Integrated Pollution Prevention and Control (IPPC) Licensing

Application Form

EPA Reg. No:
(Office use only)

Environmental Protection Agency
P.O. Box 3000, Johnstown Castle Estate, Co. Wexford
Lo Call: 1890 335599 Telephone: 053-9160600 Fax: 053-9160699
Web: www.epa.ie Email: info@epa.ie
CONTENTS

ABOUT THIS APPLICATION FORM ................................................................. 3
SECTION A: NON-TECHNICAL SUMMARY ............................................... 4
SECTION B: GENERAL ..................................................................................14
SECTION C: MANAGEMENT OF THE INSTALLATION ................................19
SECTION D: INFRASTRUCTURE & OPERATION ......................................19
SECTION E: EMISSIONS ..............................................................................27
SECTION F: CONTROL & MONITORING ....................................................37
SECTION G: RESOURCE USE AND ENERGY EFFICIENCY ......................41
ABOUT THIS APPLICATION FORM

This form is for the purpose of making an application for an Integrated Pollution Prevention and Control (IPPC) Licence under the Environmental Protection Agency Acts, 1992 and 2003. There are separate application forms for licensees who wish to apply for a review of existing licences and for Pig & Poultry sector applicants.

The Application Form must be completed in accordance with the instructions provided in the IPPC Licensing Application Guidance Note. The Guidance Note gives an overview of IPPC Licensing, outlines the licence application process (including number of copies required) and specifies the information to be submitted in the application. The Guidance Note and application forms are available to download from the IPPC Licensing pages of the EPA’s website at www.epa.ie. A valid application for an IPPC licence must contain the information prescribed in the Environmental Protection Agency (Licensing) Regulations, 1994 to 2004. Article 10 of the Regulations sets out the statutory requirements for information to accompany a licence application. The application form is designed in such a way as to set out these questions in a structured manner and not necessarily in the order presented in Article 10. In order to ensure a legally valid application in respect of Article 10 requirements, please complete the Article 10 Checklist provided in Annex 2.

This Application Form does not purport to be and should not be considered a legal interpretation of the provisions and requirements of the Environmental Protection Agency Acts, 1992 and 2003 and the Environmental Protection Agency (Licensing) Regulations 1994 to 2004. While every effort has been made to ensure the accuracy of the material contained in the Application Form, the EPA assumes no responsibility and gives no guarantees, undertakings and warranties concerning the accuracy, completeness or up-to-date nature of the information provided herein and does not accept any liability whatsoever arising from any errors or omissions.

Should there be any contradiction between the information requirements set out in the Application Form and any clarifying explanation contained in the accompanying Guidance Note, then the requirements in this Application Form shall take precedence.
SECTION A: NON-TECHNICAL SUMMARY

A non-technical summary of the application is to be included here. The summary should identify all environmental impacts of significance associated with the carrying on of the activity/activities, and describe mitigation measures proposed or existing to address these impacts. This description should also indicate the normal operating hours and days per week of the activity.

The following information must be included in the non-technical summary:

A description of:

- the installation and its activities,
- the raw and auxiliary materials, other substances and the energy used in or generated by the installation,
- the sources of emissions from the installation,
- the environmental conditions of the site of the installation (e.g. soil and groundwater, air, noise, surface water),
- the nature and quantities of foreseeable emissions from the installation into each medium as well as identification of significant effects of the emissions on the environment,
- the proposed technology and other techniques for preventing or, where this is not possible, reducing emissions from the installation,
- where necessary, measures for the prevention and recovery of waste generated by the installation,
- further measures planned to comply with the general principles of the basic obligations of the operator i.e.

(a) all the appropriate preventive measures are taken against pollution, in particular through application of the Best Available Techniques (BAT);
(b) no significant pollution is caused;
(c) waste production is avoided in accordance with Council Directive 75/442/EEC of 15 July 1975 on waste; where waste is produced, it is recovered or, where that is technically and economically impossible, it is disposed of while avoiding or reducing any impact on the environment;
(d) energy and other resources are used efficiently;
(e) the necessary measures are taken to prevent accidents and limit their consequences;
(f) the necessary measures are taken upon definitive cessation of activities to avoid any pollution risk and return the site of operation to a satisfactory state.

- measures planned to monitor emissions into the environment.

Supporting information should form Attachment No A.1

Martin Jennings Wholesale Limited is a wholly Irish owned wholesaler of premium quality Irish beef and lamb. The company has been in the retail trade since the 1890’s and since 1989 has been located at its present facility on the Neal Road in Ballinrobe, County Mayo. The company under the directorship of Mr John Vaughan is the largest employer in Ballinrobe, employing directly and indirectly approximately one hundred people.
The activity falls under the Environmental Protection Agency Act 1992 (Established Activities) Order 2006 (S.I. No. 279 of 2006), Schedule 1 of the Act, 7.4.1: *The operation of slaughterhouses with a carcass production capacity greater than 50 tonnes per day.*

**Manufacturing Process**

Cattle and lamb sourced from the surrounding area are slaughtered to produce meat cuts to meet customer requirements. In addition to slaughtering, there are also facilities for boning, chilling and packing of beef and lamb products. The installation is divided into two distinct areas:

1. **Lairage**
2. **Slaughter**

**Wastewater**

Effluent/wastewater is drained to the foul drainage system; the waste water is initially screened through grates fitted to floor drains in line with BREF guidelines. It is then put through a series of baffling tanks (four in total) onsite before it leaves the site and enters the municipal waste water treatment plant. Grids on the factory floor allow for the screening of solids, thereby reducing the amount of suspended solids entering the wastewater. Fat traps are in place on site to capture fats, oils and greases that may have entered the waste water. Analysis of the trade effluent is regularly undertaken to ensure limits are in line with the existing Discharge Licence. Blood troughs are installed to collect blood and all other by-products draining from the carcass. Catch pots are installed to catch meat wastes prior to them entering drains.

Blood is collected in a dedicated bulk storage tank and pumped to a designated trailer, which is collected daily by a licensed waste contractor. The frequency of collection is to ensure that the capacity of the tank is not exceeded; thereby, reducing the risk of accidental overfilling and subsequent leakages/spillages occurring. This practice also mitigates against the potential of storm water from the hard-standing area which currently goes to soak away becoming polluted. Along the slaughter line drip trays are in place to collect liquids and solids. This leads to a reduction in by-products entering the water. The amount of wastewater produced; its BOD, COD and suspended solids are all reduced as a result of this. Hides and skins are transported to
an approved processor. Bones are disposed of by an approved renderer. Waste is removed from site daily in order to mitigate against any potential mal odours arising.

**The Sources of Emissions from the Installation**

**Point Emissions to Atmosphere**

There are two HeatMaster hot water boilers located on site. This is a high performance water heater capable of supplying 1675 litres in 10 minutes; 5976 litres in 60 minutes. It is supplied with a Riello RG4S 396 T1 fuel burner. The location of the point emission to atmosphere at the Martin Jennings Wholesale Limited plant is shown on the site layout plans which accompany this application. Further details concerning the characteristics of point source emissions from the 0.18 MW (reference A3-1) on site can be seen in TABLE E.1(iv): EMISSIONS TO ATMOSPHERE - Minor atmospheric emissions. In accordance with EPA guidance, the boilers used at this facility are below 250kW and therefore are considered minor emissions. There are no other main emission points to atmosphere on site.

The BAT emission limit values for emissions to air for the slaughtering sector refers to non-combustion gases and are therefore not applicable to this installation. Forming part of the Quality Management Policy, calibration, maintenance and equipment validation procedures are in place, in line with BREF guidance notes to significantly reduce consumption and emission levels.

**Fugitive Emissions to Atmosphere**

Some activities on site if mismanaged may give rise to odour emissions. The potential receptors of these odours are residential housing to the east and west of the site. The potential sources of odour include: the blood tank, general waste skip and the paunch hold. All Category 1 and 3 wastes are removed from the site daily, the general waste area is kept clean and the paunch and truck washings are removed weekly and kept covered as much as is practicable.

An odour impact assessment has been undertaken at Martin Jennings Wholesale Limited. Monitoring which assessed four locations including 2 boundary locations; one upwind and one downwind of the facility and two sensitive receptors. The ambient samples were collected in accordance with the CEN standards EN 13725 –
Air Quality – Determination of Odour Concentration by Dynamic Olfactometry, 2004. The samples were sent to Bord na Móna odour laboratory for analysis within 24 hours. The samples were analysed by means of Dynamic Olfactometry and procedures were undertaken in accordance with EN 13725 using a trained panel of 4 assessors. The results of this monitoring determined that from fugitive emissions perspective, specifically odour related, Martin Jennings Wholesale Limited is not impacting adversely on the surrounding environment. This concurs with the fact that there is no history of complaints in relation to odour from the public in relation to the plant. Furthermore, the stringent daily cleaning programme at the plant including daily waste disposal ensures there is no odour impact on the surrounding environment.

Emissions to Surface Waters
There are no emissions to surface waters from the Martin Jennings Wholesale Limited installation.

Emissions to Sewer
All process discharges to sewer from the installation are via a single emission point, SE1 as indicated on the site layout plan which accompanies this application. Domestic and effluent waste water produced from operational activities is sent to the on site mechanical treatment system. Effluent waste water is screened in line with the conditions set out in the Licence to Discharge Trade or Sewage Effluent to Sewer to reduce suspended solids, particulate BOD and the potential for the formation of malodorous gases. The effluent is then treated by passing it through four holding tanks which act as sediment tanks to clean the effluent. It is then directed to the local authority sewer in agreement with Mayo County Council. The treated waste water then receives further treatment in the municipal waste water treatment plant. All effluent arising from the office and factory toilets, washing areas and canteen are discharged downstream of the fat traps.
Under the Licence to Discharge Trade or Sewage Effluent to Sewer issued to Martin Jennings Wholesale Limited by Mayo County Council analysis of the effluent prior to discharge to the sewer is carried out regularly. Attachment E.3 of this application details results of analysis taken by Environmental Efficiency Consultants of effluent for the purposes of this application. All parameter results are in line with the
Discharge Licence as issued by Mayo County Council. A sampling chamber has been constructed located to the front of the installation, this allows for the taking of samples of the treated effluent in a safe manner. The analysis of the treated effluent is carried out by approved accredited laboratories.

