

EPA Application Form



Attachment

Organisation Name: *

Amazon Data Services Ireland Limited

For inspection Per-

Application I.D.: *

LA007495

Amendments to this Application Form Attachment

Version No.	Date	Amendment since previous version	Reason
V.1.0	July 2017	N/A	Online application form attachment
As above	Mar 2018	Identification of required fields	Assist correct completion of attachment
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9 Environmental Management Techniques¹

9.1. Accident Prevention Measures

Measures to prevent accidental emissions and liabilities

Incidents and accidents are unplanned events. Emissions from incidents and (major) accidents usually occur within a relatively short time frame but with greater intensity than under normal operating conditions. Incidents such as fire or fuel spillages can result in liabilities such as contaminated soil and groundwater. Proactive risk management reduces the potential for an incident.

Abnormal operating conditions must be managed without endangering human health and harming the environment, and in particular without risk to water, air, soil, plants or animals, without causing a nuisance through noise or odours, and without adversely affecting the countryside or places of special interest.

The applicant must firstly undertake a risk assessment in accordance with EPA guidance on assessing and costing environmental liabilities. Having identified the key risks, the applicant should populate the following table with the measures to be taken to treat the key risks, e.g., bunding, integrity testing, fire prevention, etc.

The range of measures is dependent on the complexity of the site. Pollution prevention measures may, inter alia, include the following information:

- Conclusions on BAT set out in the EU Reference document on BAT on emissions from storage such as a safety management system; corrosion prevention measures on tanks, etc.
- Details of storage of all raw materials, products and wastes such as segregation, labelling, designation and impervious surface;
- Details of spill or emergency containment measures and structures such as bunds, high level alarms, absorbent materials;
- Details of fire detection and fire-water retention facilities in the event of emergencies or other measures to contain fire-water;
- Details of transport of material within the site, solid, liquid or sludge transported by pipe, vehicle or conveyor; etc.,
- The Agency has published a guidance document on Fire-Water Retention Facilities and on the Storage and transfer of materials.

¹ This part of the form collects information on environmental management at the installation/ facility. It seeks to understand the maturity of the management system in terms of knowledge of abnormal operating conditions, prevention and early detection measures and emergency response procedures. The level of detail required in this part of form relates to the environmental risk posed.

Describe in the table below existing and/or proposed measures, including emergency procedures, to minimise the impact on the environment of an accidental emission or spillage. (This table should include the measures to be taken under abnormal operating conditions, including start-up, shutdown, leaks, malfunctions, breakdowns and momentary stoppages that will demonstrate that any emission arising will not cause significant environmental pollution)².

Measure *	Surveillar	ice Measures	
	Description *	Frequency of Surveillance *	Method / Standard *
Emergency Response Plan	An on-site Emergency Response Plan (ERP) is in place for the existing data storage facilities and this will be updated to incorporate the additional data storage facility developments in the extended campus as well as the requirements of the EPA's guidance. The ERP details the required actions to be undertaken in the event of an incident on site and will cover all possible emergency scenarios including fires, explosions, natural disasters, chemical spills, terrorism, etc. The ERP also includes the arrangements for contacting the emergency services and the relevant ADSIL personnel. The ERP is reviewed regularly by the EHS manager and is updated as required. It should be noted that the facilities will typically operate 24/7, 365 days a year. There is therefore no additional specific procedure required for emergencies outside normal working hours. In addition to the ERP there is a disaster response procedure which provides instruction for the Disaster Response Action Team (AWS DRT).	ERP and standard operating procedure (SOP) to be reviewed regularly	ADSIL's Emergency Response Plan (ERP) ADSIL's Disaster Response Employee SOP

² Information relating to the integrity, impermeability and recent testing or pipes, tanks and bund areas should be included.



