EPA Application Form

9.1 - Environmental Management Techniques - Attachment

Organisation Name: *	Amazon Data Services Ireland Limited
Application I.D.: *	LA011866

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

9 Environmental Management Techniques [1]

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 firewater;
- 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 *	**Surveillance Measures**		
	Description *	**Frequency of Surveillance ***	**Method / Standard ***
Emergency Response Plan	An on-site Emergency Response Plan (ERP) is in place for the Installation. The ERP details the required actions to be undertaken in the event of an incident on site and 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 Regional Environmental Manager and Regional Safety Manager and is updated as required. It should be noted that the facilities will 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	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 ***
	instruction for the Disaster Response Action Team (AWS DRT).		
Environmental Management System (EMS)	An EMS has been developed for the site and accredited under ISO 14001. The EMS outlines the management of the site's environmental program and will be reviewed to ensure it includes the requirements of the reviewed IE Licence, once granted.	EMS will be reviewed annually	ISO 14001
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 fuel tanks are integrity tested by the vendor at installation. Breather valves installed in accordance with the manufacturers design. The tanks are equipped with level detection as outlined in Attachment-4-8-1 Operational Report. All bunds are 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 is designed in accordance with the EPA's guidelines for the storage and transfer of materials for	Daily visual inspections of bunds, sumps, and oil detection probes SOPs to be reviewed regularly	EPA Guidance Note on the Storage and Transfer of Materials for Scheduled Activities

Measure *	Surveillance Measures		
	Description *	**Frequency of Surveillance ***	**Method / Standard ***
	scheduled activities (EPA, 2004). The design of all bunds conforms to standard bunding specifications - BS8007:1987. Infrastructure inspections are undertaken by the operations team. Fuel 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 equipped will 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 hydrocarbons are detected in the sump. If hydrocarbons are detected, 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.		

Measure *	Surveillance Measures		
	Description *	**Frequency of Surveillance ***	**Method / Standard ***
Controlled Delivery of Fuel Oil to Site	ADSIL have in place an SOP to monitor and supervise the delivery and pumping of fuel and heavy oil at all data storage facilities. It is ADSIL policy that the tanks are not filled above 90% capacity (high level alarm).	During all deliveries and dispatch of products SOPs to be reviewed regularly	ADSIL's Refuelling SOP
Spill prevention and response measures	ADSIL have in place SOPs covering the management of spills and the management of spill kits. The SOPs are implemented to prevent discharges of hazardous and dangerous material, such as fuel and oil. 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 event. Operations staff receive no notice that the spill event is to occur and are evaluated on their performance after the event. Spill kits are located across the site in highly visible and mobile units. These will include absorbent socks, mats, pads, disposable bags, drain covers and PPE. Spill kits utilised in the event of a spill and staff are trained in the use of spill management materials.	Ongoing SOPs to be reviewed regularly Compulsory training Spill Drills	ADSIL's Spill Prevention and Response SOP ADSIL's Spill Kit Management SOP ADSIL's Waste and Spill Inspections SOP

Measure *	Surveillance 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 are 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 at 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	Hydrocarbon interceptors are installed at points along the stormwater and foul drainage networks as outlined in Attachment-4-8-1 Operational Report. Hydrocarbon interceptors are inspected at the time of installation and inspected and cleaned	Ongoing Preventative maintenance as per schedule in EAM	ADSIL's Preventative Maintenance Schedule

Measure *	Surveillance Measures		
	Description *	**Frequency of Surveillance ***	**Method / Standard ***
	typically every 6 months by a specialist vendor. Waste sludge from hydrocarbon interceptors is removed directly from each separator by a specialised company by means of a vacuum tanker.		
Management of underground pipelines to prevent uncontrolled losses to ground	Fuel will be supplied from the bulk fuel tanks to the double skinned day tanks and emergency back-up generator units. 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 forms part of the EMS for the site.	Preventative maintenance as per schedule in EAM	EMS in place

