Submission	
Submitter:	Miss Siobhan Murphy
Organisation Name:	HSE South
Submission Title:	HSE Submission Bausch Health Ireland IE Licence P1112-01
Submission Reference No.:	S005637
Submission Received:	07 August 2019
Application	
Applicant:	Bausch Health Ireland Limited
Reg. No.:	P1112-01
See below for Submission details. Attachments are displayed on the following page(s).	

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Waterford Community Services,
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Date: 1st August 2019

Name: EPA

Address: P.O BOX 3000, Johnstown Castle Estate, Wexford.

Re: Industrial Emissions Licence Application Reference: P1112-01

Proposed Development: Bausch Health Ireland Ltd., 424 IDA Business Park, Waterford

Dear Sir/Madam,

Please find enclosed the HSE consultation report(s) in relation to the above proposal.

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 sincerely,

Siobhan Murphy
Principal Environmental Health Officer

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Waterford Community Services,
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Waste Licence Application
HSE submission Report
Environmental Health Service Consultation Report

Date: 1 August 2019

Our reference: 0967

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

Type of Consultation: Industrial Emissions (IE)

Applicant: Bausch Health Ireland Ltd.,
424 IDA Business Park,
Waterford
X91 V383

Nature of Activity: The surface treatment of substances, objects or products using organic solvents, in particular for dressing, printing, coating, degreasing, waterproofing, sizing, painting, cleaning or impregnating, with a consumption capacity of more than 150 kg per hour or more than 200 tonnes per year.

EPA reference: P1112-01

Introduction

The following HSE Departments were notified of the consultation request for the licence application on 25th June 2019

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

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

General

Bausch Health Ireland Ltd is applying to the EPA for an Industrial Emissions Licence (P1112-01) to develop a new contact lens production facility in a greenfield site adjacent to their existing facility at the IDA Business Park in Waterford. The footprint of the current facility is approximately 39,000m^2 and will increase to 47,500m^2 on completion of the planned expansion. The proposed development will accommodate a new contact lens manufacturing process which includes an Isopropyl Alcohol (IPA) bath system. As the use of IPA for extracting impurities would be in excess of thresholds set for a Class 12.2.1 activity, an application for an Industrial Emissions Licence is required.

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.

The Environmental Health Service has not received any complaints concerning the existing Bausch Health facility.

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, dust and process emissions

The Environmental Health Service undertook a site visit on 17th July 2019.

The material submitted in the licence application and supporting documentation were reviewed with regard to the '*BAT Guidance Note for Solvent Use in Coating, Cleaning and Degreasing*' EPA 2008.

Site Location

The proposed site is located on agricultural land which is not currently farmed, situated to the North East of the current Bausch Health Ireland Facility at the IDA Park, Waterford. The proposed development will be in the townlands of Lismore and Skibereen and is located in an industrial area at the western boundary of Waterford City. The site is predominately industrial and commercial with one occupied domestic dwelling located 290m to the north -west. There are no schools, hospitals or other sensitive receptors in the vicinity of the site.

Surface Water

The Environmental Health Service (EHS) has considered any potential risk of contamination of surface water from the proposed activities and makes the following comments:

a) It is noted that there will be no direct emissions to surface waters from the proposed plant.

b) In reviewing Section 5.3 '*Emissions to Surface Water'* of Attachment 7-1-3-3 '*Emissions Impact Statement*' which accompanies the application, it is noted that '*stormwater from the site will discharge both directly and indirectly into Lisduggan Stream'*. **Although the stormwater network will include a Class 1 bypass hydrocarbon interceptor for the direct discharges to Lisduggan Stream, the Environmental Health Service recommends that due to the nature of materials used on site, all surface run-off including potential fire water passes through hydrocarbon interceptors prior to discharge to Lisduggan Stream.**

c) In Section 4 '*Stage 3-Assessment of the Site Specific Pollution Possibility'* of Attachment 4-8-2, it is noted that Boric Acid and Di Sodium Tetraborate used in the existing plant are not stored in bunded containers and present a potential risk of contamination to surface water (and potentially groundwater) from accidental spillage during the delivery process. **It is recommended that measures are put in place to mitigate the impact of potential contamination of surface water during transportation and off- loading of all hazardous materials delivered to the proposed plant**.

d) It was further noted that although the existing site is maintained to a high standard, minor cracking was identified to hard standing areas, which could result in potential groundwater contamination through seepage of contaminated surface water. EPA Application Form 7.7 *'Discharges to Storm water'* Attachment indicates that weekly monitoring will be undertaken of storm water. **The Environmental Health Service recommends that all hard standing areas are also checked on a weekly basis and any damage or cracks are repaired as they are identified.**

e) Section 4.3.1'*IPA Bulk Delivery'* and 4.3.2 '*Bulk IPA Storage, Transfer and Use'* of the Operational Report (Attachment -8-1) outline measures to minimise and contain any accidental spillage of IPA during delivery and storage of the product. It is noted that the bulk IPA delivery will be undertaken in a bunded tanker unloading area and that the tank farm bund is designed to contain 110% of the volume of the largest tank.

