



Ms Gráinne Oglesby,
Environmental Licensing Programme,
Office of Climate, Licensing & Resource Use
EPA Headquarters,
PO Box 3000,
Johnstown Castle Estate,
Co. Wexford

Uisce Éireann
Teach Colvill
24-26 Sráid Thalbóid
Baile Átha Cliath 1
Éire

Irish Water
Colvill House
24-26 Talbot Street
Dublin 1
Ireland

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www.water.ie

Reg No: P1030-01

1st February 2016

Dear Ms Oglesby,

I refer to your letter dated 2nd October 2015 regarding an application from Alexion Pharma International Trading Limited, College Business & Technology Park, Blanchardstown, Dublin 15 for an Industrial Emissions Licence.

Please find attached Irish Water's consent to discharge to sewer subject to the consent conditions attached.

If you have any further query please do not hesitate to contact us.

Yours sincerely

Mark O Callaghan,
Authorised Signatory

IRISH WATER RESPONSE

Irish Water
Colvill House
24/26 Talbot Street
Dublin 1

Name of Facility: Alexion Pharma International Trading Limited.
P1030-01

Reg. No:

Location Address: College Business & Technology Park, Blanchardstown Road North,
Blanchardstown, Dublin 15

Consent granted subject to the consent conditions outlined below.	Yes
Consent granted without conditions.	N/A
Consent refused.	N/A

CONSENT CONDITIONS TO BE INCLUDED

1. The Licensee shall permit authorised persons, of the Agency and Irish Water, to inspect, examine and test, at all reasonable times, any works and apparatus installed in connection with the trade effluent and to take samples of the trade effluent.
2. The Licensee shall at no time discharge or permit to be discharged into the sewer any liquid matter or thing that is or may be liable to set or congeal at average sewer temperature or is capable of giving off any inflammable or explosive gas or any acid, alkali or other substance in sufficient concentration to cause corrosion to sewer pipes, penstock and sewer fittings or the general integrity of the sewer.
3. The Licensee shall at no time discharge or permit to be discharged into the sewerage system any matter or thing that is capable of presenting any risk to Agency or Irish Water staff or its agents fulfilling any of their duties or causes nuisance odours to arise from the sewer network.
4. No specified emission to sewer shall exceed the emission limit value or load set out in Schedule B : Emission Limits to Sewer
5. The Licensee shall carry out such sampling, analyses, measurements, examinations, maintenance and calibrations as set out in Schedule C.
Representative samples of the final effluent shall be taken by the Licensee and tested for the chemical and physical characteristics conditioned in this licence using standard methods. The frequency of sampling shall be as necessary but shall not be less than frequencies set out in schedule C.
The costs of all such tests shall be borne by the Licensee.
6. Only trade effluent wastewater which is generated within the site boundary as a

result of licensed activities shall be permitted to be discharged to the public sewer.
7. All trade effluent shall be collected and discharged to Irish Water's foul sewer as indicated on drawings and maps which accompanied this licence application. The licensee shall notify Irish Water and the Environment & Water Services Section of Fingal County Council along with the Agency in advance of any changes which may result in a change in the nature, characteristics or volume of trade effluent discharged to sewer.
8. The Licensee shall provide to Irish Water plans and details in formats outlined below within 6 months of the date of the commencement of licensed activities. These shall include; <ul style="list-style-type: none"> ➤ Location of pipes and sewers, manholes, storage tanks, effluent treatment systems. ➤ Diameter, material, upstream invert level, downstream invert level, condition for all sewers on site. ➤ Cover level, invert level, chamber dimensions for each manhole on site. ➤ Details of effluent treatment systems, including dimensions. ➤ The condition of all sewers and manholes. ➤ Plans and details of the discharge point to the Irish Water sewer. ➤ Location and invert level of the discharge point or chamber. ➤ Details of the discharge chamber including internal dimensions, type of construction, incoming and outgoing pipe diameter, incoming and outgoing pipe material, internal features or devices such as flow control and backdrops. ➤ The Plan drawings and relevant information shall be provided in ESRI SHP File or AutoCAD DWG format with attributes geo-coordinated to Irish National Grid or Irish Transverse Mercator. All Levels shall be to Malin Head OD. The adopted coordinate system shall be clearly identified.
9. Monitoring and analyses equipment shall be operated and maintained as necessary so that monitoring accurately reflects the emission or discharge.
10. The Licensee shall record all sampling, analyses, measurements, examinations, calibrations and maintenance carried out in accordance with the requirements of this licence.
11. The Licensee shall install and maintain an on-online flow measurement device to continuously and accurately record the volume and rate of trade effluent discharged to sewer.
12. No emission to sewer shall take place which gives rise to any reaction within the sewer or to the liberation of by-products which may be of environmental significance.
13. No substances shall be discharged to sewer which cannot be appropriately treated at the downstream wastewater treatment plant and/or would be detrimental to the receiving environment and ecosystem to which the wastewater treatment plant discharges to.
14. The Licensee shall at no time, discharge or permit the discharge into the sewer of substances listed in Tables 11 & 12 of Schedule 6 of the European Communities Environmental Objectives (Surface Waters) (Amendment) Regulations 2012 (S.I. No. 327 of 2012) at concentrations in excess of MAC-EQS for Inland surface waters unless specifically allowed for under Schedule B of this licence.
15. The Licensee shall ensure that the effluent shall not contain petroleum hydrocarbons or organic solvents (including chlorinated organic solvents) which would give rise to flammable or explosive vapours in the sewer.
16. The Licensee shall at no time, discharge or permit the discharge into the sewer of

