Foyle Food Group Ltd acquired the Melton Mowbray site in 2013. Since then, the site has seen substantial investment and has achieved accreditations as follows:

- BRCGS
- Red Tractor
- AHDB Beef and Lamb (formally EBLEX)
- Organic Soil Association
- ISO 14001
- USDA Approved

There have been no noise or odour complaints received by the site to-date.

5.3 Identification of Environmental Receptors

The term '*environmental receptor*' describes those parts of the surroundings likely to be affected by the processes that are on-going at the site. The significant environmental receptors are listed below.

These receptors are used as a starting point to ensure that all significant risks are identified, and all major aspects of the environment are taken into account.

Environmental Receptors:

- Groundwater
- Surface water
- Soil
- Air Quality
- Human Beings/Public areas
- Protected Sites

A detailed description of each of these receptors can be found in Attachment B.2.3.B_SCR Support Information.

Protected Sites

- There are no SAC's within a 10km radius of the site. The closest is River Mease SAC, which is located c.29.25km West-Southwest of the site boundary.
- There are no SPA's within a 10km radius of the site. The closest is Rutland Water SPA, which is located c.25.95km East-Southeast of the site boundary.
- Rutland Water is also the closest RAMSAR Wetlands to the site.
- There are no NNR's within a 10km radius of the site. The closest is Charnwood Lodge NNR, which is located c.17.94km West-Southwest of the site boundary.
- There is only one SSSI within a 5.0km radius of the site. The closest is Twenty Acre Piece SSSI located c.160m west of the site boundary.

Twenty Acre Piece (SSSI)

Twenty Acre Piece is an 8.1-hectare (20-acre) biological Site of Special Scientific Interest and registered common land east of Loughborough in Leicestershire.

This site has grassland, scrub and wood on poorly drained acidic clay. The woodland is mainly hawthorn, oak and ash, and there are diverse populations of breeding invertebrates and birds.

The SSSI Impact Risk Zones, which reflect the particular sensitivities of the feature, that apply to the Twenty Acre Piece site cover a distance of approximately 3.0-km from the boundary, within which the Foyle Meats site is located.

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Identification of Risks

A facilitated workshop was undertaken on-site to systematically identify the major risks at the site. A total of 24 risks were identified which are summarised in Tables 5.1 and ranked in order in Table 6.3.

Table 5.1: Project Risk Register

| REF. | AREA/ISSUE | POTENTIAL FAILURE MODE / RISK | PRINCIPLE IMPACTED RECEPTORS |
|----------------------------|------------------------------------|--|---|
| Site Wide | | | |
| 1 | Pests | Risks from increased pest populations. Risk to biodiversity at the Twenty Acre Piece (SSSI). | Human beings/ SSSI |
| 2 | Litter | Risk of raw materials, waste and waste packaging litter in yard escaping the site. | Human beings/ SSSI |
| 3 | Vandalism | Risk of illegal trespass | Site plant and personnel |
| 4 | Flooding | Risk of site flooding (extreme rain event) | Surface water / Groundwater / Human Beings |
| 5 | Fire | Spread of fire off-site. Fumes from fire & potential firewater contamination of groundwater | Air Quality / Surface water/ Human Beings/ SSSI |
| Production Facility | | | |
| 6 | Water-lines - Manifold connections | Major water spillages | Surface water / Groundwater |
| 7 | Production floor | Spillage of cleaning chemicals | Surface water / Groundwater |
| 8 | Chilled Storage | Potential refrigerant leak | Air Quality/ Human beings/ SSSI |
| 9 | Boiler emissions | Emissions of NOx or particulate matter | Air Quality/ Human beings/ SSSI |
| 10 | Energy Usage | Emission of greenhouse gasses | Global Warming |
| 11 | Gas lines | Gas leakage | Air Quality/ Human beings/ SSSI |
| 12 | Refrigeration Plants | Noise emissions | Human beings/ SSSI |
| Drainage lines | | | |
| 13 | Process & foul line integrity | Potential leaks | Groundwater/ Soils/ SSSI |
| 14 | Storm drains | Potential leaks | Surfacewater/ Soils |
| External Areas | | | |
| 15 | Blood storage | Risks from leaking of blood to yard | Surface water / Groundwater/ SSSI |
| 16 | Delivery of chemicals – | Potential spillage during delivery | Surface water / |

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| REF. | AREA/ISSUE | POTENTIAL FAILURE MODE / RISK | PRINCIPLE IMPACTED RECEPTORS |
|-------------------------|-------------------------------|--|--|
| | fuels and chemicals | and operation | Groundwater/ SSSI |
| 17 | Bunding arrangements | Risk of integrity loss and overtopping | Surface water / Groundwater/ SSSI |
| Waste | | | |
| 18 | Waste engineering oil storage | Potential for spillages/leaks | Surfacewater/ Soils/ SSSI |
| 19 | Transport of waste | Potential for spillages/leaks during transport | Surfacewater/ Soils/ SSSI |
| 20 | By-product waste storage | Potential for spillages/leaks | Groundwater/ Soils |
| 21 | General waste storage | Potential for odours | Human Beings/ SSSI |
| Effluent Storage | | | |
| 22 | Effluent Sump | Potential leakage from sumps | Groundwater/ Surfacewater/ soils/ SSSI |
| 23 | Effluent Storage | Potential odour – if sump is not emptied daily | Air Quality /Human beings/ SSSI |
| 24 | Transport of effluent | Potential for spillages/leaks during transport | Surfacewater/ Soils/ SSSI |

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5.4 SUMMARY OF RISKS IDENTIFIED ON-SITE

The risks identified in Table 5.1 are to be taken as a general overview of the potential risks within each area of the site. Both the severity and likelihood of the occurrence of each depends greatly upon the control measures put in place for each during the site's operation.

