Submission	
Submitter:	Miss Fiona Byrne
Organisation Name:	HSE
Submission Title:	2028 - HSE Response
Submission Reference No.:	S010159
Submission Received:	29 November 2021
Application	
Applicant:	Data And Power Hub Services Limited
Reg. No.:	P1165-01
See below for Submission details. Attachments are displayed on the following page(s).	

Feidhmeannacht na Seirbhíse Sláinte
Health Service Executive

Environmental Health Officers Department
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Date: 29th November 2021

Our reference: 2028

Report to: Environmental Licensing Programme
Office of Environmental Sustainability
Environmental Protection Agency
Johnstown Castle Estate
Co. Wexford

EPA reference: P1165-01

Type of Consultation: Industrial Emissions (IE)

Applicant: Data And Power Hub Services Limited, D 22 The Cubes Offices, Beacon South Quarter, Sandyford, D18 HF54, Dublin 18, Dublin

Nature of Activity:

Classes and Nature of Activity in accordance with the EPA Act 1992 as amended			
Class of Activity	**Main Activity**	**EPA Act Sector (where applicable)**	**Class of Activity Description**
2.1	Yes	Energy	Combustion of fuels in installations with a total rated thermal input of 50 MW or more.

Introduction:
The following HSE departments were notified of the consultation request for the licence application on 3rd November 2021

- Emergency Planning – Brendan Lawlor
- Estates – Helen Maher/Stephen Murphy
- Assistant National Director for Health Protection – Kevin Kelleher /Helen Mulcahy
  CHO – Ann O'Shea

This report only comments on Environmental Health impacts of the licence application.

Description of the project:
The Industrial Emissions (IE) Licence is for a Power Generation Facility and two new Information Communication Technology (ICT) facilities. This new installation is planned for construction at a largely greenfield site located in the townland of Milltown, near Newcastle in Co. Dublin.

The ICT facility will be a centralised hub for the secure storage, management and distribution of information to individual businesses and organisations. When constructed the facility will consist of 2 no. two-storey Information Communication Technology (ICT) facilities with a gross floor area of 30,518sqm. The proposed ICT facilities are referred to as Buildings A and B.

Site Location:
The Proposed Development is to be located on a site of c. 8.2hectares that consists of a greenfield site of 6.6 hectares that sits to the north of the Peamount Road (R120); and a site of 1.6 hectares that forms the plots and associated lands of two residential properties known as Little Acre, Bulmer, and associate agricultural buildings within the townland of Milltown, Newcastle, Co. Dublin.

The nearest residential noise sensitive locations are located to the southeast and southwest of the site where various dwellings are located along local roads. To the north east there is a travelers site.

Chapter 9, Noise:
The Environmental Health Service (EHS) reviewed the assessment carried out on the potential impacts on noise during the construction and operational of the proposed development.

An environmental noise survey was conducted in order to quantify the existing noise environment. Noise measurements were conducted at two positions on the site that are representative of noise levels at the nearest noise sensitive receptors.

- Location N1 located to the south-east of the site in line with the rear facades of neighbouring houses.
- Location N2 located at the south-west boundary at a location representing the noise environment of a nearby neighbouring house.

Background noise levels (e.g. LA90,T) at the various locations were typically dictated by local and distant road traffic noise. The noise survey results are shown in Table 9.10 of the EIAR.

Location U1 Average ambient noise levels were the order of 64dB, 62 and 59 LAeq,15min during daytime, evening and night-time periods respectively. Average background noise levels were the order of 47dB, 45 and 38LA90,15min during daytime, evening and night-time periods respectively.

Location U2 Average ambient noise levels were the order of 52dB, 52 and 47 LAeq,15min during daytime, evening and night-time periods respectively. Average background noise levels were the order of 46dB, 45 and 38 LA90,15min during daytime, evening and night-time periods respectively.

The potential noise impacts of the proposed development during both construction and operational phase are addressed in section 9.64 to 9.75 for construction and sections 9.76 to 9.83 for operational.

