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29 August 2025

Office of Environmental Sustainability
Environmental Protection Agency
PO Box 3000
Johnstown Castle Estate
Co. Wexford

RE: EPA Industrial Emissions Licensing Application P1186-02

Dear Sir/Madam,

On behalf of the applicant, Amazon Data Services Ireland Limited, and in response to the EPA's request for further information dated 22 August 2025, we submit the following clarifications in respect of license application P1186-02.

The following revised attachments and documents are submitted with this response:

- Attachment-7-1-3-2-Air Emissions Impact Assessment
- Attachment-6-3-4-AA Screening-Licence-August
- Attachment-7-5-Noise-Emissions
- Drawing-Noise Monitoring Locations
- IDA letter dated 17 June 2025
- IDA letter dated 26 August 2025

1. Air Emissions Impact Assessment

Request:

1. Provide the number of generators, hours and load for each installation which were included in the cumulative air assessment (i.e. P1171-01, Dataplex and Digital Realty)

Applicants Response:

The air impact assessment report has been revised to address the above request and is included with this response. The process emissions Tables 5.1 to 5.5 have been revised to include the types of operations, load, and hours of operation considered in the modelling assessment.

Request:

2. Table 7.1, Table 7.2 & Table 7.3 show the process contribution from the installation in relation to NOx, NH3 and SO2 at the North West Irish Sea SPA to be less than 1%, however it is stated in the table that it was considered for further assessment. Review the relevant tables and update accordingly.

Applicants Response:

The air impact assessment report has been revised to address the above request and is included with this response. Table 7.1 to 7.3 have been corrected. The process contribution from the installation in relation to NO_x, NH_3 and SO_2 at the North-west Irish Sea SPA is less than 1% of the relevant critical loads/levels.

Request:

3. Table 7.10, Table 7.11 & Table 7.13 show the process contribution in the cumulative assessment for NOx, SO2, Nitrogen deposition at the North West Irish Sea SPA to be less than 1%, however it is stated in the tables that it was considered for further assessment. Review the relevant tables and update accordingly.

Applicants Response:

The air impact assessment report has been revised to address the above request and is included with this response. Table 7.10, Table 7.11 & Table 7.13 have been updated. The process contribution from the installation in relation to NOx, SO2, Nitrogen deposition at the North-west Irish Sea SPA is less than 1% of the relevant critical loads/levels.

The 1% threshold is applied strictly to the Process Contribution (PC) from the application installation/facility alone at European sites within the zone of influence, in accordance with the EPA IN2 guidance. In earlier assessments, cumulative contributions were identified as "considered for further assessment". This has now been updated to "N/A" (not applicable), in line with EPA IN2 guidance.

Request:

4. Table 7.10 show the process contribution in the cumulative assessment for NOx at South Dublin Bay pNHA to be less than 1%, however it is stated in the table that it was considered for further assessment. Review the relevant tables and update accordingly.

Applicants Response:

The air impact assessment report has been reviewed in respect of the above request and is included with this response. The process contribution from the installation in relation to NOx, at South Dublin Bay pNHA is less than 1%.

The 1% threshold is applied strictly to the Process Contribution (PC) from the application installation/facility alone at European sites within the zone of influence, in accordance with the EPA IN2 guidance. In earlier assessments, cumulative contributions were identified as "considered for further assessment". This has now been updated to "N/A" (not applicable), in line with EPA IN2 guidance.

Request:

5. Review the calculations in Table 7.11 in relation to South Dublin Bay & River Tolka Estuary SPA and update accordingly.

Applicants Response:

The air impact assessment report has been reviewed in respect of the above request and is included with this response. The SO_2 Process Contributions (µg/m3) for the South Dublin Bay & River Tolka Estuary SPA have been corrected in Table 7.11.

Request:

6. Table 3.3 shows the critical load for N deposition at Santry Demesne pNHA to be 10-20 kg/ha/yr and the assessment criteria to be 15 kg/ha/yr. However Section 7.1.4 and 7.2.4 of the report refer to a critical load range of 5-10 kg/ha/yr and a midpoint range of 7.5 kg/ha/yr. Clarify the critical load considered for Santry Demesne pNHA.

