



Submission

Submitter:	Mr John Hanily
Organisation Name:	HSE, Environmental Health
Submission Title:	HSE Submission
Submission Reference No.:	S005905
Submission Received:	19 December 2019

Application

Applicant:	Arran Chemical Company Limited
Reg. No.:	P0110-03

See below for Submission details.

Attachments are displayed on the following page(s).

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Environmental Health Service,
Health Service Executive,
Government Offices,
Convent Road,
Roscommon
Phone: 0906637880

Date: 16th December 2019

Name: Environmental Licensing Programme
Office of Environmental Sustainability
Environmental Protection Agency
Johnstown Castle Estate
Co. Wexford

Re: Industrial Emissions Licence Application P0110-03

Applicant: Arran Chemical Company Ltd, Units 1-3 Monksland Industrial Estate, Athlone

Dear Sir/Madam

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

Yours faithfully,

John Hanily
Principal Environmental Health Officer

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Environmental Health Service,
Health Service Executive,
Government Offices,
Convent Road,
Roscommon
Phone: 0906637880

Date: 12th December 2019

Our reference: 1039

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

Type of consultation: Industrial Emissions

Applicant: Arran Chemical Company Ltd, Units 1-3 Monksland Industrial Estate, Athlone,
Co. Roscommon.

Location of Facility: Units 1-3 Monksland Industrial Estate, Athlone, Co. Roscommon

Nature of Facility: The production of pharmaceutical products including intermediates

EPA reference: P0110-03

Introduction

The following HSE departments were notified of the consultation request for this licence application on 8 November 2019

- Emergency Planning – Kay Kennington
- Estates – Helen Maher
- Assistant National Director for Health Protection – Kevin Kelleher / Laura Murphy
- CHO – Tony Canavan

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

General

Arran Chemical Company Ltd. has operated a chemical synthesis plant on a three acre site on Monksland Industrial Estate in Athlone since 1988. It obtained an IPC licence from the EPA in 1996 and a review of this licence was issued in 2007.

The company employs 100 people and intends to move from operating 24 hours per day over 5.5 days to operating 24 hours per day seven days per week.

The Operational Report accompanying the application states that '*facilities range from laboratory and kilo laboratory for process development and prototype manufacture to pilot plant (with stainless steel, Hastelloy and glass lined vessels of volume up to 1000l) and to manufacture plant (with stainless steel, Hastelloy and glass lined vessels of volume up to 8000l)*'

Arran Chemical Company Ltd has applied for a review of their existing industrial emissions licence - P0110-02 - for the following reasons

- Increase in emissions (increasing limits for discharge to sewer)
- New/relocated emission point(s) (the relocation of existing Vent A2 emission point)
- New abatement equipment (the introduction of a Regenerative Thermal Oxidizer (RTO) abatement system)

Emissions arising from the facility are emissions to air and emissions to sewer. Emissions to sewer are in agreement with Irish Water. There are currently four licenced air emission points, one of which is no longer in operation.

The Non-Technical Summary accompanying the application details the legislative requirement for the licence application. In terms of the requirement for an Industrial Emissions licence, licencing requirements for this category of activity are contained in the First Schedule to the Environmental Protection Act 1992 as amended '5.16 – *The production of pharmaceutical products including intermediates*'

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 this licence application.

The local Environmental Health Service office has not received any complaints regarding the existing Arran Chemical Company Ltd. operation at Monksland.

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

- Any potential contamination of surface or groundwater
- Emissions to air including odour and noise

Ms. Maria Curran, Senior Environmental Health Officer visited the plant on 27 November 2019 to assist in the preparation of this report.

The Environmental Health Service notes that a number of BAT and BREF documents were referenced as part of a review of the licenced facility, including

- BAT Guidance Note for Pharmaceutical and Other Speciality Organic Chemicals
- Conclusions on BAT from the Storage BAT Reference Document
- Conclusions on BAT from the Energy Efficiency BAT Reference Document
- Reference document on the best available techniques for the manufacture of Organic Fine Chemicals

The above are the most relevant document against which to review the licence application.

Site location

Arran Chemical Company Ltd. is located on a three acre site in the Monksland Industrial Estate which is situated approximately 4km west of Athlone. A number of other industrial and pharmaceutical companies are in located in the area. The nearest sensitive receptors are located more than 400m from the plant. The M6 motorway runs to the south and east of the site.

Groundwater and surface water

The Environmental Health Service has considered any potential risks of contamination of ground and surface water and makes the following comments:

The Arran Chemical plant is located within the Upper River Shannon Catchment. The Cross river, which is located approximately 440m south of the plant, flows into the River Shannon 5km downstream of the site. The EPA has two river monitoring points, one upstream and one downstream of the plant.