Emissions to Ground
There is one surface water emission point to ground (soak away) on site SL1 as detailed on the site layout plan which accompanies this application. This is a direct storm water and run-off discharge to ground.

Noise Emissions
Regular ambient and occupational noise monitoring is undertaken at the Martin Jennings Wholesale Limited facility. No complaints have been received in relation to noise emanating from the plant. Refrigeration units are enclosed so as to minimise the noise nuisance to noise sensitive receptors. The maintenance procedure ensures that all maintenance of equipment in the factory is carried out to a specified standard to ensure smooth running of the plant and maximum efficiency to include all boilers. The maintenance manager is responsible for ensuring all maintenance is carried out in accordance with the Maintenance Schedule. Records are held on site of inspections carried out.

Environmental Conditions
Knockfereen is located in what has been classified by the Geological Survey of Ireland (GSI) as being a regionally important aquifer, Karstified (conduit). The bedrock of the area is comprised of dinantian pure bedded limestones. The Western Interim Vulnerability study undertaken as part of the Water Framework Directive programme by O’Neill’s Groundwater Engineering classified this site as being HL – High to Low. There is no known incidents of ground or groundwater contamination either historically or present on or under the site.

Measures Taken To Reduce Environmental Emissions
Emissions to Atmosphere
There are two HeatMaster hot water boilers located on site. There are no other main emission points to atmosphere on site.
The BAT emission limit values for emissions to air for the slaughtering sector refers to non-combustion gases and are therefore not applicable to this installation. Forming part of the Quality Management Policy, calibration, maintenance and equipment validation procedures are in place, in line with BREF guidance notes to significantly reduce consumption and emission levels.

Emissions to Sewer
A number of measures have been put in place by Martin Jennings Wholesale Limited in order to minimise discharge levels:

- All blood produced in the factory is pumped from an underground storage tank to an external trailer which is disposed off site daily;
- All green offal, bones, skins and hides produced in the factory is removed daily by a licensed haulier;
- All SRM is stained and removed by a licensed haulier;
- All production floors are securely gridded and soft waste is picked up and transferred to the green offal skip;
- Fat traps are pumped out weekly and disposed off site;

Awareness is high and every effort is made by staff to minimise effluent levels.

Noise Emissions
Regular ambient and occupational noise monitoring is undertaken at the Martin Jennings Wholesale Limited facility. No complaints have been received in relation to noise emanating from the plant. Refrigeration units are enclosed so as to minimise the noise nuisance to noise sensitive receptors. The boiler maintenance programme includes:

- Weekly cleaning of filters;
- Oil pump filter cleaned weekly
- Cleaning of jets every 8-12 weeks
- Visual inspections

The calibration procedure in place at Martin Jennings Wholesale Limited guarantees that all test equipment used is working to an acceptable level of efficiency, thereby providing a high degree of accuracy and reliability. Calibration of equipment by external contractors is undertaken at least annually to national standards.
Additionally, the equipment is cross-checked on a regular basis via in-house checks. The boiler combustion efficiency is tested annually to ensure combustion conditions are maintained and they are running at maximum efficiency.

**Best Available Techniques (BAT)**

Martin Jennings Wholesale Limited is in the process of formulating an Environmental Management System (EMS) for its facility. This system will manage all activities on site which have the potential to have a significant impact on the environment, these activities will be checked regularly and associated records of same will be maintained.

In-house training with staff at all levels is regularly undertaken in order to reduce emission levels and the risk of accidents occurring throughout the plant. A planned maintenance programme has been implemented on site; this outlines the essential maintenance to be carried out. The plan is reviewed as part of the quality management system. In line with the company’s licence to discharge trade effluent to sewer, regular monitoring is carried out on site and subsequent analysis reports are submitted to the Local Authority to ensure all parameters are in line with the licence. Suppliers of packaging and ingredients to Martin Jennings Wholesale Limited must undergo a supplier vendor audit prior to approval. Suppliers with audited environmental management systems are preferred where all other considerations are equal. Many of Martin Jennings Wholesale Limited suppliers operate reuse loops, reusing pallets etc. Raw ingredients and chemicals are purchased in bulk where possible reducing packaging and transportation costs.

Forming part of this application dedicated meters for water consumption was applied at specific units. The results will be reviewed by management in order to identify areas where consumption can be reduced and action will be taken to optimise the consumption. Pressure cleaning is used throughout the installation in order to aid in reducing overall water consumption levels. Cleaning hoses are fitted with hand-operated triggers. All floor drains are fitted with screens to prevent solid materials from entering the wastewater. Every effort is made to prevent solids entering the wastewater stream and staff awareness is high on this issue. Dry cleaning of the...
installation takes place daily prior to wet cleaning which reduces the entrainment of materials in waste waters.

Waste Production & Management
At present, all non-hazardous waste is sent to Ballinrobe Waste (Waste No. CW014), for recycling or for disposal to landfill. Non-hazardous waste consists of general waste such as municipal office waste in addition to cardboard, paper and plastic wrappings that may be reused or recycled. Wooden pallets are also used onsite for transportation purposes and are reused. Every effort should be made to ensure that maximum reuse and recycling at the facility is conducted. Due to the nature of operations at the facility, hazardous wastes are generated. All animal waste is required to be disposed under the Disposal of Animal By-Products Regulations (EC) No. 1774/2002. This regulation divides and classifies waste into three categories according to their nature Categories 1-3. Hazardous wastes consist of Category 1 and Category 3 materials, in addition to contaminated cardboard and plastic wrapping associated with processing operations at the facility. Animal by-product wastes are collected in skips at the rear of the site and transferred to trailers which are clearly marked as Category 1, 2 and 3 located on hard standing areas. Blood is collected at the animal bleeding stage and drained to a blood sump. From the sump it is pumped to a holding trailer, which is emptied daily and sent for rendering. All waste, hazardous and non-hazardous will be clearly signed and segregated onsite. All waste management contractors used by Martin Jennings Wholesale Limited possess relevant authorised waste permits/licences and a copy of all permits and licences are kept onsite.

Resource Use & Efficiency
Energy demand at Martin Jennings Wholesale Limited is met by a combination of oil, gas and electricity. The processes involved in this facility involve high energy consumption associated with refrigeration machines, pumps, the generation of compressed air, lighting, heating of the installation and the heating elements for the knife sterilisers and ventilation. The refrigeration plant is the largest consumer of electricity on site at 45.35% of the overall load. Other energy consuming areas include Lighting (2.85%); Resistive (33.18%) and Equipment (18.61%). Energy audits of the facility were carried out by two independent consultants’ Perma Group
Services and F&D Developments. The audits assessed lighting and refrigeration onsite. Based on their findings recommendations were made which are currently being implemented at the facility. These include installing Fluoresave units fitted at or near the main distribution boards in strategically selected areas around the plant. The environmental benefits associated with the implementation of this system include reducing the energy to operate fluorescent and other discharge lights, which reduces the impact on the environment; and reducing the voltage to the lamps fluoresent reduces their running temperature, thus extending their life considerably. This has a valuable impact on lamp replacement costs and on the environmental impact of lamp disposal. It also assists in reducing greenhouse gas emissions. The company has installed a Sava Control system to improve the energy efficiency of operations at the facility. The Sava Control system assists in reducing energy usage at the facility.

Cleaning

A procedure is in place on site whereby dry pre-cleaning of equipment and production areas is carried out prior to wet cleaning. Dry collection of floor wastes leads to reduced water consumption and as a direct result, reduces energy consumption at the facility. Cleaning is carried out in a manner so as to optimise hygiene, water and chemical usage. Dry cleaning of the installation and spillages are cleaned by sweeping prior to wet cleaning which significantly reduces organic matter entering the water. This process reduces effluent loading, reduces energy required to heat water for cleaning purposes and reduces the amount of detergent being used in the cleaning process. Factory floors are designed to withstand the production process and allow easy cleaning. Floors in boning hall and dispatch areas are covered in poly acrylic coatings, which are specifically tough, durable and washable. Drains are designed and maintained to minimise risk of product contamination. Drains are positioned at numerous points throughout the factory; they are located specifically to expediently remove all excess water which could risk product safety if allowed to accumulate. Delivery vehicles are first dry scraped and then cleaned using a high pressure water spray, this reduces water consumption. Automated start/stop controls are fitted to water supply points to reduce water consumption levels.
Accident Preventative Measures

A company safety statement has been formulated for Martin Jennings Wholesale Limited. The safety statement includes details on Fire Emergency, Natural or LP Gas Leaks, Spills and Exposure to Hazards. Martin Jennings Wholesale Limited is currently implementing an Environmental Management System (EMS) which is being developed by Environmental Efficiency Consultants on behalf of the company. The EMS incorporates procedures to reduce spillages and leakages onsite, in addition to procedures in the event of a spillage or leakage at the facility. Section J of this IPPC licence application addresses these procedures in greater detail. The EMS details more specific actions that will be taken at the plant in the event of an accidental spillage/emission. These are divided into response and clean-up procedures for Low Risk Spills and response and clean-up procedures for High Risk Spills. Low risk spills are categorised as those that have a low risk of spreading and reaching on-site drains or nearby water courses and these spills can generally be handled by internal personnel and do not generally require an emergency response by fire department personnel. High risk spills are defined as spills that have a high risk of spreading quickly to on-site drains or nearby watercourses. The fire service and Local Authority may be required to help clean up high-risk spills.

Cessation Plan

The site closure plan will be implemented by Martin Jennings Wholesale Limited in order to safely decommission all aspects of the installation on cessation of activities at this site. A description of the procedures that will be implemented during decommissioning of the site is presented in Section K of the licence application. Such decommissioning will only arise where the plant is being permanently closed or in the event of a buy-out by another company who do not require some or all of the facilities.

