

4 April 2025

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

RE: EPA Industrial Emissions License Application P1186-02 – Additional Information

Dear Sir/Madam,

On behalf of the applicant, Amazon Data Services Ireland Limited, and further information requested in discussion with the EPA, we submit additional information and clarifications requested 14 March 2025 in respect of the licence application P1186-02.

Sewer Request:

1. *Sewer: Applicant's response to Sewer Question 3 states "The downstream hydrocarbon interceptor is designed to capture other regulated discharge prior to entering the foul sewer, thus ensuring that only stormwater is leaving the site." Provide clarity on how the discharge/emissions captured by hydrocarbon interceptor(s) are disposed of.*

Applicants Response:

Waste sludge/oily water from hydrocarbon interceptors is removed directly from each separator by means of a vacuum tanker. Once removed by the vacuum tanker, it is removed from the Installation. There is no storage of this waste on site and there is no discharge of oily water or waste sludge from the hydrocarbon interceptors to foul sewer / stormwater. Under normal operating conditions, there is no oil/fuel discharged into the foul sewer / stormwater drainage system. The interceptors serve solely as a final control measure in the event of a significant spill, leak or incident on site.

Preventative maintenance of hydrocarbon interceptors is undertaken by independent contractors regularly. Hydrocarbon interceptors are inspected at the time of installation and inspected and cleaned typically every 6 months by a specialist vendor/contractor. In addition to this routine maintenance, the hydrocarbon interceptors are equipped with a hydrocarbon probe which is connected to the onsite BMS and will alarm if the chamber is full. The response programme includes contacting the contractor to inspect and clean the interceptor as needed.

Appropriate permits and waste documentation, compliant with relevant legislation are provided by the licensed waste contractors to the Operator, i.e. ADSIL. All waste leaving the site is recorded. Copies of relevant documentation are retained on site.

HEADQUARTERS

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AWN Consulting Ltd. Registered in Ireland No. 319812 Directors: T Donnelly / D Larson / P Greywall

This waste management process is outlined in the application documentation Section 6.3 of Attachment-4-8-1-Operational Report, Section 1.2 of Attachment-8-1-2 Waste Management and Waste Hierarchy. In addition, management / maintenance of the hydrocarbon interceptors as described above is detailed in Attachment 9.1 – Environmental Management Techniques. Attachment 8.1 – Waste Generated and Animal By-Products Generated, which details the relevant waste codes, as well as the estimated amount generated and the disposal / recovery treatment technique (13 05 06* oil from oil/water separators, and 13 05 07* oily water from oil/water separators).

Air Request:

2. *Air: Results regarding air modelling differ greatly in the applicant's response from results included in Attachment-7-1-3-2-Air Emissions Impact Assessment. Submit an updated Attachment-7-1-3-2-Air Emissions Impact Assessment ensuring that all information is correct, and that results of the predicted environmental concentration (PEC) being used to determine compliance with the ambient air quality standards is included.*

Applicants Response:

A revised Air Emissions Impact Assessment (Attachment-7-1-3-2-Air Emissions Impact-REV1) incorporating the details relating to the further information requested by the EPA, is included with this response.

The assessment has been updated to account for the following additional information:

- ▶ The assessment report has been updated to account for revised background NO_x, SO₂, and nitrogen deposition values to reflect actual levels in the nearby ecologically sensitive areas. The background NO_x level used in the Attachment-7-1-3-2-Air Emissions Impact Assessment was substantially lower than the correct value (the values were based on a much more rural background than was appropriate) and this error has been corrected leading to substantially different predicted environmental concentrations (PECs). The background NO_x is updated as follows:
 - Background NO_x for Santry Demesne changed from 7.6 µg/m³ NO_x to 17.1 µg/m³ NO_x.
 - Background NO_x for Baldoyle Bay SAC changed from 4.0 µg/m³ NO_x to 10.9 µg/m³ NO_x.
- ▶ The process contributions (PCs) in all cases are unchanged in this assessment compared to the original submission as the original process emissions information has not changed from the previous submission.
- ▶ There were also some minor changes to the nitrogen deposition background levels as a result of checking and confirming the Air Pollution Information System (AIPS) database and this is now updated in this submission. The nitrogen deposition background is updated as follows:
 - Background N deposition levels for Santry Demesne changed from 6.8 kgN/ha/yr to 7.0 kgN/ha/yr.
 - Background N deposition levels for Baldoyle Bay SAC changed from 5.4 kgN/ha/yr to 6.0 kgN/ha/yr.
- ▶ There are two methods used to predict the allowable operational hours for the backup generators. The USEPA is the preferred method and is based on the backup generators operating for 150 hours per year. The second method is the UKEA method and it invariably will give a different result given that the modelling approach is very different. Using the UKEA method, the allowable emergency operational hours for the backup generators is 137 hours. As noted in the assessment, the preferred

method for selecting the allowable emergency operating hours is the USEPA method and thus we are requesting that the emergency operational hours for the facility is based on 150 hours per year.