Measure *	Surveillance Measures		
	Description *	Frequency of Surveillance *	Method / Standard *
Environmental Management System (EMS)	An EMS will be developed for the site in accordance with the requirements of BAT and will be in place 12 months after commencement of IE Licence. The EMS will outline the management of the site's environmental program and will be in line with the principals of ISO14001.	EMS will be reviewed annually	EMS will be in place 12 months after commencement of IE Licence.
Raw materials will be stored in appropriate vessels	The materials of construction will be compatible with the materials that will be used in the process. This will ensure that corrosion is avoided. The diesel tanks have been designed to BS799. The diesel tanks are integrity tested by the vendor at installation. Pressure relief valves will be installed in accordance with the manufacturers design.	Ongoing	EPA Guidance Note on the Storage and Transfer of Materials for Scheduled Activities
Raw materials will be stored to ensure adequate containment	The only hazardous material stored onsite is diesel. Diesel is stored in bunded bulk tanks and in double skinned belly tanks and day tanks. The tanks will be equipped with level detection as outlined in Attachment 4.8.1 Operational Report.	Daily visual inspections of bunds, sumps, and oil detection probes	EPA Guidance Note on the Storage and Transfer of Materials for Scheduled Activities
	All bunds will be capable of containing 110% of the volume of the largest drum/tank within the bund or 25% of the total volume of the substance stored and will be designed in accordance with the EPA's guidelines for the storage and transfer of materials for scheduled activities (EPA, 2004).	SOPs to be reviewed regularly	



Measure *	Surveillance Measures		
	Description *	Frequency of Surveillance *	Method / Standard *
	The design of all bunds conforms to standard bunding specifications - BS8007:1987.		
Controlled Delivery of Fuel Oil to Site	ADSIL have in place an SOP to monitor and supervise the delivery of diesel and heavy oil at all data storage facilities.	During all deliveries and dispatch of products	ADSIL's Refuelling SOP
	It is ADSIL policy that the tanks are not filled above 80% capacity (high level alarm).	SOPs to be reviewed regularly	
Spill prevention and response measures	ADSIL have in place SOPs covering the management of spills and the management of spill kits. These are	Ongoing	ADSIL's Spill Prevention And Response SOP
	implemented to prevent discharges of hazardous and dangerous material, such as diesel and oil.	SOPs to be reviewed regularly	ADSIL's Spill Kit Management SOP
	Spill drills are undertaken at each site once per year. During such events operations staff go through the steps which would be required during a real spill	Compulsory training	ADSIL's Waste And Spill
	event. Operations staff receive no notice that the spill event is to occur and are evaluated on their performance after the event.	Spill Drills	Inspections SOP
	Spill kits will be located across the site in highly visible and mobile units. These will include absorbent socks, mats, pads, disposable bags, and PPE. Spill kits will be utilised in the event of a spill and staff are trained in the use of spill management materials.		



Measure *	Surveillar	nce Measures	
	Description *	Frequency of Surveillance *	Method / Standard *
	 There is an SOP and compulsory online training for spill kit management which provides instruction on the provision, management, and use of spill kits in the data storage facilities. Staff will be fully trained in site procedures, including all SOPs and emergency response and safety procedures in relation to the storage and handling of all substances being used bat the installation. A reporting procedure is also in place with respect to the online tool used to report monthly hazardous waste and spill prevention inspections. Installation inspections are also undertaken twice per shift (4 times in 24 hours) to identify any spills. 		
Use of hydrocarbon interceptors	 Class 1 by-pass interceptors will be installed at points along the stormwater drainage network as outlined in Attachment 4.8.1 Operational Report. Class 2 by-pass interceptors will be located at the existing campus fuel delivery bays and bunds and on the foul drainage from the extended campus as outlined in Attachment 4.8.1 Operational Report. Interceptors are inspected at the time of installation and inspected and cleaned every 6 months by a specialist vendor. Waste sludge from oil separator is 	Ongoing Preventative maintenance as per schedule in EAM	ADSIL's Preventative Maintenance Schedule



Measure *	Surveillance Measures		
	Description *	Frequency of Surveillance *	Method / Standard *
	removed directly from each separator by a specialised company by means of a vacuum tanker.		
Management of Diesel tanks and bunds	 Infrastructure inspections are undertaken by the operations team. The twice a shift inspection of infrastructure ensures that any problems with tanks and bunds are dealt with if they arise. Flanges and valves on the diesel tanks, where present are subject to vendor maintenance. Diesel tanks have level gauges which are monitored continuously by BMS/EPMS. These are inspected and calibrated annually by the vendor. The bunds and delivery bays are and will be equipped with fuel detection probes to prevent any contaminated stormwater from exiting the bund. These probes are also connected to the BMS system and a critical alarm is alerted if hydrocarbon are detected in the sump. If hydrocarbons are detected in the sump, the drains close, preventing any discharge from the sumps. The sump probes are inspected annually by the vendor and are also included in the operations inspections. The maintenance of sump probes is tracked in the EAM (maintenance scheduling) system. 		Daily checklist sheet ADSIL Policy for Equipment Calibration Bund/Sump/Pipeline Register



