

Hayley Jenkins-Jones
 Environment Agency
 Via email: hayley.jenkins-jones@environment-agency.gov.uk

Dear Hayley,

Date 2024/02/21
 23rd February 2024

Subject: Response to Additional Information to Duly Make Environmental Permit Application for LHR11/12, Chandos Rd, London, NW10 6NF (reference: EPR/YP3329SB/A001)

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Please find below the responses to the request for further information for the environmental permit application for LHR 11/12 (reference: EPR/YP3329SB/A001).

Ref

One of the additional information requests consists of a Noise Management Plan for the installation. It is understood that there is an additional fee for the Environment Agency to review the Noise Management Plan, comprising £1,246, resulting in a total application fee of £21,128. As part of the original application all application fee except that related to the review of the Noise Management Plan (£19,882) was paid. Please contact Ms. Jennie Arrocha on 07841277884 to arrange the payment of the remaining application fee (£1,246) via credit card on behalf of VDC LHR11 Limited.

Table 1: Environment Agency Queries and Applicant Response

S.No	EA Query	Applicant Response
1.	Form A: Currently we have two Form A's on file and both include different bits of information. Please submit one Form A with all the correct sections filled in, this includes the correct company name and number exactly how they appear on Companies House, a UK business address, contact information and a list of Directors names and DOB. The reason	Form A has been updated to provide details for the appropriate legal entity (VDC LHR11 Limited) as

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2.	<p>for this is the form is included in the consultation and needs to be correct. Please note that the list of Directors you supply must also be listed on Companies House.</p> <p>Form B2, Question 3d Management systems (all): We have determined that our completeness check could not be completed as aspects of your Management System required by our guidance were not provided. Please ensure that your Management System summary includes all of the below:</p> <ol style="list-style-type: none"> a. Site operations b. Site and equipment maintenance plan c. Contingency plans d. Accident prevention and management plan e. A changing climate f. Complaints procedure g. Managing staff competence and training records h. Keeping records i. Review your management system j. Make sure people understand what you do <p>Please re-submit a Management System summary following the Develop a management system: environmental permits (https://www.gov.uk/guidance/develop-a-management-system-environmental-permits) with the above included.</p>	<p>registered in the UK.</p> <p>Appendix 6 of the Operations Report showing the list of company directors has also been updated. Directors are the same as the sister company VDC UK Management Company Ltd (12361880)</p> <p>Section 2.5 of the Operations report has been updated with the guidance provided.</p> <p>It should be noted that the environmental management system (EMS) for the installation is not currently in place as the site is not operational. However, the operator will develop an EMS in line with the EA guidance and compliant with the requirements of ISO14001:2015 prior to commencement of operations.</p> <p>Form B2 has been updated to reflect the most up to date version</p>

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3.	<p>Form B2, Question 3d Management systems (all): Please confirm whether or not you propose to operate a peaking plant in terms of supplying electricity to the grid in times of high demand. Your Operations Report (Section 2.5) says, 'In summary, the management system will identify systems and procedures that minimise the risk of pollution and harm to human health; which may arise from the operation, maintenance, accidents, incidents and non-conformances specific to the proposed peaking plant.</p>	<p>published on the EA website and is included in this response.</p> <p>The reference to operation of a peaking plant was an error and has now been corrected.</p>
4.	<p>Form B2, Question 5a Provide a plan or plans for the site: The site plan is insufficient. Please provide a site plan(s) which include, but is not limited to the following:</p> <ul style="list-style-type: none"> a. Site /permitted area boundary highlighted in green. b. Emission points clearly shown and labelled A1, SW1, SL1 etc. Please note that if there are no emissions to sewer from the permitted installation, then please remove this from the site plan. We only need to know about emissions we are permitting. Soakaways are also classed as an emission point. c. Fuel storage areas, tanks and underground pipes identified. d. Fuel delivery areas identified. e. Bunding identified. f. Site surfacing identified. <p>The drainage plan is incredibly detailed. Please provide a simple schematic drainage plan for the site which includes, but is not limited to the following:</p> <ul style="list-style-type: none"> g. Emissions to surface water h. Emissions to land (soakaways) i. Emissions to sewer (if part of permitted installation) j. Direction of drainage k. Interceptors l. Other discharge contamination protection measures 	<p>Please see attached updated Figures 2 and 3 showing the Site Plan and Drainage Plan respectively.</p> <p>Please note that the installation will not discharge any process effluent to controlled waters or sewer, and the only release to water from the installation will comprise uncontaminated surface water run-off to the combined sewer connection point. The discharge point has been labelled as SW1 in Figure 2 –</p>