As a general overview of the facilities activities and control measures in place, many of the risks identified are not considered significant risks due to the safeguards already in place at the facility.

The most significant environmental risk posed is the effluent storage sump, which emptied daily and removed off site via tanker for treatment. No treatment occurs on-site.

A number of the risks identified relate to potential spillages/leaks and risks to ground and water contamination. These potential risks rely heavily on the integrity of the various bunds, storage tanks, and process drains.

All underground pipes/lines and tanks similarly are automatically at a higher risk due to the potential for undetected leaks occurring from these structures containing potentially contaminated substances.

The criteria scoring methodology and risk scores are included in the following section.

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6.0 ASSESSMENT OF RISKS

6.1 Methodology

The risks identified during the workshop in Table 5.1 were assessed against the risk classification tables (RCT) in Tables 6.1 and 6.2. The risk classification tables were designed to reflect the levels of risk appropriate to the facility.

Ratings taken from a risk classification table were applied to the consequence and likelihood of occurrence of each risk. A risk score was calculated for each risk using the ratings. The risks were then ranked and compared based on the risk scores.

The risks were placed in a risk matrix to illustrate the ranking of each risk, and to allow the risks to be quantified and visually prioritised. The risk matrix is a particularly useful tool for tracking changes in risk levels over time.

Risk management measures were identified for selected risks during the workshop and included in the worksheets. These measures are presented in Section 6.0.

6.2 Risk Classification Table

The Risk Classification Tables (RCT) has been designed to reflect the critical levels of risk appropriate to the Foyle- Melton Mowbray site. The RCT provides likelihood of occurrence and environmental consequence for the ranking of risks. These are included in Table 6.3 below.

Table 6.1: Risk Classification Table (Likelihood)

| Rating | Likelihood | |
|--------|------------|---|
| | Category | Description |
| 1 | Very low | Very low chance (0-5%) of hazard occurring in 30 yr period |
| 2 | Low | Low chance (5-10%) of hazard occurring in 30 yr period |
| 3 | Medium | Medium chance (10-20%) of hazard occurring in 30 yr period |
| 4 | High | High chance (20-50%) of hazard occurring in 30 yr period |
| 5 | Very High | Very high chance (>50%) of hazard occurring in 30 yr period |

Table 6.2: Risk Classification Table (Consequence)

| Rating | Consequence | |
|--------|-------------|---|
| | Category | Description |
| 1 | Very low | No impact or negligible change to the environment |
| 2 | Low | Minor / localised impact or nuisance |
| 3 | Medium | Moderate impact to the environment |
| 4 | High | Severe impact to the environment |
| 5 | Very High | Massive impact to a large area, irreversible in the medium term |

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The risks are identified in Table 6.3 below and a description of each heading of the table is given below:

- Risk ID – Provides a unique identifier for each risk.
- Processes carried out on site – Lists the sites process which gives rise to the potential risk.
- Potential failure mode / risk – Identifies the potential failure mode that could result in the risk occurring.
- Potential causes – Identifies what events could cause the potential failure mode to occur.
- Current Controls – Identifies the current controls in place to prevent the risk event from occurring.
- Consequence – Rates the environmental impact and potential costs due to the hazard event occurring given the current controls. The consequence is ranked against the Risk Classification Table (RCT) as provided in Table 6.2.
- Basis for consequence rating – Identifies the basis for the selected consequence rating.
- Likelihood – Rates the probability of the potential hazard occurring given the current controls. The likelihood rating is ranked against the Risk Classification Table (RCT) as provided in Table 6.1.
- Basis for likelihood rating – Identifies the basis for the selected likelihood rating.
- Risk Score – Provides a risk score to allow the ranking of each risk. The risk score is based on the product of the consequence rating and the likelihood rating.

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Table 6.3: Project Risk Register – Classified by Risk Score

| RISK ID | PROCESS | POTENTIAL HAZARDS | LIKELIHOOD RATING | BASIS OF LIKELIHOOD | CONSEQUENCE | BASIS OF CONSEQUENCE | RISK SCORE |
|------------------|-------------------------------------|--|-------------------|---|-------------|--|------------|
| Site Wide | | | | | | | |
| 1 | General Management – Pest Control | Increased pest populations. Risk to biodiversity at the Twenty Acre Piece (SSSI). | 1 | Low likelihood of increased pest populations as good housekeeping, waste management and pest control measures onsite. Rodent baiting locations in place to control pest numbers onsite. Contract with Pest Control company in place to control pest population. Regular environmental checks are carried out (ER03 Daily Environment Check). | 4 | Potentially consequence on amenity, public health and the Twenty Acre Piece (SSSI). | 4 |
| 2 | General Management – Litter Control | Potential raw materials, waste and waste packaging litter in yard escaping the site. | 2 | Low potential as all deliveries are supervised to ensure no spills occur (OP08 Receipt of Bulk Liquids) Segregated waste bins are provided at relevant process points in order to ensure correct disposal of wastes (OP04 Disposal Of Waste) Regular site inspections (ER03 - Daily Environmental Check) ensure good housekeeping in place and prompt action taken if an issue is identified. | 2 | Low to moderate nuisance impact on local residents, local businesses and the Twenty Acre Piece (SSSI). | 4 |
| 3 | Site Security | Illegal trespass and vandalism. | 1 | Low potential, there are good security measures in place. | 5 | Potentially large consequence on site personnel, on-site plant | 5 |