Measure *	Surveillance Measures		
	Description *	Frequency of Surveillance *	Method / Standard *
Management of underground pipelines to prevent uncontrolled losses to ground	Fuel will be supplied from the bunded diesel tanks to the day tanks and emergency back-up generator units via 110mm diameter double lined underground distribution lines. Stress analysis will be completed on all pipes prior to installation. Pipelines are integrity tested at the time of installation. Fuel pipelines are included in the operations inspections and will be subject to vendor maintenance. The below ground fuel pipelines are Close Fit PLX (dual-contained pipe system) and comprise a system of leak detection.	SOP to be reviewed regularly Preventative maintenance as per schedule in EAM	Daily checklist sheet Preventative Maintenance SOPs in place EAM system in place. Leak detection systems in place for underground pipelines. Bund/Sump/Pipeline Register
Preventative maintenance	 The preventative maintenance schedule will form part of the EMS for the site. Preventative maintenance is undertaken on mechanical moving parts equipment and electrical equipment. Enterprise Asset Management (EAM) is the software platform the Infrastructure uses to maintain and manage its mechanical, electrical, and plumbing (MEP) equipment. This platform enables Infrastructure teams to do a variety of tasks: Track and coordinate planned and unplanned maintenance 	Preventative maintenance as per schedule in EAM SOPs to be reviewed regularly	EMS will be in place 12 months after commencement of IE Licence. Preventative Maintenance SOPs EAM system in place



Measure *	Surveillar	Surveillance Measures		
	Description *	Frequency of Surveillance *	Method / Standard *	
	 Track the full life cycle of critical data center assets Identify defective equipment through mechanisms like field service bulletins (FSBs) Provide tracking for DCEO spare part inventory Provide key insights for equipment failure, root cause analysis (RCA), and total cost of ownership (TCO) The EAM tracks preventative maintenance of the following which are maintained by external specialist vendors Pumps CRAHUS/AHUS Humidifiers Generators Power transformers 			
	standard provides preventative maintenance guidelines for generators for all manufacturers and models for all facilities.			
Fire prevention and detection	The data storage facilities are equipped with automated fire detection systems (heat and smoke). These are connected to a main fire panel in the	The fire detection and alarm systems are/will be subject to routine checks	Safety Fire System Inspection, Testing, and Maintenance Guidelines	



Measure *	Surveillar	nce Measures	
	Description *	Frequency of Surveillance *	Method / Standard *
	security office which is manned at all times. In the event that a fire is detected, the fire panel will display the location of the detected fire. Once detected the location of the potential fire will go into an alarm state.	by site personnel and are/will be inspected and tested by the external service provider on a regular basis.	
	Fire detection and alarm systems will be regularly checked to ensure they are fully operational in accordance with ADSIL's policy. The SQP on Safety Fire System Inspection, Testing, and Maintenance Guidelines includes (weekly) sprinkler maintenance and sets out frequency of testing and maintenance to be undertaken by vendors.		
Firewater Management	An attenuation pond has been installed to attenuate storm water at the existing campus and a new attenuation pond will be constructed for the extended campus. Penstocks will be installed after the IE Licence is granted, to allow shut off the stormwater discharge from the installation in the event of a fire event.	Ongoing.	Firewater management SOP (to be developed) Penstock to be installed on grant of IE license
	Potentially contaminated stormwater (e.g. in the event of a fire) that enters the stormwater attenuation pond(s) will be tested prior to discharge to the receiving surface water body. Any stormwater of unacceptable quality will be pumped out of the attenuation pond and disposed of appropriately.		



Measure *	Surveillan	nce Measures	
	Description *	Frequency of Surveillance *	Method / Standard *
Waste segregation	All waste materials will be segregated into appropriate categories and will be stored in appropriate bins or other suitable receptacles in designated, easily accessible areas of the site. Further details are supplied in Attachment 8-2-1. Further details are supplied in Attachment 8-2-1.	Ongoing SOP to be reviewed regularly	ADSIL's Waste Management Policy ADSIL's Hazardous Waste Management SOP ADSIL's Used LAB SOP ADSIL's WEEE Management SOP
Hazardous wastes will be stored to ensure adequate containment	The small amounts of hazardous waste generated is stored in designated storage areas, on hardstand, at each building. The waste is covered, and a mobile retention bund is in place to contain any liquid waste that requires storage. The waste is collected from this area by an appropriately licensed waste contractor for recovery and /or disposal off-site. A procedure is in place to provide instruction on the management of hazardous waste in the data storage facilities. In addition to the above procedure ADSIL also has SOPs for the management of Batteries and WEEE. The purpose of the 'Waste Battery SOP' is to define the process for storage, labelling, and recycling of	Ongoing SOPs to be reviewed regularly Compulsory online training	AWS Hazardous Waste Management SOP AWS Waste Battery Management SOP AWS WEEE Management SOP



