

Submission				
Submitter:	Mrs Joanna Troughton			
Organisation Name:	Environmental Health Service			
Submission Title:	HSE consultation			
Submission Reference No.:	S006191			
Submission Received:	23 November 2020			

	Application				
Applicant:		ZOETIS BELGIUM S.A			
	Reg. No.:	P0015-06			

Attachments are displayed on the following page(s).



Health Centre, Glenside Road, Wicklow Town, Co. Wicklow Phone: 0766959301

E-Mail:wicklowpeho@hse.ie

Date: 20/11/2020

Our reference: 1399

Report to: **Environmental Licensing Programme**

> Office of Environmental Sustainability **Environmental Protection Agency**

Johnstown Castle Estate

Co. Wexford

EPA reference: P0015-06

Industrial Emissions Type of Consultation:

ZOETIS BELGIUM S.A. Zoetis BelgiumS.A. (Irish branch), Copse **Applicant:**

House, Laragh road, A67 X704, Rathdrum, Wicklow

Dear Sir/Madam

Consent of copyright Please find enclosed the HSE consultation reports in relation to the above Industrial Emissions Licence. If you have any queries regarding any of this report the initial contact myself Niamh McGrath, Principal Environmental Health Officer, I will refer your query to the appropriate person

Yours faithfully,

Niamh McGrath

Principal Environmental Health Officer



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House, Laragh road, A67 X704, Rathdrum, Wicklow

Nature of Activity:

Classes	and Nature of Activity in accordance with the EPA Act 1992 as amended				
Class of Activity	Main Activity	EPA Act Sector (where applicable)	Class of Activity Description		
5.16	Yes	Chemicals	The production of pharmaceutical products including intermediates.		
11.6	No	Waste	Temporary storage of hazardous waste, (other than waste referred to in paragraph 11.5) pending any of the activities referred to in paragraph 11.2, 11.3, 11.5 or 11.7 with a total capacity exceeding 50 tonnes, other than temporary storage, pending collection, on the site where the waste is generated.		
11.3 (b)	No	Waste	Disposal or recovery of waste in waste incineration plants or in waste co-incineration plants for hazardous waste with a capacity exceeding 10 tonnes per day.		

Introduction

The following HSE departments were notified of the consultation request for the licence application on 13th October 2020

- Emergency Planning Brendan Lawlor
- Estates Helen Maher
- Assistant National Director for Health Protection Kevin Kelleher / Laura Murphy
- CHO Martina Queally

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

Site Visit by the Environmental Health Service (EHS)

A site visit was carried out by Ms Joanna Troughton, Environmental Health Officer (EHO) on the 19th November 2020. The locations of sensitive receptors identified in the EIAR and access to and from the site were verified during this site visit.

Third Party Submissions

The Environmental Health Department have not received any complaints from the public in relation to this facility.

General

The EHS assessed the baseline assessment report for Zoetis Bergium S.A for the site located at Laragh Road, Rathdrum, Co. Wicklow. As the EPA are revising the permit for the existing license Zoetis are required, under the Industrial Emissions Directive (IED), to consider baseline conditions with regard to soil and groundwater contamination as the site involves the use, production or release of relevant hazardous substances.

Under the IED, a Relevant Hazardous Substance is a raw material, product, intermediary, by-product, emission or waste which, as a result of hazardousness, mobility, persistence and biodegradability (as well as other characteristics), is capable of contaminating soil or groundwater.

There has been a pharmaceutical manufacturing facility on this site since 1961. In 1994 the site was granted its first integrated pollution control licence (IPC) under the licence number P0015-01 by the Environmental Protection Agency (EPA). The site's licence has subsequently been revised on four occasions and its current licence number is P0015-05.

COD

In 2013, the licence status was converted to an industrial emission licence (IEL) of the same number.

The previous licence holder, Merck Sharpe & Dohme (MSD) ceased operations at the site and the completed closure and decommissioning of the plant took place in 2016 / 2017. Decommissioning works are understood to have included removal of bulk chemicals, and cleaning and decommissioning of tanks / drains and the wastewater treatment plant. In addition, groundwater wells not required to be monitored under the IEL were decommissioned.

Following decommissioning, Zoetis purchased the site from MSD and commenced operations in 2018. The IEL P0015-05 was transferred to Zoetis in September 2017.

Site Location:

The site is located on 550,620 m2 of land, including a developed area of 150,765 m2, in Co. Wicklow, Ireland. It is situated approximately 1.5 km north of the town of Rathdrum and is located on the east facing slope of the Avonmore River valley.

Soil and Groundwater Baseline Assessment:

As part of the decommissioning of the site under Merck Sharpe & Dohme ground water monitoring was carried out in order to verify that the site closure and decommissioning activities did not have adverse impact on groundwater quality.