The revised 'Environmental Liability Risk Assessment Report' (ELRA) which is included in the application states that there were no exceedances or incidents of effluent emissions noted during the period 2014 to date. However, it was noted that an uncontrolled release of effluent to ground from Sump 2 was detected in November 2018 due to a breach of sump walls and that there was an oil spillage in the plant room in 2017. Remedial action undertaken as a result of these incidents is outlined in the ELRA.

The Baseline Report accompanying the licence application indicates that the site is almost 100% hardstanding with concrete cover and that there are no underground tanks for the storage of raw materials.

The facility is served by the Lismoggan Athlone Public Water Supply and is connected to the mains sewerage system. The Operational Report attached to the licence application states that there are currently no emissions to water from the operation of the facility. Stormwater emissions, which are to the Local Authority surface water drainage network, are monitored weekly for conductivity, pH and COD.

All liquid chemicals are stored in bunded areas which have been subject to integrity testing every three years under the existing Industrial Emissions licence (P0110-02). In addition, visual inspections of the bunding and associated pipework are undertaken weekly. Procedures are in place to divert all fire water to the Fire Water Retention Pond.

Emissions to sewer are in agreement with Irish Water and this licence application includes a letter from Irish Water supporting the applicant's request for an increase in emissions to the public sewer.

The Environmental Health Service is satisfied that if

- **the mitigation measures included in the 'Statement of Measures' (Table 9, 'Revised Environmental Liability Risk Assessment') are implemented in full and**
- **the parameters specified and the frequency of monitoring of waste water discharges to the public sewer, as outlined in the table included in Attachment 7.3.1 'Emissions to Sewer' is adhered to**

these measures should be sufficient to protect public health

Emissions to air including odour and noise

Odour

The Arran Chemical Company Ltd facility currently has four licenced emissions to air points. Emission points are Vent A1, Vent A2, and boiler emission points BE1 and BE2. BE2 is no longer in operation and the installation of a thermal oxidiser will result in the introduction of a new emission point, Vent A3, which will make emission point Vent A1 redundant.

The 'Emissions to Air' section of the Operational Report included with the application details the VOC emissions resulting from the operation of the plant and the abatement measures undertaken to minimise emissions to air. A detailed Air Emission Process Flow is included as is a description of the proposed Regenerative Thermal Oxidiser, which will be installed at the northern boundary of the site. The Thermal Oxidiser heats the VOCs to a temperature at which they are oxidised. This process breaks down the harmful particulates into CO₂ and water.

It is noted that there were three complaints from members of the public in 2019 regarding odour from the Arran Chemical plant and that the applicant has installed 'Airborne 10 Odour Removal Technology' to reduce potential odours arising from plant processes.

The Operational Report states that *'The system is not operational at all times but is a mitigation option at times where corrective action is required or when odours are detected during routine patrols'*

The Environmental Health Service recommends that routine odour patrols continue. Should odour complaints exceed current (2019) levels, consideration should be given to the continual operation of the Airborne 10 Odour Removal System in the interest of the protection of public health.

Noise

Noise emissions associated with the Arran Chemical plant are currently monitored at two locations. A Noise Monitoring Report included as an appendix to the Operational Report outlines the result of the last (2019) annual noise survey. The survey indicates that noise levels are dominated by road traffic noise during the day and by road traffic noise and chiller fans from neighbouring facilities at night. Although daytime and night time measurements exceeded the relevant limits, exceedences were due to factors external to the operation of the plant and it has been concluded that Arran Chemical Company Ltd is compliant with noise limits specified in the existing Industrial Emissions licence.

It is noted that noise mitigation measures include that '*all new equipment purchased is noise rated and assessed prior to purchase*' and that '*noisy equipment would be located internally or housed*'.

The Environmental Health Service is satisfied that Arran Chemical Company Ltd. is not in a 'Quiet Area' and is located in an area dominated by industry. As outlined, the applicant is compliant with noise limits specified in IE Licence P0110-02 and has indicated that noise minimisation will be a criterion for the purchase of new equipment. The Environmental Health Service is therefore satisfied that adherence to the above mitigation measures will minimise the impact of noise from the facility on the nearest sensitive receptors.

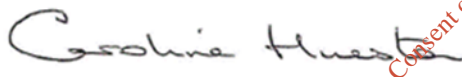
Conclusions

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

- that all mitigation measures outlined in relation to discharges to sewer and stormwater (Statement of Measures') are implemented in full
- the parameters specified and the frequency of monitoring of waste water discharges to the public sewer is adhered to
- routine odour patrols should continue and the continual operation of the Airborne 10 Odour Removal System should be considered if odour complaints exceed current levels



Maria Curran
Senior Environmental Health Officer
Roscommon



Caroline Hueston
Environmental Health Officer
Environment OU

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