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## HILLINGDON LONDON

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| <b>Meeting:</b> | <b>HS2 &amp; Major Applications Planning Committee</b> |                     |
| <b>Date:</b>    | <b>Wednesday, 9<sup>th</sup> March 2022</b>            | <b>Time: 6.00pm</b> |
| <b>Place:</b>   | <b>Civic Centre, Uxbridge</b>                          |                     |

### ADDENDUM SHEET

| Item: 7                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Location:<br>Woodlands Park<br>Landfill Site |
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| Amendments/Additional Information                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Officer<br>Comments                          |
| <p>Addition of the following Air Quality Officer comments to Section 06.2:</p> <p><b>AIR QUALITY OFFICER:</b><br/>The proposed development is in the vicinity of the LBH Air Quality Management area (AQMA), within approximately 650 metres of LBH Hillingdon Hospital Focus Area and approximately 550 metres of LBH Uxbridge Focus Area, bringing additional emissions which will add to current backgrounds levels as well as likely to impact on sensitive receptors already exposed to poor air quality in the area. In addition, the application site is in the immediate vicinity of an allocated new homes area as per the LBH housing Plan.</p> <p>As per the London Plan and LBH Local Action Plan 2019-2024, developments need to be neutral as minimum. LBH requires new developments to incorporate air quality positive design measures from the outset and suitable mitigation measures to reduce pollution, especially in areas where the air quality is already poor (LBH Air Quality Local Action Plan 2019-2024), namely AQMA and Focus Areas. Furthermore, policy DME1 14 of the emerging London Borough of Hillingdon Local Plan (part 2), requires active contribution towards the continued improvement of air quality, especially within the Air Quality Management Area.</p> <p>The proposed development is considered not air quality neutral as per the London Plan requirements; whilst the application is outside the GLA's jurisdiction, sensitive receptors within the LBH will be exposed to the most adverse impacts due to emissions resulting of the proposed development and therefore the proposals need to comply with regional policy to safeguard LBH citizen's health.</p> <p>Furthermore, the proposed development is not clean by design, using diesel backup generators for its operation which could be replaced by alternative cleaner technologies, which in turn would significantly reduce total annual emissions of NOx and PM, which are pollutants of concern in terms of public health. In particular, PM2.5 has been subject to significantly tighter target limits</p> | <p>Updated Information.</p>                  |

on the 2021 WHO global air quality guidelines<sup>1</sup>, as a result of robust epidemiological evidence of the hazardous effects of this pollutant on human health.

Given the significant number of diesel backup generators (171), and the lifetime associated with the operation of the proposed development (i.e. 30 years), planning must be effective to select the most sustainable technologies, which, once approved, will be in place for a long period of time. Unlike vehicle emissions, which are expected to reduce significantly over the next 10 to 20 years, diesel backup generators will remain polluting at the same load/rate over the lifetime of the proposal, emitting NO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>.

Finally, location plays a central role in the planning decision making process and the location of the proposed development is inappropriate given the LBH Plan allocated new homes area in the immediate vicinity of the proposed development. Therefore, new residents of this area would be exposed to unacceptable emission levels and resulting pollution concentrations from the operation of the proposed facility.

Therefore, given the concerns expressed above, LBH has undertaken a detailed peer review of the air quality report submitted to support the outline planning application of the proposed development.

Key findings of the peer review of the air quality report submitted to support the planning application:

a) The report does not acknowledge the choice of type of backup generators for the proposed development as not being clean by design; there are cleaner, more sustainable backup generator technologies widely used in data centres which could have been analysed and selected as viable alternative options.

b) The report does not provide sufficient information on the input data used to model/predict the impacts of the diesel backup generators on nearby sensitive receptors: no information is provided on the location of the diesel backup generators (eastings and northings should have been tabulated and used in the modelling exercise), nor the definition of the buildings included in the model set up (these play an important role in pollution entrainment and dispersion and should equally been tabulated to allow peer review procedures). Furthermore, the relevant data sheets of the proposed diesel backup generators were not provided, namely the emission datasheets for the pollutants of concern which are missing.

c) The stack diameter chosen (0.45m per diesel backup generator) in the modelling is not supported by robust design evidence; it is very unlikely (and not feasible) that the diesel backup flues will be individually set; it is expected that flues will be combined, and the associated stack diameter will be higher than the used in the model set up. This will increase the Actual Volumetric Release (m/s) value and significantly increase the pollutant emission rate (g/s). Therefore, the emission rates used in the model set up are very likely to be significantly underestimated as well as the impacts on sensitive receptors.

d) Furthermore, the time modelled for the testing activities is considered underestimated; the model only accounts for mensal testing of 1 hour (it is usually totalled to 1.5 hours). In addition to the monthly testing, there are maintenance episodes as well as annual testing events that were not accounted for – given the number of diesel backup units being proposed, such emissions cannot be dismissed. In addition, the testing activities were not modelled simultaneously with the energy backup scenario (emergency event) – the

emissions will be cumulative in annual terms when the need of backup operation occurs. Therefore, the impacts on sensitive receptors are underestimated.

e) Worst case receptors at NO2 Annual Mean for LBH 2019 LAEI locations near exceedance were not included in the model set up. At these locations, the impact will be significant.

f) A total flue height of 23m has been modelled in the assessment. The Local Authority needs to approve the chimney height. Should the chimney approved be lower than the modelled in the report, the impacts on sensitive receptors will be much higher.