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	<p>For further information on preparing your site infrastructure plan please see our guidance under Develop a management system: environmental permits (Develop a management system: environmental permits - GOV.UK (www.gov.uk)).</p> <p>Form B2, Question 6 Environmental risk assessment (Air Quality Assessment): The following aspects required by our guidance were not provided in the Air Quality Assessment:</p> <p>Modelling files - Provide the ADMS model input files used for the predictions listed in the AQA. <i>Reason: We require the model input files to check the inputs used by the consultant in accordance with Environmental permitting: air dispersion modelling reports - GOV.UK (www.gov.uk)</i></p> <p>Type of diesel fuel used - Confirm the type of diesel fuel used – is low sulphur diesel used? <i>Reason: If high sulphur fuels are used, the consultant should assess impacts of sulphur dioxide (SO₂) on human health and at ecological sites.</i></p> <p>Details of operational scenarios and assessment of impacts of these scenarios - Describe the operational scenarios of the diesel engines, including testing schedules and anticipated emergency operational scenarios, and assess the pollutant impacts of these scenarios. <i>Reason: The consultant has not described any testing or emergency scenarios or assessed the impacts of the diesel generators according to the testing or emergency scenarios. The scenarios are key because they represent emissions profiles varying with time. We need to evaluate what particular generator</i></p>	<p>Site Plan.</p> <p>Please see attachment to response email.</p> <p>The generator units will have the capability to run on both diesel and HVO. It is however anticipated that the units will primarily be run using HVO with a maximum sulphur content of 5mg/kg. Low sulphur diesel will be used to run the generators if required as an alternative.</p> <p>Please see attached the updated Air Quality assessment. However, please note that testing scenarios are limited, expected to be up to 2 hours per month for a</p>

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	<p><i>operation leads to worst-case short-term (hourly) and long-term (annual) impacts.</i></p> <p>Please see below some common scenarios and description of scenarios:</p> <div style="border: 1px solid black; padding: 5px;"> <p><i>Common scenarios</i></p> <p>Testing: Generator tests (typically, in specific order) and preparedness for unplanned outage (typically, all generators operating at once for a short period of time).</p> <p>Unplanned outage (emergency): Failure of electricity supply (72 hours is considered a 'realistic maximum' for emergency operations).</p> <p><i>Description of scenarios</i></p> <p>The operational scenarios should be clear and explicit i.e. able to interpret at first glance. Frequency, schedule and duration e.g. every month at 8 am for 30 min. Sequence (order) of operation and number of units e.g. in turns, in pairs or all at once. Loads.</p> </div> <p>Locations of each stack (National Grid References) - Provide the National Grid References (NGRs) for each of the proposed stacks. <i>Reason: These are required for detailed modelling.</i></p> <p>Values of actual oxygen and water levels in the stacks - Provide the percentages of actual oxygen (O₂) and actual water (H₂O) levels in the stacks. <i>Reason: These are required to calculate the normalised volume flow, and with this, the emission rates in accordance with Environmental permitting: air dispersion modelling reports - GOV.UK (www.gov.uk)</i></p>	<p>single generator.</p> <p>Please see Appendix C of the updated Air Quality Assessment as well as Table 5.1 of the updated Operations Report (attached to the response email) for the list of the location of each emission point.</p> <p>The data sheet for the generator units does not contain this information. However, Section 1.3 of the Air Quality Assessment explains that</p>
d.		
e.		