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| RISK ID | PROCESS | POTENTIAL HAZARDS | LIKELIHOOD RATING | BASIS OF LIKELIHOOD | CONSEQUENCE | BASIS OF CONSEQUENCE | RISK SCORE |
|----------------------------|------------------------------------|---|-------------------|---|-------------|---|------------|
| | | | | <p>Perimeter fence, CCTV security surveillance, 24-hour security personnel presence on-site.</p> <p>Contractors and visitors must sign in at security.</p> <p>No high-risk substances on site.</p> <p>Cleaning chemicals and storage tanks not accessible to unauthorised people.</p> | | and the environment. | |
| 4 | Flooding | Potential site flooding due to extreme weather | 1 | <p>Low potential for flooding onsite as the site is located in Flood Zone 1 – Low Probability (Attachment B.2.3 - Site Condition Report)</p> <p>Surface water drainage is designed to accommodate extreme weather events.</p> <p>Bunds checked weekly and emptied of rainwater as required OP09 Bund Inspection Procedure</p> | 3 | Potential consequence on the environment would be moderate due to good housekeeping and correct storage of potentially polluting materials. | 3 |
| 5 | Fire | Spread of fire off-site. Fumes from fire and potential firewater contamination. | 1 | Low potential as comprehensive emergency response procedures in place and main facility at setback distance from the boundary and off-site structures. | 5 | Consequences would be large as potential impact on local community could be severe. Costs of new building would be significant. | 5 |
| Production Facility | | | | | | | |
| 6 | Water-lines - Manifold connections | Major water spillages | 3 | Connections from Manifolds part of daily processes, leaks likely to occur on a high frequency. | 1 | <p>Spillages caught in floor drains of building and into contained effluent sump.</p> <p>Sump is located in an area of low elevation. Any</p> | 3 |

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| RISK ID | PROCESS | POTENTIAL HAZARDS | LIKELIHOOD RATING | BASIS OF LIKELIHOOD | CONSEQUENCE | BASIS OF CONSEQUENCE | RISK SCORE |
|---------|------------------|--|-------------------|---|-------------|---|------------|
| | | | | | | <p>overflow would be contained upon a concrete surface.</p> <p>Sump is emptied daily reducing risk of overflowing.</p> <p>No major cost for fix & clean-up.</p> | |
| 7 | Production floor | Spillage of cleaning chemicals and raw materials | 3 | <p>Minor spillages would occur during normal operation and cleaning chemical spillage would be likely to occur during non-routine operations. Manual intervention.</p> <p>Spill containment procedure in place (OP11 Spillage Response)</p> <p>Process lines and operations that reduce excessive spillage of material onto the floor are in place and are continually reviewed.</p> <p>Dry cleaning in place, ensuring all food waste is diverted from drains.</p> | 1 | All spillages flow into process drains, and into the effluent sump where any spillage will be diluted in balancing tank and treated. | 3 |
| 8 | Chilled Storage | Potential refrigerant leak into public areas and the Twenty Acre Piece (SSSI). | 3 | <p>There is a high chance of this occurring in a 30 yr period.</p> <p>Leaks are usually due to manifold breaks in the chill or refrigeration rooms.</p> <p>Preventative maintenance and leak test plan in place.</p> | 3 | Impact would be localized and short-lived. | 9 |

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| RISK ID | PROCESS | POTENTIAL HAZARDS | LIKELIHOOD RATING | BASIS OF LIKELIHOOD | CONSEQUENCE | BASIS OF CONSEQUENCE | RISK SCORE |
|---------|------------------|---|-------------------|---|-------------|---|------------|
| | | | | Logbook in place to record quantity of refrigerant and oil added, leakage testing results and details of leakage incidents. | | | |
| 9 | Boiler emissions | Emissions of SOx, NOx or particulate matter into public areas and the Twenty Acre Piece (SSSI). | 4 | <p>Monitoring of emission values on an a bi-annual basis during maintenance.</p> <p>NOx, SOx and particulate matter levels are low due to boilers fuelled by natural gas.</p> <p>Combustion plant is relatively small with a combined thermal input of 1.26MW.</p> <p>2024 Air Quality Report concluded: <i>'The results indicated that impacts on pollutant concentrations were not predicted to be significant at any human or ecological receptor location in the vicinity of the site.'</i></p> <p>Emissions inspected for soot and black smoke as part of ER03 - Daily Environmental Check</p> | 1 | Minor due to low concentrations in combustion products from natural gas. Any exceedance would be minor and short lived. | 4 |
| 10 | Energy Usage | Emission of greenhouse gasses | 2 | <p>Low potential for emission of greenhouse gasses.</p> <p>Site uses natural gas for the fuelling of boilers and internal forklifts are electric.</p> <p>Gas and electricity metering recorded weekly.</p> | 3 | <p>Site is a minor producer of greenhouse gasses in the national context.</p> <p>Impact from the site would not be significant.</p> | 6 |

