Annual Environmental Report (AER)

2024

Company Name: Intel Ireland Limited

Licence Number: P0207-05

Address: Collinstown Industrial Park, Leixlip, Co. Kildare

Class of Activity[1]:

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

[1] See Appendix I

Purpose of this Report

One of the functions of the Environmental Protection Agency (EPA) is to licence and regulate the activities[2] 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

[2] See Appendix I

member of the public can obtain further information on topics reported in this document.

2) Some documents[3] 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.

[3] This includes EPA site inspection and compliance monitoring reports, licence holders' self-monitoring reports, AERs and special reports

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Glossary

Abatement Equipment	Technology used to reduce pollution
AER	Annual Environmental Report.
Beyond Compliance	Beyond compliance is concept to help deliver greater organisational performance and long-term value for the environment, society and the economy.
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

I, **Marina Lucey (Environmental Health & Safety Manager)**, 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

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

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. In 2024, there were ten minor environmental incidents. Of these, seven were related to downtime of the Continuous Emissions Monitoring System (CEMS) analysers, and one was due to a fire in an unattended parked car in the IR4 Multi-Storey Car Park (MSCP). Neither of these incidents had any environmental impact. Two incidents involved refrigerant loss from chillers.

There were five complaints received from neighbours in August 2024, one complaint to the Agency and four complaints directly to Intel from nearby residents. All complaints were related to the same incident and all complaints were fully investigated and closed out. Further details are provided in Section 4 of this report.

Construction work continued at the new manufacturing (Fab 34) building on site in 2024. Fab 34 Mod 1 started production in late September 2023. Construction and tool installation in the Fab 34 Mod 2 facility continued through 2024.

Intel's Environmental Management System is certified to the ISO 14001 standard. The site underwent an ISO 14001 surveillance audit in May 2024. Intel's Energy Management System is certified to the ISO 50001 standard. The site underwent an ISO 50001 surveillance audit in September 2024. Both audits were conducted by the National Standards Authority of Ireland (NSAI).

In 2024, Intel Ireland won the Excellence in Community and Sustainable Development Award at the County Kildare Chamber Awards. Intel was also shortlisted for the Environmental and Biodiversity Award at the Chambers Ireland Sustainable Business Impact Awards.

Intel Ireland also contributes to the achievement of Intel's global RISE (Responsible, Inclusive, Sustainable and Enabling) Sustainability 2030 goals. More information on our environmental goals at site level and our work which goes beyond compliance are provided in Section 2 and Appendix III.

Contact Us

If you have any questions or would like further information on any aspect of our licensed activity, please contact us directly.

See below details:

Sarah Sexton – Director of Community Relations and Sustainable Operations.
sarah.sexton@intel.com Tel: +353 (1) 606 8537

2) How we Manage our Facility

Environmental Management System

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

Environmental Goal	Target Date	Progress
Meet the Intel Corporate waste target to achieve zero total waste* to landfill by 2030.	Dec 2029	Ahead of schedule - achieved zero waste to landfill in 2024.
Contribute to Intel Corporate target to implement circular economy strategies for 60% of our manufacturing waste streams, in partnership with our suppliers, by 2030.	Dec 2029	Ahead of schedule – 89% achieved in 2024.
Contribute to the Intel Corporate water conservation 2030 goals through the site's water conservation programme.	Dec 2029	In Progress (See Appendix III – Beyond Compliance)

Contribute to the Intel Corporate energy conservation 2030 goals through the site's energy conservation programme.	Dec 2029	In Progress (See Appendix III – Beyond Compliance)
Maintain certification of Intel's ISO 50001 Energy Management System	Sept 2024	Complete
Implement natural gas boiler upgrades to increase efficiency and reduce NOx emissions.	Sept 2024	Complete (3 boilers upgraded)
Review fugitive emissions programme in line with Condition 3.14 of IE Licence P0207-05.	Dec 2024	Complete
Ensure all required bund/ underground pipe integrity testing is completed for 2024.	Dec 2024	In Progress
Continue to maintain our site Biodiversity Program.	Jan – Dec 2024	Complete (See Appendix III – Beyond Compliance)
Maintain certification of Intel's ISO 14001 Environmental Management System	May 2024	Complete
2025 Goals:		
Continue to contribute to the Intel Corporate waste target to achieve zero total waste* to landfill by 2030.	Dec 2029	In Progress
Continue to contribute to the Intel Corporate target to implement circular economy strategies for 60% of our manufacturing waste streams, in partnership with our suppliers.	Dec 2029	In Progress
Contribute to the Intel Corporate water conservation 2030 goals through the site's water conservation programme.	Dec 2029	In Progress
Maintain the site's ISO 50001 certified Energy Management	Dec 2029	In Progress