Furthermore, the Environmental Protection Agency will be consulted prior to the implementation of any exit procedure.
SECTION B: GENERAL

B.1. Owner/Operator

<table>
<thead>
<tr>
<th>Name*</th>
<th>Martin Jennings Wholesale Limited</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address</td>
<td>Knockfereen, Neale Road, Ballinrobe, County Mayo.</td>
</tr>
<tr>
<td>Tel</td>
<td>094 9541611</td>
</tr>
<tr>
<td>Fax</td>
<td>094 954 1746</td>
</tr>
<tr>
<td>e-mail</td>
<td><a href="mailto:Quality@jenningsmeat.com">Quality@jenningsmeat.com</a></td>
</tr>
</tbody>
</table>

Name and Address for Correspondence

<table>
<thead>
<tr>
<th>Name</th>
<th>Environmental Efficiency Consultants Limited</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address</td>
<td>Parnell House, 19 Quinsboro Road, Bray, County Wicklow</td>
</tr>
<tr>
<td>Tel</td>
<td>01 276 1428</td>
</tr>
<tr>
<td>Fax</td>
<td>01 276 1561</td>
</tr>
<tr>
<td>e-mail</td>
<td><a href="mailto:rnidhubhda@energy.iol.ie">rnidhubhda@energy.iol.ie</a></td>
</tr>
</tbody>
</table>

Address of registered or principal office of Body Corporate (if applicable)

<table>
<thead>
<tr>
<th>Address</th>
<th>Martin Jennings Wholesale Limited Knockfereen, Neale Road, Ballinrobe, County Mayo.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tel</td>
<td>094 9541611</td>
</tr>
<tr>
<td>Fax</td>
<td>094 9541746</td>
</tr>
<tr>
<td>e-mail</td>
<td><a href="mailto:Quality@jenningsmeat.com">Quality@jenningsmeat.com</a></td>
</tr>
</tbody>
</table>

If the applicant is a body corporate, the following information must be attached as Attachment B1:

a) a Certified Copy of the Certificate of Incorporation (see Attachment B.1(a))
b) the Company’s Registration Number from the Companies Registry Office: (see Attachment B.1(b))
c) Particulars of Registered Office of the Company: (see Attachment B.1(c))
Name and address of the proprietor(s) of the Land on which the Activity is situated (if different from applicant named above):

<table>
<thead>
<tr>
<th>Proprietor’s Name:</th>
<th>As Above</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address:</td>
<td></td>
</tr>
<tr>
<td>Tel:</td>
<td></td>
</tr>
<tr>
<td>Fax:</td>
<td></td>
</tr>
<tr>
<td>e-mail:</td>
<td></td>
</tr>
</tbody>
</table>

Name and address of the owner(s) of the building and ancillary plant in which the activity is situated (if different from applicant named above):

<table>
<thead>
<tr>
<th>Name:</th>
<th>As Above</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address:</td>
<td></td>
</tr>
<tr>
<td>Tel:</td>
<td></td>
</tr>
<tr>
<td>Fax:</td>
<td></td>
</tr>
<tr>
<td>e-mail:</td>
<td></td>
</tr>
</tbody>
</table>

B.2. Location of Activity

<table>
<thead>
<tr>
<th>Name:</th>
<th>Martin Jennings Wholesale Limited</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address*:</td>
<td>Knockfereen, Neale Road, Ballinrobe, County Mayo.</td>
</tr>
<tr>
<td>Tel:</td>
<td>094 9541611</td>
</tr>
<tr>
<td>Fax:</td>
<td>094 9541746</td>
</tr>
<tr>
<td>Contact Name:</td>
<td>Catherine Duignan / Jim Fox</td>
</tr>
<tr>
<td>Position:</td>
<td>Quality Controller / Financial Controller</td>
</tr>
<tr>
<td>e-mail:</td>
<td><a href="mailto:Quality@jenningsmeat.com">Quality@jenningsmeat.com</a></td>
</tr>
</tbody>
</table>

* Include any townland.

National Grid Reference

| (12 digit 6E,6N) | 119224E/263405N |

Location maps (≤A3), appropriately scaled, with legible grid references should be enclosed in Attachment B.2. The site boundary must be outlined on the map in colour.

See Attachment B.2 for location map.
Geo-referenced digital drawing files (e.g. AutoCAD files) in Irish Grid projection of the site boundary and overall site plan, including labelled emission, monitoring and sampling points, are also required. This data should be provided to the Agency on a separate CD-ROM containing sections B.2, E.6 and F.3.

<table>
<thead>
<tr>
<th>Name of geo-referenced digital drawing files</th>
<th>Martin Jennings Wholesale Ltd. Geo-Referenced Digital Drawing Site Layout Map</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of CD-Rom with digital drawing files</td>
<td>Martin Jennings Wholesale Limited. CD 885-1b</td>
</tr>
</tbody>
</table>

A CD-ROM entitled “Martin Jennings Wholesale Limited CD 885-1b” with a geo-referenced AutoCAD file detailing emission, monitoring and sampling points is included with the application on the accompanying CD-Rom.

**B.3. Class of Activity**

![Table](data:image/csv;base64,expected_table_data)

**Note 1:** In order to give a precise identification, select only those words from the description of the class or classes that best describes the nature of the activity for which the licence is being applied for.

**B.4. Employees/ Capital Cost**

<table>
<thead>
<tr>
<th>Number of Employees (existing facilities):</th>
<th>87</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross Capital Cost (new proposals) €</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**B.5. Relevant Planning Authority**

<table>
<thead>
<tr>
<th>Name:</th>
<th>Mayo County Council</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address:</td>
<td>Aras an Chontae,</td>
</tr>
<tr>
<td></td>
<td>The Mall,</td>
</tr>
<tr>
<td></td>
<td>Castlebar,</td>
</tr>
<tr>
<td></td>
<td>County Mayo.</td>
</tr>
<tr>
<td>Tel:</td>
<td>094 90 24444</td>
</tr>
<tr>
<td>Fax:</td>
<td>094 90 28455</td>
</tr>
</tbody>
</table>

Planning Permission relating to this application:

<table>
<thead>
<tr>
<th>has been obtained</th>
<th>Yes</th>
<th>is being processed</th>
<th>-</th>
</tr>
</thead>
<tbody>
<tr>
<td>is not yet applied for</td>
<td>-</td>
<td>is not required</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Local Authority Planning File Reference No:</th>
<th>P96/1434</th>
</tr>
</thead>
</table>
Attachment B.5 should contain all planning permissions, including a copy of all conditions, and the required copies of any EIS should also be enclosed. For existing activities, Attachment No B.5 should also contain all licences and permits past and present in force at the time of submission.

See Attachment B.5 for copies of all Planning Permissions associated with this site, copy of Fire certificate and Licence to Discharge Trade Effluent to Sewer.

**B.6. Relevant Sanitary Authority.**

In the case of a discharge of any trade effluent or other matter to a sewer of a sanitary authority, give the name of the sanitary authority in which the sewer is vested or by which it is controlled.

<table>
<thead>
<tr>
<th>Name</th>
<th>Mayo County Council(Water and Sewerage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address</td>
<td>Second Floor, Aras an Chontae, The Mall,</td>
</tr>
<tr>
<td></td>
<td>Castlebar, County Mayo.</td>
</tr>
<tr>
<td>Tel</td>
<td>094 902 4444</td>
</tr>
<tr>
<td>Fax</td>
<td>094 902 5891</td>
</tr>
</tbody>
</table>

In the case of a discharge of any trade effluent or other matter to a sewer not vested by a sanitary authority, the applicant must supply an attachment B.6; (a) the name and address of the owner(s) of the sewer and the waste water treatment plant to which the sewer discharges and who are responsible for the quality of the treated effluent discharging to waters and (b) a copy of the effluent regulations and the agreement between the applicant and the aforementioned.

<table>
<thead>
<tr>
<th>Name</th>
<th>NOT APPLICABLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address</td>
<td></td>
</tr>
<tr>
<td>Tel</td>
<td></td>
</tr>
<tr>
<td>Fax</td>
<td></td>
</tr>
</tbody>
</table>

**B.7. Relevant Health Board Region**

<table>
<thead>
<tr>
<th>Name</th>
<th>Western Health Board</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address</td>
<td>Merlin Park Regional Hospital,</td>
</tr>
<tr>
<td></td>
<td>Galway, Co. Galway.</td>
</tr>
<tr>
<td>Tel</td>
<td>091 751131</td>
</tr>
<tr>
<td>Fax</td>
<td>091 752644</td>
</tr>
</tbody>
</table>

**B.8 Site Notice, Newspaper Advertisement and Planning Authority Notice.**
Attachment B.8 should contain a copy of the text of the site notice, a map (no larger than A3) showing its location on site (in accordance with Article 7 of the Regulations) and a copy of the newspaper advertisement. A copy of the notice given to the Planning Authority should also be included.

See Attachment B.8 for a copy of the Site Notice and a copy of the Newspaper Advertisement. Also included is a copy of notice served to Mayo County Council on the 9th of June 2008.

B.9 Seveso II Regulations

State whether the activity is an establishment to which the EC (Control of Major Accident Hazards involving Dangerous Substances) Regulations (S.I. No. 74 of 2006) apply.

If yes, outline how the process comes under these regulations.

Supporting information should be included in Attachment B.9.

The activities carried out at Martin Jennings Wholesale Limited do not fall under these regulations.

B.10 IPPC Directive

Specify whether the activity is a category of industrial activity referred to in Annex I of the IPPC Directive (96/61/EC) and if yes specify the category.

Supporting information should be included in Attachment B.10.

The facility falls into the following category referred to in Annex 1 of the IPPC Directive (96/61/EC):

6.4. (a) Slaughterhouses with a carcase production capacity greater than 50 tonnes per day.

Please refer to Attachment B.10 for supporting information.
SECTION C: MANAGEMENT OF THE INSTALLATION

C.1 Site Management & Control

Details should be provided on the management structures for the activity. Organisational charts and all relevant environmental management policy statements, including provisions for on-going assessment of environmental performance, are required.

C.2 Environmental Management System (EMS)

Indicate whether an Environmental Management System has been developed for the installation. If yes, specify which standard and include a copy of the accreditation certificate.

C.3 Hours of Operation

Provide details of the hours of operation for the installation, including:
(a) Proposed hours of operation.
(b) Proposed hours of construction and development works and timeframes.
(c) Any other relevant hours of operation expected.

This information should form Attachment N° C.

See Attachment C for response to Sections C.1 – C.3 for all of the above.

SECTION D: INFRASTRUCTURE & OPERATION

D.1. Operational Information Requirements

Describe the plant, methods, processes, ancillary processes, abatement, recovery and treatment systems, and operating procedures for the activity, to include a copy of such plans, drawings or maps, (site plans and location maps, process flow diagrams), and such other particulars, reports and supporting documentation as are necessary to describe all aspects of the activity. Maps and drawings must be no larger than A3 size.

A development and operational history of the site should be included here.

