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Table 1 – Assessment of odour risks

Hazard *What has the potential to cause harm?*	**Receptor** *What is at risk? What do I wish to protect?*	**Pathway** *How can the hazard get to the receptor?*	**Risk management** *What measures will be taken to reduce the risk? If it occurs - who is responsible for what?*	**Probability of exposure** *How likely is this contact*	**Consequence** *What is the harm that can be caused?*	**What is the overall risk?** *What is the risk that still remains? The balance of probability and consequence.*
Odour from cooking, roasting and smoking meat from emission points to air and fugitive emissions from roof vents and external doors owing to over pressure air conditioning inside.	Local community employed in Industrial units neighbouring the installation on all sides.	Air	Factory doors are kept closed most of the time.	Probable. Smells from some vents likely to occur most of the time.	Minor. Nuisance, but unlikely to be noticed beyond the boundary.	Not significant.
Smell from waste containers in the yard.	Local community employed in the neighbouring industrial units to the North, North-east and East nearest the yard.	Air	Filled containers are kept covered and collected regularly. Frequency of collections can be increased if necessary.	Probable. Smell from containers for non-hazardous waste, animal by-products and foodstuffs likely to occur most of the time, especially in summer when outside temperatures are higher.	Minor Nuisance, but unlikely to be noticed beyond the boundary.	Not significant.

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Table 1 – Assessment of odour risks (continued)

Hazard *What has the potential to cause harm?*	**Receptor** *What is at risk? What do I wish to protect?*	**Pathway** *How can the hazard get to the receptor?*	**Risk management** *What measures will be taken to reduce the risk? If it occurs - who is responsible for what?*	**Probability of exposure** *How likely is this contact*	**Consequence** *What is the harm that can be caused?*	**What is the overall risk?** *What is the risk that still remains? The balance of probability and consequence.*
Smell from the dissolved air flotation (DAF) plant.	Local community employed in Industrial units neighbouring the installation on all sides.	Air	Sludge and effluent tanks are enclosed and will reduce odours.	Probable. DAF plant is operated continuously and there will be some smells from around the collection pit and DAF plant itself and occasionally when sludge is pumped into tankers for removal.	Minor. Nuisance, but unlikely to be noticed beyond the boundary.	Not significant.

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Table 2 – Assessment of noise and vibration risks

Hazard *What has the potential to cause harm?*	**Receptor** *What is at risk? What do I wish to protect?*	**Pathway** *How can the hazard get to the receptor?*	**Risk management** *What measures will be taken to reduce the risk? If it occurs - who is responsible for what?*	**Probability of exposure** *How likely is this contact*	**Consequence** *What is the harm that can be caused?*	**What is the overall risk?** *What is the risk that still remains? The balance of probability and consequence.*
Noise from goods vehicles delivering raw materials, collecting finished products, waste, etc including engine noise, reverse warnings and trailer refrigerator noise.	Local community employed in the closest industrial units to the North, North-east and East nearest the yard.	Air	No specific measures.	Probable. Noise occurs intermittently during the day, less at night. Noises are audible around both entrances.	Minor. Nuisance but unlikely to be noticed beyond the boundary or above background noise from other units.	Not significant.
Noise from machinery installed outside e.g. refrigeration and air compressors, DAF plant, etc.	Local community employed in the closest industrial units to the North, North-east and East nearest the yard.	Air	No specific measures.	Probable. Noise occurs most of the time but is barely audible at the site boundary.	Minor. Nuisance but unlikely to be noticed beyond the boundary.	Not significant.

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Table 3 – Assessment of fugitive emissions risks