substances (including any active pharmaceuticals) which may be detrimental to the receiving environment and ecosystem.

17. The Licensee shall at no time, discharge or permit the discharge into the sewer of substances in a manner, or at a concentration which, after initial dilution in the receiving waters to which the downstream wastewater treatment plant discharges to, causes tainting of fish or shellfish.

18. A summary report of results of analysis of effluent discharged to the sewer with relevant volumes shall be forwarded on a quarterly basis to both :

Local Authority Contact: Jim Kavanagh

Address: Environment & Water Services, County Hall, Swords, Co. Dublin.

E-mail: jim.kavanagh@fingal.ie

&

Irish Water: TER@water.ie (TER = Trade Effluent Returns)

19. Fail safe mechanisms shall be employed in viral inactivation processes used on site
- (i) Records shall be kept on site of assays carried out to determine if chemical virus inactivation is required.
 - (ii) Records shall be kept on site of CIP wastewaters (Biowastes) treated by heat inactivation.

20. In the event of any incident which relates to discharge to sewer, having taken place, the Licensee shall notify, by telephone and e-mail, the Agency along with both:

Local Authority Contact: Jim Kavanagh

Address: Environment & Water Services, County Hall, Swords, Co. Dublin.

E-mail: jim.kavanagh@fingal.ie

Phone number during Office Hours: 01 890 5961

Phone number outside of Office Hours: 087 6791595

&

Irish Water: TER@water.ie (TER = Trade Effluent Returns)

Phone Number: 1890 278 278

An incident shall be considered to be any discharge which is in breach of emission limits to sewer and/or would constitute a danger to sewer maintenance personnel working in the sewerage system or would be injurious to the construction of the sewer or would interfere with the operations of the downstream wastewater treatment works and supporting infrastructure.

21. Non-trade effluent wastewater (e.g. firewater, accidental spillages) which occurs on site shall not be discharged to the sewer without the prior authorisation of Irish Water.
22. The Licensee shall maintain, or have maintained the on-site effluent treatment systems.
23. Best available technology (BAT) shall be used to prevent, minimise, manage and treat pollutants in the wastewater discharge to sewer.
24. A fee of €205 per sample shall be payable to Irish Water by the Licensee for any required compliance monitoring outside of scheduled EPA monitoring. This charge covers the cost of sample collection by the Irish Water representative and chemical analysis. Payment is to be made on demand. This charge will be reviewed annually by Irish Water.
25. The licensee shall pay to Irish Water a charge in respect of the reception, conveyance and treatment of the trade effluent discharged to the foul sewer. The charges associated with the Trade effluent discharge will be in accordance with the Local Authorities current charging regime and will remain in place until a Non-Domestic tariff structure has been approved by the Commission for Energy Regulation (CER) and implemented by Irish Water. These charges will be billed for by Fingal County Council until further notice. Payment to be made on demand

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Limit Values for Process Effluent to Sewer

Schedule B: Emission Limits

Emission Point Reference No.: SE 1
E307776, N240967

Emission to (*sewer description*): Southern boundary of site

Volume of Trade effluent emitted: Maximum in any one day: 10 m³
Maximum in any hour: 3 m³

Parameter	Emission Limit Values*	
pH	6-9 pH Units	
Temperature	42°C	
Toxicity	10 Toxicity Units**	
	Daily Mean Concentration (mg/l) ^{Note 1}	Daily Mean Loading (kg/day)
BOD	1000	10
COD	2000	20
Suspended Solids	500	5
Fats, Oils & Grease	100	1
Detergents (as MBAS)	100	1
Orthophosphate	50	0.5
Sulphates	300	3

***Note 1.**

All samples, with the exception of pH and Temperature, shall be collected on a 24 hour flow proportional composite sampling basis.

