



# Annual Environmental Report (AER) 2021

Company Name: AbbVie Ireland NL B.V.

Licence Number: P1087-01

Address: Old Bundoran Road, Ballytivnan, Sligo.

Class of Activity<sup>1</sup>: 5.16: Chemicals

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<sup>1</sup> See Appendix I

# Purpose of this Report

One of the functions of the Environmental Protection Agency (EPA) is to licence and regulate the activities<sup>2</sup> of large scale industrial (e.g. chemical, food processors, power plants) and waste facilities. Submitting an Annual Environmental Report (AER) is a requirement of all EPA licences.

An AER is a public document. To this end, this format has been developed for industrial and waste licence holders (other than the intensive agriculture sector) to use as a template. This is to assist any member of the public to interpret and understand the environmental performance of the licensed facility.

The AER is a **summary** of environmental information for a given year. It includes:

- Details of the licence holder's environmental goals achieved, goals to maintain compliance and/or improve their environmental performance;
- Answers to questions regarding their facility's activities;
- Tables of results from monitoring emissions such as air, water, noise, and odour; and
- Details of waste generated, accepted and treated.

An AER does **not** provide detailed technical data. Such information is available in three ways:

- 1) Contacting the licence holder directly. The Contact Us section of this template enables the licence holder to provide details of where a member of the public can obtain further information on topics reported in this document.

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<sup>2</sup> See Appendix I

- 2) Some documents<sup>3</sup> are available on the EPA website via the licence details page for each individual licence. This can be found by browsing either the <http://www.epa.ie/licensing/> or <http://www.epa.ie/enforcement/> pages of the EPA website.
- 3) All formal enforcement correspondence exchanged between the EPA and a licence holder during the regulatory process is available for public viewing by appointment at any EPA Office.

If you have a question or query about an AER or an individual EPA licensed facility see the EPA's website or contact the relevant EPA office. See <http://www.epa.ie/about/contactus/> for contact details.

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<sup>3</sup> This includes EPA site inspection and compliance monitoring reports, licence holders' self-monitoring reports, AERs and special reports

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## Glossary

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Abatement Equipment	Technology used to reduce pollution
AER	Annual Environmental Report.
CRAMP	Closure, Restoration and Aftercare Management Plan.
ELRA	Environmental Liability Risk Assessment.
Emission Limit Value	Limits set for specified emissions, typically outlined in Schedule B of an EPA licence.
EMS	Environmental Management System.
Environmental Goal	An objective or target set by a licensee as part of an environmental management system (EMS).
Environmental Pollutant	Substance or material that due to its quantity and/or nature has a negative impact on the environment.
Facility	Any site or premises that holds an EPA industrial or waste licence.
FP	Financial Provision.
GJ	Giga joules, an international unit of energy measurement.
Groundwater	All water which is below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil.
Incident	As defined by an EPA industrial or waste licence.

Inert Waste	Is waste that will not undergo physical, chemical or biological change thereby, is unlikely to cause environmental pollution or harm human health.
List of Wastes (LoW)	A list of wastes drawn up by the European Commission and published as Commission Decision 2014/955/EU.
Noise Sensitive Location	Any dwelling house, hotel or hostel, health building, educational establishment, place of worship or entertainment, or any other installation or area of high amenity which for its proper enjoyment requires the absence of noise at nuisance levels.
Non-Renewable Resource	A resource of economic value that cannot be replaced at the same rate it is being consumed e.g. coal, peat, oil and natural gas.
Oil Separator	Separator system for light liquids (e.g. oil and petrol).
PRTR	Pollutant Release and Transfer Register.
Renewable Resource	Wind, solar, aerothermal, geothermal, hydrothermal and ocean energy, hydropower, biomass, landfill gas, sewage treatment plant gas and biogases.
Sanitary Waste	Waste water from toilet, washroom and canteen facilities.
Storm Water	Rain water run-off from roof and non-process areas.

Surface Water	Lakes, rivers, streams, estuaries and coastal waters.
Trigger Level	A value set for a specific parameter, the achievement or exceedance of which requires certain actions to be taken by the licence holder.
Volatile Organic Compounds	Gases produced from solids or liquids that evaporate readily in ambient conditions.
Waste	Any substance or object which the holder discards or intends or is required to discard.