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|-----------------------|-------------------------------|--|-------------------|---|-------------|--|------------|
| | | | | OP03 - Energy Management Procedure | | | |
| 11 | Gas lines | Potential leakage into public areas and the Twenty Acre Piece (SSSI). | 1 | Has not occurred to date. Gas lines are secure and monitored. Use of system safety and environmental controls include automatic lock out of fresh feed if any of control parameters are exceeded. | 4 | Minor / localised impact or nuisance. Any exceedance would be minor and short lived. | 4 |
| 12 | Refrigeration Plants | Noise emissions affecting public areas and the Twenty Acre Piece (SSSI). | 3 | Noise monitoring has shown this to be a moderate noise source. The site has not received a noise complaint since operations began. The site has an established complaints procedure. | 2 | Potential minor nuisance impact on local community as area is significantly influenced by road traffic at all times. | 6 |
| Drainage lines | | | | | | | |
| 13 | Process & foul line integrity | Potential leaks and contamination of local groundwater and soil. | 2 | Drainage pipes are cleaned regularly by external contractor. Manholes inspected regularly on site. No hydrological link to public amenities or the Twenty Acre Piece (SSSI). | 4 | Leakages in lines may result in major costs due to high reliance on investigations as a control measure. Undetected leaking to ground can lead to high clean-up costs and ground investigation costs. | 8 |
| 14 | Storm drains | Potential leaks and contamination of local surfacewater and soil | 5 | CCTV Integrity Survey Carried out. Valve installing on surface water discharge which can be closed in case of emergency. | 3 | Large dilution washed down drain from rainwater and dilution of any spills. Storm pipe normally carries rainwater, therefore | 15 |

H1 ENVIRONMENTAL RISK ASSESSMENT

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| RISK ID | PROCESS | POTENTIAL HAZARDS | LIKELIHOOD RATING | BASIS OF LIKELIHOOD | CONSEQUENCE | BASIS OF CONSEQUENCE | RISK SCORE |
|-----------------------|--|--|-------------------|---|-------------|---|------------|
| | | | | Concrete underground pipes, likelihood of leaking over 30 year period is minimal. | | any leak would have low contamination. | |
| External Areas | | | | | | | |
| 15 | Blood storage | Risks from overfilling and leaking into yard and surfacewater. | 3 | <p>Potential for tank leakage over 30 year life span, also potential for leaks in connection. Local yard drainage is directed to the effluent sump.</p> <p>OP11-Spillage Response in place.</p> <p>Personnel are trained in all emergency procedures.</p> | 2 | Tanks are visually assessed as part of ER03 - Daily Environmental Check | 6 |
| 16 | Delivery of chemicals – fuels and cleaning chemicals | Potential spillage during delivery and operation leaking onto yard and surfacewater. | 3 | <p>Can occur on a small scale on a regular basis during normal operation.</p> <p>Spill kits and a Spillage Procedure (OP11) are also in place.</p> <p>Bulk cleaning chemicals are banded and bund inspection carried out. Storage area accessible by authorised personal only.</p> <p>Accident traffic management controls speed limits on site, low congestion on site. No incident in sites history to date.</p> <p>No hydrological link to public amenities or the Twenty Acre Piece (SSSI).</p> | 3 | <p>Spillages could potentially flow into ground via pours hardstand surface.</p> <p>Potential large clean-up costs.</p> | 9 |

H1 ENVIRONMENTAL RISK ASSESSMENT

FOYLE MEATS, SIX HILLS, MELTON MOWBRAY, UK

| RISK ID | PROCESS | POTENTIAL HAZARDS | LIKELIHOOD RATING | BASIS OF LIKELIHOOD | CONSEQUENCE | BASIS OF CONSEQUENCE | RISK SCORE |
|--------------|-------------------------------|---|-------------------|---|-------------|--|------------|
| 17 | Bunding Arrangements | Risks from integrity loss and overtopping | 4 | <p>Potential for tank leakage over 30 year life span, also potential for leaks in connection.</p> <p>Bund Assessment carried out as per permit application – See Attachment D.3.</p> <p>Bunds checked weekly and emptied of rainwater as required as per OP09-Bunds Inspection</p> <p>Large vessel stored upon a bund is 1,000-litres.</p> <p>No hydrological link to public amenities or the Twenty Acre Piece (SSSI).</p> | 3 | Any liquids in contained bunds would be pumped to Effluent Sump. | 12 |
| Waste | | | | | | | |
| 18 | Waste engineering oil storage | Potential for spillages/leaks and contamination of local surfacewater | 1 | <p>Potential for tank leakage over 30 year life span.</p> <p>Waste oil contained on drums on sufficient bunding.</p> <p>OP09-Bunds Inspection Procedure in place.</p> <p>Spill kits and Spillage Procedure (OP11) are also in place.</p> <p>No hydrological link to public amenities or the Twenty Acre Piece (SSSI).</p> | 3 | <p>Stored in banded tank in yard.</p> <p>Potential problem flowing into storm water, clean-up costs may be high.</p> | 3 |
| 19 | Transport of waste | Potential for spillages/leaks during transport and | 2 | Potential for accidents on haul route. | 3 | Potential large severity if accident occurred; cost high. Potential impact on | 6 |

H1 ENVIRONMENTAL RISK ASSESSMENT

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| RISK ID | PROCESS | POTENTIAL HAZARDS | LIKELIHOOD RATING | BASIS OF LIKELIHOOD | CONSEQUENCE | BASIS OF CONSEQUENCE | RISK SCORE |
|-------------------------|--------------------------|--|-------------------|---|-------------|--|------------|
| | | contamination of local surfacewater | | Containers are covered and sealed to prevent any spillages occurring. Licenced waste contractors are used for the transport of waste. No incidents have occurred to date. No hydrological link to public amenities or the Twenty Acre Piece (SSSI). | | human beings, soils, surface water and groundwater. | |
| 20 | By-product Waste storage | Potential for spillages/leaks and container overflowing | 2 | Low Potential for over-flowing. Containers are covered and sealed to prevent any spillages occurring. Regular environmental checks are carried out and Procedure in place. OP11-Spillage procedure. Personnel are trained in all emergency procedures. | 4 | Spillages could potentially flow into ground via pours hardstand surface. Potential large clean-up costs. | 8 |
| 21 | General Waste Storage | Potential odours in public areas and the Twenty Acre Piece (SSSI). | 2 | Low likelihood as all potentially odorous wastes is stored in sealed bins. Odour monitoring has shown this to be a low odour source. Waste compactor is enclosed. Odour Management Plan in place – see attachment B.3.8. Complaints Procedure in place. | 3 | Commercial units adjacent to the site therefore possibility of odour complaint is high. | 6 |
| Effluent Storage | | | | | | | |

