



Submission

Submitter:	Miss Siobhan Murphy
Organisation Name:	HSE
Submission Title:	HSE Submission 0040-03 EHS1984
Submission Reference No.:	S010140
Submission Received:	05 November 2021

Application

Applicant:	Anglo Beef Processors Ireland Unlimited Company
Reg. No.:	P0040-03

See below for Submission details.

Attachments are displayed on the following page(s).

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Industrial Emissions Licence Application
HSE Submission Report
Environmental Health Service Consultation Report

Date: 5th November 2021

Our reference: 1984

Report to: Environmental Licensing Programme,
Office of Environmental Sustainability,
Environmental Protection Agency,
Johnstown Castle Estate,
Co.Wexford.

EPA Reference: P0040-03

Type of Consultation: Industrial Emissions Licence Application

Applicant: Anglo Beef Processors Ireland Unlimited Company, Kilcommon,
Cahir, Co. Tipperary

Location: Christendom, Ferrybank, Co Waterford.

Nature of Activity: The disposal or recycling of animal carcasses and animal waste with a treatment capacity exceeding 10 tonnes per day.

Introduction

The following HSE Departments were notified of the consultation request for the licence application on 30 September 2021

- Emergency Planning – David O’Sullivan
- Estates – Helen Maher
- Assistant National Director for Health Protection – Kevin Kelleher / Helen Mulcahy
- CHO – Kate Killeen White

This report only comments on Environmental Health impacts of the licence application.

General

The 'Waterford Proteins' plant was constructed in 1972 and was originally operated by Clover Meats as a rendering plant. Anglo Beef Processors (ABP) acquired the facility and the adjacent beef processing plant in 1985 and has operated it as a rendering plant since. The plant was granted an IPC licence by the EPA in 1997 (P0040-01). A revised licence was issued in 2001 (P0040-02). A review of this licence was instigated by the EPA on 8 December 2020 due to material changes in the nature and extent of emissions at the installation.

All commitments to future actions, including mitigation and further testing have been taken as read, and all data has been accepted as accurate. No additional investigations/measurements were undertaken in the review of the application.

In respect of this application, the areas reviewed were those of concern to Environmental Health and which are:

- Any potential contamination of surface water
- Any potential contamination of ground water
- Emissions to air including noise and odour

Site Location

The Waterford Proteins plant is situated in Christendom, Ferrybank, Waterford, on a 5.5 hectare site adjacent to the estuary on the edge of Waterford city. The area surrounding the facility is predominantly industrial with a small number of residential dwellings in close proximity to the plant.

Surface Water

The Environmental Health Service has considered any potential risk of contamination of surface water from the activities undertaken at the Waterford Proteins plant. The existing licence (P0040-02) stipulates that *'No potentially polluting substance or matter shall be permitted to discharge to off-site surface waters or off-site storm drains'*. Approval has been obtained from the EPA for the diversion of stormwater to the Wastewater Treatment Plant at ABP Waterford where it is treated.

Attachment 7.1 'Emission Overview Attachment' indicates that there are no emissions to surface water/discharges to surface water from the facility and that there are two storm water emission points, which discharge stormwater from non-process related areas to land drains. Monitoring of this discharged stormwater is undertaken on a monthly basis and the parameters used are pH, Total Ammonia and COD. Chapter 6 of Attachment 7.1.3.3 'Emissions Impact Assessment' states that *'there will be no potentially polluting substances released to surface waters from the Waterford Proteins site'*.

Trigger values established for stormwater emissions in accordance with the EPA Guidance (Guidance on the Setting of Trigger Values for Storm Water Discharges to Off-Site Surface Waters at EPA IPPC and Waste Licensed Facilities, 2012) are used in the monitoring of stormwater discharges from the Waterford Proteins plant. The results of monitoring for the two surface water monitoring points from 2018 -2020 are contained in Appendix D of Attachment 7.1.3.1 'Emissions Compliance Report'. There were no exceedences of trigger levels during this period.

Wastewater Emissions

The Environmental Health Service (EHS) notes the applicant's intention to reduce water usage on site with a consequent reduction in the volume of wastewater going for treatment from the 400 cubic metres permitted in the current Industrial Emissions licence to an anticipated 300 cubic metres per day. This reduction in the volume of wastewater will result in an increase in the concentration of contaminants and the applicant has requested *'to increase the concentration limits of licenced parameters in this wastewater as reduced wastewater volume will increase the concentration of contaminants'*. (Chapter 4.1 'Effluent Emissions' of Attachment 7.1.3.3 Emissions Impact Assessment')

The EHS recommends that the applicant ensures that the existing WWTP is suitably constructed to cater for the anticipated reduction in wastewater volume and that this proposed reduction will not negatively impact on the operation and performance of the WWTP.

Ground Water

The Waterford Proteins site is underlain by the Waterford Groundwater Body, which is a 'Regionally Important Fractured Aquifer'. Reference to the GSI Vulnerability Groundwater Map indicates that the vulnerability of the bedrock aquifer has been classed as moderate for the northern section of the site and high for the southern section of the site.