#### Disclaimer

These are **not** legal definitions. Legal definitions can be found in the corresponding legislation.

## Declaration

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I Jim Leahy of Abbvie Ireland, confirm that by ticking the box below, all information in this report is truthful and accurate to the best of my knowledge and belief.

In addition, I confirm that all monitoring and performance reporting required by our EPA licence and summarised herein is available for inspection by the EPA.

**Tick here**

## 1) Introduction

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See below a brief description of our facility and a summary of our environmental performance this year.

AbbVie Ireland holds an operational IE licence to produce Pharmaceutical Products including intermediates on an industrial scale by chemical or biological processing of substances or groups of substances. The main process steps are Buffer Preparation, Thawing, Formulation, and then Vial Filling and Lyophilisation followed by semi-automatic visual inspection and Cold Storage before shipping. The main support functions consist of Water for Injection and Clean Steam, generation, storage and distribution, as well as raw material and Active Pharmaceutical Ingredients (API) storage. Testing of operational activities were commenced in early 2021 while a number of upgrades to the facility have also been made including such as additional roof insulation and installation of a heat exchanger.

There have been 3 exceedances of quarterly Sulphate limit values for emissions to sewers which were determined to be caused by spikes in Sulphate from the incoming water supply.

A reading of surface water discharge on the 21<sup>st</sup> of December showed total organic carbon (TOC) readings of 130 mg/l and a pH reading of 12.25 at surface water sample point SW3A. It was concluded that the sample contained residue and is not an accurate reading.

During the quarterly groundwater Sampling in 2021 it was shown that elevated levels of manganese, chloride, and Iron were recorded in some of the monitoring locations. Likely due to poor background ground water quality in the locality. Additional monitoring and assessment is being planned for 2022 to address the source.

### Contact Us

If you have any questions or would like further information on any aspect of this report, please contact us directly.

See below details:

Charelene Rooney-  
Email: [charelene.rooney@abbvie.com](mailto:charelene.rooney@abbvie.com)

## 2) How we Manage our Facility

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### **Explanation**

To ensure our facility's activities do not cause environmental pollution we are required to have detailed documentation systems in place to help us manage and track our environmental performance. These systems are referred to as Environmental Management Systems (EMS). We review our EMS every year and set up-to-date **environmental goals** to continually improve our environmental performance.

The information below sets out the environmental goals for our facility to help us prevent environmental pollution and reduce our impact on the environment. Target dates for completing each goal and progress towards achieving the goal are outlined in Table 1.

**Table 1 Environmental Goals**

<b>Environmental Goal</b>	<b>Target Date</b>	<b>Progress</b>
Separation of foul water line. (E)	Mar-21	100% (complete)
Water Optimization for the ABB Steam Boiler Chemical Treatment Skid	April-21	100% (complete)
Complete sectional area of ABB roof insulation upgrade program	2021 and ongoing	100% (complete)
Addition of a Heat Exchanger to the RO	2021	100% (complete)
Surface Water Oil Interceptor enchantment project	Dec-21 And ongoing	100% (complete)

Develop EHS & Energy Sustainability LRP	2021 -2025	100% (complete and in practice)
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Add rows as necessary

Comment

The site is currently accredited to ISO 50001 Energy Management Standard.

### 3) Energy & Water

#### Energy

##### Explanation

Fossil fuels such as coal, gas and oil are non-renewable resources. As a result, our EPA licence requires that we measure our energy use and set targets to improve the energy efficiency of our activities and reduce our overall use, where possible. Where we have the means and technology on-site to generate energy, this is also captured in this report.

The information below summarises the energy used this year compared to the previous year and includes renewable and non-renewable energy types.

**Table 2 Energy Used**

Energy Used (GJ)	Quantity	% Increase/ decrease on previous year
Electricity	8,131,916 kwh	9%
Heavy Fuel Oil		N/A
Light Fuel Oil		N/A
Natural Gas	9,943,153 kwh	19%
Coal / Solid Fuel		N/A
Peat		N/A
Renewable Biomass		N/A

Renewable Energy Generated On-site	116,194 kwh	-7%
<b>Total Energy Used</b>	18,191,264 kwh	14%

Comment

AbbVie has a successful ISO 50001 energy management system that delivers continual improvement in energy performance and energy management. AbbVie successfully recertified to the 2018 version of the ISO 50001 energy

The information below summarises the energy we generated on our site this year with specific focus on renewable energy generation.