- ▶ Critical loads for proposed Natural Heritage Areas (pNHAs) are not defined on the Air Pollution Information System (APIS) website. In order to provide an assessment criteria, the nitrogen deposition critical load in Santry Demense pNHA has been reviewed in consultation with the project ecologist to reflect the nature of the most sensitive ecology at this location. Section 3.2.3 of the revised Air Emissions Impact Assessment sets out the rationale for the conservative critical load used for the assessment.
- ▶ The assessment has been updated to include the impact at all of the nearby ecologically sensitive receptors. A further detailed assessment was undertaken at Santry Demesne pNHA, which is the closest and most impacted (in terms of process contributions) ecologically sensitive area. A detailed assessment was also undertaken at Baldoyle Bay SAC, which is the most impacted (in terms of process contributions) Natura 2000 site. A detailed assessment was also undertaken at South Dublin Bay SAC, and South Dublin Bay & River Tolka Estuary SPA, which are the closest and most impacted (in terms of predicted environmental concentration) Natura 2000 site. The South Dublin Bay SAC, and South Dublin Bay & River Tolka Estuary SPA are both included in this assessment, as the boundaries of these designated areas largely overlap.
- ▶ The assessment has been updated to account for impacts which have been broken down into process contributions (PCs) and predicted environmental concentrations (PECs) in order to determine the impact of the facility at each of the ecologically sensitive receptors relative to the prevailing background levels at these locations.
- ▶ The assessment has been updated to account for the detailed cumulative impact assessments at all nearby ecologically sensitive receptors for NO_x, NH₃, SO₂, nitrogen deposition and acid deposition.
- ▶ For the purposes of this assessment, the licenced operational scenario is a worst-case assessment which assumes that all of the emergency back-up generators operate for 150 hours per year. However, in reality, it is likely that they will be in operation for less than 18 hours per year.

Appropriate Assessment Request:

3. *Appropriate Assessment: Provide updated information regarding appropriate assessment of potential noise and air impacts from the overall development (to include existing and proposed development) and potential in-combination effects with other developments.*

Applicants Response:

A revised Appropriate Assessment Screening (Attachment-6-3-4-AA Screening Licence-Apr 2025) incorporating the details relating to the further clarifications requested by the EPA is included with this response. This updated screening incorporates the additional details requested by the EPA, specifically addressing potential noise and air emissions impacts from the overall development, including both existing and proposed elements, as well as potential in-combination effects with other developments.

The Appropriate Assessment Screening has been updated to account for the following information:

- ▶ Noise Emissions:
 - The AA Screening assesses the potential noise impact on European sites, referencing the Noise Impact Assessment (Attachment-7-1-3-2) submitted as part of the EPA Licence Review Application.

- The noise assessment concludes that, given the separation distance between the Installation and the nearest ecologically sensitive area/European site, noise from the facility is highly unlikely to have any impact under any operational scenario.
- As a result, noise impacts on ecologically sensitive areas have been scoped out of further assessment.

► Air Emissions:

- The AA Screening evaluates potential air emissions impacts with reference to the revised Air Emissions Impact Assessment prepared by AWN which is discussed in Question 2 above (April 2025).
- This assessment considers emissions of NO₂, NH₃, and SO₂ and their potential effects on ecological receptors, including nitrogen and acid deposition.
- The results of the assessment confirm that NO₂, NH₃, SO₂, and nitrogen and acid deposition remain within acceptable thresholds.

► In-Combination Effects:

- The assessment considers potential in combination effects from the existing and proposed development, as well as any potential in-combination effects with other nearby developments.
- The cumulative air impact assessment includes this installation, the operators installation located in the business park (P1171-01) and two additional data centres identified within the study area: the Dataplex data centre, and the Digital Realty data centre.
- As part of the Screening for Appropriate Assessment, other relevant plans and projects in the area were considered to determine whether there are any potential significant in-combination effects on European sites.

Please do not hesitate to contact us should you have any questions regarding the above information.

Sincerely,

A handwritten signature in black ink, appearing to be 'Jonathan Gauntlett', with a long horizontal line extending to the right.

Jonathan Gauntlett
Principal Environmental Consultant
AWN Consulting