The nearest watercourse is the River Suir which is approximately 280 m south-west of the site. The Waterford Groundwater Body has been classified by the EPA as having 'Good Status' based on quality data for the period 2013-2018.

Waterford Harbour, which is located approximately 11km from the Waterford Proteins site, is designated as a shellfish designated area under the EC (Quality of Shellfish Waters) (Amendment) Regulations 2009. The Waterford Harbour Characterisation Report (No. 35) states that the water quality in the main shellfish designated area is of moderate quality due to excessive levels of dissolved inorganic nitrogen.

Attachment 7.1 'Emissions Overview' indicates that there are no emissions or emission points to groundwater from the Waterford Proteins plant.

Emissions to air including noise and odour

Noise

The site is located in a primarily industrial area of the Christendom, Ferrybank, which is in the Kilkenny County Council functional area but which has a Waterford postal address. The 5.5 hectare site is located on the outskirts of Waterford City. Attachment 7.1.3.2 'Receiving Environment' describes the surrounding land use as

- Industrial units to the northwest of the site; agricultural land borders the north and a housing development is located approximately 400m north of the site
- Two residential dwellings are located 125m and 250m south of the site. The River Suir is located c.280m south west of the site
- The site is bordered by agricultural land to the east
- Anglo Beef Processors (ABP) is situated approximately 10m west of the Waterford Proteins site boundary.

The Waterford Proteins site operates in accordance with the noise limits specified in the existing Industrial Emissions licence (P0040-02) which are

Max. noise level daytime dB L _{A,r,T} (30 mins)	Max. noise level night dB L _{eq,T} (15-30 mins)
55	45

The Environmental Health Service emphasises that these values are maximum limits and recommend that best practice is adopted to ensure that noise levels from the facility are minimised

Noise monitoring is undertaken on an annual basis in accordance with Condition 9.3 of the licence.

Noise monitoring is undertaken at four site boundary locations. Six noise sensitive locations, comprising individual residential dwellings and housing estates, have been identified in the vicinity of the site. **It is recommended that consideration be given to relocating the monitoring points to noise sensitive locations in order to ensure that limits applied in the licence are applicable.**

Attachment 7.1.3.1 'Emissions Compliance Report' indicates that one noise complaint was received during the period 2018-2020. This complaint was investigated and corrective action implemented.

The 'Emissions Compliance Report' indicates that all monitoring points were deemed compliant with the Waterford Proteins licence limits for 2018, 2019 and 2020. Attachment 7.1.3.3 'Emissions Impact Assessment' states that *'there are no changes to the [noise] emissions profile of the site as part of this licence review'*

Odour

Attachment 7.1.3.3 'Emissions Impact Assessment' states that *'Waterford Proteins sources its raw materials mainly from abattoirs and fallen animal licenced collectors throughout Ireland'* and that *'the potential impacts on local air quality from the site have been identified as due to emissions from the thermal oxidiser (TO)'*. Heat which is recovered from the Thermal Oxidiser is used to generate steam from the rendering process and to heat the tallow storage tanks.

Application Form 7.4.1 'Emissions to Atmosphere – Main and Fugitive Emissions' indicates that there are two main emission points to atmosphere (AEP-1 and AEP-2)

All production buildings on the Waterford Proteins site are maintained under negative pressure. Air from these buildings is ventilated through stainless steel ducting to a woodchip bed biofilter (AEP- 1) which is used to treat odour emissions from buildings and storage tanks.

The principal odour abatement system at the facility is the thermal oxidiser (AEP-2) which is *'used to treat vapour emissions from the continuous cooker (rendering process) and other process areas'*.

The HSE notes that as the applicant has surplus processing capacity it proposes to increase the volume of raw material accepted on a daily basis from the current 375 tonnes per day to a proposed 600 tonnes per day.

The Environmental Health Service recommends that the EPA are satisfied that current odour mitigations measures and odour abatement systems have the capability to address any potential increase in odour emissions arising as a result of this increased volume of raw material.

Air dispersion modelling was undertaken using the AERMOD dispersion model and the results of a detailed study are contained within the Emissions Impact Assessment attachment. The study concludes that *'modelling results indicate that the ambient ground level concentrations will be below the relevant air quality standards or guidelines for the protection of human health for all parameters under maximum operation of the facility'* and that *'the long-term maximum concentrations occur near the northern and north eastern boundaries of the facility'*

As a result of the applicants proposal to increase the volume of raw materials accepted, it is recommended that a weekly odour monitoring programme is undertaken at the northern and north eastern site boundary during the summer months (June to September inclusive) to assess the long-term maximum odour concentrations at these locations and to verify the effectiveness of on- site odour mitigation measures

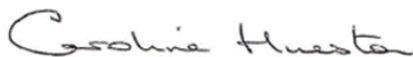
Conclusion

The Environmental Health Service makes the following recommendations in respect of this licence application