**Table 3 Energy Generated**

Energy Generated (GJ)	Quantity	% Increase/ decrease on previous year
Renewable Energy	116,194 kwh	-7%
<b>Total Energy Generated</b>	116,194 kwh	-7%

Comment

Renewable electricity was generated from the sites solar energy farm and used on site in 2021.

## Water

### Explanation

Water is a natural resource and we are required by our EPA licence to identify ways to reduce our use where possible. Water used in industry can be extracted from groundwater, rivers and lakes (surface water), taken from public water supplies (Irish Water), recycled from the facility's processes or harvested from rainwater.

The information below summarises and compares the quantity of water used this year compared to the previous year.

**Table 4 Water Used**

Source of Water Used	Quantity (m <sup>3</sup> /year)	% Increase/decrease on previous year
Groundwater		N/A
Surface Water		N/A
Public Supply	<b>38874</b>	5% increase
Recycled Water		N/A
Rainwater		N/A
<b>Total Water Used</b>	<b>38874</b>	5% increase

### Comment

The 2025 target for Public Supply water reduction is a 20% reduction, the plant has not established a baseline for water use under normal operating conditions yet, thus 5% increase is not unexpected.

## 4) Environmental Complaints

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### **Explanation**

Our EPA licence requires that activities do not cause environmental nuisance such as odour, dust or noise. Our licence also requires that we have procedures in place to record, investigate and respond to environmental complaints if or when they arise.

We have an environmental complaints procedure in place where you can contact us<sup>4</sup> directly. You can also contact the EPA<sup>5</sup> if you wish to make an environmental complaint, confidentially or not.

See the information below for a summary of **all** the environmental complaints relating to our activities made directly to us and to the EPA this year.

**Table 5 Summary of All Environmental Complaints Received in**

<b>Type of Complaint</b>	<b>Number of Complaints Received</b>	<b>Number Closed</b>
<b>Odour / Smells</b>	0	0
<b>Noise</b>	0	0
<b>Dust</b>	0	0
<b>Water Quality</b>	0	0
<b>Air Quality</b>	0	0
<b>Waste</b>	0	0
<b>Litter</b>	0	0
<b>Vermin/Flies/Birds</b>	0	0
<b>Soil Contamination</b>	0	0
<b>Vibration</b>	0	0
<b>Other</b>	0	0

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<sup>4</sup> See Section 1, Introduction – Contact Us

<sup>5</sup> If you wish to contact the EPA to make an environmental complaint about an EPA licenced facility, please go to <https://lema.epa.ie/complaints>

Comment

## 5) Environmental Incidents

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### **Explanation**

It is our responsibility as an EPA licensed facility to ensure we have systems in place to prevent incidents that have the potential to cause environmental pollution. If an incident occurs, we are required to report it to the EPA, investigate the cause and fix the problem.

The EPA classify environmental incidents into 5 categories based on the potential impact on the environment:

- Minor
- Limited
- Serious
- Very Serious
- Catastrophic

See Table 6 for the number of the environmental incidents we reported to the EPA this year.

**Table 6      Number of Environmental Incidents**

<b>Incident Category</b>	<b>Minor</b>	<b>Limited</b>	<b>Serious</b>	<b>Very Serious</b>	<b>Catastrophic</b>
Abatement Equipment Offline					
Breach of Ambient ELV					
Breach of Emission Limit	2				
Explosion					
Fire					
Monitoring Equipment Failure					
Odour					
Spillage					
Breach of trigger Level					

<b>Incident Category</b>	<b>Minor</b>	<b>Limited</b>	<b>Serious</b>	<b>Very Serious</b>	<b>Catastrophic</b>
Uncontrolled Release					
Other					

Comment

## **2 Events in 2020 that were raised on EDEN**

### **Incident: (Eden reference: INCI022440)**

A reading of surface water discharge on the 21<sup>st</sup> of December showed total organic carbon (TOC) readings of 130 mg/l and a pH reading of 12.25 at surface water sample point SW3A. Site had emptied and cleaned the interceptor at SW3A on the 16th of Dec 2021. Due to the construction nature of the interceptor chamber a small amount of residue could not be emptied. The emptying of the interceptor left the level in the chamber low. During routine sampling the residue was collected and sent for analyses. Site concluded that the sample contained residue and is not an accurate reading. The next surface water sampling point located at Sw3b (in which water from SW3a flows in to) was within limits. Results from 12<sup>th</sup> January and 29<sup>th</sup> December 2021 at SW3a show a similarly high pH and are attributed to sampling technique. The sampling procedure document, JSTM.BAL-ES-001, was updated to include additional instructions on appropriate sampling techniques while staff awareness and training was organised in Jan and Feb 2022.