To address the issues above, ADMS 5 was run to look at the cumulative impacts at additional sensitive receptors and moderate to substantial adverse impacts were estimated, using the background levels monitored at LBH for 2019 (backgrounds monitored during 2020 are deemed unsuitable to ascertain baseline conditions due to COVID-19 effects).

#### Damage Cost and Mitigation

Calculations undertaken at the outline stage indicate a S106 value due of £5,300,9542 if no cleaner technologies are proposed.

The development is not sustainable and further action is required to reduce emissions. As it stands, the proposed development will expose LBH sensitive receptors to moderate to substantial adverse impacts with an (underestimated) 18.2 tonnes/year of NOx released on an annual basis into the atmosphere, together with 0.9 tonnes/year of PM2.5; such level of annual emissions is unacceptable, increasing local backgrounds and counterfeiting planning efforts to improve air quality and protect citizen's health. The damage cost to society is a good indicator of the damage such emissions originate in terms of health and other as well as the benefits should the proposal be refused.

#### Reason for Refusal (if objecting)

The proposed development is not sustainable, not air quality neutral, not clean by design and produces significant adverse impacts on sensitive receptors downwind of the proposed facility at LBH, deteriorating existing poor air quality conditions and increasing local background levels, counterfeiting the LA efforts to improve air quality and safeguard citizen's health. Therefore, the proposed development is contrary to policy EM8 of the Local Plan: Part 1 (November 2012), policy DMEI 14 of the London Borough of Hillingdon Local Plan (part 2), the London Borough of Hillingdon Air Quality Action Plan 2019-2023, London Plan (2021) policy SI1, and paragraphs 174(e), 186 and 188 of the National Planning Policy Framework (2021).

#### Observations

The damage cost calculated used the most up to date guidance and most recent baseline year costs, as per Defra's released data. There are cleaner by design technologies for backup generators that can be used by data centres with proven success elsewhere in the country. Therefore, it is strongly recommended that these are adopted, in the light of the costs to society of the proposed diesel generators and that the applicant would have to pay to secure the mitigation level required.

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| <p>Amend Air Quality consideration in Section 07.18 to the following:</p> <p>The site is located next to the Hillingdon Air Quality Management Area and Uxbridge Air Quality Focus Area. Following consultation with the Council's Air Quality Officer, it is understood that the proposed development is not sustainable, not air quality neutral, not clean by design and produces significant adverse impacts on sensitive receptors downwind of the application site within Hillingdon. This would deteriorate existing poor air quality conditions and increasing local background levels. An objection is raised on this basis.</p>                                                                                                                 | <p>Updated Information.</p> |
| <p>Addition of the following objection:</p> <p>Objection – Air Quality</p> <p>The proposed development is not sustainable, air quality neutral, or clean by design and produces significant adverse impacts on sensitive receptors downwind of the application site within Hillingdon. This would deteriorate existing poor air quality conditions and increase local background levels. As such, the proposed development conflicts with Policy EM8 of the Hillingdon Local Plan: Part 1 (2012), Policy DME1 14 of the Hillingdon Local Plan: Part 2 (2020), the London Borough of Hillingdon Air Quality Action Plan 2019-2023, Policy SI 1 of the London Plan (2021), and Paragraphs 174 and 186 of the National Planning Policy Framework (2021).</p> | <p>Updated Information.</p> |
| <p>Addition of the following text to Section 07.05:</p> <p>It is acknowledged that the proposed development would facilitate the delivery of a district heating network of c.150MW zero carbon heat, sufficient to serve up to 3,000 homes. As addressed within Section 07.01 of the report, it is not agreed that there is a need for a data centre to be located on designated Green Belt land. As such, it is posited that the benefit of such a district heating network could also be achieved as part of a scheme located on a brownfield site. Only very limited weight is afforded to this consideration and the recommendation to object on grounds of inappropriate development is maintained.</p>                                              | <p>Updated Information.</p> |

| <b>Item: 8</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <b>Location:<br/>Woodlands Park<br/>Landfill Site</b> |
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| <b>Amendments/Additional Information</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <b>Officer Comments</b>                               |
| <p>Amend Air Quality consideration in Section 07.18 to the following:</p> <p>The site is located next to the Hillingdon Air Quality Management Area and Uxbridge Air Quality Focus Area. It is understood that no emissions will be generated by the proposed batteries and that there is limited potential for the generation of emissions by vehicles associated with the maintenance of the facility. It is acknowledged that specific requirements will be by Buckinghamshire Council with regard to these elements. Given the nature of the proposal, no objection is raised with regard to air quality matters.</p> | <p>Updated Information.</p>                           |