



# 2019 Annual Environmental Report (AER)

Company Name: INTEL IRELAND LIMITED

Licence Number: P0207-04

Address: Collinstown Industrial Park, Leixlip, Co. Kildare

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

- Class 2-Energy
- Class 12-Surface Coatings
- Class 13-Other Activities

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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.
- 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.

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<sup>2</sup> See Appendix I

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

- 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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## 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, a 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 Energy Sources	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.
Trade Effluent	Treated or untreated effluent discharged from any trade or industrial facility but does not include domestic waste water or storm water.
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, Michael Cullen, Senior Environmental Engineer, 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 in 2019.

Intel is a semiconductor manufacturing facility licensed by the Environmental Protection Agency (EPA) to manufacture integrated circuits and printed circuit boards.

Secondary licensed activities taking place on site to support the manufacturing process include:

- Operation of combustion installations with a rated thermal input equal to or greater than 50 Megawatts and
- Surface treatment of products using organic solvents, in particular for coating and/or cleaning, with a consumption capacity of more than 200 tonnes per year

The site operates in strict compliance with its EPA licence. There was one minor environmental incident in 2019. There were 6 complaints received from neighbours in 2019, five relating to noise and one to steam being released from site. All were addressed to the satisfaction of the neighbours.

Production increased by approximately 15% in 2019 compared to 2018.

Construction work began on a new manufacturing building on site in 2019.

Intel's Environmental Management System is certified to the ISO 14001 standard. In November 2019, Intel's Energy Management System was recertified to the ISO 50001 standard.

The Leixlip site is also required to meet Intel's corporate targets for excellent environmental performance. This involves meeting Intel's stringent energy and water saving targets and achieving waste recycling and recovery targets. Intel won the Green Manufacturer Award at the 2019 Green Awards and the Best Corporate Social Responsibility Community Programme Award at the 2019 All Ireland Community & Council Awards for its Biodiversity & Community Program.

## 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:

<p>Lisa Harlow – Global Public Affairs Lisa.Harlow@intel.com Tel: 01-6067000</p>
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## 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 2019 and 2020**

<b>Environmental Goal</b>	<b>Target Date</b>	<b>Progress</b>
Work with waste receiving facilities to develop recovery processes for three waste types, rather than sending wastes for disposal	Q3 2019	Completed
Maintain the Biodiversity Programme for Intel site	Q1-Q4 2019	Completed
Installation of hoist for air abatement monitoring equipment	Q3 2019	Completed
Investigate how the control parameters associated with the emissions to air abatement systems correlate with emission levels of fluorides and ammonia	Q4 2019	Completed
Implement design improvements of the F24-2 RCTO solvent abatement system to reduce bypasses	Q4 2019	Completed

Conserve water through Intel's water conservation programme	Q4 2019	Completed (1,507,653 m <sup>3</sup> of water was conserved)
Conserve energy through Intel's energy conservation programme	Q4 2019	Completed (29.5 GWh of energy saved)
Successfully complete recertification audit of ISO 50001 Multisite Energy Management System, with Ireland as the headquarter site	Q4 2019	Completed
Maintain the Biodiversity Programme for the Intel Ireland site	Q1-Q4 2020	In progress
Update and improve site noise sources survey model	Q3 2020	In progress
Increase awareness of environmental noise amongst personnel within Intel operations	Q3 2020	In progress
Increase awareness of environmental effect of releases of high global warming refrigerant gases	Q2 2020	In progress
Meet the Intel Corporate waste target to <i>achieve zero hazardous waste to landfill</i>	Q4 2020	In progress
Contribute to the Intel Corporate non-hazardous waste target to <i>achieve a 90% non-hazardous waste recycle rate by 2020</i>	Q4 2020	In progress
Investigate design improvements of the F14 RCTO solvent abatement system to reduce bypasses	Q4 2020	In progress
Contribute to the Intel Corporate water conservation 2030 goals through the site's water conservation programme	Q4 2020	In progress
Contribute to the Intel Corporate energy conservation 2030 goals through the site's energy conservation programme	Q4 2020	In progress
Successfully complete surveillance audit of ISO 50001 Multisite Energy	Q4 2020	In progress

Management System, with Ireland as the headquarter site		
Ensure all required bund/underground pipe integrity testing is completed	Q4 2020	In progress
Increase storm water awareness for site personnel	Q4 2020	In progress

Comment

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### 3) Energy & Water

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#### Energy

##### **Explanation**

Fossil fuels used to produce energy are a non-renewable resource. 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. For this report our energy use is split into two sources:

- renewable (wind, solar etc.)
- fossil fuel (oil, coal, gas etc.).