### **Actions:**

1. In house sampling of PH was taken on 14th Jan 2022 and was within limits.
2. The retained sampling was reviewed and contains residue on visual inspection.

3. Incident investigation created under site procedure AVBAL.ES.055.

**Incident: (Eden Reference: INCI022104)**

During the quarterly groundwater Sampling in 2021 it was shown that elevated levels of manganese, chloride, conductivity, and Iron were recorded in some of the monitoring locations.

Q2 – Manganese above threshold/limit value at MW1

Q3 - Manganese above threshold/limit value at MW1

Q3- Conductivity above threshold/limit value at MW1

Q3- Chloride above threshold/limit value at MW1, MW2 and MW3

Q4- Manganese above threshold/ limit at MW1

Q4- Iron above threshold/limit value at MW1

Groundwater reports suggest levels recorded at the sample locations and in particular readings for MW1 over the year is likely due to poor background groundwater quality. The addition of an extra 3no. groundwater boreholes to be included in the quarterly monitoring are in discussions and may be drilled in 2022.

## 6) Our Environmental Emissions

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### **Explanation**

We are required to ensure the emissions from our activities do not cause environmental pollution.

We are required to monitor any of the following emissions that we make:

- Storm water
- Waste water
- Air
- Groundwater
- Noise

We regularly test any such emissions for specific pollutants and materials to ensure they do not contain levels of pollution that exceed emission limit values (ELVs) or cause environmental pollution. If monitoring of an emission indicates an ELV is exceeded, we are required to report this to the EPA<sup>6</sup>.

The next sub-sections of this report summarise our compliance with any ELVs set in our EPA licence. Some emissions monitored do not have specific ELVs, but we still carry out monitoring and report all incidents that may give rise to environmental pollution.

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<sup>6</sup> See section 5, Incidents

## Storm Water

### **Explanation**

Storm water is rain water run-off from roof and non-process areas of a facility, e.g. car parks, and generally shall not contain any pollution. Storm water is usually released into a local water body after a basic form of treatment. Our EPA licence requires that we manage storm water to ensure no polluting substances or materials are released into the environment.

The information below summarises how the storm water from our facility is treated, where it is released and the results of monitoring this year.

### **1. Storm water from our facility is managed prior to release by;**

All surface water drains via a Class 1 by-pass hydrocarbon petrol interceptor before discharging to the off-site drain.

A Class 1 Full Retention interceptor is also in place for drainage from the diesel tank loading bay.

### **2. Storm water from our facility is released into the following water bodies:**

IE\_WE\_35W010300 (Shannon Eighter)

Segment code: 45\_3326

EPA code: 35S29

**Table 7 Summary of Storm Water Monitoring**

<b>Parameter measured</b>	<b>No. of Samples (2021)</b>	<b>% Compliant<sup>7</sup></b>	<b>Comment</b>
Colour (visual)	199	100%	
pH (acidity or alkalinity)	199	98%	Emission point SW3a
TOC (total organic compound)	199	99.5%	Emission point SW3a
FOGs (Fats Oils Grease)	199	100%	
Odour (Visual)	199	100%	
Total Petroleum Hydrocarbons	199	100%	

Add rows as necessary

#### Comment

Storm water monitoring consists of both continuous monitoring and independent grab sample analysis. pH and TOC are continuously monitored at SW1a, SW2a, SW3a and SW3b storm water emissions point. Trigger limits are set for both. See comments in section 5 concerning trigger limits breached during 2021.

<sup>7</sup> % compliant = [(number of samples compliant) / (number of samples taken)] x 100. Compliance could refer to emission limit values or trigger levels. The EPA commonly use trigger levels on stormwater discharges.

## Waste Water

### Explanation

There are two types of waste water that can be produced:

- Process waste water produced from the activities and;
- Sanitary waste water from toilets, washrooms and canteens.