Applicants Response:

Critical loads for nitrogen deposition are not defined in APIS for proposed Natural Heritage Areas (pNHAs), including Santry Demesne pNHA. Furthermore, Santry Demesne pNHA does not have clearly identified Annex I habitats for which site-specific critical loads could be applied.

To ensure a precautionary approach, AWN previously applied a critical load for N deposition of 7.5 kg/ha/yr at Santry Demesne pNHA. Following consultation with the project ecologist, professional judgement was applied in selecting assessment criteria, adopting a critical load range of 10–20 kg/ha/yr based on the most comparable Annex I woodland type: *Old Sessile Oak Woods with Ilex and Blechnum* (Annex I code 91A0; EUNIS code G1). However, as there are no Annex I habitats in the Santry Demesne pNHA this classification was made by exclusion, as other semi-natural woodlands with defined critical loads are typically associated with wetlands, rivers, or bogs and are therefore not considered comparable with Santry Demesne pNHA.

The values presented in Table 3.3 (critical load for N deposition 10–20 kg/ha/yr, lower range criteria of 10 kg/ha/yr) reflect this broader comparative approach, while the lower range referenced in Sections 7.1.4 and 7.2.4 (critical load for N deposition 5–10 kg/ha/yr, midpoint assessment criteria of 7.5 kg/ha/yr) reflects a precautionary test scenario.

The air impact assessment report has been reviewed in respect of the above request and is included with this response. To address the EPAs concern of consistency, the critical load considered for Santry Demesne pNHA has been updated to the assessment criteria of 10 kg/ha/yr for the Santry Demesne pNHA based on the habitat Annex I code 91A0; EUNIS code G1. This ensures alignment across tables and sections, while continuing to reflect a precautionary approach. In all cases, predicted nitrogen deposition from the project does not result in an exceedance of critical loads at the site.

2. Appropriate Screening

Request:

7. Ensure that any updates made to the air impact assessment, and which are relevant to the Appropriate Assessment are included in the AA screening report.

Applicants Response:

The AA Screening Report considers the European sites most impacted from air emissions associated with the Installation, both in terms of process contribution (PC) and predicted environmental concentration (PEC).

A revised AA Screening Report has been provided, this revision is due to the consideration of acid deposition (as N) at the Malahide Estuary SAC (Site Code: 000205) and Malahide Estuary SPA (Site Code: 004025. These sites have been included in the assessment not on the basis of being the most impacted in terms of PC or PEC, but because predicted acid deposition (as N) exceeds 1% of the relevant critical level/load.

There is no change to the conclusions of the AA Screening Report.

3. Stormwater

Request:

8. Provide evidence that permission has been received from the IDA allowing discharge from the installation (existing and proposed) to their storm water drainage network.

Applicants Response:

Included letter dated 17 June 2025 – from the IDA permitting discharge from the installation to their storm water drainage network.

Request:

9. In the event hydrocarbon interceptors alarm, clarify what, if any, automative shut off systems are in place to prevent discharge of storm water from the installation.

Applicants Response:

There are no automatic shut off systems in place to prevent discharge of storm water from the installation at the final discharge(s) from the site.

Manual penstocks are installed at the following locations:

- SW1-1 prior to discharge at SW1
- SW2-2 prior to discharge at SW2

Manual penstocks will be installed at the following locations:

- SW3-1 prior to discharge at SW3

It should be noted that activation of a hydrocarbon interceptor alarm is an early warning (high level liquid sensors, oil level detection systems), the alarm activation does not mean that hydrocarbons are being discharged from the site. Within the interceptor, lighter hydrocarbons float to the surface while heavier particles settle to the base, with only the clean water layer allowed to pass through in accordance with I.S. EN-858-2: 2003. Figure 3.1 below shows the oil level detection system with the lowest tip of the probe immersed above the lowest level of the interceptor outlet.