Ground Water

a) The proposed development is located within the Suir Catchment and the Williamstown sub-catchment under the Water Framework Directive. The River Suir, which is the nearest water course to the proposed development, is located approximately 2km north of the site.

b) The site is within an area which is underlain by a Regionally Important Aquifer of fissured bedrock and forms part of the Waterford Groundwater Body (GWB). The groundwater quality of the Waterford GWB is classified by the EPA as being of 'good status'. The GSI Vulnerability Groundwater Map classifies the vulnerability of the ground water as 'high'.

c) The proposed Bausch development site is in an area which is served by a Public Water Scheme

d) The EHS notes the measures to be adopted to implement BAT conclusions, including that all tanks will be bunded and that a preventative maintenance system will be put in place which will include leak inspection of pipes, valves and storage vessels. **The EHS recommends that an alarmed leak detection system is installed on storage tanks containing liquids that could cause soil and potentially groundwater pollution.**

e) The Emissions Compliance Report (Attachment 7-1-3-1) indicates that the existing plant is licenced under Section 16 of the Local Government (Water Pollution) Acts 1977 to 2007and

that there were exceedences in 2018 for zinc, copper and chromium. It is noted in the EPA '*Application Form 7.3.1-Emissions to Sewer-Attachment'* that it is intended to discharge zinc, copper and chromium into the Waterford Wastewater Treatment Plant from the proposed Area 9 building. **The Environmental Health Service recommends that consideration be given to increasing the frequency of sampling for these parameters from quarterly to monthly.**

Emissions to air including noise, dust and process emissions to the atmosphere

Noise

a) The site is located in an area which is predominately industrial and commercial. It is not situated in an area designated as a 'Quiet Area'.
b) One occupied house (noise sensitive location) has been identified approximately 290m to the west of the site.
c) No equipment or processes have been identified which are likely to result in vibration impacts during the operational phase of the development.
d) Acoustic consultants Moloney and Associates undertook baseline noise monitoring at various locations including in the rear garden of the nearest noise sensitive location on May 16th and 17th 2019. Noise assessments were based upon procedures set out in the '*International Standard, ISO 1996 (Acoustics – description and measurement of environmental noise)*' and on guidance (NG4) published by the Irish EPA in 2016.
e) The predominant noise from the existing facility was found to be from air handling units fitted to roofs. EPA Application Form 7.5 '*Noise Emissions – Attachment'* outlines measures to be employed to reduce noise emissions and includes the housing of compressors and the installation of attenuators and noise barriers *as required*. **The EHS recommends that noise barriers are installed to the west of the site to reduce the impact of noise on the nearest sensitive receptor.**
f) Road traffic noise dominated during daytime hours**. It is recommended that access roads to the facility are maintained in good condition and free from defects which could give rise to an increase in noise levels**

Dust

a) It is not anticipated that the operation of the proposed plant will result in dust emissions

Process emissions

The Environmental Health Service notes that

a) There will be six emission points to air from the proposed facility, the main emission point being at the Regenerative Thermal Oxidiser (RTO)

b) The principal point source emissions to the atmosphere will be from the Regenerative Thermal Oxidiser (RTO), the Combined Heat and Power (CHP) plant and from four steam boilers.

c) The main pollutants from these boilers will be oxides of nitrogen (NO_x) and carbon monoxide (CO)

d) An abatement unit will treat emissions from the contact lens manufacturing lines in the new facility, in which IPA is used in the production process

e) Measures to reduce, minimise or prevent fugitive emissions are detailed in Form 7-4-1 '*Emissions to Atmosphere Main and Fugitive'* which states that '*the IPA storage tanks will be provided with a conservation vent and nitrogen for blanketing and a relief device for emergency pressure / vacuum protection'.*

f) Section 3.1 '*Operational Emissions'* of Attachment 7-1-3-3*'Emissions Impact Assessment'* describes a detailed air quality dispersion modelling study which was undertaken to evaluate the impact on local air quality arising from the development, taking into account the Irish Environmental Protection Agency (EPA) AG4 Guidance Note on Dispersion Modelling (2010).

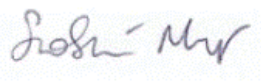
g) It is noted that there will be no significant impact to the environment due to the atmospheric emissions at the proposed emission limit values

Conclusions

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

- All surface run-off from the proposed facility including potential fire water passes through hydrocarbon interceptors prior to discharge to Lisduggan Stream.
- All hard standing areas are checked on a weekly basis and any damage or cracks are repaired as they are identified.
- An alarmed leak detection system is installed on storage tanks containing hazardous liquids which could cause soil and potentially groundwater pollution.
- Consideration is given to increasing the frequency of sampling for zinc, copper and chromium in wastewater discharges from quarterly to monthly.
- Noise barriers are installed to the west of the site to reduce the impact of noise on the nearest sensitive receptor.
- Access roads to the facility are inspected regularly, maintained in good condition and free from defects which could give rise to an increase in noise levels

Yours sincerely,



Siobhan Murphy
Principal Environmental Health Officer

Caroline Hueston
Environmental Health Officer