Our EPA licence requires us to manage our waste water on or off-site and ensure that it does not cause environmental pollution when discharged into the environment.

The information below summarises how we treat the waste water produced from our activities, where it is released and the results of monitoring this year.

### **1. Waste water produced by our activities is treated as follows before discharge to a receiving waterbody;**

#### Management systems

The management of wastewater is subject to extensive monitoring and will be controlled through the implementation of the EMS and through a variety of environmental design considerations and operational measures.

Low strength waste water and high strength wastewater are collected by two independent waste water collection system with no possibility of cross contamination.

High strength wastewater from areas containing cytotoxic materials is collected in a closed collection system and diverted to a sunken bulk storage tank which will be emptied via road tanker for offsite disposal (incineration).

Low strength wastewater from secondary equipment wash and misc. process use and non-drug contact wastewater is pumped to a separate sunken bulk storage tank and will undergo pH and temperature adjustment as required before being pumped to the municipal sewer outlet. Low strength water can also contain boiler blow-down and cooling tower water.

Continuous sampling and grab sampling will be completed for wastewater composition in accordance with the IE licence requirements. Information from sample analysis to be retained as part of on-site inventory.

### **Treatment**

Applicable – Process-integrated techniques and wastewater pre-treatment (pH and temperature adjustment) have been utilised. Final wastewater treatment is via local Sligo Wastewater Treatment Plant (WWTP).

Contaminant recovery not possible (cytotoxic material).

Wastewater will be collected via independent wastewater collection systems (high strength and low strength). Wastewater from areas containing cytotoxic materials will be collected in a closed collection system and the commissioned Process Automatic System and site SOPs will prevent cross contamination of low strength waste with high strength waste. The process areas only contain high strength drains.

Wastewater that has not been contaminated by cytotoxic materials will be diverted to the low strength wastewater system for pH and temperature adjustment and controlled disposal to sewer.

## **2. Treated waste water from our facility is released into the following water bodies:**

Emission Point: SE1 (Grid reference (169843E, 337621N))

Irish Water Sewer

**Table 8 Summary of Waste Water Monitoring**

<b>Parameter measured</b>	<b>No. of Samples</b>	<b>% Compliant</b>	<b>Comment</b>
COD (Chemical Oxygen demand)	51	100%	Weekly
BOD (Biological Oxygen demand)	51	100%	Weekly
SS (Suspended solids)	51	100%	Weekly
P (Phosphorus)	3	100%	Weekly
N (Nitrogen)	3	100%	Weekly
Cl (Chloride)	3	100%	Quarterly
Sulphate	5	40%	Quarterly (comments below)
FOG (Fats Oil Grease)	5	100%	Quarterly
MBAS (Methylene blue active substances)	5	100%	Quarterly

Add rows as necessary

#### Comment

A review of the results showed that the parameter sulphates (SO<sub>4</sub>) had exceeded its limit of 15 mg / L for emissions to sewer at SE1 3 times in 2021 which were determined to be caused by spikes in Sulphate from the incoming water supply.

## Air

### Explanation

Generally, three types of air emissions are monitored from industry in Ireland: gases, dust (particulates) and odour. Our EPA licence requires us to ensure that any air emissions from our activities do not cause air pollution or create an odour nuisance.

The information below details the number of air emission points we monitor, the results from testing the air emissions and any odour assessments carried out by us and the EPA this year.

### 1. We monitor air emissions from the following number of emission points at our facility.

A1-1  
A1-2  
A1-4

**Table 9 Summary of Air Emissions Monitoring**

Parameter measured	No. of Samples	% Compliant	Comment

Add rows as necessary

### Comment

No air emissions data as the licensed activity has not started yet, monitoring was not required.

**Table 10 Summary of Odour Assessments Carried Out**

<b>Assessment Conducted By</b>	<b>No. of Odour Assessments</b>	<b>% Compliant<sup>8</sup></b>	<b>Comment</b>
Licence Holder			
EPA			

Add rows where necessary

Comment

As there are no odour sources, odour assessments were not required.

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<sup>8</sup> A compliant odour assessment is based on EPA Odour Impact Assessment Guidance available at <http://www.epa.ie/pubs/advice/air/emissions/ag5-odourassessment.html>

## Fugitive Solvent Emissions

Are you are required to monitor fugitive solvent air emissions from your facility?