Where we have the means and technology on-site to generate energy, this is also captured in this report.

The information below summarises the heat and electrical energy we used in 2019.

**Table 2 Energy Used (Heat and Electricity) in 2019**

<b>Energy Used</b>	<b>Quantity (GJ)</b>	<b>% Increase/ decrease on previous year</b>
<b>Fossil Fuels</b>	869,951	+5%
<b>Renewable Energy</b>	3,035,739	+7%
<b>Total Energy Used</b>	3,905,689	+7%

##### Comment

The electricity used at the Intel Ireland site is generated off site from certified 100% from indigenous renewable sources.

The information below summarises the heat and/or electrical energy we generated on our site in 2019.

**Table 3 Energy Generated (Heat and Electricity) in 2019**

<b>Energy Produced</b>	<b>Quantity (GJ)</b>	<b>% Increase/ decrease on previous year</b>
<b>Fossil Fuel</b>	562,242	+6%
<b>Renewable Energy</b>	N/A	N/A
<b>Total Energy Produced</b>	562,242	+6%

**Comment**

Energy generated on site was in the form of heat in natural gas boilers and electricity in gas oil emergency generators.

## 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 in 2019 compared to the previous year.

**Table 4 Water Used in 2019**

Source of Water Used	Quantity (m <sup>3</sup> /year)	% Increase/decrease on previous year
Groundwater	0	N/A
Surface Water	0	N/A
Public Supply	6,790,612	+14%
Recycled Water	493,026	-
Rainwater	0	N/A
<b>Total Water Used</b>	<b>7,283,638</b>	<b>+14%</b>

### Comment

Intel recycles water internally by diverting certain waste streams for re-use in facilities systems. This is one part of Intel's water conservation programme which also includes other water saving measures. Approximately 90% of the water taken from the public water supply is returned to the River Liffey after on-site and off-site treatment. Most of the remaining 10% is evaporated from the cooling towers on site.

## 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 about us.

See the information below for a summary of **all** the environmental complaints about our activities made directly to us or to the EPA in 2019.

**Table 5 Summary of All Environmental Complaints Received in 2019**

<b>Type of Complaint</b>	<b>Number of Complaints Received</b>	<b>Number Closed in 2019</b>
<b>Odour / Smells</b>		
<b>Noise</b>	5	5
<b>Dust</b>		
<b>Water Quality</b>		
<b>Air Quality</b>	1	1
<b>Waste</b>		
<b>Litter</b>		
<b>Vermin/Flies/Birds</b>		
<b>Soil Contamination</b>		
<b>Vibration</b>		
<b>Other</b>		

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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

All 2019 noise concerns were fully investigated and resolved. Follow up actions were communicated to the complainants with continuous engagement during the investigation. The air quality concern was submitted by a neighbour, inquiring about the site's air emissions. Clarification was given to the neighbour who was satisfied with the information provided.

## 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 in 2019.

**Table 6      Number of Environmental Incidents in 2019**

<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	1				
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

The licence limit for pH at the point where wastewater is discharged to sewer is 9.5. In April 2019, the pH exceeded 9.5 for approximately one and a half hours, reaching a maximum of 10.2.

There was no impact on the Leixlip wastewater treatment plant, the location to which the waste water is discharged.

The cause of the incident was identified as a procedural issue relating to maintenance of the pH probes. The procedure for undertaking this task has been updated to prevent re-occurrence.

## 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 in 2019.

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

All site storm water flows via interceptors to the site's storm water retention pond and then to the River Rye. Flow and pH of the discharge to the river Rye is continuously monitored. There is an outlet valve which can be closed remotely or manually at any time if there are any concerns over the discharge quality.