Measure *	Surveillar	nce Measures	
	Description *	Frequency of Surveillance *	Method / Standard *
	used batteries). Batteries may be found in uninterruptible power supply units, power generators, or other data storage facility equipment.		
	The 'WEEE Management SOP' is used to ensure the proper management of waste electrical and electronic equipment (WEEE) at data storage facilities. This procedure outlines the handling, labelling, storage, and management of WEEE, as well as other electronic equipment that has not reached End of Life (EOL).		
Waste being sent offsite for recovery or disposal is controlled	All waste leaving site will be recycled or recovered, with the exception of those waste streams where appropriate recycling facilities are currently not available. All waste leaving the site will be transported by suitably permitted contractors and taken to suitably registered, permitted and/or licenced facilities.	SOP to be reviewed regularly	ADSIL's Management and Shipment of Waste SOP
	All waste leaving the site is recorded on the online AWS Manage Store Ship waste platform, specifically designed for the management of hazardous and WEEE. Copies of relevant documentation are retained on site.		



Measure *	Surveillance Measures		
	Description *	Frequency of Surveillance *	Method / Standard *
Management of power outages	 Procedures are in place to manage other than normal operating conditions (OTNOC) in accordance with the Large Combustion Plant BAT. Under normal operating conditions the emergency back-up generators will be operated during routine testing and maintenance only. Under one OTNOC, the generators may be operated for a longer period of time to supply emergency electricity to the data storage facilities in the event of a power cut. An uninterruptible power source or UPS system is also provided for the short-term transition from mains power to the emergency back-up generators. The changeover will be a highly controlled process which will be automated and will be controlled at the central control room. This automated system is required to ensure consistency of power supply and will ensure maximum efficiency. The 'Loss Of Utility Power Procedure' is an Emergency Operating Procedure for response to a loss of utility power. 		ADSIL's Loss Of Utility Power Procedure ADSIL's Planned Power Outage Procedure
	The 'Planned Power Outage Procedure' is to provide Operations guidance on what actions to take if they are notified of a planned power outage.		



Measure *	Surveillar	ce Measures	
	Description *	Frequency of Surveillance *	Method / Standard *
Safety and Accident Response Training	All employees will be made aware of the potential for accidents and be suitably trained to ensure that policy objectives are met. Training will be provided at induction stage and by regular online training modules. In addition, all contractors' employees will be made aware of the potential for accidents and their responsibilities in relation to them at induction stage. They will also be suitably trained, for specific tasks where relevant (and operate under safe pass, permit to work systems etc). All employees will they aware of their responsibilities in the management of accidents and will be selected and trained to ensure that they have the necessary skills and experience to perform their duties. All employees will have access to safety information (notice boards and an online system will be made available to all staff to access key health and safety documents).		EMS will be in place 12 months after commencement of IE Licence
Pollution Prevention Initiatives	As part of the EMS, the facility will establish targets for pollution prevention and will develop suitable programmes to ensure that, where practical, the data storage facilities are operated in such a way that minimizes the generation and discharge of	Ongoing SOP to be reviewed regularly	EMS will be in place 12 months after commencement of IE Licence.



Measure *	Surveillance Measures		
	Description *	Frequency of Surveillance *	Method / Standard *
	waste and other impacts on the environment and		
	the significant consumption of natural resources.		

Outline what provisions have been made to ensure an adequate response to emergency situations outside of normal working hours, i.e., during night-time, weekends and holiday periods (attach additional pages to this document if required): *

Four of the data storage facilities are already operational (Buildings A, B, C and D) with a sifth under construction (Building E) and a sixth has planning permission granted. The operational data storage facilities have an Emergency Response Plan which outlines the required actions and the responsible persons for any plausible emergency scenario. The ERP also includes for out of hours response. It should be noted that each of the six data storage facilities will operate 24/7, 365 days a year and as such will be fully staffed at all times. There is therefore no additional specific procedure required for emergencies outside normal working hours.