Yes

No

### Explanation

The use of solvents is regulated under Irish and European Union (EU) Regulations<sup>9</sup>. Solvents are chemicals that, by their nature, are volatile (evaporate readily under ambient conditions). Solvents can be found in many inks, glues and cleaning agents. Due to the volatility of solvents some emissions may be released into the atmosphere during our activities before being captured in our air treatment system. This type of emission is called a **fugitive solvent emission**.

The information below summarises the quantity of solvents used this year, the percentage of fugitive solvent emissions (% of total quantity used) and whether the percentage complied with the targets set in the EU Regulations.

**Table 11 Summary of Fugitive Solvent Emissions**

Quantity of Solvents Used (Kg)	% Fugitive Solvent Emissions	Compliant
0	0	100

Comment

As the licensed activity has not started yet, monitoring was not required.

<sup>9</sup> See Annex VII of the Industrial Emissions Directive

<https://ec.europa.eu/environment/industry/stationary/ied/legislation.htm>

## Groundwater

### Explanation

Groundwater is an important and sensitive resource in Ireland. Our EPA licence requires that we monitor groundwater to ensure our activities do not cause groundwater pollution.

Understanding how groundwater flows through soil and rock layers and eventually into surface and coastal waters is a complex science. Sometimes groundwater pollution that occurred in the past can take years and even decades to disappear. Therefore, it is important that experts help us monitor and interpret results from groundwater monitoring and testing.

The information below is a basic summary of the condition of the groundwater this year.

#### 1. Do you have a groundwater monitoring programme in place?

Yes

No

#### 2. Have the groundwater monitoring results over the last 5 years indicated the presence of groundwater pollution?

Yes

No

**Table 12 List of Groundwater Pollutants Identified**

Pollutants
Chloride
Iron
Manganese

Add rows as necessary

**3. Give details of the investigations and subsequent actions taken, where applicable, to manage the groundwater pollution.**

AbbVie complete quarterly monitoring of groundwater at three monitoring points each year. There is a small topographic gradient across site from the north to south. One monitoring well is located upgradient of the site and two down gradients of the facility. Quarterly groundwater results suggest contaminants present in groundwater at the site are of historical/local source. The addition of an extra 3no. groundwater boreholes to be included in the quarterly monitoring are in discussions and planned to be drilled in 2022.

Comment

## Noise

### Explanation

Our EPA licence requires that we monitor noise emissions from our facility. Noise monitoring can be conducted at the boundary of our facility and/or at locations beyond the boundary referred to as “noise sensitive locations”. Noise monitoring requires the use of special noise monitoring equipment. Our EPA licence requires that noise produced by our facility shall not exceed the noise limit values and/or give rise to nuisance.

The information below gives a summary of when and where we conducted noise monitoring this year and if results complied with our EPA licence limits.

#### 1. We conducted noise monitoring on the following dates this year:

- Noise monitoring was carried out on Monday 11th October 2021.

#### 2. Was the noise monitoring carried out at:

- the boundary of our facility,
- noise sensitive locations off-site, or
- both?

i. The boundary of our Facility

#### 3. Were measured noise levels compliant with your EPA licence limits?

Yes

No

If No, we took the following actions to address the noise level exceedances?

## Comment

In terms of the significant on-site noise sources, the air conditioning units on the AbbVie plant roof are the dominant noise source at the site boundary, particularly during the evening and night-time when there are lower traffic volumes on the Old Bundoran Road. The air conditioning units on the AbbVie plant roof are audible at all site boundary monitoring locations along with other plant sources, such the boiler room and chiller room at NML 4 and the gas cooling towers at NML 1. However, these were not determined objectively or subjectively to be a significant noise source in terms of the likelihood of complaint at neighbouring properties. Average day time noise levels measured over the course of the survey did not exceed the licence limit of 55dB(A) at any noise monitoring location. Evening time noise levels measured over the course of the survey did not exceed the licence limit of 50dB(A) at any noise monitoring location. Night-time noise levels measured over the course of the survey did not exceed the licence limit of 45dB(A).

## 7) Waste

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### Waste Generated

#### Explanation

Our EPA licence requires us to manage the waste we generate in a manner that does not cause environmental pollution.