Hazard *What has the potential to cause harm?*	**Receptor** *What is at risk? What do I wish to protect?*	**Pathway** *How can the hazard get to the receptor?*	**Risk management** *What measures will be taken to reduce the risk? If it occurs - who is responsible for what?*	**Probability of exposure** *How likely is this contact*	**Consequence** *What is the harm that can be caused?*	**What is the overall risk?** *What is the risk that still remains? The balance of probability and consequence.*
To Air						
Leaking refrigerant gases from chilling and freezing equipment.	Emissions of HCFC and HFC gases contribute to global ozone depletion and global warming.	Air	Contracted specialist service providers for installation, service and decommissioning equipment including inspection and log books (BAT) and mandatory leak detectors installed.	Probable. Some refrigeration systems may require topping-up during the year when leaks occur.	Minor. Minor breach of permitted emission limits but unlikely to cause environmental harm.	Not significant.
Catastrophic loss of refrigerant gases from chilling and freezing equipment owing to equipment failure or damage.	Catastrophic loss of refrigerant gases from large systems could cause harm to persons in close proximity e.g. employees inside the installation.	Air	Contracted specialist service providers for installation, service and decommissioning equipment including inspection and log books (BAT) and mandatory leak detectors installed.	Fairly probable.	Severe. Large quantities of gas released at ground level could cause harm to employees inside the installation, but risk of harm beyond the boundary is unlikely.	Not significant.

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Table 3 – Assessment of fugitive emissions risks (continued)

Hazard *What has the potential to cause harm?*	**Receptor** *What is at risk? What do I wish to protect?*	**Pathway** *How can the hazard get to the receptor?*	**Risk management** *What measures will be taken to reduce the risk? If it occurs - who is responsible for what?*	**Probability of exposure** *How likely is this contact*	**Consequence** *What is the harm that can be caused?*	**What is the overall risk?** *What is the risk that still remains? The balance of probability and consequence.*
To Water						
Run-off from the yard.	Local environment including humans, animals and plants in controlled waters on the industrial park.	Yard is covered with impervious concrete surface draining into surface water drains. Water is released via emission points W1 and W2 on the site plan into surface water sewer and subsequently controlled water.	A Class I separator will limit any oily substances being released from the installation via emission point W2 on the site plan (BAT) but there appears to be no separator for W1.	Somewhat unlikely.	Noticeable. Minor breach of permitted emission limits via emission point especially via W1 but unlikely to cause environmental harm.	Not significant.
Pests						
Vermin, flies and rodents attracted to waste containers and cardboard in the yard.	Local community employed in the nearest industrial units to the North, North-east and East of the yard.	Via air or ground.	Filled containers are kept covered and regularly collected. Frequency can be increased if needed. Contracted regular pest control services.	Fairly probable. Could occur at any time, but especially in the summer when outside temperatures are higher.	Minor. Unlikely to be noticed beyond the boundary.	Not significant.

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Table 3 – Assessment of fugitive emissions risks (continued)

Hazard *What has the potential to cause harm?*	**Receptor** *What is at risk? What do I wish to protect?*	**Pathway** *How can the hazard get to the receptor?*	**Risk management** *What measures will be taken to reduce the risk? If it occurs - who is responsible for what?*	**Probability of exposure** *How likely is this contact*	**Consequence** *What is the harm that can be caused?*	**What is the overall risk?** *What is the risk that still remains? The balance of probability and consequence.*
Mud/Litter						
Litter.	Local environment and community employed in the nearest industrial units to the North, North-east and East of the yard.	Air	Chain link security fence around the installation keeps any litter inside. There are hygiene procedures for clearing litter away periodically.	Probable.	Minor. Nuisance unlikely to be noticed beyond the boundary.	Not significant.

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Table 4 – Assessment of accident risks

Hazard *What has the potential to cause harm?*	**Receptor** *What is at risk? What do I wish to protect?*	**Pathway** *How can the hazard get to the receptor?*	**Risk management** *What measures will be taken to reduce the risk? If it occurs - who is responsible for what?*	**Probability of exposure** *How likely is this contact*	**Consequence** *What is the harm that can be caused?*	**What is the overall risk?** *What is the risk that still remains? The balance of probability and consequence.*
Accidental spillage of liquids substances including foodstuffs, cleaning chemicals, oils, etc when unloading delivery vehicles.	Local environment including humans, animals and plants in controlled waters on the industrial park.	Surface water. Yard is covered with impervious concrete surface sloping into surface water drains. Water is released via emission points W1 and W2 into surface water sewer and subsequently controlled water. Some cleaning chemicals (detergents) could contribute to releasing any oily substances trapped in the separator.	Hygiene procedures for clearing away dry and liquid spillages (BAT). Shovels, mops, brooms, spill-kits, etc are provided around the site. Grates over drains prevent entry of gross debris and the class I separator (BAT) will prevent oily substances leaving the installation via emission point W2 but there appears to be no separator for W1.	Fairly probable.	Noticeable. Minor breach of permitted emission limits especially via W1, but unlikely any exposure to humans, animals or plants in controlled water will cause significant harm.	Not significant.

