

The Planning Inspectorate
Major Casework Directorate
Temple Quay House (2 The Square)
Temple Quay
Bristol
Avon
BS1 6PN

Our ref: NE/2023/136256/02-L01

Date: 31 October 2023

Dear Sir/Madam,

**Application by London Luton Airport Limited for an Order granting
Development Consent for the proposed London Luton Airport Expansion
Project: The Examining Authority's Written Questions and requests for further
information**

Luton Airport, 2 Percival Way, Luton, LU2 9LY

Thank you for consulting us on the above questions. We have responded to question WE.1.11 which directly addressed us and the other following questions which related to our remit: BCG.1.5, PED.1.6, WE.1.10.



Reference	Subject	Comment															
BCG.1.5.	Update on progress with obtaining consents, licences, and permits	<p>As of 23/10/2023, Luton Airport holds a single environmental permit for their medium combustion plant (boilers) to heat the existing terminal building. No applications have been made and no formal permitting pre-application advice sought relating to the proposed development. They have previously requested pre-application advice relating to other proposals detailed below:</p> <table border="1"> <thead> <tr> <th>Type</th> <th>Subject</th> <th>Date submitted</th> <th>Reference</th> <th>Regime</th> </tr> </thead> <tbody> <tr> <td>pre-application advice</td> <td>Discharge to surface water or ground</td> <td>02 09 2022</td> <td>EPR/ZB3692EG/A00 1</td> <td>Water Quality</td> </tr> <tr> <td>pre-application advice</td> <td>glycol reclamation plant</td> <td>17 03 2023</td> <td>EA/EPR/LB3904TT/A 001 (408967)</td> <td>Waste</td> </tr> </tbody> </table>	Type	Subject	Date submitted	Reference	Regime	pre-application advice	Discharge to surface water or ground	02 09 2022	EPR/ZB3692EG/A00 1	Water Quality	pre-application advice	glycol reclamation plant	17 03 2023	EA/EPR/LB3904TT/A 001 (408967)	Waste
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PED.1.6.	Earthworks	<p>The volume of imported granular material required to deliver the development platform depends upon how much excavated waste from the historic landfill can be recovered as part of the development. The current earthworks design assumes 80% of the waste can be recovered, but this figure would need to be justified through an environmental permit application for the recovery of waste which has not yet been submitted (see BCG.1.5.). The suitability of the recovered waste would need to be chemically and physically suitable, therefore we believe an 80% recovery rate may be overly optimistic. If this is not achieved, it would increase the need for imported granular material to make up the shortfall.</p> <p>Where an additional 467,000m³ material needs to be imported, this is unlikely to be available from a single natural source, therefore likely to be a waste activity, importing and recovering waste to achieve the development platform. This has not yet been discussed with the Environment Agency, discussions to date have related solely to the recovery of onsite material.</p>															
WE.1.10.	Landfill Capping at phase 10	<p>The proposed cap would be permeable and allow infiltration to the underlying waste mass. Depending on the design and materials to be used, it may have a low permeability to water and infiltration. The volume of water infiltration to the landfill would be impacted by the performance (permeability), area of cap, and the presence of any drainage above the cap. The infiltration rate into the landfill can be calculated, but these design considerations have not yet been discussed with the Environment Agency.</p>															

		<p>If the final design consists of solely a mineral based cap such as London Clay, it will still be highly permeable to landfill gas emissions coming out of the landfill surface.</p> <p>Capping the landfill will not remove the waste or source term for contamination, therefore pollution of the aquifer could still occur. By reducing the infiltration rate, this would result in a lower level of contamination but over a much longer period. Where buildings and impermeable surfacing are installed, this may prevent infiltration as long as the surface and drains are maintained and do not leak.</p> <p>We have not been provided with any detailed hydrogeological assessments for the proposed works on the landfill. The applicant has indicated this would be considered as part of a permit application, so at this stage we cannot confirm if this would be acceptable.</p>
WE.1.11.	Landside drainage attenuation tank	<p>This may pose unacceptable risk to groundwater. Such a tank and associated pipework would be subject to significant physical stresses due to disturbance of the waste and future differential settlement. It would also be subject the chemical attack from the surrounding waste and any perched leachate. It is therefore considered likely that leakage could occur from the landside attenuation / rainwater harvesting tank; this could result in increased infiltration of water, relative to the existing pre-development infiltration rates, through the underlying waste deposits. This could result in increased leachate generation rates within the waste underlying the attenuation tank potentially increasing the risk to groundwater quality in the underling Chalk aquifer.</p> <p>The Drainage Strategy indicates due to differential settlement, localised repairs may be necessary, indicating a failure and loss of containment will have occurred, therefore no preventative maintenance is proposed. As this is an underground structure there would be no scope to inspect for leaks, therefore posing an increased risk to groundwater.</p> <p>This would also be applicable to the below ground greywater storage tank underneath the Terminal 2 building where it is much more difficult to detect a leak, repair and/or remediate. This poses a much higher risk as the quality of the water is more questionable and the total capacity of this greywater tank has not yet been confirmed.</p> <p>Given that this underground tank is not being installed to specifically store hazardous substances or within an inner groundwater source protection zone the EA would not have specific grounds to object.</p>

		<p>However, we would expect the tank to be installed to a high standard with consideration for the potential for differential settlement and for the mobilization of other hazardous substances within the surrounding landfill material should there be a failure. We would also require a risk assessment, considering the potential for leakage from the underground tank, to be provided. The risk assessment should include reference to monitoring and maintenance activities that will be adopted to enable the operator to identify if the tank is leaking and reference to specific actions that will be completed if leakage is identified.</p> <p>Recent discussions with the applicant have highlighted that these plans are not yet finalised and that further options will be looked at. Our concerns were also noted. The EA raised in this meeting that tanks located in a room where they could be inspected would be more preferable than any design where the tanks are set straight into the ground. Moving the tanks to areas outside of the landfill would cause much less concern. As such, at this moment in time we cannot confirm if the outline design for these tanks is suitable.</p>
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Final comments

Thank you for contacting us regarding the above written questions and requests for further information. Our comments are based on our available records and the information submitted to us.

Should you have any queries regarding this response, please contact me.

Yours faithfully,

George Lloyd

Planning Specialist – Green Growth and Delivery

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