Attachment N° D should contain a list of all unit operations (processes) to be carried out, including flow diagrams of each with any relevant additional information.

Development and Operational History

Martin Jennings Wholesale Limited is a private owned company which employs 87 people at the c.3.5 hectare site. The company has been in the retail meat trade since the 1890s and has been operating from the current site since 1989.
The company under the directorship of Mr John Vaughan and Mr Martin Jennings is Ballinrobes’ largest employer, employing directly and indirectly approximately 100 people. The activity falls under the Environmental Protection Agency Act 1992 (Established Activities) Order 2006, Schedule 1 of the Act, 7.4.1: *The operation of slaughterhouses with a carcass production capacity greater than 50 tonnes per day*. Based on information supplied by the Teagasc Research Centre, Moorepark Fermoy, County Cork relating to average carcass weights for each of these animals (2005 figures), it was established that this installation is exceeding the carcass production capacity of 50 tonnes per day, see Section B10 of this application.

Cattle and lamb sourced from the surrounding area are slaughtered to produce meat cuts to meet customer requirements. In addition to slaughtering, there are also facilities for boning, chilling and packing of beef and lamb products.

The installation is located at Knockfereen, Neale Road, Ballinrobe, County Mayo. Lands under the ownership of Martin Jennings Wholesale Limited covers an area of approximately 3.5 hectares located in the southern environs of Ballinrobe town on the eastern side of the Neale Road approximately 700 metres to the south of the centre of Main Street, Ballinrobe. The Neale Road is a regional route (R334) and incorporates a generally good alignment in the vicinity of the site and to the south of the site. The centre of the site is located at National Grid 119219E/263412N. Ballinrobe is located approximately 30 kilometres south of Castlebar on the N84, national primary route linking Castlebar and Galway.

Prior to being used as a slaughter house this was a grassland site used for grazing. A surface area car park is located between the meat processing building and the eastern boundary of the site. Access to the meat processing plant is provided via a dedicated access road which runs along the southern boundary of the entire landholding. Lands to the north of the site accommodate a retail furniture warehouse (Ballinrobe Furniture). Lands to the south of the site are in agricultural use.

There are footpaths and public lighting along the eastern side of the Neale Road in the vicinity of the site. There are no footpaths on the opposite side of the road. Lands directly opposite the...
site accommodate a number of large detached dwellings facing directly onto the road. The site is located just within the 50 kph speed limit for the town.

Under the *Ballinrobe Town Development Plan 1997*, the site is zoned for industrial development. The site is governed by the policies and provisions contained in the Mayo County Development Plan 2003 - 2009.

**Operational Information**

The installation is divided into distinct areas:

**Lairage:** The animals are delivered to site and unloaded using ramps with a non-slip surface. The animals are directed to the lairage prior to slaughtering. Straw is used as bedding to prevent the animals getting dirty. The lairage is cleaned by shovelling out the solid manure and straw into a skip and then washing down the floor area with a high pressured hose.

**Slaughter:** The animals are moved towards the slaughter hall in single file and then fed one by one into a pen for stunning. Following stunning, the animal is shackled and hoisted onto an overhead rail along the slaughter line which runs through the slaughter hall. The suspended animal is moved along the rail, until it is directly above a bleeding trough, where the large blood vessels in its neck are severed (Bleeding). The blood flows into a blood collection sump and is pumped to an outdoor trailer which is removed from site daily by an authorised waste disposal company. Once bled, the animals head and hoofs are removed and machines are used to remove the hide and skin. The carcass is then moved down the slaughter line to be dressed and cleaned. 'Dressing' means converting the animal's carcass into sides of meat suitable for sale. It includes the removal of the head, hide and internal organs (evisceration).

The carcass is examined for disease and damage by Department of Agriculture officials.

**Chilling:** The carcasses are chilled for 24-48 hours to prevent bacterial growth.

**Packing Areas:** The meat is weighed and boxed and stored for dispatch.
Production Process Description

Martin Jennings Wholesale Limited is a privately operated company, dedicated to the slaughter and processing of cattle and lamb. The majority of animals are further processed on site through the boning hall. Customers include retail multiples, further processors, caterers as well as the local butchery trade.

Manufacturing Process Beef (Attachment D1)

- Cattle are unloaded into the cattle intake area where they are penned and have their ear-tags read. The manure waste from this area is collected and put into the category 2 trailer prior to disposal off site.
- Beef animals are stunned with a hammer gun in the lairage area and dropped down one at a time into the slaughtering hall where they are each hung up on a conveying line and slaughtered within 60 seconds.
- The animal is stuck and allowed to bleed.
- The vast majority of the blood is collected in the initial slaughtering area and once the carcass is conveyed past this area, blood spills are usually restricted to dripping of blood as opposed to significant spills. The blood spilt in the slaughtering area (approximately 10-20 litres/BF animals) is collected in an underground storage tank and pumped to the outdoor Category 1 trailer whereupon it is removed daily.
- Following the sticking and bleeding the animal’s snout is removed as is the fore leg and any horns which may be present.
- All the parts removed from the animal in the above processes are segregated into category 1 and 3 wastes and disposed off site accordingly.
- The hide of the animal is then peeled off by specialised machinery and transported off site for further processing.
- The head is cleaved off and any excess meat is cut off and segregated for sale.
- The feet are cleaved off and disposed of as waste.
- The kidneys, heart, tongue, tail and other miscellaneous parts are removed for sale as specialised meat products or inclusion in pet food.
• The stomach, bladder and intestines are removed in accordance with the documented quality procedure. The contents of the stomach (paunch) are segregated and the dried paunch is then disposed of by a licensed haulier weekly as Category 2 waste.

• The remaining carcass has had all its major organs removed and is cut in half. It is then graded, weighed and labelled. Carcasses are washed to remove bone dust.

• The two halves exit the manufacturing area and are conveyed to the chills where they are brought down to a temperature of less than 4°C.

• Within the marshalling area the carcasses are quartered. Quarters are then either despatched off site in refrigerated trucks or sent to the adjoining boning halls for deboning (the removed bones are removed off-site for processing by an approved renderer).

• Following de-boning, the meat is vacuum packed and sent to the Vac-Pack store where it is sorted on to pallets prior to distribution.

Manufacturing Process Lamb (Attachment D2)
The primary difference between the beef and lamb process at Martin Jennings Wholesale Limited is that the latter does not go through the de-boning process.

• Sheep are led into the stunning pen where they are stunned prior to bleeding. The stun time is 5-6 seconds using tongs.

• The vast majority of the blood is collected in the initial slaughtering area and once the carcass is conveyed past this area, blood spills are usually restricted to dripping of blood as opposed to significant spills. The blood spilt in the slaughtering area (approximately 0.8litres/sheep) is collected in an underground storage tank and pumped to an external Category 1 trailer.

• The animals are hung on an overhead rail which carries the carcass through the slaughtering line.

• The head is removed, stained and disposed of as category 1 waste.

• Evisceration involves the removal of the respiratory, pulmonary and digestive organs; the resulting offal is removed to the offal processing area.

• It is weighed and labelled.

• The carcass is next sent to the chill area prior to loading for dispatch.
Ancillary activities carried out on site arise from the slaughter process, and include cleaning, waste handling and storage, effluent treatment and management, and control and abatement systems. These are dealt with further in the sections to follow.

**Abatement, Recovery and Treatment Systems**

**Wastewater**

Effluent/wastewater is drained to the foul drainage system; the waste water is initially screened through grates fitted to floor drains in line with BREF guidelines. It is then put through a series of baffling tanks (x4) on site before it leaves the site and enters the municipal waste water treatment plant.

Grids on the factory floor allow for the screening of solids, thereby reducing the amount of suspended solids entering the wastewater.

Fat traps are in place on site to capture fats, oils and greases that have entered the waste water. This mechanical fat separation reduces COD significantly.

Analysis of the trade effluent is regularly undertaken to ensure limits are in line with the existing Discharge Licence.

Blood troughs are installed to collect blood and all other by-products draining from the carcass. Catch pots are installed to catch meat wastes prior to them entering drains. Cleaning staff are actively encouraged to empty the catch pots into a waste bin and replace them prior to water being used in the area.

Blood is collected in a dedicated bulk storage tank and pumped to a designated trailer which is collected daily by a licensed waste contractor. The frequency of collection is to ensure that capacity of the tank is not exceeded; thereby, reducing the risk of accidental overfilling and subsequent increases in the COD of the waste water. It also mitigates against the potential of storm water from the hard-standing area which currently goes to soak away becoming polluted.
Waste
Waste generated at Martin Jennings Wholesale Limited falls primarily into the animal by-products category. General waste including cardboard, plastic and effluent are also generated. Further details in relation to the handling and storage of waste are provided in Section H of this application.

Along the slaughter line drip trays are in place to collect liquids and solids. This leads to a reduction in by-products entering the water. The amount of wastewater produced; its BOD, COD and suspended solids are all reduced as a result of this.

Hides and skins are disposed of to an approved rendering plant. Waste is removed from site daily in order to mitigate against any mal odours occurring.

Cleaning
A procedure is in place on site whereby dry precleaning of equipment and production areas is carried out prior to wet cleaning. Dry collection of floor wastes leads to reduced water consumption and as a direct result reduced energy consumption.

Cleaning is carried out in a manner so as to optimise hygiene, water and chemical usage. Dry cleaning of the installation and spillages takes places, prior to wet cleaning which significantly reduces organic matter entering the water. This process reduces effluent loading, reduces energy required to heat water for cleaning purposes and reduces the amount of detergent being used in the cleaning process. Cleaning chemicals are recommended and supplied by Johnson Diversey. They are suitably labelled, secured in closed containers, and used in accordance with manufacturer’s instructions.

Factory floors are designed to withstand the production process and allow easy cleaning. Floors in boning hall and dispatch areas are covered in poly acrylic coatings, which are tough durable and washable.
Drains are designed and maintained to minimise risk of product contamination. Drains are positioned at numerous points throughout the factory; they are located specifically to expediently remove all excess water which could risk product safety if allowed to accumulate.

**Water Consumption**

Delivery vehicles are first dry scraped and then cleaned using a high pressure water spray, this reduces water consumption.

Automated start/stop controls are fitted to water supply points this decreases water consumption levels.

**General**

All grounds within the site are finished and maintained to an appropriate standard. Yards and driveways are concreted covered to provide smooth easily cleanable surfaces. Grassed areas are regularly cut or sprayed during growing season and weeds controlled.