Four scenarios have been developed to consider the noise impact of the proposed operations. These are as follows:

- Scenario A – Proposed Data storage facility – Normal Operation – Day/Evening
- Scenario B – Proposed Data storage facility – Normal Operation – Night
- Scenario C – Proposed Data storage facility – Emergency
- Scenario D – Proposed Data storage facility – Generator Testing

Noise modelling was carried out the results of which are shown in table 9.13 of the EIAR. Table 9.15, 9.16 and 9.17 presents the predicted changes in noise level associated with the development at the nearest noise sensitive locations to the site. For each scenario modelled at each of the 6 noise sensitive locations (NSL) identified the change the noise levels was Imperceptible, with the highest change being 3dB at NSL2 during the night time operation.

The noise impact assessment concludes that *"the existing soundscapes that are encountered at the nearest noise sensitive locations are predicted to remain unchanged in terms of ambient noise levels with the development of the data storage facility introducing a low level of plant noise which will increase the background noise environment"* and *"The resultant noise impact is negative, not significant and long-term."*

However, due to the close proximity of the residential properties it is the opinion of the EHS that additional noise monitoring is carried out at the NSL's identified in the noise impact assessment once the proposed development is operational. This is to ensure the local community is protected from noise levels;

- **That shall not be so loud, so continuous, so repeated, of such duration or pitch or occurring at such times as to give reasonable cause for annoyance to a person in any residence, adjoining premises or public place in the vicinity; and**

- **Noise due to the normal operation of the proposed development, expressed as L_{A90} over 15 minutes at the façade of the noise sensitive locations identified in the noise impact assessment, shall not exceed the daytime background level by more than 10 dB(A) and shall not exceed the background level for evening and night time. The noise levels from the proposed development should be assessed against the baseline noise level survey outlined in the noise impact assessment.**

Chapter 10, Air Quality and Climate:
The EHS reviewed the assessment carried out on the potential impacts on air quality and climate during the construction and operational of the proposed development.

The EHS assessed the air emissions impact assessment and is satisfied that there will be no major air emissions during the normal operation of the data storage facility. The main source of air emission from the proposed development will be during the construction phase in the form of dust from the construction site and from the 36 standby diesel generators during the operation phase.

The EIAR states that two modelling scenarios were investigated during the operational phase of the development, both normal operations and emergency operations. The Normal Operations Scenario conservatively assumed the continuous operation (24 hours per day, 365 days per year) of the 7 no. dual fuel engines operating on natural gas. Monthly testing of the engines using diesel fuel and the scheduled testing of 36 no. standby diesel generators for the data centre were also included in this scenario. The Emergency Operations Scenario included the normal operation of the facility as described above and also included the emergency operation of the 36 no. standby diesel generators for up to 72 hours per year. The EIAR also states that industry experience of power outages in the Dublin area indicates that in any given year the standby generators may operate for 24-48 hours in total, if at all.

The modelling results indicate that ambient ground level concentrations are below the relevant air quality standards for all pollutants modelled (NO2, CO and ammonia) for both the Normal Operations Scenario and the Emergency Operations Scenario.

The mitigation measures for both the construction phase and the operation phase are outlined in sections 10.54 through to section 10.65. In addition the EIAR states that it proposes to monitor dust during the construction phase to ensure the mitigation measures put in place are working satisfactorily, this is welcomed by the EHS.

EHS are satisfied that once the mitigation measures outlined in the EIAR are implemented in full the effects are on air during construction phase will negligible and imperceptible.

The EHS is satisfied with the conclusion in the impact assessment that states, impacts on ambient air quality associated with the standby generators at the proposed development site will be in compliance with the ambient air quality standards which are based on the protection of the environment and human health.

All correspondence or any queries with regard to this report, including acknowledgement of this report, should be forwarded to Mr Tom Prendergast, Principal Environmental Health Officer, at the above address

Thomas Mangan
Environmental Health Officer
Environment Operational Unit

Tom Prendergast
Principal Environmental Health Officer

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Dear Sir/Madam

Please find enclosed the HSE consultation reports in relation to the above licence application. If you have any queries regarding any of these reports the initial contact is Mr Tom Prendergast, Principal Environmental Health Officer, who will refer your query to the appropriate person

Yours faithfully,

Tom Prendergast
Principal Environmental Health Officer