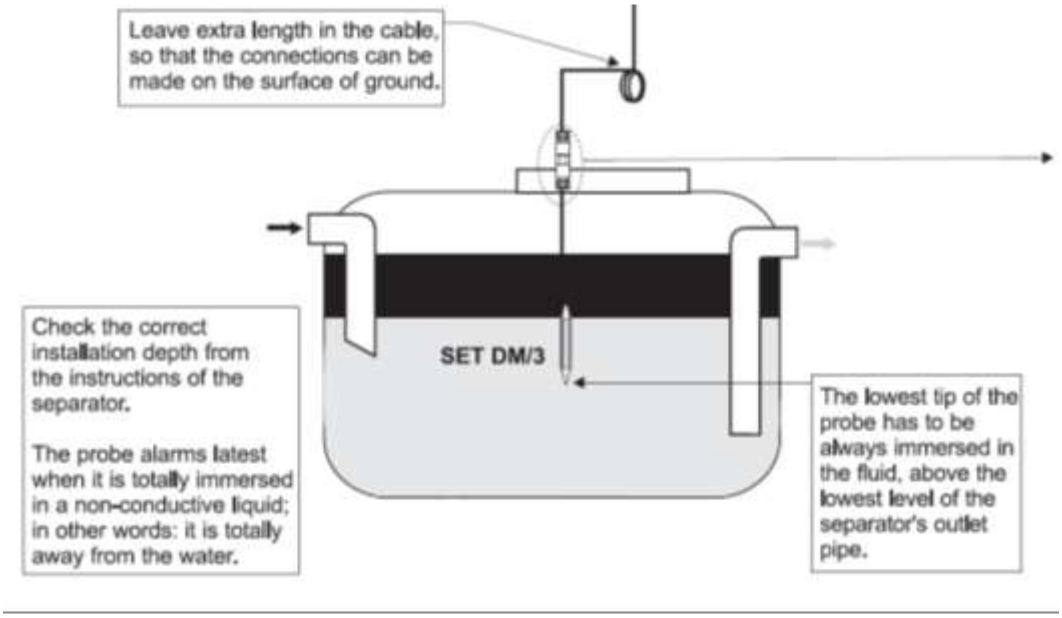


Figure 3.1 Hydrocarbon Alarm System

Request:

10. Describe how used firefighting water will be managed for the installation (existing and proposed).

Applicants Response:

In the event of a fire, manual penstocks can be closed to prevent contaminated firefighting water from leaving the site. Firefighting water would be retained within on-site attenuation and drainage systems.

A FWRA was previously submitted (19/07/2023) but was not accepted by the EPA (09/02/2024). Given that HVO is the primary fuel on site and does not carry environmental hazard statements within the H400–H499 range (it only carries H304 – Aspiration hazard), the installation is currently evaluating the most appropriate approach to firewater retention risk assessment.

4. Cooling Water

Request:

11. Clarify how the installation (existing and proposed) will comply with BAT 14 of LCP BAT.

Applicants Response:

In order to demonstrate compliance with BAT 14, it is first necessary to consider its scope and intent as set out in the Commission Implementing Decision (EU) 2021/2326 of 30 November 2021 establishing the BAT conclusions for Large Combustion Plants ("LCP BAT") and the associated BAT Reference Document ("LCP BREF").

The LCP BAT conclusions within the first Annex explicitly exclude:

> *— the upstream and downstream activities not directly associated to combustion or gasification activities;*

BAT 14 requires that: "I*n order to prevent the contamination of uncontaminated waste water and to reduce emissions to water, BAT is to segregate wastewater streams and to treat them separately, depending on the pollutant content*."

As explained in the LCP BREF:

> *"The individual waste water streams generated by the various operations in an LCP include:*
>
> - *process waste water, in particular waste water from the FGD unit;*
> - *collected rainwater run-off and firefighting water;*
> - *sanitary waste water.*
>
> *Due to their different compositions and quality (pollutants' characteristics and concentration), the above-mentioned streams are usually collected by separate drainage systems and are directed to separate destinations for further treatment in dedicated waste water treatment plants (sanitary waste water in biological waste water treatment plants, and process waste water and contaminated rainwater run-off in industrial waste water treatment plants)."*

The LCP BREF sets out some common wastewater streams in large combustion plants and management techniques, including:

- Surface run-off from solid fuel storage areas should be collected, settled, and treated before discharge.
- Oil separation wells and interceptors should be used to prevent oil-contaminated wash waters from entering surface waters.
- Effluents from de-ionisation plants should be neutralised and pH-balanced prior to discharge.
- Cooling water dosing with oxygen scavengers, biocides, or other chemicals should be carefully optimised and minimised to reduce environmental impact.
- Wastewater from wet Flue Gas Desulphurisation (FGD) plants must undergo appropriate treatment prior to discharge, typically involving pH adjustment, chemical precipitation of heavy metals, and removal of suspended solids.