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Table 4 – Assessment of accident risks (continued)

Hazard *What has the potential to cause harm?*	**Receptor** *What is at risk? What do I wish to protect?*	**Pathway** *How can the hazard get to the receptor?*	**Risk management** *What measures will be taken to reduce the risk? If it occurs - who is responsible for what?*	**Probability of exposure** *How likely is this contact*	**Consequence** *What is the harm that can be caused?*	**What is the overall risk?** *What is the risk that still remains? The balance of probability and consequence.*
Run-off into the yard from cleaning floors inside the factory, especially near external doors in meat intake and despatch. Run-off likely to contain water, food waste and cleaning chemicals (detergents).	Harm to humans, animals and plants in controlled water.	Surface water. Yard covered with impervious concrete surface sloping into surface water drains. Water is released via emission points W1 and W2 into surface water sewer and subsequently controlled water. Cleaning chemicals (detergents) could contribute to releasing any oily substances trapped in the separator at emission point W2.	There are hygiene procedures for cleaning floors and run-off into the yard is to be avoided (BAT).	Fairly probable.	Noticeable Minor breach of permitted emission limits, but without any environmental harm to humans, animals or plants in controlled water.	Not significant.

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Table 4 – Assessment of accident risks (continued)

Hazard *What has the potential to cause harm?*	**Receptor** *What is at risk? What do I wish to protect?*	**Pathway** *How can the hazard get to the receptor?*	**Risk management** *What measures will be taken to reduce the risk? If it occurs - who is responsible for what?*	**Probability of exposure** *How likely is this contact*	**Consequence** *What is the harm that can be caused?*	**What is the overall risk?** *What is the risk that still remains? The balance of probability and consequence.*
Emergency situations including minor, major or catastrophic fire causing smoke and run-off of fire-fighting water.	Harm to humans, animals and plants in the local environment and in controlled water.	Air and surface water. Yard covered with impervious concrete surface sloping to surface water drains. Water is released via emission points W1 and W2 into surface water sewer and subsequently controlled water.	Grates over the drains will prevent entry of gross debris and the class I separator (BAT) at emission point W2 will limit any oily substances from leaving the installation but there appears to be no separator for W1.	Somewhat unlikely.	Noticeable to severe Ranging from minor breach of permitted emission limits, but no environmental harm to humans, animals or plants in controlled water to a status of public warning and off-site emergency planning by Fire Services.	Not significant.

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Table 5 – Probability of exposure

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

Reference - Environment Agency (2001) Environmental Assessment and Appraisal of BAT

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Table 6 - Consequences

Category	Definition
Minor	• Nuisance on site only (no off-site effects) • No outside complaint
Noticeable	• Noticeable nuisance off-site e.g. discernible odours • Minor breach of Permitted emission limits, but no environmental harm • One or two complaints from the public
Significant	• Severe and sustained nuisance, e.g. strong offensive odours or noise disturbance • Major breach of Permitted emissions limits with possibility of prosecution • Numerous public complaints
Severe	• Hospital treatment required • Public warning and off-site emergency plan involved • Hazardous substance releases into water course with ¾ mile effect
Major	• Evacuations of local populace • Temporary disabling and hospitalisation • Serious toxic effect on beneficial or protected species • Widespread but not persistent damage to land • Significant fish kill over 5 mile range
Catastrophic	• Major airborne release with serious offsite effects • Site shutdown • Serious contamination of groundwater or water course with extensive loss of aquatic life

Reference - Environment Agency (2001) Environmental Assessment and Appraisal of BAT

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Note

a) Existing risk management measures generally include indicative best available techniques (BAT) described in the Technical Guidance Note for The Food & Drink Sector (EPR6.10) and on balance the remaining probability and consequence of all the amenity and accident hazards are considered to be not significant.
b) No further justification of appropriate measures is required.