Measure *	Surveillance Measures		
	Description *	**Frequency of Surveillance ***	**Method / Standard ***
	Preventative maintenance is undertaken on mechanical moving parts equipment and electrical equipment. Enterprise Asset Management (EAM) is the software platform used 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 • Track the full life cycle of critical data centre 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)	SOPs to be reviewed regularly	Preventative Maintenance SOPs in place EAM system in place

Measure *	Surveillance Measures		
	Description *	**Frequency of Surveillance ***	**Method / Standard ***
	The EAM tracks preventative maintenance of the following which are maintained by external specialist vendors - Pumps - CRAHUs/AHUs - Humidifiers - Generators - Power transformers The generator preventative maintenance 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 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. Fire detection and alarm systems will be regularly checked to ensure they are fully operational in accordance with ADSIL's policy. The SOP on Safety Fire System Inspection, Testing, and Maintenance Guidelines includes	The fire detection and alarm systems are/will be subject to routine checks by site personnel and are/will be inspected and tested by the external service provider on a regular basis.	Safety Fire System Inspection, Testing, and Maintenance Guidelines

Measure *	Surveillance Measures		
	Description *	**Frequency of Surveillance ***	**Method / Standard ***
	(weekly) sprinkler maintenance and sets out frequency of testing and maintenance to be undertaken by vendors.		
Firewater Management	It is planned to install penstocks at a later date to allow shut off the stormwater discharge from the installation in the event of a fire event. Potentially contaminated stormwater (e.g., in the event of a fire) that enters the stormwater network or attenuation system(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/cell and disposed of appropriately.	Ongoing	Firewater management SOP
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.	Ongoing SOP to be reviewed regularly	ADSIL's Waste Management Policy ADSIL's Hazardous Waste Management SOP ADSIL's Used LAB SOP

Measure *	Surveillance Measures		
	Description *	**Frequency of Surveillance ***	**Method / Standard ***
			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 will be covered, and a mobile retention bund will be 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 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	Ongoing SOPs to be reviewed regularly Compulsory online training	AWS Hazardous Waste Management SOP AWS Waste Battery Management SOP AWS WEEE Management SOP

Measure *	Surveillance Measures		
	Description *	**Frequency of Surveillance ***	**Method / Standard ***
	the handling, labelling, storage, and management of WEEE, as well as other electronic equipment that has not reached End of Life (EOL). Compulsory online training must be completed by operations staff on an annual basis.		
Waste being sent offsite for recovery or disposal is controlled	All waste leaving site is recycled or recovered, with the exception of those waste streams where appropriate recycling facilities are currently not available. All waste leaving the site is transported by suitably permitted contractors and taken to suitably registered, permitted and/or licenced facilities. All waste leaving the site is recorded on the online AWS Manage Store Ship waste platform, specifically designed for the management of hazardous waste and WEEE. Copies of relevant documentation are retained on site.	SOP to be reviewed regularly	ADSIL's Management and Shipment of Waste SOP
Management of power outages	Procedures are in place to manage other than normal operating conditions (OTNOC) in accordance with the Large Combustion Plant BAT.	SOP to be reviewed regularly	ADSIL's Loss of Utility Power Procedure

Measure *	Surveillance Measures		
	Description *	**Frequency of Surveillance ***	**Method / Standard ***
	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. 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. The 'Planned Power Outage Procedure' is to provide Operations guidance on what actions to take if they are notified of a planned power outage.		ADSIL's Planned Power Outage Procedure

Measure *	Surveillance Measures		
	Description *	**Frequency of Surveillance ***	**Method / Standard ***
Safety and Accident Response Training	All relevant site staff are aware of the potential for accidents and are 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 relevant employees will be aware of their responsibilities in the management of accidents and selected and trained to ensure that they have the necessary skills and experience to perform their duties. All employees have access to safety information (notice boards and an online system is available to all staff to access key health and safety documents).	Training to be updated regularly as required.	EMS in place (ISO 14001 accredited)
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	Ongoing	EMS in place

Measure *	Surveillance Measures		
	Description *	**Frequency of Surveillance ***	**Method / Standard ***
	operated in such a way that minimizes the generation and discharge of waste and other impacts on the environment and the significant consumption of natural resources.	SOP to be reviewed regularly	

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): *

The facility has 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. The 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. Relevant staff are 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 site[3].