The intent of BAT 14 is to avoid mixing uncontaminated water with contaminated wastewater streams from combustion activities, as this would unnecessarily increase effluent volumes, complicate treatment, and reduce efficiency. Instead, wastewater from combustion activities should be segregated according to pollutant content and directed to the most appropriate form of treatment.

<u>Combustion Activities - Compliance with BAT 14</u>

The emergency generators, while classified as combustion plants, do not generate wastewater typically associated with Large Combustion Plants, specifically:

- No solid fuels are used, and no solid fuel stockpiles are required.
- No flue-gas desulphurisation or wet abatement systems are included, so no process wastewater is produced from flue-gas treatment.
- The generators are air-cooled, closed-loop systems.
- During planned maintenance activities, any waste generated is controlled and managed and taken off site.
- Stormwater is managed through the site stormwater drainage system.

By design, the combustion activities produce no wastewater. In the absence of contaminated discharges, the installation fully meets the objectives of BAT 14 by preventing contamination and minimising emissions to water.

<u>Scope of BAT 14 Relating to Data Centre Buildings - Cooling Systems</u>

The scope of the LCP BAT conclusions exclude "*The upstream and downstream activities not directly associated to combustion or gasification activities*". The data centre buildings are consumers of the energy produced by the on-site emergency generators rather than components of the combustion process itself. As such, these downstream systems are not directly associated with combustion activities and therefore do not fall within the scope of LCP BAT (BAT 14).

ADSIL is committed to reducing water consumption, contamination of cooling water, and evaporative cooling waste discharges. Key measures include:

- Free cooling mode operates for the majority of the year, maximising energy efficiency and reducing reliance on water.
- Evaporative (adiabatic) cooling is only employed during elevated ambient temperatures; water is recirculated, reducing overall consumption.
- Cooling water is biologically maintained using UV sterilisation, with no chemical additives, corrosion inhibitors, or water softeners
- Cooling system discharges are essentially uncontaminated, and the conservative stormwater impact assessment confirm no adverse effects on the receiving waterbody.
- Changes made to the IT equipment to operate at higher temperature ranges (e.g., increased evaporative cooling activation from 18 °C to 25 °C external temperature in the existing installation. The extended installation has newer equipment with evaporative cooling activation at 30.5 °C external temperature) to reduce usage of on evaporative cooling water, and evaporative cooling water discharges.
- Using rainwater as makeup water for cooling systems further reduces reliance on potable mains water.

<u>Summary</u>

The combustion activities on site generate no wastewater, and in the absence of contaminated discharges the installation meets the objectives of BAT 14. The data centre cooling systems are outside the scope of LCP BAT.

Request:

12. For each building describe accurately the evaporative cooling water system. This description should include, but not limited to the following:
(a) The criteria for when evaporative cooling process water is required.
(b) How the evaporative cooling water system operates when cooling is required and not required.
(c) Details relating to draining of sumps/ pipe/ troughs etc. including frequency of draining and quantities of discharge.

Applicants Response:

As set out in the operational report the cooling units or AHUs provide conditioned air to maintain temperature, relative humidity and pressurisation in the data storage rooms. The cooling units operates under 2 modes;

- Free Cooling – Utilises outdoor air during normal atmospheric temperatures. No water is consumed in this mode.
- Evaporative (Adiabatic) Cooling – Uses mains water as the cooling medium when ambient temperatures exceed the capacity of free cooling.

Table 4.3 provides additional detail on the Evaporative (Adiabatic) Cooling functions as requested by the Agency. There are no evaporative cooling systems in Building V.

The expected quality parameters of the anti-stagnation drain-down and evaporative cooling water discharges are presented in Table 4.1, based on historical sampling of mains water, and in Table 4.2, based on estimates provided by the ADSIL Waters Team. The evaporative cooling water is sourced from the mains water supply provided by Uisce Éireann and does not require any chemical treatment when operational.