Adequate space is provided around all buildings. The site is securely enclosed by stone walls and fencing. Access and egress is through one main gate only. Drains are in place in the back yard area of the factory to adequately remove all washings and liquid produced during production.
SECTION E: EMISSIONS

E.1. Emissions to Atmosphere

E.1.A. Details of all point emissions to atmosphere

Details of all point emissions to atmosphere should be supplied. Complete Table E.1(i) for Boiler Emissions and Table E.1(ii) and E.1(iii) for all other main emission points. Complete Table E.1(iv) for minor emission points.

A summary list of the emission points, together with maps and/or drawings (no larger than A3), and supporting documentation should be included as Attachment N° E. Plans of emission elevations, relevant roof heights, etc., should also be included, as should detailed descriptions and schematics of all abatement systems.

The applicant should address in particular any emission point where the substances listed in the Schedule of S.I. 394 of 2004 are emitted.

For emissions outside the BAT guidance limit, a full evaluation of the existing abatement/treatment system must be provided. A planned programme of improvement towards meeting upgraded standards is required. This should highlight specific goals and a time scale, together with options for modification, upgrading or replacement as required to bring the emissions within the limits as set out in the BAT guidance note(s). These notes can be found on the EPA website at www.epa.ie.

E.1.B. Fugitive and Potential emissions

Give summary details of fugitive and potential emissions in Table E.1(v).

In relation to activities listed in the Schedule of Council Directive 1999/13/EC on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain activities and installations,

- specify the relevant category of activity in the Schedule
- specify how the requirements in relation to fugitive emissions will be met.

Full details and any supporting information should form Attachment E.1.B

E.1.A Point Emissions to Atmosphere

There are two HeatMaster hot water boilers located on site which were supplied and installed by Geoff Castles Boiler Services Limited of Carrickfergus, County Antrim in July 2007. This is a high performance water heater capable of supplying 1675 litres in 10 minutes; 5976 litres in 60 minutes. It is supplied with Riello RG4S 396 T1 fuel burner.

For inspection purposes only. Consent of copyright owner required for any other use.
General Characteristics of the boilers are as follows:

<table>
<thead>
<tr>
<th>HeatMaster 200F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuel</td>
</tr>
<tr>
<td>Input</td>
</tr>
<tr>
<td>Output</td>
</tr>
<tr>
<td>Combustion Efficiency</td>
</tr>
<tr>
<td>Output CO₂</td>
</tr>
</tbody>
</table>

The location of the point emission to atmosphere at the Martin Jennings Wholesale Limited plant is shown on the AutoCAD drawing file which accompanies this application; the grid reference is also noted. Further details concerning the characteristics of point source emissions from the 0.18 MW (reference A3-1) on site can be seen in Table E.1(iv) EMISSIONS TO ATMOSPHERE - Minor atmospheric emissions. There are no other main emission points to atmosphere on site.

The BAT emission limit values for emissions to air for the slaughtering sector refers to non-combustion gases and are therefore not applicable to this installation.

Forming part of the Quality Management Policy, calibration, maintenance and equipment validation procedures are in place, in line with BREF guidance notes to significantly reduce consumption and emission levels.

The maintenance procedure ensures that all maintenance of equipment in the factory is carried out to a specified standard to ensure smooth running of the plant and maximum efficiency (including all boilers). The maintenance manager is responsible for ensuring all maintenance is carried out in accordance with the Maintenance Schedule. Records are held on site of inspections carried out.

The boiler maintenance programme includes:

- Weekly cleaning of filters
- Oil pump filter cleaned weekly
• Cleaning of jets every 8-12 weeks
• Visual inspections

The calibration procedure in place at Martin Jennings Wholesale Limited guarantees that all test equipment used is working to an acceptable level of efficiency, thereby providing a high degree of accuracy and reliability. Calibration of equipment by external contractors is undertaken at least annually to national standards. Additionally, the equipment is cross-checked on a regular basis via in-house checks.

The boiler combustion efficiency is tested annually to ensure combustion conditions are maintained and they are running at maximum efficiency.

**E.1.B Fugitive Emissions to Atmosphere**

Some activities on site if mismanaged may give rise to odour emissions. There are no national or international standards for acceptable odour levels in the ambient environment, however, Martin Jennings Wholesale Ltd. apply stringent cleaning and waste practices at the facility to ensure that malodours do not arise at the facility. No complaints have been received in relation to malodours arising from the site, indicating that the facility is not impairing adversely on the local environmental and/or public amenities in the area.

The EPA guidelines “Approved BAT Guidance Note on Best Available Techniques for the Slaughtering Sector” (2006) provide guidance on the determination of Best Available Techniques (BAT) in relation to applicants seeking IPPC licences under Part IV of the Environmental Protection Agency Acts, 1992 and 2003, within the slaughtering sector. Odours from animal by-product storage and handling can potentially result in malodours, which can potentially impact adversely on the local environment. The EPA 2006 guidelines provide recommendations on minimising the occurrence of adverse odours arising from operations, which includes enclosing animal by-products during storage; maintaining short storage periods; frequent cleaning of processing areas and regular disposal of materials. Martin Jennings Wholesale Limited presently implements stringent practices to ensure the highest levels of hygiene at the facility and ensure that there is no odour nuisance generated from the facilities.
activities. The potential sources of odour include: the blood tank, general waste skip and the paunch hold. The potential receptors of any odours are residential dwellings to the east and west of the site. In order to avoid malodours being generated at the facility all waste is located to the rear of the facility away from sensitive receptors. Furthermore, category 1 and 3 wastes are removed from the site daily; category 2 materials i.e. paunch and truck washings are removed weekly and kept covered as much as is practicable, and the facility undergoes continuous cleaning, both dry and wet cleaning processes. All blood produced in the factory is pumped from an underground storage tank to an external trailer which is disposed off site daily. All green offal, bones, skins and hides produced in the factory is removed daily by licensed hauliers.

An odour impact assessment has been undertaken at Martin Jennings Wholesale Limited. Monitoring was undertaken at four locations including 2 boundary locations one upwind and one downwind of the facility and two sensitive receptors. The ambient samples were collected in accordance with the CEN standards EN 13725 – Air Quality – Determination of Odour Concentration by Dynamic Olfactometry, 2004. Samples of gas of approximately 60 litres in volume were collected via PTFE/Teflon tubing into Nalophane gas sampling bags by means of the ‘lung principle’. The sample bag was housed in a sealed carbuoy that was evacuated using a sampling pump. The volume of air removed was replaced by sample gas entering the bag through the tubing and sampling was undertaken until the bag was filled. The samples were sent to Bord na Mona odour laboratory for analysis within 24 hours. The samples were analysed by Dynamic Olfactometry and procedures were undertaken in accordance with EN 13725 using a trained panel of 4 assessors.

Meteorological conditions noted during the survey were mild, overcast and dry. There was a light breeze of 2-3 metres per second blowing in a westerly direction.

The Table below details the results of monitoring:

<table>
<thead>
<tr>
<th>Sampling Ref</th>
<th>Location</th>
<th>Result (OUs/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>OD-1</td>
<td>Upwind sensitive location</td>
<td>30</td>
</tr>
<tr>
<td>OD-2</td>
<td>Upwind boundary</td>
<td>28</td>
</tr>
</tbody>
</table>

NOTE1: For inspection purposes only. Consent of copyright owner required for any other use.
The relative strength of an odour unit may be described as follows:

- 1 OUe/m³ is the point of detection of an odour
- 5 OUe/m³ is a faint odour
- 10 OUe/m³ is a distinct odour

The results demonstrate that the upwind concentrations are marginally higher than downwind samples and therefore there is no odour contribution from the meat plant at sensitive receptors downwind.

No complaints have been received regarding odour nuisance from the plant which strongly indicates that Martin Jennings Wholesale Limited is having no adverse impact on the surrounding environment. Furthermore, the stringent daily cleaning programme at the plant including daily waste disposal ensures there are no malodours discernible beyond the plant boundary.

Martin Jennings Wholesale Limited will continue to implement and develop good onsite practices to ensure there will be no odour nuisance generated from on-site activities. (Please refer to Attachment E.1.B for full White Young Green Odour Impact Assessment Report)

E.2 Emissions to Surface Waters

Tables E.2(i) and E.2(ii) should be completed.

A summary list of the emission points, together with maps/drawings (no larger than A3) and supporting documentation should be included as Attachment N° E.2.

The applicant should address in particular any emission point where the substances listed in the Schedule of S.I. No. 394 of 2004 are emitted.

Details of all List I and List II substances listed in the Annex to EU Directive 76/464/EEC (as amended), contained in any emission must be presented. All surface water runoff and storm water drains discharging to surface water bodies must be included. A National Grid...
References (12 digit, 6E, 6N) must be given for all discharge points. The identity and type of receiving water (river, ditch, estuary, lake, etc.) must be stated.

For emissions outside the BAT guidance limit, a full evaluation of the existing abatement/treatment system must be provided. A planned programme of improvement towards meeting upgraded standards is required. This should highlight specific goals and a time scale, together with options for modification, upgrading or replacement as required to bring the emissions within the limits as set out in the BAT guidance note(s).

There are no emissions to surface waters from the Martin Jennings Wholesale Limited installation.

E.3 Emissions to Sewer

Tables E.3(i) and E.3(ii) should be completed.

A summary list of the emission points, together with maps and/or drawings (no larger than A3) and supporting documentation should be included as Attachment N° E.3. Details of all List I and List II substances listed in the Annex to EU Directive 76/464/EEC (as amended), contained in any emission must be presented. All relevant information on the receiving sewer, including any effluent treatment/abatement systems, not already described, with schematics as appropriate should also be included in Attachment N° E.3.

For emissions outside BAT guidance limit (where given), a full evaluation of the existing abatement/treatment system must be provided. A planned programme of improvement towards meeting upgraded standards is required. This should highlight specific goals and a time scale, together with options for modification, upgrading or replacement as required to bring the emissions within any limits set out in the BAT guidance note(s).

All process discharges to sewer from the installation are via a single emission point, SE1 as indicated on the site layout plan presented in AutoCAD drawing format.

