M E M O R A N D U M

DATE: 10/06/98

TO: Each Board Member

FROM: Leo Sweeney

RE: Proposed Determination for Donegal Meat Processors Limited application for an IPC licence.

Application Details	
Name of applicant:	Donegal Meat Processors Limited
Location of activity:	Drumnashear, Carrigans, Co. Donegal
Class and Nature of activity:	The slaughter of animals in installations where the daily capacity exceeds 1,500 units and where units have the following equivalents: 1 sheep = 1 unit, 1 head of cattle = 5 units
Reg. No.	187
Licence application received:	01/10/96
Number of employees	120
Notices under article 11(2)(b)(ii) issued:	26/11/96 15/05/97 03/02/98
Information under article 11(2)(b)(ii) received:	02/05/97 15/12/97 18/02/98
Information under article 17 requested	09/04/98
Information under article 17 received	08/05/98
Date of site visit(s)	25/11/96
Local Authority	Donegal County Council
Submissions received:	1. Department of the Marine 2. Mr & Ms Sharkey, Doire, Drumnashear, Carrigans, Co. Donegal 3. Environment & Heritage Service, Dept. of the Environment for Northern Ireland

The Company:

The initial IPC application was made in the name of AIBP Limited t/a AIBP Carrigans. The Agency was informed in a correspondence dated 6th January 1998 that the company had changed ownership. Donegal Meat Processors Limited, the new owner, subsequently provided the Agency with details of the change of ownership which included a copy of the Certificate of Incorporation.

The plant is designed to slaughter a maximum of 400 cattle and 2,000 sheep per day equivalent to 4,000 units.

Cattle and sheep are delivered to lairage from where they are taken and slaughtered. Blood is allowed to drain from the slaughtered animals into an underground collection trough. Blood (process) from here is vacuum pumped to the blood treatment plant where anti-coagulant is added after which it is chilled and stored on-site in an overground collection tank. Processed blood is subsequently removed from the site and transported by sealed tanker to APC Technologies Craigavon, Co. Armagh, for further processing.

Blood (waste) arising primarily from washing operations is directed to an overground collection tank. From here it is transported to Ronan Industries, Cashel, Co. Tipperary for further processing for use in animal feed.

Following slaughtering the animal is conveyed through the slaughter hall during which the hide/pelt is removed as well as the head, feet and offal.

Hides/pelts are transported off-site for tanning and fell-mongering.

Red offal which may include heart, kidney's, lungs, tongue etc. are trimmed, chilled packed and placed in cold storage for sale as dog food.

Animal fats removed and trimmed from the carcass are cooked, following which the cooked material is centrifuged to separate tallow oil from greaves. Tallow is pumped to two overground storage tanks from where it is removed off-site periodically. Greaves is bagged for sale to pet food manufacturers. The capacity falls below the threshold for Class 7.1 *The manufacture of animal oils and fats where the capacity for processing raw material exceeds 40 tonnes per day.*

Tripe (derived from stomachs of ruminants) is washed and stored in containers prior to dispatch.

Casings (derived from cattle gut) are separated out, washed, rolled, salted and packed into containers for dispatch.

Paunch (partly digested food) is removed from animal stomachs, dewatered and conveyed to a trailer, from where it is transported to a landspreading area for storage and disposal.

Specified risk material (SRM) is separated and stored for transport to the designated rendering facility.

Offal, other than SRM including feet, udders, bone and other material are transported off-site daily, for rendering.

The animal carcass is split and conveyed to chilling and quartering. Quarters may be dispatched off-site in refrigerated trucks or sent to the deboning hall. Following deboning the product is vacuum packed or blast frozen and stored prior to dispatch.

Operating hours vary depending on the time of year but the plant normally operates for 5 days per week (6:00a.m. to 10:00p.m.) during the busy season and 3-5 days per week during the off-season (8:00a.m. to 8:00p.m.).

Emissions to Air

There are two boilers on site which are fuelled on gas oil. The boiler stack heights were calculated using the HMIP *Chimney Heights* guidance note and were found to be acceptable.

Minor emissions arise from an on-site fat rendering process but there is no direct point source emission to atmosphere.

There is no history of odour complaints associated with the operation of this facility.

Emissions to Water

The facility is currently regulated under a single media *Licence to Discharge Trade or Sewage Effluent to the River Foyle* under the Local Government (Water Pollution) Act, 1977, issued by Donegal County Council. The Foyle is tidal at the point of discharge of WW from this facility.

A report *"Proposals For A Water Quality Management Strategy For The Foyle Catchment And Lough Foyle"* September 1997, was undertaken by the Department of the Environment for Northern Ireland, the Department of the Environment and Local Government (Dublin), Donegal Co. Co. and others. The proposals have specified esturarine and coastal targets to *"...protect its commercial shellfish, game angling, recreation and amenity areas".* There is significant dilution available for this discharge, in the order of 1250 dilutions at 95 percentile flow, and tidal influences further add to this dilution capacity.

Schedule 1(i) Emissions to Waters of the proposed determination (PD) requires the licensee to meet the requirement of New Plant BATNEEC for BOD, SS and OFG, from the date of grant of the IPC licence. Condition 6.7 requires the company to put forward proposals and report on the success of reducing nutrient inputs to the receiving system.

The wastewater treatment plant (WWTP) consists of coarse screening, balance tank, oxidation ditch and final clarifier. The company have recently upgraded the WWTP through the introduction of a new balance tank.