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.

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

Soil Monitoring Point Code	Monitoring Point Grid Ref.	
	Easting [4]	Northing [5]
	In accordance with conditions of existing IE Licence.	

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.)

Parameter	Unit	Trigger Level	How was the trigger level determined?	Proposed Monitoring Frequency	Sample Method	Analysis Method / Technique
Relevant hazardous substances						

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

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**): * **No**

Monitoring Point Code	Monitoring Point Grid Ref.	
	Easting [6]	Northing [7]
	In accordance with conditions of existing IE Licence.	

Groundwater Parameters

Complete the table below with summary details of the groundwater parameters. (If different parameters are associated with different monitoring points this should be identified in the table below.)

Parameter	Unit	Trigger Level	How was the trigger level determined?	Proposed Monitoring Frequency	Sample Method	Analysis Method / Technique
Relevant hazardous substances						

*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 ELRA[8] 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: '**ELRA**' in the application form).

Costed **ELRA** document filename:	N/A

Indicate your preferred form of financial provision instrument to meet ELRA costings have regard to the Environmental Protection Agency's Guidance on Financial Provision (2015), e.g., Environmental Liability Insurance:

To be agreed with Agency as required

Upload a financial provision proposal have regard to the Environmental Protection Agency's Guidance on Financial Provision (2015) (where required at application /review application stage) (select Document Type: '**Financial Provision Proposal**' in the application form)

Financial Provision Proposal filename:	N/A

[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 activities[9]. 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.

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

CRAMP filename:	Attachment 9-2-3 Site Closure Plan

Costed CRAMP

Indicate if the activity, through pre-application meeting with the Agency or other means, is required to have a CRAMP [9] submitted as part of the licence, or licence review application.

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

[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)
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.

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

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:	N/A

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 into this attachment).

See Attachment 9-2-3 Site Closure Plan

Emergency Response Procedure

Do you have an emergency response procedure (ERP)? (**Yes/No**) *	Yes
Is the ERP compliant with the EPA guidance? (**Yes/No**) *	Yes

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 on site
Dust	Not Applicable	There are no activities on site that are expected to generate dust that would cause a nuisance.	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

Note: Odour must also be addressed in the fugitive emissions section of the '*7.4 Emissions to Atmosphere – Main and Fugitive*' template, where applicable.

9.3. Environmental Management System (EMS)

Do you have an environmental management system? (**Yes/No**) *	Yes
If '**Yes**', is the environmental management system accredited? (**Yes/No**) *	Yes
State the date accreditation was achieved **or** is expected to be achieved, where applicable:	16 January 2024
State the standard of accreditation achieved:	ISO 14001

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. *	Energy efficient design will be a key element in the detailed design phase for the facility. Attachment-4-7-3 provides details of the energy efficiency measures to be employed in accordance with BAT.
Has an energy audit been carried out? (**Yes/No**) *	Yes – Last audits done in 2023 for four of ADSIL's data storage facilities across Ireland, with energy audits for other sites currently ongoing.
	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.
Do you have an energy efficiency management system? (**Yes/No**) *	ENEMS will be in place 12 months after commencement of IE Licence An energy efficiency management system (ENEMS) will be developed that will set out the energy targets for the facility and will define the facility's energy policy. The facility performance and equipment will be continually monitored using an Electrical Power Management System (EPMS) and a system will be in place to optimise performance.
If '**Yes**', is the energy efficiency management system accredited? (**Yes/No**)	No
State the date accreditation was achieved **or** 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.

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.

N/A

(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.

Condition/ Schedule No.	Existing Condition	OEE Agreement Reference	Description
Condition 3.16.2		LR078024	Approval for the use of Hydrotreated Vegetable Oil (HVO) fuel in the emergency backup generators.

*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**