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FOYLE MEATS, SIX HILLS, MELTON MOWBRAY, UK

| RISK ID | PROCESS | POTENTIAL HAZARDS | LIKELIHOOD RATING | BASIS OF LIKELIHOOD | CONSEQUENCE | BASIS OF CONSEQUENCE | RISK SCORE |
|---------|-----------------------|--|-------------------|---|-------------|--|------------|
| 22 | Effluent Sump | Potential leakage to underground | 2 | <p>Leak is possible over a 30 yr period.</p> <p>Tank is solid concrete and inspected every three years.</p> <p>Sub-contractors required to repair if required.</p> <p>No hydrological link to public amenities or the Twenty Acre Piece (SSSI).</p> | 4 | <p>Underground tanks leaking may go undetected and lead to high investigation and clean-up costs.</p> <p>Sump is emptied daily, which allows for visual inspection.</p> | 8 |
| 23 | Effluent Storage | Potential odour – if sump is not emptied daily | 5 | <p>No odour complaint received by the site to-date.</p> <p>Odour monitoring has shown this to be a moderate local odour source.</p> <p>Potential of odour if the effluent sump is not emptied daily.</p> <p>Odour Management Plan in place.</p> | 3 | <p>Consequences would be small as potential odour impact on local community would be small and short-lived</p> <p>The sump is a blow ground structure and potential dispersion of odour by wild is minimal</p> | 15 |
| 24 | Transport of effluent | Potential for spillages/leaks during transport | 2 | <p>Potential for accidents on haul route.</p> <p>Sealed tanker is used to prevent any spillages occurring.</p> <p>Effluent removed daily under supervision.</p> <p>Licenced waste contractors are used for the transport of waste.</p> <p>No incidents have occurred to date.</p> | 3 | <p>Potential large severity with high cost if accident occurred. Potential impact on human beings, soils, surface water and groundwater.</p> | 6 |

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6.3 Risk Matrix

The Risk Matrix has been developed to allow the risks to be easily displayed and prioritised. The consequence and likelihood ratings are used in the matrix; with the level of consequence forming the x-axis and the likelihood forming the y-axis. This matrix provides a visual tool for regular risk reviews and the success of mitigation can be easily identified. The risk matrix is displayed in Table 6.3.1. The risks have been colour coded in the matrix to provide a broad indication of the critical nature of each risk. The colour code is as follows:

- Red – These are considered to be high-level risks requiring priority attention. These risks have the potential to be catastrophic and as such should be addressed as a priority.
- Amber – Yellow – These are medium to high-level risks requiring action but are not as critical as a red coded risk.
- Green – These are lowest-level risks and indicate a need for continuing awareness and monitoring on a regular basis. Whilst they are currently low or minor risks, some have the potential to increase to medium or even high-level risks and must therefore be regularly monitored. If cost effective mitigation can be carried out to reduce/mitigate the risk even further this should be pursued.

Table 6.3.1: Risk Matrix – Current Risk Status

| | | | | | | | |
|------------|---------|---|-------------|--------|----------------|------------|---------|
| Likelihood | V. High | 5 | | | 14, 23 | | |
| | High | 4 | 9 | | 17 | | |
| | Medium | 3 | 6, 7 | 12, 15 | 8, 16 | | |
| | Low | 2 | | 2 | 10, 19, 21, 24 | 13, 20, 22 | |
| | V. Low | 1 | | | 4, 11, 18 | 1 | 3, 5 |
| | | | Trivial | Minor | Moderate | Major | Massive |
| | | | 1 | 2 | 3 | 4 | 5 |
| | | | Consequence | | | | |

The risk matrix indicates that there are two risks in the red zone requiring priority attention.

Six risks fall into the yellow zone indicating that these risks require mitigation or management action. All remaining risks are located in the green zones indicating a need for continuing awareness and monitoring on a regular basis.

However, assessment of the green zone risks during the preparation of the workshop has indicated that many of these risks can be reduced through the implementation of mitigation measures. These measures should be adopted where considered cost-effective to further reduce the risks.

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6.4 Discussion of Risk Levels

Overall the facility was found to be well managed in terms of environmental controls, thus resulting in a minor number of risks with both high likelihood of occurrence and high consequence.

In cases where risks were identified as occurring on a regular basis, the consequence of environmental damage and remedial cost was generally found to be minor as a result of control measures integrated into daily operations, site design and risk management on site.

The risks identified as high severity in terms of environmental damage and cost were effluent spillage, refrigerant leaks and chemical bunding, with mitigation and management actions currently being implemented.

An action plan should also address the risks identified in the yellow zone.

All remaining risks lie in the green zone. These risks require continuing awareness and monitoring on a regular basis. Risk management measures should be put in place to manage them at their current levels, or preferably to reduce these further.

During the Risk Management Workshop, recommended mitigation measures were identified for selected risks which can be implemented as part of the overall site management.

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7.0 IDENTIFICATION AND ASSESSMENT OF MITIGATION ACTIONS

7.1 Identification Of Mitigation Actions

The risk assessment and categorisation phase identified that three of the risks, No.14 and No.23 lay in the red zone of the matrix (see Table 6.3.1);

- Risk 14 – Storm Drains
- Risk 23 – Effluent Storage

The risk assessment and categorisation phase identified that six of the risks lie in the yellow zone of the matrix (see Table 6.3.1).