AECOM Ireland were commissioned to carry out the baseline assessment. They collected groundwater samples from sixteen existing groundwater monitoring wells across the site and compared the analytical results against generic acceptance criteria (GAC) protective of nearby human health and controlled water receptors, the results of which can be found in section 3.3.1. On reviewing the monitoring results the EHS are satisfied with the AECOM conclusion that the decommissioning works did not have any adverse impact on groundwater quality.

The site was fully decommissioned in 2017 and subsequently purchased by Zoetis. In 2018, AECOM completed one groundwater monitoring round under the annual monitoring programme defined by the IEL. Groundwater samples were collected in November 2018 from five monitoring wells and submitted for laboratory analysis. All groundwater results were compared against GAC for nearby human health and controlled water receptors. The results from the ground water monitoring can be found in section 3.3.3. The EHS are satisfied with AECOM findings which states "that that the majority of detected parameters were at concentrations below adopted assessment criteria. While some exceedances of the criteria were identified, based on the conceptual site model of the site, AECOM assessed that they posed a low risk to the identified receptors."

Section 3.3.4 covers the Zoetis Rathdrum Priority Substances Review and IEL Groundwater Monitoring carried out in 2019.

The priority substance review identified ten substances present on the site to be included in annual monitoring. The results were compared against GAC where relevant.

The EHS are satisfied AECOM conclusions based on the 2019 annual groundwater results which states "that while some localised exceedances of the criteria were identified, based on the conceptual site model of the site it was assessed that they posed a low risk to the identified on and offsite potential receptors."

A conceptual site model was developed for the site and is outlined in section 5.2.

Section 5.2.2 identifies potential sources of pollution from the plant. The EHS is satisfied with the report's conclusion "that on the basis of monitoring results to date, Zoetis' operations do not appear to be having an adverse effect on groundwater beneath the site. The VOCs detected in groundwater are related to historic activities, are not increasing and there are relatively few exceedances of GAC."

The potential risk to off-site receptors have been identified in section 5.2.3 and they are as follows,

- The bedrock aquifer beneath the site, classified as a locally important aquifer which is moderately productive only in local zones and as having high groundwater vulnerability; and
- The Avonmore River located approximately 170 m down gradient to the east of the site.

Section 5.2.4 outlines the potential pathways for pollution which it identifies as:

- Partitioning of soil contamination between soil, pore water and air and vertical migration of impacted water through the unsaturated zone to the groundwater table; and
- Lateral migration of dissolved contaminants within groundwater down hydraulic gradient towards the Avonmore River receptor.

However the report does point out that, "as the site is industrial in nature and the surrounding land is primarily agricultural, there are very limited pathways for exposure of onsite commercial / industrial and offsite commercial users to potential contamination contained within the underlying aroundwater."

Section 5.2.5, Table 4 summaries the potential pathways to human health and controlled waters receptors from soil and groundwater into 4 receptor categories;

- On-site and off-site workers,
- Residents of neighbouring properties,
- Groundwater and,
- Surface Water.

The EHS is satisfied with the conclusion the report makes that the risks to the 4 categories outlined above rage from very low to low.

The EHS welcomes the recommendation that continued annual monitoring, in line with the site's IEL requirements which includes the monitoring for the recommendation that continued annual monitoring, in line with the site's IEL requirements which includes the monitoring for the recommendation that continued annual monitoring, in line with the site's IEL requirements which includes the monitoring for the recommendation that continued annual monitoring, in line with the site's IEL requirements which includes the monitoring for the recommendation that continued annual monitoring is a site of the recommendation that continued annual monitoring is a site of the recommendation that continued annual monitoring is a site of the requirements which includes the monitoring for the recommendation that continued annual monitoring is a site of the recommendation that continued annual monitoring is a site of the recommendation that is a si

Surface Water Discharges:

Surface water discharge into the Avonmore River is address in the report "Attachment D.1a: Existing Environment & Impact of the Activity".

Section 2.2 of this reports outline ablinoised biological sampling and a water quality assessment of five sites on the Avonmore River, Co Wicklow upstream and downstream of the Zoetis facility which was carried out in September 2020.

The results of this assessment indicate that the Water Quality Status at all five locations is considered 'Unpolluted Waters'. The EHS is satisfied with the report's conclusion that the biological data indicates there is no impact from the Zoetis facility on the biological water quality of the Avonmore River.

Conclusion:

The current facility appears to be operated in a very efficient manner by the applicant. The Environmental Health Service have no concerns regarding their Industrial Emissions License.

All correspondence or any queries with regard to this report, including acknowledgement of this report, should be forwarded to myself Niamh McGrath, Principal Environmental Health Officer, at the above address.

Niamh McGrath

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Principal Environmental Health Officer

HSE Wicklow Area

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Environmental Health Officer

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