Domestic and effluent waste water produced from operational activities is sent to the on site mechanical treatment system. Effluent waste water is screened in line with the conditions set out in the Licence to Discharge Trade or Sewage Effluent to Sewer to reduce suspended solids, particulate BOD and the potential for the formation of malodorous gases. The effluent is then further treated by passing it through four tanks which act as sediment tanks to clean the effluent. It is then directed to the local authority sewer in agreement with Mayo County Council. The treated waste water then receives further treatment in the municipal waste water treatment plant.
All effluent arising from the office and factory toilets, washing areas and canteen are discharged downstream of the fat traps.

Under the Licence to Discharge Trade or Sewage Effluent to Sewer issued to Martin Jennings Wholesale Limited by Mayo County Council analysis of the effluent prior to discharge to the sewer is carried out regularly. Attachment E.3 details results of analysis taken by Environmental Efficiency Limited of effluent for the purposes of this application. All parameter results were in line with the Discharge Licence as issued by Mayo County Council.

A sampling chamber has been constructed located to the front of the installation, this allows for the taking of samples of the treated effluent in a safe manner. The analysis of the treated effluent is carried out by approved accredited laboratories.

A number of measures have been put in place by Martin Jennings Wholesale Limited in order to minimise discharge levels:

- All blood produced in the factory is pumped from an underground storage tank to an external trailer which is disposed off site daily;
- All green offal, bones, skins and hides produced in the factory is removed daily by licensed hauliers;
- All SRM is stained and removed by a licensed haulier;
- All production floors are securely gridded and soft waste is picked up and transferred to the green offal skip;
- Fat traps are pumped out weekly and disposed off site;
- Awareness is high and every effort is made by staff to minimise effluent levels.

E.4. Emissions to Ground

Describe the existing or proposed arrangements necessary to give effect to Articles 3, 4, 5, 6, and 7 of Council Directive 80/68/EEC of 17 December 1979 on the protection of groundwater against pollution by certain dangerous substances.

The applicant should supply details of the nature and quality of the substance (agricultural and non-agricultural waste) to be landspread (slurry, effluent, sludges etc) as well as the proposed application rates, periods of application and mode of application (e.g., pipe discharge, tanker).
For emissions outside the BAT guidance limit, a full evaluation of the existing abatement/treatment system must be provided. A planned programme of improvement towards meeting upgraded standards is required. This should highlight specific goals and a time scale, together with options for modification, upgrading or replacement as required to bring the emissions within the limits as set out in the BAT guidance note(s).

There is one surface water emission point to ground (soak away) on site reference SL1 as detailed on the AutoCAD drawing file enclosed with this application. This is a direct storm water and run-off discharge to ground. It is not a discharge to sensitive areas as defined in S.I. No. 254 of 2001.

There is a potential for the yard run-off containing substances which have an unfavourable influence on the oxygen balance such as blood. Visual inspections are carried out daily of the area around the blood trailer to ensure there are no leakages.

Hydrocarbons, a List 1 substance in the Annex to the EU Directive 76/464/EEC may be present in storm water. To mitigate against the possibility of hydrocarbon pollution all tanks will be bunded and all bunds will undergo integrity testing as required or specified by the EPA.

**E.5 Noise Emissions**

Give particulars of the source, location, nature, level, and the period or periods during which the noise emissions are made or are to be made.

Table E.5(i) should be completed, as relevant, for each source.

Supporting information should form Attachment N\(^5\) E.5

For emissions outside the EPA Guidance Note for Noise in relation to Scheduled Activities 2\(^{nd}\) Edition (2006), a full evaluation of the existing abatement/treatment system must be provided. A planned programme of improvement towards meeting upgraded standards is required. This should highlight specific goals and a time scale, together with options for modification, upgrading or replacement as required to bring the emissions within the limits as set out in the Guidance Note.

Noise levels both internal from machines and refrigeration units and external from animals may constitute a local noise nuisance. Refrigeration units are enclosed so as to minimise the noise nuisance to noise sensitive receptors.
Regular noise monitoring both ambient and occupational is undertaken at the Martin Jennings Wholesale Limited plant. No complaints have been received in relation to noise emanating from the plant.

In February 2006, White Young Green Environmental (Ireland) Consultants were retained by Neale Road Development to undertake a noise impact assessment of Martin Jennings Wholesale Limited plant to assess the plants impact on the surrounding area from a noise perspective. This report determined that there are no adverse noise impacts from Martin Jennings Wholesale Limited. A copy of this report is attached in Attachment No. E.5.

### E.6 Tabular Data on Emission Points

Applicants should submit the following information for each emission point:

<table>
<thead>
<tr>
<th>Point Code</th>
<th>Point Type</th>
<th>Easting</th>
<th>Northing</th>
<th>Verified</th>
<th>Emission</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provide label ID’s assigned in section E</td>
<td>A=Atmospheric SW=Surface Water SE=Sewer GW=Groundwater N=Noise SL=Soil/Ground WS=Waste</td>
<td>6E-digit GPS Irish National Grid Reference</td>
<td>6N-digit GPS Irish National Grid Reference</td>
<td>Y = GPS used N = GPS not used</td>
<td>e.g. SO₂, HCl, NH₃</td>
</tr>
</tbody>
</table>

An individual record (i.e. row) is required for each emission point. Acceptable file formats include Excel, Access or other upon agreement with the Agency. A standard Excel template can be downloaded from the EPA website at www.epa.ie. This data should be submitted to the Agency on a separate CD-Rom containing sections B.2, E.6 and F.3.

See Attachment E.6 for tabulated data of emission points. This is contained on the accompanying CD-Rom.
SECTION F: CONTROL & MONITORING

Describe the proposed technology and other techniques for preventing or, where this is not possible, reducing emissions from the installation/facility.

F.1: Treatment, Abatement and Control Systems

Details of treatment/abatement systems (air and effluent emissions) should be included, together with schematics as appropriate.

For each Emission Point identified complete Table F.1(i) and include detailed descriptions and schematics of all abatement systems.

Emission Point A3-1 & Emission Point A3-2

The location of the point emission to atmosphere at the Martin Jennings Wholesale Limited plant is shown on the AutoCAD file included with this application, the grid reference is also noted. The BAT emission limit values for emissions to air for the slaughtering sector refers to non-combustion gases and are therefore not applicable to this installation.

Forming part of the Quality Management Policy, calibration, maintenance and equipment validation procedures are in place, in line with BREF guidance notes to significantly reduce consumption and emission levels.

The maintenance procedure ensures that all maintenance of equipment in the factory is carried out to a specified standard to ensure smooth running of the plant and maximum efficiency to include all boilers. The maintenance manager is responsible for ensuring all maintenance is carried out in accordance with the Maintenance Schedule. Records are held on site of inspections carried out. The boiler maintenance programme includes:

- Weekly cleaning of filters
- Oil pump filter cleaned weekly
- Cleaning of jets every 8-12 weeks
- Visual inspections

The calibration procedure in place at Martin Jennings Wholesale Limited guarantees that all test equipment used is working to an acceptable level of efficiency, thereby providing a high degree of accuracy and reliability. Calibration of equipment by external contractors is undertaken at least annually to national standards. Additionally, the equipment is cross-checked on a regular basis via in-house checks. The boiler combustion efficiency is tested
annually to ensure combustion conditions are maintained and they are running at maximum efficiency.

**Emission Point SL1**

There is one surface water emission point to ground (soak away) on site which is referred to as reference point SL1 (refer to site map which accompanies this application). This is a direct storm water and run-off discharge to ground. All fuel tanks onsite are bunded and integrity tests will be conducted every 3 years (or as required) to ensure good condition. In addition, visual inspections are conducted weekly to detect any potential leaks etc.

Visual inspections are carried out daily of the area around the blood trailer to ensure there are no leakages which would have an adverse impact on the oxygen balance of the ground water.

**Emission Point SE1**

All process discharges to sewer from the installation are via a single emission point, SE1 as identified on the site layout plan which accompanies this application.

Domestic and effluent wastewater produced from operational activities is sent to the on site mechanical treatment system. Effluent waste water is screened in line with the conditions set out in the Licence to Discharge Trade or Sewage Effluent to Sewer to reduce suspended solids, particulate BOD and the potential for the formation of malodorous gases. The effluent is then treated by passing it through four holding tanks which act as sediment tanks to clean the effluent. It is then directed to the local authority sewer in agreement with Mayo County Council. The treated waste water then receives further treatment in the municipal waste water treatment plant.

All effluent arising from the office and factory toilets, washing areas and canteen are discharged downstream of the fat traps.

Under the Licence to Discharge Trade or Sewage Effluent to Sewer issued to Martin Jennings Wholesale Limited by Mayo County Council analysis of the effluent prior to discharge to the sewer is carried out regularly. Attachment E.3 details results of analysis taken by
Environmental Efficiency Consultants of effluent for the purposes of this IPPC licence application. All parameter results were in line with the Discharge Licence as issued by Mayo County Council.

A sampling chamber has been constructed located to the front of the installation, this allows for the taking of samples of the treated effluent in a safe manner. The analysis of the treated effluent is carried out by approved accredited laboratories.

A number of measures have been put in place by Martin Jennings Wholesale Limited in order to minimise discharge levels:

- All blood produced in the factory is pumped from an underground storage tank to an external trailer which is disposed off site daily;
- All green offal, bones, skins and hides produced in the factory are removed daily by licensed hauliers;
- All SRM is stained and removed by a licensed haulier;
- All production floors are securely gridded and soft waste is picked up and transferred to the green offal skip;
- Fat traps are pumped out weekly and disposed off site;
- Awareness is high and every effort is made by staff to minimise effluent levels.

Emission Point NSL1 & Emission Point N1-N4

Noise is not an issue at the site and it is the objective of management at the facility to ensure this continues. A noise assessment was undertaken in 2006 by White Young Green Consultants Ltd. It determined that the facility does not have an adverse impact. Additional site boundary noise emission levels were assessed in 2007. Refer to Table 1.7(i) for results. Location of this assessment is illustrated in AutoCAD drawing file which accompanies this application. In order to ensure that noise remains under control the following mitigation measures are proposed: A regular maintenance programme will be implemented for all plant items onsite to ensure they are operating effectively; all mechanical plant used onsite will be fitted with exhaust silencers and will be maintained in good working order; all vehicle engines will be shut
down when not in use; the number of machines/equipment in operation simultaneously will be minimised where practicable.