The anti-stagnation drain-down (Table 4.1) reflects typical potable water characteristics, with neutral pH, moderate alkalinity, and low concentrations of dissolved ions and trace metals. Evaporative cooling discharge (Table 4.2) shows relatively elevated concentrations of dissolved minerals and salts due to recirculation and evaporative concentration. The cooling water discharges are essentially uncontaminated and pose no risk of environmental pollution.

Table 4.1 Quality of Water During Cooling System Drain Down (Irish Water supply)

Parameter	Unit	Value
Conductivity (Field)	µS/cm	440
Conductivity (Lab)	µS/cm	378
TDS	mg/L	308
Alkalinity	mg/L	129
Ca (as CaCO3)	mg/L	168
Ph (Field)	pH units	7.1
Chloride (Cl-)	mg/L	18.8
Silicone (as SiO2)	mg/L	3.2
Sulfate (SO4)	mg/L	42.8
Free Chlorine (Field)	mg/L	0.05
Turbidity (Field) Reclaimed sites only	mg/L	N/A
Ba	mg/L	0.027
Iron (Fe)	mg/L	<0.23
Mg (as CaCO3)	mg/L	27.9
Mn	mg/L	<0.007
K	mg/L	1.63
Sodium (Na-)	mg/L	13.4

Table 4.2 Estimation of Cooling Water Discharge Parameters

Parameter	Unit	Value
Conductivity	µS/cm	1,500
TDS	mg/l	1,050
Alkalinity	mg/l	440
Ca (as CaCO3)	mg/l	573
Chloride	mg/l	64
Silicone (as SiO2)	mg/l	11
Sulphate (SO4)	mg/l	146
Barium	mg/l	0.092
Magnesium	mg/l	95
Potassium	mg/l	5.6
Sodium	mg/l	46

Table 4.3 Additional Information on Evaporative (Adiabatic) Cooling process

Building	Criteria for When Evaporative Cooling Water is Required	Description of Cooling Units	Operation When Evaporative Cooling is Required	Operation When Evaporative Cooling is Not Required	Draining / Maintenance
Building W	Evaporative cooling water sumps prefill when outside air temperature is 24.6 °C Evaporative cooling activates when outside air temperature exceeds 25 °C and IT equipment requires additional cooling.	49 no. AHU's cooling units installed. Each AHUs includes one 60-litre sump.	- Evaporative cooling water sumps prefill when the ambient air temperature reaches 24.6°C and are maintained full for operational readiness. - Units stage into evaporative cooling progressively above 25°C - Evaporative cooling water recirculates through the sump (~60 L/unit) over the evaporative pads - fresh mains water top ups the sump as the cooling water is circulated and evaporated, conductivity in the sump is between 500–1,500 µS. - the units exit evaporative cooling mode when outside air falls below threshold of 25°C. - when the temperature drops below 24.6°C evaporative cooling is no longer required, each evaporative cooling unit automatically drains its sump to stormwater (~60 L/unit) - the frequency of evaporative cooling discharges is dependent on ambient air conditions and set points set out above. - No flow meters are installed on the cooling water discharges. A conservative estimate of the maximum potential evaporative cooling discharge for the existing installation (~117 m³ per day) was calculated based on the system design and available on-site water storage. However, in reality the volumes would be far less than this figure	- Evaporative cooling system remains idle if outside air ≤24.6°C - Free cooling mode is active, and cooling is provided using outdoor air.	- Water stored in on site tanks recirculates through UV and 25-micron filters in plant room - anti-stagnation drain-down occurs when the evaporative cooling system has remained unused for a continuous period of 7 day to prevent stagnation and minimise the risk of legionella growth within the system. - anti-stagnation drain-down the mains water from within pipework, through the sump, to the stormwater network, this is at minimum 40 litres per unit (~1.96 m³ per flush cycle) - Cleaning of the water-based cooling systems including all AHUs and pipelines with hydrogen peroxide solution is undertaken only if positive legionella samples have been detected in the unit. During dosing, the AHU is placed in blowdown mode, continuously cycling water through the unit to flush it out.
Building X	Evaporative cooling water sumps prefill when outside air temperature is 24.6 °C Evaporative cooling activates when outside air temperature exceeds 25 °C and IT equipment requires additional cooling.	21 no. AHU's installed in data storage rooms, and 11 no. computer room AHU's installed in electrical rooms. Each AHUs includes one 60-litre sump.			- Water stored in on site tanks recirculates through UV and 25-micron filters in plant room - anti-stagnation drain-down occurs when the evaporative cooling system has remained unused for a continuous period of 7 day to prevent stagnation and minimise the risk of legionella growth within the system.