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f.	<p>Impacts of carbon monoxide -</p> <ul style="list-style-type: none"> Assess the impacts of carbon monoxide (CO) on human health receptors under the specific operational scenarios. Provide the source terms for CO (emission concentrations and emission rates). <p><i>Reason: CO has been mentioned as a parameter in Table 4.1 of the Operations Report but impacts of CO have not been assessed in the AQA.</i></p>	<p>the normalised volumetric flowrates (dry gas, 273K) at 5% and 15% have been back calculated from data on data sheet.</p> <p>The emissions from the units have been modelled for emergency scenario but were screened out for testing scenario. Please see Section 6.1.2.4 of the Air Quality Assessment for the details of the predicted impact of CO emissions on the receptors.</p>
g.	<p>Impacts of short-term nitrogen dioxide on human health - Assess the short-term (ST) nitrogen dioxide (NO₂) impacts of the diesel engines on human health receptors under the specific operational scenarios.</p> <p><i>Reason: The consultant has not included an assessment of ST NO₂ impacts, these must be included in the AQA.</i></p>	<p>Please see sections 6.1.1.2 for the long term and 6.1.2.1 of the AQA for the short term impact of NO_x emissions on human health receptors during emergency operational scenario and sections 6.1.3.1 and 6.1.3.2 of the AQA for the impact of NO_x emissions on human health receptors during testing</p>

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h.	<p>Pollutant impacts at Local Wildlife Sites - Assess the impacts of pollutants at Local Wildlife sites (LWS) within 2 km of the dispersion site. <i>Reason: The consultant has assessed the impacts of nitrogen oxides (NO_x) at relevant European sites, Sites of Special Scientific Interest (SSSIs) and local nature reserves (LNRs), but not at the additional thirty-two LWS within 2 km of the dispersion site as advised in the Pre-application Basic Conservation Screening Report (28/04/23). Impacts at LWS must be assessed in the AQA.</i></p>	<p>operational scenario.</p> <p>Please see section 6.2 of the AQA for the assessment details of impact on wildlife sites during emergency operational scenario and testing operational scenario.</p>
i.	<p>Daily NO_x, nutrient nitrogen deposition and acid deposition impacts - Assess the impacts of Daily NO_x, nutrient nitrogen deposition and acid deposition at all relevant ecological sites identified within the relevant habitat screening distances. <i>Reason: The consultant has not included an assessment of Daily NO_x, nutrient nitrogen deposition or acid deposition at any ecological sites in their AQA.</i></p>	<p>Sections 6.2.2.4 and 6.2.2.5 of the Air Quality Assessment provide the assessment outcomes for nitrogen deposition and acid deposition respectively on ecological receptors.</p>
j.	<p>Numerical maximum on grid predictions - Provide the numerical value of max on grid predictions. <i>Reason: The consultant has provided contour plots for annual NO₂ impacts, but has not provided the numerical value of the max on grid prediction in their AQA in accordance with present your results section of Environmental permitting: air dispersion modelling reports - GOV.UK (www.gov.uk)</i></p>	<p>Please see the Grid Maxima result in Table 6-2 for the grid maximum PC for annual NO₂ impacts; the grid maximum PC is less than 1%, and the impacts are not significant.</p>
k.	<p>Meteorological site chosen - Provide explanation why Heathrow airport was chosen as a representative meteorological site. <i>Reason: The consultant has chosen Heathrow as a representative meteorological site but has not explained why this site was chosen, or why other meteorological sites were discounted as suitable or</i></p>	<p>Please see Section 4.2.1.3 of the Air Quality Assessment providing this detail.</p>

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6	<p><i>representative of the dispersion site in accordance with Environmental permitting: air dispersion modelling reports - GOV.UK (www.gov.uk)</i></p> <p>AEGLs - Provide an acute exposure risk assessment comparing the 100%ile predicted environmental concentrations of nitrogen dioxide (NO2) against appropriate acute exposure criteria, such as the US EPA acute exposure guidelines levels (AEGLs).</p> <p>Please re-submit an Air Quality Assessment following the Air emissions risk assessment for your environmental permit guidance (Air emissions risk assessment for your environmental permit - GOV.UK (www.gov.uk)) with the above aspects included.</p> <p>i. We have also noted that your current Air Quality Assessment dated August 2022 (page 17) does not strictly match with what you said you were going to do at planning Citizen Portal Planning (agileapplications.co.uk) dated November 2023 (page 19) with regard to fitting abatement to the generators. Please can you confirm whether you are fitting abatement (SCR) to the generators and if so, please can you confirm the target abatement/ELV. This figure needs to be included in your Air Quality Assessment.</p> <p>Form B2, Question 6 Environmental risk assessment (Noise Impact Assessment): The following information is missing from your Noise Impact Assessment:</p> <ol style="list-style-type: none"> Modelling - Provide noise modelling file(s) in the original file format (.cna for CadnaA noise models). Background Sound Levels - Provide the raw data for the sound survey at locations LT1 and LT2 in a spreadsheet or otherwise tabulated format. Include the time, date, LAeq, LAmx and LA90 values for each individual measurement. <p><i>Reason: We require this information in order to carry out an audit of your Noise Impact Assessment.</i></p>	<p>Please see Section 6.1.2.1 of the Air Quality Assessment providing the assessment of emissions against AEGLs.</p> <p>The Air Quality Assessment has been updated to include confirmation of SCR being fitted to the generator units to meet 500mg/Nm³ at 5% oxygen.</p>