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

River Ryewater.

**Table 7 Summary of Storm Water Monitoring in 2019**

<b>Parameter measured</b>	<b>No. of Samples</b>	<b>% Compliant<sup>7</sup></b>	<b>Comment</b>
pH	Continuous monitoring	100%	Trigger levels agreed with the EPA
Flow	52	N/A	
COD	52	N/A	
Conductivity	52	N/A	
Total Organic Carbon (as C)	52	N/A	
Total Heavy Metals	2	N/A	

**Comment**

All storm water emissions monitoring as per IE Licence P0207-04 was carried out.

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<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 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 in 2019.

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

The waste water generated at Intel is neutralised onsite before being discharged to an Irish Water sewer for further treatment at its Municipal Waste Water Treatment Plant in Leixlip.

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

Waste water from Intel is discharged to Irish Water (Leixlip Municipal Waste Water Treatment Plant) for further treatment before being discharged into the River Liffey.

**Table 8 Summary of Waste Water Monitoring in 2019**

<b>Parameter measured</b>	<b>No. of Samples</b>	<b>% Compliant</b>	<b>Comment</b>
COD Equivalence	52	100%	
Inorganic Suspended Solids	52	100%	
Suspended Solids	52	100%	
Total Dissolved Solids	52	100%	
Total Nitrogen	52	100%	
Total Phosphorus	52	100%	
Fluorides (as total F)	52	100%	
Cyanides (as total CN)	52	100%	
Arsenic and compounds (as As)	52	100%	
Copper and compounds (as Cu)	52	100%	
Chromium and compounds (as Cr)	52	100%	
Nickel and compounds (as Ni)	52	100%	
Tin	52	100%	
Lead and compounds (as Pb)	52	100%	
Total heavy metals	52	100%	

Ammonia (as N)	52	N/A	
Cobalt	52	N/A	
Nitrate (as N)	52	N/A	
Sulphate	52	N/A	
Volumetric flow	Continuous monitoring	100%	
pH	Continuous monitoring	99.99%	The pH level of the process effluent being discharged from the site Effluent Balance Tank (EBT) (Emission Point; SE1) exceeded the pH upper limit of 9.5 for approximately 1.5 hours commencing at 5:38pm on Tuesday, 23rd April 2019
Temperature	Continuous monitoring	100%	

#### Comment

All waste water emissions monitoring as per IE Licence P0207-04 was carried out.

## 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 in 2019.

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

72

**Table 9 Summary of Air Emissions Monitoring in 2019**

Parameter measured	No. of Samples	% Compliant	Comment
Carbon Monoxide	RCTO: continuous monitoring Trimix: 8 samples	100%	
Nitrogen Oxides (as NO <sub>2</sub> )	RCTO: continuous monitoring Boilers: 13 samples Trimix: 8 samples	100%	
Total Organic Carbon	RCTO: continuous monitoring	100%	
Total Acids (as HCl)	Acid Scrubbers: 76 samples	100%	
Hydrofluoric acid (Gaseous) (as HF)	Acid Scrubbers: 76 samples	100%	

Total Fluorides (as HF)	Acid Scrubbers: 76 samples	100%	
Organics Class I	RCTO: 99 samples	100%	
Organics Class II	RCTO: 45 samples	100%	
Ammonia	Trimix: 8 samples Ammonia Scrubbers: 16 samples	100%	
Volumetric Flow	RCTOs: 99 samples Acid Scrubbers: 76 samples Ammonia Scrubbers: 16 samples Trimix: 8 samples Speciality Exhaust: 4 samples	100%	
Inorganic Dust Particles Class I	Speciality Exhaust: 4 samples	100%	
Inorganic Dust Particles Class II	Speciality Exhaust: 4 samples	100%	
Inorganic Dust Particles Class III	Speciality Exhaust: 4 samples	100%	
Total Dusts	Speciality Exhaust: 4 samples	100%	

#### Comment

All air emissions monitoring required by the IE Licence P0207-04 were carried out. All samples were within compliance limits.