System to continue delivering energy conservation as per Intel's 2030 Sustainability goals.		
Implement an additional natural gas boiler upgrade to increase efficiency and reduce NOx emissions.	Dec 2025	In Progress
Update Firewater Risk Assessment Report.	Dec 2025	Not commenced
Increase awareness of importance of correct waste segregation - continuous improvement.	Dec 2025	Not commenced
Continue to maintain our site Biodiversity Program.	Jan – Dec 2025	In Progress

(*The Intel definition of "zero waste to landfill" is <1% waste to landfill).

Comment

The site Environmental Management Program captures projects relating to Intel's legal and other requirements, as well as voluntary commitments the site makes in line with Intel Corporation's RISE 2030 Sustainability Goals (10-year goals).

Beyond Compliance

Explanation
We are legally required to comply with our environmental licence. However, the EPA realise that some sites go further than just complying with their environmental licence requirements. Some projects carried out at facilities can have long term positive impacts on the environment and local communities.
The EPA's beyond compliance initiative is encouraging us to identify and report on these environmental and sustainability projects. For example, the project could involve renewable energy, biodiversity, water conservation or exemplar community engagement.

Did any project completed on your site in the reporting year go beyond your licence requirements?

Yes ☑ No ☐

If yes, provide details of one case study in Appendix III that demonstrates how the project went beyond compliance of your licence.

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 3 Energy Used

Energy Used	Quantity (GJ)	% Increase/ decrease on previous year
Electricity	5,015,832	18% Increase
Heavy Fuel Oil	0.0	0%
Light Fuel Oil	4,671	60% Decrease
Natural Gas	1,019,589	7% Increase
Coal / Solid Fuel	0.0	0%
Peat	0.0	0%
Renewable Biomass	0.0	0%
Renewable Energy Generated On-site	0.0	0%
Total Energy Used	**6,040,092**	**16% Increase**

Comment

The Leixlip site's energy consumption increased in 2024 with ongoing ramp of production in Fab 34. Natural gas usage is up due to increased abatement requirements in Fab 34, while loading on boilers has increased with increased production demands. The electricity used at the Intel Ireland site is generated off site from 100% renewable sources as covered by Guarantees of Origin.

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

Table 4 Energy Generated

Energy Generated	Quantity (GJ)	% Increase/ decrease on previous year
Renewable Energy	0.0	0.0%
Total Energy Generated	**0.0**	**0.0%**

Comment

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 5 Water Used

Source of Water Used	Quantity (m^3/year)	% Increase/ decrease on previous year
Groundwater	0.0	0.0%
Surface Water	0.0	0.0%
Public Supply	10,560,541	22.7%
Recycled Water	3,307,775	15%
Rainwater	0.0	0.0%
Total Water Used	**13,868,316**	**20.8%**

Comment

The Leixlip site's water consumption increased in 2024 due to commissioning activities and ramp of production in Fab 34.
Intel recycles water internally by diverting certain streams of process water from drain for use in facilities systems. The volume of water recycled in 2024 increased due to more diverted process water being available for reuse.

4) Environmental Complaints

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[4] directly. You can also contact the EPA[5] 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 6 Summary of All Environmental Complaints Received in

Type of Complaint	Number of Complaints	Number Closed
Odour / Smells		
Noise	5	5
Dust		
Water Quality		
Air Quality		
Waste		
Litter		
Vermin/Flies/Birds		

[4] See Section 1, Introduction – Contact Us

[5] 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

Soil Contamination		
Vibration		
Other		

Comment

On August 17th, a noise incident occurred due to a malfunctioning nitrogen system on site, leading to one complaint to the EPA and four complaints directly to Intel from nearby residents. The noise was caused by a safety valve releasing nitrogen gas as part of a fail-safe response, a rare occurrence for this equipment. The incident involved a loud pop and subsequent venting, with no associated air pollution risk. Intel's Community Relations and Sustainable Operations group addressed the complaints, and an investigation has been completed. As a result, a new communication protocol was developed. The EPA was informed and found Intel's report satisfactory.

5) Environmental Incidents

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 7 for the number of the environmental incidents we reported to the EPA this year.