We manage, store and record hazardous, non-hazardous and inert waste we generate in accordance with our licence. We ensure that this waste is subsequently treated or disposed of in accordance with the relevant waste Regulations.

The information in table 13 is a summary of waste we generated this year and the percentage increase or decrease on the previous year. The percentage recovery is the amount of total waste generated that was reused, recycled or recovered.

**Table 13 Waste Generated**

Type	Quantity (Tonnes)	% Increase/ decrease on previous year	% Recovery
Hazardous	130.5	4210% increase	92.6%
Non-Hazardous	168.1	248% increase	72.3%
Inert	0	0	0
<b>Total Tonnes</b>	<b>298.6</b>		<b>73.1%</b>

#### Comment

The large increase in hazardous waste can be attributed to the increase in operations at the facility in 2021 and is a result of testing production phase activities. The non-hazardous waste increased due to a number of single use items as a result of Covid-19 controls implemented on site and increased personnel.

## Waste Accepted

Did you accept waste onto your facility for storage, treatment, recovery or disposal this year?

Yes

No

### Explanation

Our EPA licence requires us to manage the waste we accept in a manner that does not cause environmental pollution.

We manage, store and record all incoming and outgoing hazardous, non-hazardous and inert waste. The waste we accept may be treated, recovered, disposed or stored at our facility depending on our licence requirements.

The information in Table 14 provides a summary of waste we accepted this year and the percentage increase or decrease on the previous year. The percentage recovery is the amount of total waste accepted that was reused, recycled or recovered.

**Table 14 Waste Accepted**

Type	Quantity (Tonnes)	% Increase/ decrease on previous year	% Recovery
Hazardous			
Non-Hazardous			
Inert			
<b>Total Tonnes</b>			

Comment

## 8) Financial Provision

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### Explanation

Our EPA licence requires us to assess the risk our activities pose to the environment if we cease our activities or if an incident occurred. If we are identified as a high risk facility<sup>10</sup> by the EPA, we are required to put provision in place such as a financial bond or insurance to cover the cost of restoring our site to a satisfactory condition. This financial provision can then be used to cover the cost of managing the restoration or clean up should such an event occur.

1. Are you required to have an agreed financial provision in place?

Yes

No

2. What year was your Closure, Restoration and Aftercare Management Plan (CRAMP) last agreed by the Agency?

Site not required to have one

3. What year was your Environmental Liability Assessment Report (ELRA) agreed by the Agency?

Site not required to have one

4. Has there been any significant changes on your site since the last agreements?

Yes

No

If yes, have you submitted details to the EPA?

Yes

No

N/A

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<sup>10</sup> See Appendix II

# Appendix I

## Class of Activity

Industrial and waste facilities are classed into different sectors depending on the nature of their activity and its potential impact on the environment. The EPA Act 1992 as amended, outlines these as follows:

Class 1	Minerals and other materials
Class 2	Energy
Class 3	Metals
Class 4	Mineral fibres and glass
Class 5	Chemicals
Class 6	Intensive Agriculture <sup>11</sup>
Class 7	Food and drink
Class 8	Wood, paper, textiles and leather
Class 9	Fossil fuels
Class 10	Cement, lime and magnesium oxide
Class 11	Waste
Class 12	Surface Coatings
Class 13	Other Activities

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<sup>11</sup> This reporting template is not applicable to the **intensive agriculture sector**. Their annual environmental reporting structure is different and can be found at <http://www.epa.ie/pubs/advice/aerprtr/aerguid/>

# Appendix II

## High Environmental Risk Categories

If an industrial or waste licence falls into one of these categories it is deemed, by the EPA, as a high environmental risk. As a result, the licence holder is required to have financial provision in place. See section 8, Financial Provision.

1. Landfills
2. Non-Hazardous Waste Transfer Station
3. Incineration and Co-Incineration Waste Facilities
4. Category A – Extractive Waste Facilities
5. Upper and Lower Tier Seveso Facilities
6. Hazardous Waste Transfer Stations
7. High Risk Contaminated Land
8. Exceptional Circumstances

### NOTE:

This list is subject to change.

See the link below for further information.

<http://www.epa.ie/pubs/advice/licensee/fp/epaapproachtoenvironmentalliabilitiesandfinancialprovision.html>