Management measures should be identified and implemented for these risks as a matter of priority whilst all other risks require monitoring on a regular basis. However, the green zone risks may have the potential to increase to yellow or red zone risks, and where additional risk management measures are available to manage them at their current levels or reduce them further, these should be implemented if considered cost-effective. Additional management measures were identified for all green zone risks.

The recommended risk mitigation measures identified are provided in Table 7.1. This table provides the following information:

- Risk ID – Designated ID number for each risk.
- Processes carried out on site – Lists the process which gives rise to the potential risk.
- Potential hazards/risks – Identifies the potential failure mode that could result in the risk occurring.
- Current controls in place on site as a means of preventing or reducing the risk.
- Recommended mitigation measures – Describes the mitigation actions which could be taken to reduce the likelihood of occurrence and consequence of the risk, and hence the risk score.
- Current Score – provides a risk score to allow the ranking of each risk. The risk score is based on the product of the likelihood rating and the consequence rating.
- Revised risk score – This is a revised risk score after the mitigation actions have been implemented based on the product of revised likelihood and consequence, where applicable. The revised risk score is also illustrated on a revised colour matrix as per Table 7.2.

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Table 7.1: Recommended Risk Mitigation Measures and Revised Risk Scores

| RISK ID | PROCESS | POTENTIAL HAZARDS | CURRENT CONTROLS | RECOMMENDED MITIGATION MEASURES | CURRENT RISK SCORE | REVISED RISK SCORE |
|------------------|-------------------------------------|--|---|---|--------------------|--------------------|
| SITE WIDE | | | | | | |
| 1 | General Management – Pest Control | Increased pest populations. Risk to biodiversity at the Twenty Acre Piece (SSSI). | Rodent baiting locations in place to control pest numbers onsite. Regular environmental checks are carried out. Pest Management Plan is in place. | Continue to ensure raw materials and by-product wastes are stored internally. | 4 (1x4) | 4 (1x4) |
| 2 | General Management – Litter Control | Potential raw materials, waste and waste packaging litter in yard escaping the site. | All deliveries are supervised to ensure no spills occur. Segregated waste bins are provided at relevant process points in order to ensure correct disposal of wastes (OP04 Disposal of Waste Procedure) Regular site inspections ensure good housekeeping in place and prompt action taken if an issue is identified. | Control measures are considered adequate. | 4 (2x2) | 4 (2x2) |
| 3 | Site Security | Illegal trespass and vandalism. | Perimeter fence, CCTV security surveillance, 24 hour security personnel presence on-site. Contractors and visitors must sign in at security. No high-risk substances on site. Cleaning chemicals and effluent treatment tanks not accessible to unauthorised people. | Control measures are considered adequate. | 5 (1x5) | 5 (1x5) |
| 4 | Whole site | Potential site flooding due to extreme weather or local river overtopping. | Low potential for flooding onsite as the site is located in Flood Zone 1 (Attachment B.2.3 - Site Condition Report) Surface water drainage is designed to accommodate extreme weather events. | Control measures are considered adequate. | 3 (1x3) | 3 (1x3) |

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| RISK ID | PROCESS | POTENTIAL HAZARDS | CURRENT CONTROLS | RECOMMENDED MITIGATION MEASURES | CURRENT RISK SCORE | REVISED RISK SCORE |
|----------------------------|------------------------------------|---|--|---|--------------------|--------------------|
| | | | Bunds checked weekly and emptied of rainwater as required OP09 Bund Inspection Procedure | | | |
| 5 | Factory – Major fire | Spread of fire off-site. Fumes from fire and potential firewater contamination. | Good fire prevention and protection measures in place. Fire detection system through-out factory Full fire alarm (addressable). | Control measures are considered adequate. | 5 (1x5) | 5 (1x5) |
| Production Facility | | | | | | |
| 6 | Water-lines – Manifold connections | Major water spillages | Spillages caught in floor drains of building and into Effluent Sump No major cost for fix & clean-up. Training of staff for spillage containment | Continued periodic training of staff for spillage containment, Conduct regular floor inspections for leaks and spills as opposed to remote monitoring. | 3 (3x1) | 3 (3x1) |
| 7 | Production Floor | Spillage of cleaning chemicals and raw materials | All spillages flow into floor drain, drains washed down in event of spillages. Spill containment procedure in place (OP11 Spillage Procedure) Process lines and operations that reduce excessive spillage of material onto the floor are in place and are continually reviewed. Dry cleaning in place, ensuring all food waste is diverted from drains. Training of staff for spillage containment | Continued periodic training of staff for chemical handlings and spillage containment measures in the event of a spillage. | 3 (3x1) | 3 (3x1) |
| 8 | Chill and Cold Store | Potential refrigerant leak into public areas and the Twenty Acre Piece (SSSI). | Preventative maintenance and leak test plan in place, as per agreement with external contractor. Accessible shut off valves are in place so that the refrigeration plant can be isolated. These double shut-off valves have being certified. | Continue with quarterly maintenance visits on all relevant equipment. | 9 (3x3) | 6 (2x3) |