					- anti-stagnation drain-down the mains water from within pipework, through the sump, to the stormwater network, this is at minimum 40 litres per unit (~1.28 m^3 per flush cycle) - Cleaning of the water-based cooling systems including all AHUs and pipelines with hydrogen peroxide solution is undertaken only if positive legionella samples have been detected in the unit. During dosing, the AHU is placed in blowdown mode, continuously cycling water through the unit to flush it out.
Building Y	Evaporative cooling water sumps prefill when outside air temperature is 24.6 °C Evaporative cooling activates when outside air temperature exceeds 25 °C and IT equipment requires additional cooling.	126 no. computer room AHU's installed in data storage rooms, and 10 non computer room AHU's installed in electrical rooms. Each AHUs includes one 60-litre sump.			- Water stored in on site tanks recirculates through UV and 25-micron filters in plant room - anti-stagnation drain-down occurs when the evaporative cooling system has remained unused for a continuous period of 7 day to prevent stagnation and minimise the risk of legionella growth within the system. - anti-stagnation drain-down the mains water from within pipework, through the sump, to the stormwater network, this is at minimum 40 litres per unit (~5.44 m^3 per flush cycle) - Cleaning of the water-based cooling systems including all AHUs and pipelines with hydrogen peroxide solution is undertaken only if positive legionella samples have been detected in the unit. During dosing, the AHU is placed in blowdown mode, continuously cycling water through the unit to flush it out.
Building U	Evaporative cooling water sumps prefill when outside air temperature is > 30.1°C	36 AHUs installed. Each AHUs includes two 60-litre sumps.	- Evaporative cooling water sumps prefill at 30.1°C and are maintained full for operational readiness.	- Evaporative cooling system remains idle if outside air ≤30.1°C	- Water stored in on site tanks recirculates through UV and 25-micron filters in plant room - the cooling system is designed for winterised operation from 1 October to

	Evaporative cooling activates when outside air temperature >30.5°C and IT equipment requires additional cooling.		- Units stage into evaporative cooling when outside air > 30.5°C and IT equipment requires additional cooling. - Evaporative cooling water recirculates through the sumps (~120 L/unit) over the evaporative pads - fresh mains water top ups the sump as the cooling water is circulated and evaporated, - when water in the sump is >1,500 µS, the drain opens for gradual discharge from the units - units exit evaporative cooling when outside air falls below threshold 30.1°C - when the temperature drops below 30.1°C evaporative cooling is no longer required, each evaporative cooling unit automatically drains its sump to stormwater (~120 L/unit) - No flow meters are installed on the cooling water discharges. A conservative estimate of the maximum potential evaporative cooling discharge for the existing installation (~12 m^3 per day) was calculated based on the system design and available on-site water storage. To date, the evaporative cooling system has not been activated.	- Free cooling mode is active, and cooling is provided using outdoor air.	31 March. However, it has remained in winterisation since entering operation as ambient temperatures have not exceeded the system set points. - there is no anti-stagnation drain-down process when the system is winterised. - outside of winterisation, the anti-stagnation drain-down would occur when the evaporative cooling system has remained unused for a continuous period of 7 day to prevent stagnation and minimise the risk of legionella growth within the system. - if implemented, the anti-stagnation drain-down system would drain the mains water from within pipework, through the sump, to the stormwater network, this is at minimum 40 litres per unit (~1.44 m^3 per flush cycle) - To date, ambient air has not exceeded 30.1°C, and the cooling system in Building U has remained winterised throughout this year without requiring a refill. There are currently no plans to implement an anti-stagnation system, as the system continues to operate in its winterised state. - Cleaning of the water-based cooling systems including all AHUs and pipelines with hydrogen peroxide solution is undertaken only if positive legionella samples have been detected in the unit. During dosing, the AHU is placed in blowdown mode, continuously cycling water through the unit to flush it out.

5. Sewer

Request:

13. Provide evidence that permission has been received from the IDA allowing discharge from the installation to their foul network.