The following Conditions in the PD provide for the monitoring and control of WWTP processes:

"6.5 The licensee shall within four months of the date of grant of this license provide automatic flow monitoring equipment to monitor emissions to water from the WWTP. The automatic flow monitoring equipment shall continuously indicate, integrate and record the flow in meters cubed per hour and the cumulative daily flow in meters cubed per day.

6.6 The licensee shall within four months of the date of grant of this license, provide a continuous dissolved oxygen monitoring and recording system on the WWTP aeration tank(s). This monitor shall be linked to an alarm system, which will provide for an immediate response in the event that the dissolved oxygen levels fall below an appropriate range."

Surface Water

Under *Schedule 3(i) Surface Water Discharge Monitoring* of the PD, there is a requirement to monitor surface waters at the site of the activity.

Condition 9.1.4 of the PD requires that *"The licensee shall within six months from the date of grant of this licence submit to the Agency for agreement a surface water monitoring programme for surface waters which bisect the landspreading area...."*.

The conditions below have been inserted to the PD to provide for the protection of groundwater and surface water:

"9.3.3 The licensee shall, within four months of the date of grant of this licence submit to the Agency for agreement proposals for bunding of blood storage tanks and the blood processing/treatment area. Such proposals shall include such details as capacity, timeframes and testing of bund structures.

9.3.4 Rainwater gullies and inspection chambers shall be adequately sealed to prevent the ingress of contaminating material within three months from the date of grant of this license.

9.3.7 The licensee shall undertake a programme of testing and inspection of underground tanks and pipelines to ensure that all underground blood, effluent and foul sewer pipes are tested at least once every three years. A report on such tests shall be included in the AER."

Waste

The proposed determination contains requirements for the handling of SRM and infectious wastes. As already discussed animal by-products such as bones, offal and blood are sent off site for further processing. Animal fat, tripe and casings are treated on-site as described above.

Dewatered paunch, lairage and truck wash as well as WWTP sludge have all been identified as sources of waste material for landspreading. Paunch is stored on open ground at one of the landbanks prior to land application in the spring. Lairage and truck wash waste are piped to an open concrete tank on-site from where it is collected for landspreading.

Waste sludge from the WWTP is removed from the process in liquid form for landspreading.

Six landbanks have been identified in the IPC application for landspreading of wastes from this facility. An area within one of the landbanks specified, where paunch is presently stored on open ground has been identified in the *Aquifer Vulnerability Assessment* report as being *"not generally acceptable"* for storage purposes. Condition 7.6.6 of the PD requires the licensee to provide the Agency with a report on the adequacy and suitability of both on-site and off-site waste storage arrangements for landspreading purposes, and directs the licensee not to use any "not generally acceptable" areas until the Agency is satisfied on the basis of the report.

The proposed determination includes a number of conditions relating to landspreading and requires the applicant to submit a nutrient management plan again within four months from grant of licence. This will provide for any changes in relation to the landbanks that may be required by the applicant.

Groundwater

The PD contains a requirement under Condition 9.2.1 for the licensee to submit within six months a groundwater monitoring programme for wells located within the landspreading area.

Noise

The Agency have not to date received any noise complaints in relation to the operation of this facility. The PD specifies "*Guidance Note for Noise in relation to Scheduled Activities*"levels of 45 dBA and 55 dBA at any noise sensitive locations.

Confidential Information

None submitted

Submissions

Three submissions were received in respect of this IPC licence application as follows:

1. Department of the Marine

A submission was received from the Department of the Marine dated 06 November 1996. It advises that BOD/SS levels for discharges to surface waters be set at 20/30 mg/l and raises concerns about increasing levels of phosphorus in watercourses.

Response:
The ELV specified for BOD/SS in the PD is set at 40mg/l for both parameters. These figures represent BATNEEC for this sector and as stated above considerable dilutions are available to ensure minimal impact

2. Mr & Ms Sharkey, Doire, Drumnashear, Carrigans, Co. Donegal

A submission was received from Mr & Ms Sharkey on the 26 August 1997. Their submission primarily relates to landspreading of blood products and open burning of wastes on lands owned by the above facility and located adjacent to the complainants residence.

Since the company were made aware of the above submission, landspreading of blood products and burning of wastes on the said lands have been discontinued.

Response:
Processed blood is removed from the site daily and transported to APC Technologies, Craigavon, Co. Down, for recovery. Waste blood (washings of slaughtering area, equipment etc.) is removed periodically from the site and transported to Ronan Industries, Cashel, Co. Tipperary, for recovery. Under Schedule 2(ii) Other Wastes for Disposal/Recovery of the PD, any variation in the disposal/recovery arrangements for bloods may only be undertaken with the prior notice and prior written agreement of the Agency.

The disposal of wastes (including the burning of wastes) is strictly controlled under the PD.

3. Environment & Heritage Service, Dept. of the Environment for Northern Ireland

A submission was received from the above Department on the 6 May 1998. The Environment & Heritage Service state that they have provided water quality monitoring data for the Foyle estuary to the facility. They further state that the facility are aware of a Water Quality Management Strategy for the Foyle catchment. They believe that the effluent discharge is to St. Johnstown Burn.

Response:
The water quality monitoring data for the Foyle estuary provided, has been used by the Agency in determining the impact of the discharge on the receiving system.

The effluent discharge in question is not to St. Johnstown Burn but is directly to the Foyle estuary via a land drainage outfall.

Recommendation

The Board approve the proposed determination as submitted..

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L. Sweeney.

Inspector
Licensing & Control