Table 7 Number of Environmental Incidents

Incident Category	Minor	Limited	Serious	Very Serious	Catastrophic
Abatement Equipment Offline					
Breach of Ambient ELV					
Breach of Emission Limit					
Explosion					
Fire	1				
Monitoring Equipment Failure	7				
Odour					
Spillage					
Breach of trigger Level					
Uncontrolled Release					

Incident Category	Minor	Limited	Serious	Very Serious	Catastrophic
Other	2				

Comment

There were seven minor incidents categorised as “Monitoring Equipment Failure” related to downtime of the Continuous Emissions Monitoring System (CEMS) analysers.

There was one minor incident categorised as “Fire”, related to a fire in an unattended parked car in the IR4 Multi-Storey Car Park (MSCP).

There were two minor incidents categorised as “Other” which were related to refrigerant loss from chillers.

6) Our Environmental Emissions

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
- Wastewater
- 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[6].

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.

[6] See section 5, Incidents

Storm Water

Explanation
Storm water is rainwater run-off from roof and non-process areas of a facility, e.g. carparks, 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:**

Site storm water flows via interceptors to the site's storm water retention ponds and then to the River Rye. Flow and pH at the outfall to the River Rye is continuously monitored. There are outlet valves 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 Rye

Table 8 Summary of Storm Water Monitoring

Parameter measured	No. of Samples	% Compliant	Comment
pH	Continuous monitoring	100%	Trigger levels are communicated to the EPA in Spring and Autumn seasons.
Flow	Continuous monitoring	100%	
COD	52		
Conductivity	52		
Total Organic Carbon (as C)	52		
Total Heavy Metals	2		

Comment

All storm water emissions monitoring was carried out as per IE Licence. 52 weekly SW1 samples were taken during 2024.

Wastewater

Explanation

There are two types of wastewaters that can be produced:

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

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

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

1. **Wastewater produced by our activities is treated as follows before discharge to a receiving waterbody**.

The wastewater generated at Intel is neutralised onsite before being discharged to Irish Water's Leixlip Municipal Wastewater Treatment Plant for further treatment.

2. **Treated wastewater from our facility is released into the following water bodies.**

River Liffey (discharged from Leixlip Wastewater Treatment Plant).

Table 9 Summary of Wastewater Monitoring

Parameter measured	No. of Samples	% Compliant	Comment
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%	
Cobalt (as Co)	52	100%	
Total Heavy Metals	52	100%	
Ammonia (as N)	52	100%	

Nitrate (as N)	52	100%	
Sulphate	52	100%	
Volumetric flow	Continuous monitoring	100%	
pH	Continuous monitoring	100%	
Temperature	Continuous monitoring	100%	

Comment

All wastewater monitoring was carried out as per the IE Licence P0207-05.

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.**

93

Table 10 Summary of Air Emissions Monitoring

Parameter measured	No. of Samples	% Compliant
Carbon Monoxide	RCTO: continuous monitoring Trimix: 8 samples Boilers: 20 samples	100%
Nitrogen Oxides (as NO2)	RCTO: continuous monitoring Trimix: 8 samples Boilers: 20 samples Acid Scrubbers: 25 samples	100%
Total Organic Carbon	RCTO: continuous monitoring	100%

Total Acids (as HCl)	Acid Scrubbers: 102 samples	100%
Hydrofluoric acid (Gaseous) (as HF)	Acid Scrubbers: 102 samples	100%
Total Fluorides (as HF)	Acid Scrubbers: 102 samples	100%
Organics Class I	RCTO: 126 samples	100%
Organics Class II	RCTO: 60 samples	100%
Ammonia	Trimix: 196 samples & continuous monitoring Ammonia Scrubbers: 570 samples & continuous monitoring	100%
Volumetric Flow	RCTOs: 126 samples Acid Scrubbers: 204 samples Ammonia Scrubbers: 967 samples & continuous monitoring Trimix: 196 samples & continuous monitoring Speciality Exhaust: 6 samples	100%
Inorganic Dust Particles Class I	Speciality Exhaust: 6 samples	100%
Inorganic Dust Particles Class II	Speciality Exhaust:6 samples	100%
Inorganic Dust Particles Class III	Speciality Exhaust: 6 samples	100%
Total Dust	Acid Scrubbers: 25 samples Speciality Exhaust: 6 samples	100%

Comment

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

Table 11 Summary of Odour Assessments Carried Out

Assessment Conducted By	No. of Odour Assessments		% Compliant[7]	Comment
Licence Holder	**0**	**N/A**		
EPA	**0**	N/A		

Comment

Odour monitoring is not required by the site's IE Licence.