Applicants Response:

Included letter dated 26 August 2025 – from the IDA permitting discharge from the installation to their foul network

Request:

14. Provide a S99E from Uisce Eireann or evidence that a S99E from Uisce Eireann is not required for the foul drainage line serving the fire sprinkler pumphouse located to the south of Building U.

Applicants Response:

Uisce Eireann have been contacted in regard to the above request and they have stated that UÉ are not in a position to provide a response in the timeframe. UÉ were notified by the EPA of the application on 13th August and requested to make a response within a 5-week period. The application is currently under review. The Applicant will continue to engage with UÉ and follow up on this matter.

Request:

15. Describe the drainage system in place at the fire sprinkler pumphouse located between Building Y and Building W. Describe how any spills or leaks will be managed.

Applicants Response:

The fire sprinkler pumps are housed internally on impermeable surfaces. In a major incident (e.g. catastrophic failure and flooding of the pump room) there is a potential pathway to the stormwater system (and onwards to the Santry River). However, such an occurrence would only arise in the extremely unlikely event of multiple simultaneous failures of containment, monitoring, and response measures.

There is no direct source–pathway linkage from the fire sprinkler pumphouse located between Building Y and Building W, nor from the fire sprinkler pumphouse to the south of Building W, to either the foul or stormwater drainage networks due to the control measures in place which interrupt that pathway.

The control measures include:

- The fire sprinkler pumps systems include double-skinned fuel tanks, each with leak detection alarms within the external skin. If there are any leaks or spills arising from the primary containment, it is retained within the secondary containment, and leak detection alarms will activate.
- Should the tank level alarms (high and low) or leak detection alarms activate, an alarm signals to the Building Management System (BMS) to alert Engineering Operations Technicians (EOTs).
- Fuel or oil would be prevented from entering drainage networks, and through the use of spill kits, containment, isolation, and clean-up.
- Any liquid waste, or waste arisings from spill clean-up (absorbents etc) would be managed as hazardous waste and removed from site by licensed contractors.

- If spills or leaks do enter stormwater drainage network, Class 1 Hydrocarbon Interceptors are in place to provide tertiary protection.

6. Noise

Request:

16. It is noted that Scenario C as described in the Noise Impact Assessment dated June 2024 and the Noise Impact Assessment dated June 2025 are different in the number of generators to be tested and the selected building. Provide a rationale for this different approach.

Applicants Response:

In the June 2025 report, the Scenario C was revised to align with the Air Impact Assessment and other documentation in which it is stated that only one generator among the data centres in Licence P1186-02 will be tested at any one time. In the preparation of the assessment, various generators were activated in the noise model to confirm which generator under test would (along with normal operation of the data centres) give rise to the highest noise levels at nearby NSLs. As described in the June 2025 Attachment 7-1-3-2 Noise Impact Assessment, in section 5.4:

> *Scenario C is representative of generator testing scenario. Considering that only one generator within the application installation will be tested at any one time, the following approach was taken: various trial models were run, activating different single generators to compare which unit had the potential to be the most impactful at noise-sensitive locations. In this instance the eastern-most generator Building W was selected as the predicted noise levels were slightly higher than other alternatives, as it has line of sight to NSL R24. The load of the generator under test is assumed to be 100%. It is re-iterated that generator testing will take place during daytime periods only*

It is noted that the predicted noise levels for Scenario C in the previous June 2024 report are higher than those reported in the June 2025 report; this is to be expected, as in the former case, two generators were assumed to be under test, whereas in the current report there is only one generator under test, aligning with the parameters of the air impact assessment and the proposed testing regime.

Request:

17. Provide details as to why no noise monitoring location has been selected to represent the noise sensitive receptors located to the east of Building Y and W.

Applicants Response:

The EPA previously accepted the monitoring locations under the existing licence (P1186-01). In response to this request, the applicant has now identified an additional monitoring location (Location D) at coordinates E718,602; N740,579 to represent the nearest set of noise sensitive receptors (NSRs) located to the east of Buildings Y and W.

Attachment 7-5 and the associated drawing have been updated accordingly to reflect this additional monitoring location.

7. Accidents

Request:

18. Clarify which drainage system (i.e. storm or foul) any leaks or spills arising from the containerised generators at Building Y, W, U, & V will discharge to.