**Table 10 Summary of Odour Assessments Carried Out in 2019**

<b>Assessment Conducted By</b>	<b>No. of Odour Assessments</b>	<b>% Compliant<sup>8</sup></b>	<b>Comment</b>
Licence Holder	0	N/A	
EPA	0	N/A	

Comment

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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 in 2019, 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 in 2019**

Quantity of Solvents Used (Kg)	% Fugitive Solvent Emissions	Compliant
8,045,335	0.4%	Yes

Comment

As per IE Licence P0207-04 condition 6.11.1, fugitive solvent emissions shall not exceed 15% of total solvent input. In 2019 solvent emissions were only 0.4%, well within the compliance limit.

<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 in 2019.

**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**

<b>Pollutants</b>
Extractable hydrocarbons at a single localised monitoring well MW18 (related to a historical local diesel spill in 1997)

Add rows as necessary

**Comment**

In addition, there is a long-term trend of elevated sulphates noted at monitoring well MW4. No upward trend noted.

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

Localised residual hydrocarbon contamination at MW18. Risk assessment and monitoring has confirmed there is no potential for migration and is contained locally. Source removed and natural degradation and monitoring is ongoing. Localised long-term elevations of non-hazardous inorganic substances primarily sulphate north of the industrial site. No evidence of an increasing trend of sulphate and no evidence of impact on the Ryewater water quality.

## 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 in 2019 and if results complied with our EPA licence limits.

#### 1. We conducted noise monitoring on the following dates in 2019:

- 11/19 September 2019
- 16/17 October 2019
- 18/19/27/28 November 2019

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

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

Both at the boundary of our facility and at noise sensitive locations

#### 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 2019, as confirmed by the annual noise monitoring survey, Intel operated within the noise limits stipulated in the site Industrial Emissions Licence.

## 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 and record all outgoing hazardous, non-hazardous and inert waste. We ensure that waste transported off-site for treatment is carried out in accordance with the relevant waste Regulations.

The information in table 13 is a summary of waste we generated in 2019 and the percentage increase or decrease on the previous year.

**Table 13 Waste Generated in 2019**

Type	Quantity (Tonnes)	% Increase/ decrease on previous year
Hazardous	30,029	41% increase
Non-Hazardous	24,085	55% increase
Inert	122,625	1,303% increase
<b>Total Tonnes</b>	<b>176,739</b>	<b>288% increase</b>

#### Comment

There was an increase in both hazardous and non-hazardous waste on site due primarily to a large construction project which commenced in Q1 2019. Inert waste reported here reflects some of the soil and stones generated during construction activity. A small proportion of the overall increase in both hazardous and non-hazardous waste was related to increased production in the factory.

## Waste Accepted

Did you accept waste onto your facility for storage, treatment, recovery or disposal in 2019?

Yes

No

### Explanation

We manage the waste we accept in a manner that does not cause environmental pollution.

We manage 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 in 2019 and the percentage increase or decrease on the previous year. It also details the tonnes of this waste accepted that was for disposal or recovery.

**Table 14 Waste Accepted in 2019**

Type	Quantity (Tonnes)	% Increase/ decrease on previous year	Waste Disposed	Waste Recovered
Hazardous				
Non-Hazardous				
Inert				
Total Tonnes				

### NOTE:

See Appendix II for detailed figures of waste accepted in 2019.

Comment

## 8) Financial Provision

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### **Explanation**

We are required 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?

The 2015 Update of the CRAMP was approved by the Agency in May 2016. Updated versions of the CRAMP were submitted in April 2019 and April 2020.

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

The 2015 Update of the ELRA was approved by the Agency in May 2016. Updated versions of the ELRA were submitted in April 2019 and April 2020.

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

Yes

No

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<sup>10</sup> See Appendix III

If yes, have you submitted details to the EPA?

Yes

No

N/A

# 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 template is different and can be found at <http://www.epa.ie/pubs/advice/aerprtr/aerguid/>

# Appendix II

Waste Accepted Data

**Table 15 Waste Accepted On-Site in 2019**

List of Waste Code	Quantity (Tonnes)	Waste Description	Disposal or Recovery

Add rows as necessary

# Appendix III

## 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>