An additional SOP is in place for the emergency power supply scenario following loss of utility power to the data storage facilities. The Building Management System (BMS) will control the changeover in electrical supply from the grid to the backup generators in the event of an outage. Staff will be trained in all relevant procedures relating to this change over.



Soil Monitoring Points

Periodic monitoring of soil and groundwater is required having regard to the possibility of soil and groundwater contamination of the site³.

Complete the table below with details of soil monitoring locations and in particular where a baseline report has been/is required in accordance with Section 86B of the EPA Act 1992 as amended.

No

Is periodic soil monitoring proposed at the installation/facility? (Yes/No): *

Sail Monitoring Doint Code	Monitoring	Point Grid Ref.
Soil Monitoring Point Code	Easting ⁴	Northing ⁵
· · · ·		

Soil Parameters
Complete the table below with details of soil monitoring parameters (where a baseline report is required in accordance with Section 86B of the EPA Act 1992 as amended). (If different parameters are associated with different monitoring points this should also be identified in the table below.)

			Food A			
Parameter	Unit	Trigger Level (How was the trigger level determined?	Proposed Monitoring Frequency	Sample Method	Analysis Method / Technique

³ Inherent in the monitoring of soil and groundwater is accepting the possible necessity for remediation of the soil / groundwater. Regular monitoring of soil and groundwater provides an early detection of any contaminations.

⁴ Six Digit GPS Irish National Grid Reference

⁵ Six Digit GPS Irish National Grid Reference



No

Groundwater Monitoring Points

Based on the assessment(s) carried out previously or as part of this licence application, complete the table below with summary details of the groundwater monitoring points.

Is groundwater monitoring proposed at the installation/facility? (Yes/No): *

Monitoring Doint Code	Monitoring Poi	nt Grid Ref.
Monitoring Point Code	Easting ⁶	Northing ⁷

omplete the table below with sumi hould be identified in the table belo	•		Formspitetto				
iroundwater Parameters	mary details of th	ne groundw	vater parameters (in purpose)		ters are associat	ed with different m	nonitoring points this
				onthis any other use.			

*add rows to the table as necessary

⁶ Six Digit GPS Irish National Grid Reference

⁷ Six Digit GPS Irish National Grid Reference



Costed Environmental Liabilities Risk Assessment (ELRA)

Indicate if the activity, through pre-application meeting with the Agency or other means, is required to submit a costed ELRA⁸ as part of the licence, or licence review application.

Costed Environmental Liabilities Risk Assessment (ELRA) required to be submitted? (Yes/No): * No

If '**Yes**', upload a costed Environmental Liabilities Risk Assessment (ELRA), prepared in accordance with the *Environmental Protection Agency's Guidance on* Assessing and Costing Environmental Liabilities (2014) (select Document Type: '<u>ELRA</u>' in the application form).

Costed ELRA document filename:	N/A
	x ^{15C}
Indicate your preferred form of financial prov	ision instrument to meet ELRA costings have regard to the Environmental Protection Agency's Guidance on
Financial Provision (2015), e.g., Environmenta	l Liability Insurance:
To be agreed with Agency as required	MPP-rifeor
	ard to the Environmental Protection Agency's Guidance on Financial Provision (2015) (where required at application ype: ' <u>Financial Provision Proposal</u> ' in the application form)
Financial Provision Proposal filename:	N/A Story
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⁸ There is an explicit requirement in EU and Irish law for financial provision for certain activities. The following categories of activities have an ELRA/CRAMP/FP requirement:

^{1.} Landfills (excl. closed L.A. Landfills closed before 16th July 2009)

^{2.} CAT A Extractive Waste Facilities

^{3.} High Risk Contaminated Land Facilities

^{4.} All Haz-Waste Transfer Stations

^{5.} Non-Haz WTS (Accepting >50,000 tons/annum)

^{6.} Incineration (incl. co-incineration of hazardous waste)

^{7.} Upper & Lower Tier Seveso Sites

^{8.} Exceptional circumstances associated with the site, e.g., significant ground/groundwater contamination.

Regard should be had by applicants to relevant Agency guidance on these matters.



Closure, Restoration and Aftercare Management Plan (CRAMP)

A restoration/aftercare period will be required where there are on-going environmental liabilities following closure. Applicants are required to describe the existing or proposed measures to avoid any risk of environmental pollution and to return the site to a satisfactory state or the state established in the baseline report where applicable, after the activity or part of the activity ceases operation.