**Attachment N° F.1** should contain any supporting information.

**F.2: Emissions Monitoring and Sampling Points**

Identify monitoring and sampling points and outline proposals for monitoring emissions. Table F.2(i) should be completed (where relevant) for air emissions, for emissions to surface waters, for emissions to sewers, for emissions to ground, and for waste emissions. Where ambient environment monitoring is carried out or proposed, Table F.2(ii) should be completed as relevant for each environmental medium.

Include details of monitoring/sampling locations and methods.

**Attachment N° F.2** should contain any supporting information.

**F.3: Tabular Data on Monitoring and Sampling Points**

Applicants should submit the following information for each monitoring and sampling point:

<table>
<thead>
<tr>
<th>Point Code</th>
<th>Point Type</th>
<th>Easting</th>
<th>Northing</th>
<th>Verified</th>
<th>Pollutant</th>
</tr>
</thead>
<tbody>
<tr>
<td>M=Monitoring, S=Sampling</td>
<td>6E-digit GPS Irish National Grid Reference</td>
<td>6N-digit GPS Irish National Grid Reference</td>
<td>Y = GPS used, N = GPS not used</td>
<td>e.g. SO₂, HCl, NH₃</td>
<td></td>
</tr>
</tbody>
</table>

An individual record (i.e. row) is required for each monitoring and sampling point. Acceptable file formats include Excel, Access or other upon agreement with the Agency. A standard Excel template can be downloaded from the EPA website at [www.epa.ie](http://www.epa.ie). This data should be submitted to the Agency on a separate CD-Rom containing sections B.2, E.6 and F.3.

Point source monitoring/sampling refers to monitoring from specific emission points (e.g. from a boiler stack or outlet from a wastewater treatment plant). Examples of ambient monitoring includes monitoring of ambient air quality (e.g. boundary or off-site) or monitoring of river quality upstream/downstream of an effluent discharge.

Refer to Attachment F.3 for information for each monitoring and sampling point. This is contained on the accompanying CD-Rom.
SECTION G: RESOURCE USE AND ENERGY EFFICIENCY

G.1 Give a list of the raw and ancillary materials, substances, preparations, fuels and energy which will be produced by or utilised in the activity.

The list(s) given should be very comprehensive, all materials used, fuels, intermediates, laboratory chemicals and product should be included. Particular attention should be paid to materials and product consisting of, or containing, dangerous substances as described in the EU (Classification, Packaging, Labelling and Notification of Dangerous Substances) Regulations 1994 [SI 77/94]. The list must classify these materials in accordance with Article 2 of these Regulations, and must specify the designated Risk Phrases (R-Phrases) of each substance in accordance with Schedule 2 of the Regulations.

Tables G.1(i) and G.1(ii) must be completed. Copy as required.

Supporting information should be given in Attachment No G.

G.2 Energy Efficiency

A description of the energy used in or generated by the activity must be provided. Outline the measures taken to ensure that energy is used efficiently and where appropriate, an energy audit with reference to the EPA Guidance document on Energy Audits should be carried out.

Resource Use (Electricity)

Bord Gáis supply the electricity requirements for Martin Jennings Wholesale Limited. Electricity is a key raw material used at the facility. Considering the nature of the installation, the refrigeration system, machines, pumps, the generation of compressed air, lighting, heating of the installation and the heating elements for the knife sterilisers and ventilation are presumed to be the main electricity consumers at the facility. The refrigerated areas include chills, freezers and cold stores.

Resource Use (Gas)

Calor Teoranta supplies bulk propane gas to Martin Jennings Wholesale Limited for the on site forklift.

Resource Use (Gas Oil)

Gas oil used to power the on site boilers, is supplied to the plant by Corrib Oil of Claremorris, Co. Mayo. These boilers are used to provide all the hot water needs of the installation.
Resource Use (Diesel Fuel)

The company operates 3 vehicles for the delivery of goods to customers. Corrib Oil supplies the fuel requirements of these vehicles. It should be noted that all refuelling of these vehicles is conducted offsite.

G.2 Energy Efficiency

Energy demand at Martin Jennings Wholesale Limited is met by a combination of oil, gas and electricity. The processes involved in this facility involve high energy consumption associated with refrigeration and heating water. Based on an Energy Audit conducted at the facility in August 2007 by Perma Group Services, it was determined that the refrigeration plant is the largest consumer of electricity on site at 45.35% of the overall load. Other energy using areas include:

1. Lighting – 2.85%
2. Resistive – 33.18%
3. Equipment – 18.61%

By determining the wattage of each load and the hours of operation of these loads, it was possible to calculate the average annual kilowatt-hour use and cost.

<table>
<thead>
<tr>
<th>Load</th>
<th>Average kWh/month</th>
<th>Percentage Cost %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lighting</td>
<td>6,493.4</td>
<td>4.51</td>
</tr>
<tr>
<td>Refrigeration</td>
<td>99,544</td>
<td>69.15</td>
</tr>
<tr>
<td>Air Conditioning</td>
<td>-</td>
<td>0</td>
</tr>
<tr>
<td>Resistive</td>
<td>23,089.5</td>
<td>16.04</td>
</tr>
<tr>
<td>Equipment</td>
<td>14,817.5</td>
<td>10.29</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>143,944.4</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

(Figures based on an Energy Audit undertaken by Perma Group Services, August 2007)
The tables below demonstrate the impact Martin Jennings Wholesale Limited has in terms of energy consumption and CO2 emissions over a twelve month period. The combined emissions from electricity, gas oil, diesel and LPG equates to approximately 45kg CO2.

**Summary of Energy Consumption at Martin Jennings Wholesale Ltd. 2007**

<table>
<thead>
<tr>
<th>Energy Source</th>
<th>Litre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gas Oil (Boiler fuel)</td>
<td>74,000 L</td>
</tr>
<tr>
<td>Diesel Oil</td>
<td>5,200 L</td>
</tr>
<tr>
<td>LPG</td>
<td>4,800 L</td>
</tr>
</tbody>
</table>

**Consumption figures for Electricity, Oil and Gas 2006/2007**

<table>
<thead>
<tr>
<th>Energy Consumption (kWh)</th>
<th>Electricity</th>
<th>Oil</th>
<th>LPG</th>
<th>Total^Note 1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1,699,032</td>
<td>855,360</td>
<td>35,520</td>
<td>2,589,912</td>
</tr>
</tbody>
</table>

Note 1: The energy consumption per tonne of meat produced in 2006/2007 is calculated at 138kWh. It should be noted that the above consumption figures include vehicle oil consumption and space heating consumption.

Energy audits of the facility were carried out by two independent consultants’ Perma Group Services and F&D Developments. Based on their findings a number of recommendations were made which are currently being implemented on site. These include installing Fluoresave units fitted at or near the main distribution boards in the following areas:

1. Fuse board at the back of the building next to the boiler room: lights the boning hall;
2. Fuse board outside reception/changing rooms: lights vets room, reception and offices, hall, service room and locker areas;
3. Fuse board in the cleaning storeroom in boning hall: lights canteen, corridor and offices;

4. Fuse board on the first floor, over boning room: lights packaging room, boning hall;

5. Fuse board in mains intake room: lights abattoir;

6. Fuse board in mains intake room: lights packing and store, chill room, loading bay lights;

7. Fuse board over cattle pens: lights cattle pen area;

8. Low energy lights – reception area

The fluoresave unit supplies mains voltage for ignition. The unit allows a short time delay period for lamp warm-up to ensure stable operation of the lights, before switching to a lower energy saving voltage. When fluoresave switches to Energy Saving Mode, it reduces the voltage by way of a step-down on the transformer. During operation, fluoresave continuously monitors the variation in the output of the current and mains voltage. When additional lights within the circuit are switched on, fluoresave will revert back to mains voltage for ignition and wait for the current to stabilize before returning to the Energy Saving Mode. If for any reason a fault occurs with the fluoresave unit, it automatically cuts itself out of the circuit delivering mains power to the lighting network. The fluoresave unit is fitted with status indicator lights to indicate when the unit is in energy saving mode or to indicate any fault condition. Independent electrical auditors have tested fluoresave in the workplace and compared power consumption before and after connection of fluoresave. The auditors confirmed that the current required to operate the lamps was reduced by more than 35% with little discernable loss in lux levels.

The environmental benefits associated with the implementation of this system include:

1. fluoresave reduces the energy to operate fluorescent and other discharge lights, which reduces the impact on the environment.

2. By reducing the voltage to the lamps fluoresave reduces their running temperature, thus extending their life considerably. This has a valuable impact on lamp replacement costs and on the environmental impact of lamp disposal.
3. The burning of fossil fuels for electrical power production generates enormous greenhouse gas emissions such as carbon and other environmentally destructive elements. The Kyoto World Greenhouse Gas Emissions Agreement requires us to reduce our carbon emissions. The beneficial effect of reducing the environmental impact of energy creation cannot be overstated. For users, fluoresave can aid ISO 14001 compliance, improve energy ratings under the Energy Performance of Buildings Directive and offer carbon trading opportunities.

In order to improve energy efficiency at the facility, Martin Jennings Wholesale Limited has installed SavaControl units, which have been successfully used in industry to cut the running cost of commercial refrigeration by up to 20%. As well as savings, SaveControls protects the air-conditioning equipment by reducing energy wastage in electric motors running at low load. They also eliminate wasted power and ensure that air-conditioning compressor units run cooler with less vibration, enhancing motor life and reducing noise.