- **The EHS recommends that the applicant ensures that the existing WWTP is suitably constructed to cater for the anticipated reduction in wastewater volume and that this proposed reduction will not negatively impact on the operation and performance of the WWTP.**
- **Best practice is adopted in the operation of the Waterford Proteins facility to ensure that noise levels from the facility are minimised**
- **Consideration be given to relocating the monitoring points to noise sensitive locations in order to ensure that limits applied in the licence are applicable**
- **That the EPA are satisfied that current odour mitigations measures and odour abatement systems have the capability to address any potential increase in odour emissions arising as a result of this increased volume of raw material.**
- **A weekly odour monitoring programme is undertaken at the northern and north eastern site boundary during the summer months (June to September inclusive) to assess the long-term maximum odour concentrations at these locations and to verify the effectiveness of on- site odour mitigation measures**
-



Siobhan Murphy
Principal Environmental Health Officer
Local Health Office
Cork Road
Waterford



Environmental Health Officer
Environment OU
Ennistymon Health Centre
Ennistymon
Co. Clare



Dial 999 / 112 – Request the service you require: An Garda Síochána, Ambulance Service and / or Fire and Rescue Service

WHEN YOU ARE CONNECTED TO THE REQUISITE SERVICE(S)

<u>GIVE THE FOLLOWING INFORMATION</u>	
This is: _____ Eircode _____ (Name, Telephone Number and Eircode Address of site)	
<i>An incident has occurred at this site - standby for ETHANE message</i>	
E	
	Exact location of the incident
T	
	Type of incident, e.g.: fire, explosion, gas leak, etc
H	
	Hazards – current and potential
A	
	Access and Egress – what is the safest approach route for responding emergency services and where is your emergency services meeting point (RVP)
N	
	Number of casualties and their condition – specify adult / children if known
E	
	The emergency services present and required
<i>N.B. If you require another emergency service stay on the line and repeat the steps again</i>	

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**R.V.P.
No.1**

HSE South Emergency Management Consultation Report			
Report to	Siobhan Murphy, PEHO, Waterford	Date	4th October, 2021
Type of consultation: EIS <input type="checkbox"/> Scoping <input type="checkbox"/> Screening <input type="checkbox"/> EIAR <input type="checkbox"/> EPA <input type="checkbox"/>			
Other: Industrial Emissions (IE) Licence Application/Review received EPA043322			
Authority	HSE / EPA		
Reference Number	EHIS Ref. No. 1984 EPA Ref. No. P0040-03		
EM Reference Number	EMENV100		
Applicant (Consultants)	Anglo Beef Processors Ireland Unlimited, Cahir, Co. Tipperary		
Proposal	The disposal or recycling of animal carcasses and animal waste with a treatment capacity exceeding 10 tonnes per day at Christendom, Ferrybank, Waterford		

HSE South Emergency Management Observations:

Please be advised that the HSE South Emergency Management function does not have any specific observations to make with respect to this application. However, please note the following recommendations within the context of site operations:

1. Should an incident occur at the site and the site operator requires the assistance of the emergency services, the incident information should be provided in the `ETHANE` format (please see attached).
2. Emergency Services access to the site should be clearly identified. This should be undertaken via appropriate high visibility signage, i.e. a green sign with a yellow border and white lettering citing the abbreviation RVP.
3. The site should have a mechanism in place to account for personnel during an evacuation in order to provide the responding emergency services with an estimate of the number of people accounted and unaccounted for.
4. The site should identify any critical / vulnerable facilities within the geographical catchment area, such as hospitals, schools, nursing homes, etc, that could be directly or indirectly affected by an incident at the site.
5. Where the `off-site` impacts of an incident at the site affects a vulnerable cohort / population such as children within crèches, schools; patients / clients / residents within nursing homes, etc; the emergency services will require assistance from the site operator in determining the impact on the local community.
6. The site operator is encouraged to develop a business continuity plan that includes a plan for severe weather. For more advice on this, please see the Department of Business, Enterprise and Innovation, *Business Continuity Planning in Severe Weather*.
<https://dbei.gov.ie/en/Publications/Publication-files/Business-Continuity-Planning-in-Severe-Weather-Check-List-for-Businesses.pdf>

All correspondence or any queries with regard to this report should be forwarded to Ms. Maryanne Horgan, Emergency Management Office, HSE South, Eye, Ear and Throat Hospital, Western Road, Cork, T12 WP62 or maryanne.horgan@hse.ie



Feidhmeannacht na Seirbhíse Sláinte
Health Service Executive

Environmental Health Department,
HSE South -Waterford
Waterford Community Services,
Cork Road
Waterford.

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Email siobhan.murphy6@hse.ie

Date: 05 November 2021
Name: Environmental Licensing Programme
Office of Environmental Sustainability
Environmental Protection Agency
Johnstown Castle Estate
Co. Wexford
Re: Industrial Emissions Licence P0040-03
Applicant: Anglo Beef Processors Ireland Unlimited Company
EHIS ref: 1984

Dear Sir/Madam

Please find enclosed the HSE consultation reports in relation to the above licence application. If you have any queries regarding any of these reports the initial contact is Ms Siobhan Murphy, Principal Environmental Health Officer, who will refer your query to the appropriate person

Yours faithfully,

Siobhan Murphy
Principal Environmental Health Officer