Applicants Response:

The containerised generators at Buildings Y, W, U, & V are housed outside on impermeable surfaces that drain to the storm water network. There is no direct source–pathway link from the Building Y, W U, & V containerised generators to the stormwater drainage network. A potential pathway to the stormwater system (and onwards to the Santry River) would only arise in the extremely unlikely event of a multiple failure of containment, monitoring, and response measures.

If spills or leaks do enter stormwater drainage network, Class 1 Hydrocarbon Interceptors are in to provide tertiary protection.

Request:

19. Clarify which drainage system (i.e. storm or foul) any leaks or spills arising from the generators at Building X will discharge to.

Applicants Response:

The Building X generators are housed internally on impermeable surfaces. In a major incident (e.g. failure of the double skinned fuel tanks), response procedure would be initiated to retain the spill in the building. In an extremely unlikely event that fuel was to escape the building, it would drain to the stormwater system.

There is no direct source–pathway link from the Building X generators to stormwater drainage networks. A potential pathway to the stormwater system (and onwards to the Santry River) would only arise in the extremely unlikely event of a multiple failure of containment, monitoring, and response measures.

If spills or leaks do enter stormwater drainage network, Class 1 Hydrocarbon Interceptors are in to provide tertiary protection.

Request:

20. Clarify what leak detection system, if any, is in place at the transformer compounds (existing and proposed).

Applicants Response:

There is 1 no. transformer compound containing 3 no. transformers and associated control building owned and operated by ADSIL, located to the south of the Newbury GIS Substation. There is an oil level sensor within the transformer that will detect loss of oil and alarms to the BMS; additional leak detection is managed by alarms within the transformer bund. When the bund sump pump detects oil, it sends an alarm signal to the BMS that oil has been detected within the bund.

The 1 no. transformer located at Building V is within a covered kiosk. The transformer is self-bunded therefore, no rainwater enters or needs to be managed. There is an oil level sensor within the transformer that will detect loss of oil and alarms to the BMS.

The 1 no. internal transformer located on the extended site to the west of Building U, is air cooled and does not contain oil.

Request:

21. Further to Condition 3.11 of P1186-01, clarify the class and type of hydrocarbon interceptors to be installed.

Applicants Response:

It is understood that the request seeks clarification on the class and type of hydrocarbon interceptors installed or to be installed. These have been reviewed previously and are as shown on the application drawings as provided to the EPA.

Condition 3.11 of P1186-01 (Existing Installation) states:

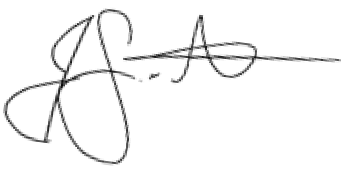
> *Silt Traps and Oil Separators*
> *The licensee shall maintain silt traps and oil separators at the installation:*
> *(i) Silt traps to ensure that all storm water discharges, other than from roofs, from the installation pass through a silt trap in advance of discharge.*
> *(ii) Oil separator on the storm water discharge from bulk tank farms and refuelling areas. The separator shall be a Class I full retention separator.*
> *(iii) An oil separator on all other storm water discharges from internal hardstanding areas. The separator shall be a Class I by-pass separator.*
> *The separators shall be in accordance with I.S. EN-858-2: 2003 (separator systems for light liquids).*

Under I.S. EN-858-2: 2003 the selection between Class I and Class II separators is based on the discharge destination. In accordance with I.S. EN-858-2: 2003:

- Class I Separators: These separators typically include a coalescer to enhance separation efficiency and are generally required for discharges to surface water.
- Class II Separators: These separators are suitable for discharges to foul sewers where a lower quality of effluent is acceptable.

It is noted that Buildings W, X, and Y constitute a legacy site, originally developed in the 1980s–1990s and refurbished by ADSIL into its current configuration in the late 2000s. Due to this, historical interceptor specifications were difficult to retrieve; however, information on installed interceptors has been obtained from old records. Upon review, it was identified that the Newbury GIS Substation transformer yard, which discharges to the foul sewer, was incorrectly specified as having a Class I interceptor in the original application (P1186-01). For the current licence review P1186-02, this has been corrected to a Class II interceptor, in line with the discharge to the foul sewer and the design criteria of I.S. EN-858-2: 2003.

Sincerely,



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