A key measure is the preparation of a Closure, Restoration and Aftercare Management Plan (CRAMP) by the operator, for certain activities⁹. Notwithstanding the requirements of the EC Environmental Objectives (Groundwater) Regulations 2010, S.I. No. 9 of 2010, the closure and restoration/ aftercare target is the site condition at the time of the original application or the baseline report. The applicant shall have regard to the Environmental Protection Agency's Guidance on Assessing and Costing Environmental Liabilities (2014) in the preparation of the CRAMP.

Attachment 9-2-3 Site Closure Pland

Upload a CRAMP, where applicable (select Document Type: 'Site Closure' in the application form)

CRAMP filename:

Costed CRAMP

Indicate if the activity, through pre-application meeting with the Agency or other means, is required to have a CRAMP⁹ submitted as part of the licence, or licence review application.

CRAMP required to be submitted at application/licence review application stage? (Yes/No): * No

6. Incineration (incl. co-incineration of hazardous waste)

⁹ There is an explicit requirement in EU and Irish law for financial provision for certain activities. The applicant shall have regard to the Environmental Protection Agency's Guidance in determining CRAMP requirements and on Financial Provision (2015) in making financial provision to cover any liabilities.

The following categories of activities have an ELRA/CRAMP/FP requirement:

^{1.} Landfills (excl. closed L.A. Landfills closed before 16th July 2009)

^{2.} CAT A Extractive Waste Facilities

^{3.} High Risk Contaminated Land Facilities

^{4.} All Haz-Waste Transfer Stations

^{5.} Non-Haz WTS (Accepting >50,000 tons/annum)

^{7.} Upper & Lower Tier Seveso Sites

^{8.} Exceptional circumstances associated with the site e.g. significant ground/groundwater contamination.

Indicate your preferred form of financial provision instrument to meet CRAMP costings (where appropriate), e.g., Secured fund, On-demand performance Bond, Parent Company Guarantee, Charge on Property (have regard to the Environmental Protection Agency's Guidance on Financial Provision (2015) on the Agency's website):

State preferred form of financial provision instrument?	To be agreed with Agency as required
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Upload a financial provision proposal (where required) having regard to the Environmental Protection Agency's Guidance on Financial Provision (2015) in making financial provision to cover any liabilities (select Document Type: 'Financial Provision Proposal' in the application form)

Financial Provision Proposal filename:

Cessation of Activity

Where a CRAMP is not required, describe the measures to be taken on and following the permanent cessation of the activity or part of the activity to avoid any risk of environmental pollution and to return the site of the activity to a satisfactory state. (Input your response in the text box below or attach the information in to this attachment).

See Attachment 9-2-3 Site Closure Plan

Emergency Response Procedure

Do you have an emergency response procedure (ERP)? (Yes/No) * Yes

N/A

Is the ERP compliant with the EPA guidance? (Yes/No) *

The ERP for the site will be reviewed and will be compliant with the EPA Guidance post to grant of IE Licence



9.2. Nuisance

Complete the table below in relation to each potential nuisance. Identify if the activity may cause or contribute to the type of nuisance in the area of the installation/facility and, where applicable, identify the techniques used to prevent/minimise the nuisance.

Type of Nuisance	Applicable to the activity? * (Yes/No/ Not Applicable)	Techniques to prevent nuisances *	Where nuisances cannot be prevented, techniques to be used to minimise and reduce nuisances
Odour	Not Applicable	No odour anticipated from facility	Not Applicable
Fire Control	Yes	Fire detection systems present	Fire suppression systems and attenuation on site
Dust	Not Applicable	Primarily activities are contained within buildings with external dust generating activities.	Not Applicable
Litter	Yes	There is limited potential for litter generation from the external storage of waste at the site, when waste is deposited into the skips and when the skips/bins are being collected. Regular inspections are carried out to ensure any litter is collected and placed in the appropriate receptacles.	Not Applicable
Birds	Not Applicable	Primary activities are contained within buildings and would not contribute to any nuisance from birds	Not Applicable
Mud	Not Applicable	Primary activities are contained within buildings and would not result in any mud on local roads	Not Applicable
Flies	Not Applicable	Primary activities are contained within buildings and would not contribute to any nuisance from flies	Not Applicable
Vermin	Not Applicable	Primary activities are contained within buildings and would not contribute to any nuisance from vermin. The waste that is stored externally is recyclable waste that is collected on a frequent basis and as such would not be likely to attract vermin	Not Applicable
Other	No	Not Applicable	Not Applicable



If 'Other' is selected define the other nuisance(s):	N/A
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Note: Odour must also be addressed in the fugitive emissions section of the '7.4 Emissions to Atmosphere – Main and Fugitive' template, where applicable.