****Note 2.**

Toxicity Units (TU) are defined as: $TU = (100/x \text{ Hour EC50})$ where x is the relevant period of exposure and EC50 is expressed as % vol/vol.

Frequency of Monitoring Process Effluent to Sewer

Schedule C

Emission Point Reference No.: SE-1

Parameter	Monitoring Frequency (Note 1 & 2)	Analysis Method/Technique
Flow to sewer	Continuous	On-line continuous Flow Meter with recorder
pH	Continuous	On-line continuous pH Probe with recorder
Temperature	Continuous	On-line continuous Temperature Probe with recorder
BOD	Quarterly	Standard Methods
COD	Quarterly	Standard Methods
Suspended Solids	Quarterly	Standard Methods
Fats, Oils & Grease	Quarterly	Standard Methods
Detergents (as MBAS)	Quarterly	Standard Methods
Orthophosphate	Quarterly	Standard Methods
Sulphates	Quarterly	Standard Methods
Toxicity	As requested	Standard Methods

Note 1.

All samples, with the exception of pH, Temperature and TOC, shall be collected on a 24 hour flow proportional composite sampling basis.

Note 2.

Sampling shall take place on alternate week days on a rolling basis to ensure representative samples are obtained for site operations which may vary across the working week.

Limit Values for Process Effluent to Sewer

Schedule B: Emission Limits

Emission Point Reference No.: SE 2
E307858, N241271

Emission to (*sewer description*): Eastern boundary of site

Volume of Trade Effluent emitted: Maximum in any one day: 1520 m³
Maximum in any hour: 295 m³

Parameter	Emission Limit Values*	
pH	6-9 pH Units	
Temperature	40°C	
Toxicity	10 Toxicity Units**	
	Daily Mean Concentration (mg/l) <small>Note 1</small>	Daily Mean Loading (kg/day)
BOD	500	750
COD	1000	1500
Suspended Solids	330	500
Total Phosphorus	200	300
Total Nitrogen	110	160
Sulphates	600	920
Fats, Oils Grease	100	150
Chloride	1000	1500

***Note 1.**

All samples, with the exception of pH and Temperature, shall be collected on a 24 hour flow proportional composite sampling basis.

****Note 2.**

Toxicity Units (TU) are defined as: $TU = (100/x \text{ Hour EC50})$ where x is the relevant period of exposure and EC50 is expressed as % vol/vol.

Frequency of Monitoring Process Effluent to Sewer

Schedule C

Emission Point Reference No.:

SE-2

Parameter	Monitoring Frequency (Note 1 & 2)	Analysis Method/Technique
Flow to sewer	Continuous	On-line continuous Flow Meter with recorder
pH	Continuous	On-line continuous pH Probe with recorder
Temperature	Continuous	On-line continuous Temperature Probe with recorder
Total Organic Carbon (TOC)	Continuous	On-line continuous TOC meter with recorder
BOD	Monthly	Standard Methods
COD	Monthly	Standard Methods
Suspended Solids	Monthly	Standard Methods
Total Nitrogen	Monthly	Standard Methods
Total Phosphorus	Monthly	Standard Methods
Sulphates	Monthly	Standard Methods
Fats, Oils & Greases	Monthly	Standard Methods
Active Pharmaceuticals	As requested	Standard Methods
Toxicity	As requested	Standard Methods
Respirometry	As requested	Standard Methods
Assays for chemical virus inactivation	Daily/Weekly/Monthly	Technique to be clarified within 6 months of issue of Licence
Biowaste inactivation	Daily/Weekly/Monthly	Technique to be clarified within 6 months of issue of Licence

Note 1.

All samples, with the exception of pH and temperature, shall be collected on a 24 hour flow proportional composite sampling basis.

Note 2.

Sampling shall take place on alternate week days on a rolling basis to ensure representative samples are obtained for site operations which may vary across the working week.

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