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7.	<p>Please submit the missing information. Further guidance on the information you must submit to the Environment Agency in a Noise Impact Assessment that uses computer modelling or spreadsheet calculations is available from the link: Noise impact assessments involving calculations or modelling - GOV.UK (www.gov.uk), in addition further guidance on how to carry out a satisfactory Noise Impact Assessment can be found here: Noise and vibration management: environmental permits - GOV.UK (www.gov.uk)</p> <p>Form B3, Question 3a Technical standards (BAT assessment): We have determined that our completeness check could not be completed as aspects of your BAT assessment required by our guidance were not provided. Please ensure that your BAT assessment includes, but is not limited to all of the below:</p> <ol style="list-style-type: none"> Assessment of different types of technologies. Assessment of different types of fuel. Assessment of different testing regimes for the choice of technology and fuel chosen. We need to know the exact testing regime/ duration/ frequency of operation you propose (see also Air Quality Assessment section above). 	<p>Please see Section 7.2 of the Operations Report.</p>
8.	<p>Please re-submit your BAT assessment following the Data Centre FAQ TechUk v11 dated May 2020 (attached) and our Emergency backup diesel engines on installations: best available techniques (BAT) guidance (Emergency backup diesel engines on installations: best available techniques (BAT) - GOV.UK (www.gov.uk)) with the above aspects included.</p> <p>Form B3, Appendix 1, Qu 13: Please complete all of this section and re-submit. Please include all the relevant information for each medium combustion plant (MCP) and a signed declaration that the MCPs will not be operated for more than 500 hours per annum. The signatory must be a relevant person equivalent to those who are able to sign the Form F1 declaration.</p>	<p>Please see Appendix 7 of the Operations Report providing details of the specified generators on site.</p>
9.	<p>Form B6 Emissions to controlled water and/or sewer:</p> <ol style="list-style-type: none"> Please confirm whether or not the discharges from the permitted installation to surface water, land and sewer are contaminated. If they are 	<p>No contaminated wastewater will be discharged from the</p>

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10.	<p>contaminated, please fill in and submit Form B6. If they are not contaminated, please confirm the measures you will have in place to ensure the prevention of contaminated discharges to surface water, land and sewer.</p> <p>b. Please confirm what the discharge to sewer is as shown on the site plan for the permitted installation.</p> <p>Please see application guidance for Form B6 for further information Application for an environmental permit: part B6 bespoke water discharge activity, groundwater activity, or point source emission to water from an installation - GOV.UK (www.gov.uk)</p> <p>Management Plans You need to send us a Noise and Vibration Management Plan. This should meet the requirements of our guidance on noise and vibration management (https://www.gov.uk/government/publications/noise-and-vibration-management-environmental-permits). I have also attached our Noise and Vibration Management Plan template for reference. The charge for our assessment of your plan is not included in your baseline application charge. You will therefore need to make an additional payment of £1,246. Please update Form F1 to reflect this additional charge and re-submit.</p>	<p>installation to any controlled waters or sewers. The installation will not generate any contaminated wastewater and the discharges from the installation will only comprise uncontaminated surface water run-off to the combined sewer. Section 5.4 and 5.6 of the Operations Report have been completed accordingly.</p> <p>Therefore, form B6 has not been completed.</p> <p>Please see the attached Noise Management Plan for the installation.</p>

Yours sincerely

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Attachments:

- Operations Report
- Environmental Risk Assessment
- Site Condition Report
- Air Quality Assessment
- Air Quality Assessment – Model files
- Noise Impact Assessment
- Noise Impact Assessment – Model files
- Noise Survey data - Manned Measurements ST1-ST4, and Noise Loggers LT1-LT2
- Site Plan (reference: Figure 2)
- Drainage Plan (reference: Figure 3)
- Forms A, B2, B3 and F1.