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| RISK ID | PROCESS | POTENTIAL HAZARDS | CURRENT CONTROLS | RECOMMENDED MITIGATION MEASURES | CURRENT RISK SCORE | REVISED RISK SCORE |
|---------|------------------|--|--|--|--------------------|--------------------|
| | | | OP12-Spillage Procedure in place Leak detection system in place. | | | |
| 9 | Boiler Emissions | Emissions of SO _x , NO _x or particulate matter into public areas and the Twenty Acre Piece (SSSI). | <p>The boilers are serviced annually by CFB Boilers bi-annually.</p> <p>An efficiency of more than 80% is usually taken to be acceptable so the boiler's efficiency is above acceptable limits.</p> <p>Monitoring of emission values on an annual basis during maintenance.</p> <p>NO_x, SO_x and particulate matter levels will be low due to boiler fuelled by natural gas.</p> <p>2024 Air Quality Report concluded: <i>'The results indicated that impacts on pollutant concentrations were not predicted to be significant at any human or ecological receptor location in the vicinity of the site.'</i></p> <p>All water is softened before use in boilers.</p> | <p>Carry out annual maintenance by external contractor on all boilers and heaters, measuring stack emissions as part of the service.</p> <p>Current Planned Preventative Maintenance should be updating to include boilers.</p> <p>Consider implementing boiler specific check-sheets.</p> | 4 (4x1) | 2 (2x1) |
| 10 | Energy Usage | Emission of greenhouse gasses | <p>Low potential for emission of greenhouse gasses.</p> <p>OP03 - Energy Management Procedure</p> <p>Site uses natural gas for the fuelling of boilers only.</p> <p>Site-wide measures to improve resource use and energy efficiency are specified in Attachment C.9: Resource and Raw Materials Attachment B.3.10: BAT Conclusion -</p> | <p>Control measures are considered adequate.</p> <p>Continue to implement new ways of increasing energy efficiency, as per EMS20 - Continual Improvement</p> | 6 (2x3) | 4 (2x2) |

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| RISK ID | PROCESS | POTENTIAL HAZARDS | CURRENT CONTROLS | RECOMMENDED MITIGATION MEASURES | CURRENT RISK SCORE | REVISED RISK SCORE |
|-----------------------|-------------------------------|--|---|---|--------------------|--------------------|
| | | | Energy Efficiency. | | | |
| 11 | Gas Lines | Potential leakage into public areas and the Twenty Acre Piece (SSSI). | Use of system safety and environmental controls include automatic lock out of fresh feed if any of control parameters are exceeded. | Control measures are considered adequate. | 4 (1x4) | 4 (1x4) |
| 12 | Refrigeration Plants | Noise emissions affecting public areas and the Twenty Acre Piece (SSSI). | Noise monitoring has shown this to be a high noise source, due to the compressors. Maintenance check sheet in place. The site has not received a noise complaint since operations began. The site has an established complaints procedure. | 1. Train out Noise Management to relevant personnel. 2. Maintain a closed-door policy for plant and compressor rooms. | 6 (3x2) | 4 (2x2) |
| Drainage lines | | | | | | |
| 13 | Process & foul line integrity | Potential leaks | Drainage pipes are cleaned regularly by external contractor. Manholes inspected on site. | 1. Ensure testing is undertaken every 3 years for integrity. 2. Paint all foul manhole and drain cover red for identification purposes. | 8 (2x4) | 6 (2x3) |
| 14 | Storm Drains | Potential leaks and contamination of local surfacewater and soil | Concrete underground pipes, cleaned and inspected annually. Storm pipe normally carries rainwater; therefore any potential leak would have low contamination. Valve installed on surface water discharge which can be closed in case of emergency. Likelihood of leaking over 30 year period is minimal. | 1. Ensure bund and pipeline testing is undertaken every 3 years for integrity. 2. Paint all storm water manhole and drain cover blue for identification purposes | 15 (5x3) | 6 (3x2) |

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| RISK ID | PROCESS | POTENTIAL HAZARDS | CURRENT CONTROLS | RECOMMENDED MITIGATION MEASURES | CURRENT RISK SCORE | REVISED RISK SCORE |
|-----------------------|---|--|---|--|--------------------|--------------------|
| External Areas | | | | | | |
| 15 | Blood storage | Risks from overfilling and leaking into yard and surfacewater. | <p>Local yard drainage is directed to the effluent inlet sump.</p> <p>OP11-Spillage Response and tanks are bunded.</p> <p>Personnel are trained in spillage procedures.</p> <p>Bunds checked weekly and emptied of rainwater as required as part of site inspection procedure.</p> <p>Bund Assessment carried out as per permit application – Attachment C.3.</p> | Consider installing level probe and high-level alarm in the blood tanks. | 6 (3x2) | 4 (2x2) |
| 16 | Delivery of chemicals, fuels & cleaning chemicals | Potential spillage during delivery and operation leaking onto yard and surfacewater. | <p>Spill kits and a Spillage Procedure (OP11) are also in place.</p> <p>Bulk cleaning chemicals are bunded and bund inspection carried out. Storage area accessible by authorised personal only.</p> <p>Accident traffic management controls speed limits on site, low congestion on site.</p> | Retraining of relevant staff to OP08 - Receipt of Bulk Liquids | 9 (3x3) | 6 (2x3) |
| 17 | Bunding Arrangements | Risks from integrity loss and overtopping | <p>All chemicals are bunded on-site.</p> <p>Bund Assessment carried out as per permit application – Attachment D.3.</p> <p>Bunds checked weekly and emptied of rainwater as required as per OP08 - Bund Inspection Procedure</p> | <p>1. Implement recommendations as per bund assessment - Attachment D.5.</p> <p>2. All bunds should be re-assessed every three years, as per guidance.</p> | 12 (4x3) | 9 (3x3) |