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9.3. Environmental Management System (EMS)

Do you have an environmental management system? (Yes/No) *

If 'Yes', is the environmental management system accredited? (Yes/No) *

State the date accreditation was achieved <u>or</u> is expected to be achieved, where applicable:

State the standard of accreditation achieved:

No – to be in place 12 months after grant of IE licence

N/A N/A

An EMS is currently being prepared broadly in line with the ISO requirements, but it will not be accredited.

The EMS with also meet the requirements of the relevant BAT documents assessed under Section 4 of this IE Licence application.



Energy Efficiency

Outline the measures taken to ensure that energy is used efficiently having regard to the relevant decision on BAT conclusions and/or BAT guidance and where appropriate, an energy audit with reference to the EPA Guidance document on Energy Audit should be carried out. *	facility. Attachment 4.7.3 provides details of the energy efficiency measures to be
Has an energy audit been carried out? (Yes/No) *	Yes – Last audits done in November 2019 for four of ADSIL's data storage facilities across Ireland.
	The Energy Audits are undertaken in accordance with Article 8 of the European Energy Efficiency Directive. Energy Efficiency audits, in the context of Article 8, are to be done every 4 years for a sample of ADSIL's facilities in Ireland. The sites are selected randomly for auditing every 4 years. The next compliance deadline is in 2023.
Do you have an energy efficiency management system? (Yes/No) *	Electrical performance monitoring in respect of Power Usage Effectiveness (PuE) of the site will be is undertaken on a continuous basis. PUE is an indicator for measuring the energy efficiency of a data centre. PuE is measured as a ratio of total amount of energy used by a computer data center facility to the energy delivered to computing equipment. An ideal PUE is 1.0. Anything that isn't considered a computing device in a data center (i.e. lighting, cooling, etc.) falls into the category of facility energy consumption. PuE is measured as a ratio of energy taken from the grid against the energy used at the data centre.
If 'Yes', is the energy efficiency management system accredited? (Yes/No)	No
State the date accreditation was achieved <u>or</u> is expected to be achieved, where applicable:	N/A
State the standard of accreditation achieved:	None proposed. Will be developed in accordance with the Energy Efficiency BREF.



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9.4. Hours of Operation

Provide details of the hours of operation for the installation/facility * (hours and days per week, etc.), including:

(a) Proposed hours of operation.

Working hours are expected to be 24 hours a day, 7 days a week.

(b) Proposed hours of construction and development works and timeframes.

It is anticipated that the construction of Buildings E and F will be completed during normal construction hours i.e. 7am to 6pm Monday to Friday and 8am to 2pm on Saturdays. However, it is possible that the contractor may wish to carry out certain operations outside these hours i.e. evening hours during long summer days etc. Such occurrences will be kept to a minimum and take place over a short timeframe and as such are unlikely to cause For inspection purpose ited it excessive disturbance.

(c) For waste activities, the proposed hours of waste acceptance.

N/A

(d) Any other relevant hours of operation expected (e.g., waste handling, etc.).

N/A



9.5. Review of a Licence

Where the Office of Environmental Enforcement (OEE) has agreed any variations or adjustments to the conditions or schedules of the existing licence, the licensee must provide details of these agreed variations and adjustments to the existing licence conditions in the table that follows.

An updated, scaled drawing of the site layout (no larger than A3) providing visual information on such adjustments or variations where appropriate should be uploaded in the **site tab** – 'site plan(s)' upload.

In the case of once-off assessments/reports required under conditions/schedules of the existing licence the licensee must provide details of those assessments/reports that have been completed and agreed with the OEE or as otherwise agreed, in the table below.

NOT APPLICABLE

NOT APPLICABLE		olly, and oller use.	
Condition/ Schedule No.	Existing Condition	OEE Agreement Reference	Description
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*add rows to the table as necessary

9.6 Environmental Management Techniques – Upload Files

State the number of 'upload files' referred to and named in this attachment document? * N/A