SavaControl units have been installed in the following areas:

1. Boiler house
2. Main intake
3. Abattoir
4. Boning hall
5. Containers x 4
<table>
<thead>
<tr>
<th>Ref. Nº or Code</th>
<th>Material/Substance(1)</th>
<th>CAS Number</th>
<th>Danger(2) Category</th>
<th>Amount Stored (tonnes or as specified)</th>
<th>Annual Usage (tonnes or as specified)</th>
<th>Nature of Use</th>
<th>R(3) - Phrase</th>
<th>S(3) - Phrase</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>SANITISERS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>608018</td>
<td>Quatdet Clear</td>
<td>5064-31-3</td>
<td>C, Xn</td>
<td>3 x 20 L</td>
<td>720 L</td>
<td>Disinfectant</td>
<td>R36/38</td>
<td>S24/25</td>
</tr>
<tr>
<td>665943</td>
<td>Zalpon Bactericidal</td>
<td>N/A</td>
<td>N/A</td>
<td>8 X 5L</td>
<td>480 L</td>
<td>Soap based washing cream</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>N/A</td>
<td>Polypro VC17: contains tetrasodium, disodium, alkyl alcohol</td>
<td>64-02-8; 68551-13-3</td>
<td>Xn, C, Xi</td>
<td>8 X 20 L</td>
<td>1,920 L</td>
<td>Cleaning/maintenance</td>
<td>R36;38</td>
<td>S26;37</td>
</tr>
<tr>
<td>659227</td>
<td>Domestos</td>
<td>N/A</td>
<td>Xi</td>
<td>14 X 5 L</td>
<td>840 L</td>
<td>Bleaching Agent</td>
<td>R36/38</td>
<td>S26</td>
</tr>
<tr>
<td>N/A</td>
<td>Delladet VS2: contains cationic surfactants; non-ionic surfactants; sodium carbonate</td>
<td>497-19-8</td>
<td>Xn, C, Xi</td>
<td>6 X 20 L</td>
<td>1440 L</td>
<td>Concentrated detergent with disinfectant</td>
<td>R38/41</td>
<td>S26; 37/39</td>
</tr>
<tr>
<td>631358</td>
<td>Deosan Red Label Hypochlorite</td>
<td>N/A</td>
<td>N/A</td>
<td>4 x 20L</td>
<td>960L</td>
<td>Concentrated liquid bactericide for cleaning</td>
<td>R31</td>
<td>S2; 28; 45; 50</td>
</tr>
<tr>
<td>607101</td>
<td>Titan Liquid Sanitiser</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
<td></td>
<td>Hard surface cleaner/disinfectant</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>N/A</td>
<td>Soft Care Alcoplus</td>
<td>N/A</td>
<td>N/A</td>
<td>6 x 800 ml</td>
<td>28.8 L</td>
<td>Hand disinfectant</td>
<td>R10</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>FUEL</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N/A</td>
<td>Diesel</td>
<td>68334-30-5</td>
<td>Xn</td>
<td>6,166 L</td>
<td>74,000 L</td>
<td>Fuel</td>
<td>R40, R65, R66</td>
<td>S43, S45, S53, S61, S62</td>
</tr>
</tbody>
</table>

For inspection purposes only. Consent of copyright owner required for any other use.
<table>
<thead>
<tr>
<th>Ref. No or Code</th>
<th>Material/Substance(1)</th>
<th>CAS Number</th>
<th>Danger(^{(2)}) Category</th>
<th>Amount Stored (tonnes or as specified)</th>
<th>Annual Usage (tonnes or as specified)</th>
<th>Nature of Use</th>
<th>R(^{(3)}) - Phrase</th>
<th>S(^{(3)}) - Phrase</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td>Liquified Petroleum Gas (LPG)</td>
<td>68476-85-7</td>
<td>Xn, F</td>
<td>400 L</td>
<td>4,800 L</td>
<td>Fuel</td>
<td>R12, R65</td>
<td>S36/37/39, S62</td>
</tr>
<tr>
<td>N/A</td>
<td>Gas Oil</td>
<td>68476-30-2</td>
<td>Xn</td>
<td>433 L</td>
<td>5,200 L</td>
<td>Fuel</td>
<td>R40, R65, R66</td>
<td>S2, S24, S36/37, S43, S62</td>
</tr>
<tr>
<td>N/A</td>
<td>Boneguard</td>
<td>N/A</td>
<td>N/A</td>
<td>4 boxes</td>
<td>12 boxes</td>
<td>Packaging Aid</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>N/A</td>
<td>CFS Shrink Pouches</td>
<td>N/A</td>
<td>N/A</td>
<td>60 boxes</td>
<td>1000 boxes</td>
<td>Packaging</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>N/A</td>
<td>Cryovac BB905TBG &amp; BB805TBG Bags</td>
<td>N/A</td>
<td>N/A</td>
<td>20 boxes</td>
<td>500</td>
<td>Packaging</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>N/A</td>
<td>Blue Liner</td>
<td>N/A</td>
<td>N/A</td>
<td>1 box</td>
<td>8 boxes</td>
<td>Personal Protection</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>N/A</td>
<td>Rope</td>
<td>N/A</td>
<td>N/A</td>
<td>20 pallets</td>
<td>20 pallets</td>
<td>Packaging</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>N/A</td>
<td>Coats</td>
<td>N/A</td>
<td>N/A</td>
<td>2 boxes</td>
<td>3 boxes</td>
<td>Surface Disinfectant</td>
<td>R11, 22, 38, 43</td>
<td>N/A</td>
</tr>
<tr>
<td>N/A</td>
<td>Boxes</td>
<td>N/A</td>
<td>N/A</td>
<td>60 boxes</td>
<td>12 boxes</td>
<td>Packaging</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>N/A</td>
<td>Disinfectant Wipes: contains benzyl ammonium chloride; polymeric hydrochloride; Ethanol</td>
<td>68424-85-1; 27083-27-8; 64-17-5</td>
<td>C, Xi</td>
<td>20 boxes</td>
<td>60 boxes</td>
<td>Labeling</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>N/A</td>
<td>Food Lube</td>
<td>N/A</td>
<td>N/A</td>
<td>20 boxes</td>
<td>60 boxes</td>
<td>Lubricating grease</td>
<td>R12, 38, 51/53, 67, 61</td>
<td>N/A</td>
</tr>
<tr>
<td>N/A</td>
<td>Pallets</td>
<td>N/A</td>
<td>N/A</td>
<td>2 x 5 L</td>
<td>60 L</td>
<td>Storage</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>N/A</td>
<td>Ink</td>
<td>N/A</td>
<td>N/A</td>
<td>20 pallets</td>
<td>400 g continuous recycling</td>
<td>Meat Marking Ink</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Ref. No. or Code</td>
<td>Material/Substance(^{(1)})</td>
<td>CAS Number</td>
<td>Danger(^{(2)}) Category</td>
<td>Amount Stored (tonnes or as specified)</td>
<td>Annual Usage (tonnes or as specified)</td>
<td>Nature of Use</td>
<td>R(^{(3)}) - Phrase</td>
<td>S(^{(3)}) - Phrase</td>
</tr>
<tr>
<td>-----------------</td>
<td>-----------------------------</td>
<td>------------</td>
<td>--------------------------</td>
<td>--------------------------------------</td>
<td>--------------------------------------</td>
<td>---------------</td>
<td>-----------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>N/A</td>
<td>Patent Blue V Food Grade Dye</td>
<td>2519-30-4</td>
<td>N/A</td>
<td>10 kg 4 boxes</td>
<td>20 kg 40 boxes</td>
<td>Category 1 Dye</td>
<td>N/A</td>
<td>S22</td>
</tr>
<tr>
<td>N/A</td>
<td>Clips (Beef and Lamb)</td>
<td>N/A</td>
<td>N/A</td>
<td>6 box 30 20</td>
<td>60 boxes 250 150</td>
<td>Packaging</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>N/A</td>
<td>Personal protective equipment</td>
<td>n/a</td>
<td>n/a</td>
<td>6 box 30 20</td>
<td>60 boxes 250 150</td>
<td>Personnel Safety</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>N/A</td>
<td>Knifes (Victorinox)</td>
<td>N/A</td>
<td>N/A</td>
<td>6 box 30 20</td>
<td>60 boxes 250 150</td>
<td>Processing</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>N/A</td>
<td>Knifes (Dick)</td>
<td>N/A</td>
<td>N/A</td>
<td>6 box 30 20</td>
<td>60 boxes 250 150</td>
<td>Processing</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Notes:
1. In cases where a material comprises a number of distinct and available dangerous substances, please give details for each component substance.
2. c.f. Article 2(2) of SI No 77/94
3. c.f. Schedules 9 and 10 of SI No 62/2004
<table>
<thead>
<tr>
<th>Ref. No. or Code</th>
<th>Material/Substance(1)</th>
<th>TA Luft Class 1, 2 or 3</th>
<th>Odour</th>
<th>Threshold µg/m³</th>
<th>EU Lists I and II (Tick and specify Group/Family Number)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>List I</td>
</tr>
<tr>
<td>Diesel</td>
<td>Yes</td>
<td></td>
<td>Yes</td>
<td>Characteristic</td>
<td>√ (7)</td>
</tr>
<tr>
<td>Liquified Petroleum Gas (LPG)</td>
<td>Yes</td>
<td></td>
<td>Yes</td>
<td>Characteristic</td>
<td>√ (7)</td>
</tr>
<tr>
<td>Gas Oil</td>
<td>Yes</td>
<td></td>
<td>Yes</td>
<td>Characteristic</td>
<td>√ (7)</td>
</tr>
<tr>
<td>Quatdet Clear</td>
<td>Yes</td>
<td></td>
<td>Yes</td>
<td>Characteristic</td>
<td></td>
</tr>
<tr>
<td>Divoshaum 311CL</td>
<td>Yes</td>
<td></td>
<td>Yes</td>
<td>Characteristic</td>
<td></td>
</tr>
<tr>
<td>Zalpon Bactericidal</td>
<td></td>
<td></td>
<td>Yes</td>
<td>Characteristic</td>
<td></td>
</tr>
<tr>
<td>Polypro VC17: contains</td>
<td></td>
<td></td>
<td>Yes</td>
<td>Characteristic</td>
<td></td>
</tr>
<tr>
<td>tetradsodium, disodium, alkyl alcohol</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Domestos</td>
<td>Yes</td>
<td></td>
<td>Yes</td>
<td>Characteristic</td>
<td></td>
</tr>
<tr>
<td>Delladet VS2: contains</td>
<td></td>
<td></td>
<td>Yes</td>
<td>Characteristic</td>
<td></td>
</tr>
<tr>
<td>cationic surfactants; non-ionic surfactants; sodium carbonate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deosan Red Label</td>
<td>Yes</td>
<td></td>
<td>Yes</td>
<td>Faint chlorine</td>
<td></td>
</tr>
<tr>
<td>Hypochlorite</td>
<td>Yes</td>
<td></td>
<td>Yes</td>
<td>Characteristic</td>
<td></td>
</tr>
<tr>
<td>Soft Care MS MED+</td>
<td></td>
<td></td>
<td>Yes</td>
<td>Characteristic</td>
<td></td>
</tr>
</tbody>
</table>

Notes (cont.): 4. The European Commission priority candidate list