[7] A compliant odour assessment is based on EPA Odour Impact Assessment Guidance available at Air Enforcement | Environmental Protection Agency (epa.ie)

Fugitive Solvent Emissions

Are you 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[8]. 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 12 Summary of Fugitive Solvent Emissions

Quantity of Solvents Used (Kg)	% Fugitive Solvent Emissions	Compliant
4,637,581	0.67	Yes

Comment

As per IE Licence Condition 6.11.1, fugitive solvent emissions shall not exceed 15% of total solvent input. In 2024, fugitive solvent emissions were 0.67%, well within the licence limit.

[8] 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 13 List of Groundwater Pollutants Identified

Pollutants
1. Hydrocarbon at MW18. 2. Hydrocarbon at Fab 34 construction site. 3. Orthophosphate at MW11

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

1. Extractable hydrocarbons at a single localised monitoring well MW18 (related to a historical local diesel spill in 1997). Risk assessment and monitoring has confirmed there is no potential for migration and is contained locally. Natural degradation and monitoring is ongoing.
2. Hydrocarbon groundwater contamination identified in the Fab 34 construction area in January 2022 was reported to the Agency. (See more details below).
3. Two rounds of investigative sampling in 2023 indicated the possibility of exfiltration from a foul (sanitary) sewer. Relining of the foul sewer north of MW10, MW11 and MW12 was carried out in Q3 2023. Orthophosphate, which was above the Groundwater Threshold Value (GTV) in MW11 in the 2023 (May/June 2023) sampling round, was below the GTV in the two 2024 sampling rounds.

Comment

In relation to Item 2 above, a groundwater monitoring and sampling program continued to be implemented along with the installation of two groundwater treatment systems which were commissioned in Q1 2024. Ongoing monitoring has shown a very high level of compliance with the agreed target value of 10µg/l or less in groundwater sampled after treatment.

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:**

17th,18th, 29th and 30th October 2024
3rd, 4th, 19th, 20th and 21st November 2024

2. **Where was the noise monitoring carried out?**
   - i. **the boundary of our facility;**
   - ii. **noise sensitive locations off-site; or**
   - iii. **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?

N/A

Comment

7) Waste

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 14 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 14 Waste Generated

Type	Quantity (Tonnes)	% Increase/ decrease on previous year	% Recovery
Hazardous	21,565	18.3%	93.3%
Non-Hazardous	13,321	-41.6%	99.2%
Inert	75	-27.2%	100.0%
Total Tonnes	34,878	-15.2%	95.8%

Comment

Hazardous Waste in 2024 increased by 18% relative to 2023. This is mainly due to an increase in production. Non-hazardous and inert waste has reduced significantly from 2023 to 2024 in line with a reduction in construction activity. Total Waste decreased by 15% in 2024 relative to 2023. Intel has maintained a high level of recovery of waste.

Waste Accepted

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

Yes [ ] No [X]

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 15 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 15 Waste Accepted

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

Comment

8) Financial Provision

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[9] 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?

2023

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

2023

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 [ ]

[9] 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[10]
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

[10] This reporting template is not applicable to the **intensive agriculture sector**. Their annual environmental reporting structure is different and can be found at Compliance & Enforcement: Licensees: Reporting Publications | Environmental Protection Agency (epa.ie)

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.

Compliance & Enforcement: Financial Provisions Publications | Environmental Protection Agency (epa.ie)

Appendix III

Beyond Compliance

The case study below shows how we went beyond the requirements of our licence in the reporting year.

Water Conservation: In 2024 the site achieved 3.3 million cubic meters of water conservation to contribute towards the Intel Corporate RISE Water Conservation goal of 227 million cubic meters (60 billion gallons) by 2030. This was achieved through a number of water conservation and water reuse projects, including the installation of the extensive heat recovery system in F34 which reduces the volume of water consumed in our cooling systems.

Energy Conservation: Numerous energy conservation projects in 2024 delivered 19.8 million kWh of annualised savings to contribute to the Intel Corporate RISE Energy Conservation goal of 4 billion kWh by 2030. These projects included the introduction of all new control schemes across our cooling plants and the optimisation of the Heating Ventilation and Air Conditioning (HVAC) systems in Fab 34.

Biodiversity: Intel maintains the Site Biodiversity Program with annual actions to survey the wildflower summer meadow and reporting the results to the National Biodiversity Data Centre. In September 2024, a walking trail, sponsored by Intel, was opened along the River Rye in Leixlip that highlights the biodiversity aspects in the area. Intel also continues to facilitate the Friends of the River Rye stakeholder meetings, as well as sponsoring the annual limnological study of the river. Intel continued its Pride of Place competition in 2024, which provides grants for local community projects, many of which have a biodiversity aspect such as dedicated gardens in local schools and housing estates.