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| RISK ID | PROCESS | POTENTIAL HAZARDS | CURRENT CONTROLS | RECOMMENDED MITIGATION MEASURES | CURRENT RISK SCORE | REVISED RISK SCORE |
|--------------|-------------------------------|--|--|---|--------------------|--------------------|
| Waste | | | | | | |
| 18 | Waste engineering oil storage | Potential for spillages/leaks and contamination of local surfacewater | Waste oil contained in sealed drums, upon adequately sized bunds. OP08- Bunds Inspection Procedure in place. Spill kits and Spillage Procedure (OP11) are also in place. | Control measures are considered adequate. | 3 (1x3) | 3 (1x3) |
| 19 | Transport of waste | Potential for spillages/leaks during transport and contamination of local surfacewater | Containers are covered and sealed to prevent any spillages occurring. Licenced waste contractors are used for the transport of food waste. | Control measures are considered adequate. | 6 (2x3) | 6 (2x3) |
| 20 | By-product Waste storage | Potential for spillages/leaks and skip overflowing | Containers are covered and sealed to prevent any spillages occurring Regular environmental checks are carried out OP11-Spillage procedure Personnel are trained in all emergency procedures | Control measures are considered adequate. | 8 (2x4) | 8 (2x4) |
| 21 | General Waste Storage | Potential odours in public areas and the Twenty Acre Piece (SSSI). | Waste compactor is enclosed. Odour Management Plan in place as per permit application - Attachment D.3. Complaints Procedure in place. | Train out Odour Management Plan to relevant personnel | 6 (2x3) | 6 (2x3) |

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| RISK ID | PROCESS | POTENTIAL HAZARDS | CURRENT CONTROLS | RECOMMENDED MITIGATION MEASURES | CURRENT RISK SCORE | REVISED RISK SCORE |
|-------------------------|-----------------------|--|---|--|--------------------|--------------------|
| Effluent Storage | | | | | | |
| 22 | ETP sumps | Potential leakage to underground | Sump is solid concrete. Sub-contractors required to repair if required. | Sumps should be tested for integrity as part of the 3-year bunds and tanks integrity test requirement. | 8 (2x4) | 4 (1x4) |
| 23 | ETP Storage | Potential odour – if sump is not emptied daily | Odour Management Plan in place. The site has an established an Environmental Complaints Procedure. | Ensure stand-by contractor can empty the sump in place of existing contractor. | 15 (5x3) | 4 (3x2) |
| 24 | Transport of effluent | Potential for spillages/leaks during transport | Sealed tanker is used to prevent any spillages occurring. Licenced waste contractors are used for the transport of waste. No incidents have occurred to date. | Control measures are considered adequate. | 6 (2x3) | 6 (2x3) |

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Table 7.2: Revised Risk Matrix

| | | | | | | | |
|------------|---------|---|-------------|---------------|-----------------------|-------|---------|
| Likelihood | V. High | 5 | | | | | |
| | High | 4 | | | | | |
| | Medium | 3 | 6, 7 | 14, 23 | 17 | | |
| | Low | 2 | 9 | 2, 10, 12, 15 | 8, 19, 13, 16, 21, 24 | 20, | |
| | V. Low | 1 | | | 4, 11, 18 | 1, 22 | 3, 5 |
| | | | Trivial | Minor | Moderate | Major | Massive |
| | | | 1 | 2 | 3 | 4 | 5 |
| | | | Consequence | | | | |

7.2 Overall Status after Mitigation

The revised matrix developed as per Table 7.2 can be compared to the matrix pre mitigation.

Comparison of the two matrices shows an improvement to the perceived risks at the site.

Risks 14 and 23 has moved from a high risk to low risk, with the works recommended in Table 7.1 implemented.

Risk ID's 8, 13, 16 and 22 have moved from a medium risk to low risk, with the works recommended in Table 7.1 implemented.

Similarly, the risks originally placed in the dark green zone may be further reduced to lower risk through the recommended actions, which would result in a reduction in environmental liability cover.

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8.0 RISK MANAGEMENT PROGRAM

8.1 General

Every risk requires a certain amount of management in order to reduce the risk or manage the risk at an acceptable level. The identified mitigation measures (and particularly risk ID's 14 & 23) have been agreed by management and an improvement plan is currently being put in place.

Where identified risks were considered to have satisfactory controls in place, additional mitigation measures were not identified. In this instance, personnel involved in the management of identified risks are required to ensure that the current levels of controls are maintained and that the level of risk does not increase.

8.2 Risk Management Review

Risk management at Foyle – Melton Mowbray is a dynamic process. This assessment and report provides a baseline assessment of the main potential risks on the site, and provides recommendations for risk mitigation and management.

Although the operation of the facility is unlikely to see any major changes in operation and controls, there is potential for processes and conditions to change. This assessment should therefore be considered to be a live document and be reviewed at least annually to ensure that all risks are identified and managed.

It is recommended that the management, environmental and safety operators review risk management at the facility on a regular basis and update the risk register and risk management programme as appropriate.

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9.0 CONCLUSION

This H1 Risk Assessment has identified and assessed the operational environmental risks from unplanned and unexpected events and has recommended risk mitigation measures.

For the most likely and severe risks identified at Foyle Meats – Melton Mowbray, a series of mitigation measures have been proposed in order to reduce those perceived risks at the facility.

The risk matrices provide a visual and benchmarking tool against which any future risk assessments can be directly compared.

10.0 REFERENCES

Horizontal Guidance Note H1 Overview Document

- H1 Annex A – Amenity & accident risk from installations and waste activities
- H1 Annex D – Discharges to surface waters
- H1 Annex E - Surface Water Discharges (complex)
- H1 Annex F – Air Emissions
- H1 Annex G – Disposal or recovery of waste produced on site
- H1 Annex H – Global warming potential
- H1 Annex J – Groundwater
- H1 Annex K – Cost benefit analysis

Guidance on Environmental Liability Risk Assessment, Residuals Management Plan and Financial Provisions – Environmental Protection Agency 2006.