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NEXT DC S4 Data Centre Horsley Park (SSD-63741210) EPA Advice on Response to Submissions (RTS)

Dear Mr Copas

Thank you for the request for advice from the NSW Environment Protection Authority (EPA) on the Response to Submissions (RTS) for the above project at 16 Johnston Crescent, Horsley Park (SSD-63741210).

The EPA understands the proposal is for:

- Staged construction and operation of two data centre buildings with an operational capacity of delivering 294 megawatts of power.
- The operation of 120 diesel generators as emergency back-up if there is a mains power failure. This includes 32 x 136kL diesel tanks and 120 x 1000L tanks for day generators and approximately 170 hours of annual testing when 2 generators run at one time.
- Storage of 4,472 tonnes of diesel in aboveground tanks.
- 455 tonnes of lithium ion (as batteries) stored onsite and replaced every 7 years.

The EPA has reviewed the following documents:

- *Submissions and amendment report NEXT DC S4 Data Centre Horsley Park (SSD-63741210)*, prepared by NEXTDC LIMITED, dated 3 September 2025.
- *Surface water and groundwater condition assessment*, prepared by JK Environments Pty Ltd, dated 30 April 2025.
- *Revised Waste Management Plan*, Prepared by Encycle Consulting Pty Ltd, dated 18 August 2025.
- *Revised Air Quality Impact Assessment*, prepared by Northstar Air Quality Pty Ltd, dated 28 April 2025.
- *Revised Noise and Vibration assessment*, prepared by Aurecon Australasia Pty Ltd, dated 1

May 2025.

- *Revised Fryland Salinity and Acid Sulfate Soil Assessment*, prepared by JK Environments Pty Ltd, dated 30 April 2025.
- *Revised Contamination and Remediation Status Letter*, prepared by JK Environments Pty Ltd, dated 29 April 2025.
- *Revised Nose and Vibration assessment*, prepared by Aurecon Australasia Pty Ltd, dated 1 May 2025.
- *Revised Backup Power Report*, prepared by Aurecon Australasia Pty Ltd, dated Unknown.
- *Greenhouse Gas Assessment Report*, prepared by Aurecon Australasia Pty Ltd, dated 9 July 2025.
- *Climate Change Risk Assessment and Adaption Plan*, prepared by Aurecon Australasia Pty Ltd, dated 23 April 2025.

The EPA provides comment on noise and vibration impacts, greenhouse gas emissions, chemical storage, natural gas and contaminated land at **Appendix A** and requests that additional information is provided as part of a revised Response to Submissions.

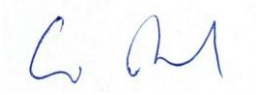
The EPA will have additional comments to provide regarding air quality following completion of our review of the revised Air Quality Impact Assessment and RTS. This will be provided as soon as possible.

All conditions recommended by the EPA in the Response to Submissions dated 3 September 2024 that have not been reiterated in this letter remain relevant and applicable should the proposal be approved.

The EPA advises that, should approval be granted for the proposal, the proponent will need to apply for an Environment Protection Licence for the premises, as the proposal triggers threshold volumes in Clause 9 (Chemical Storage), Schedule 1 of the *Protection of the Environment Operations Act 1997* (POEO Act) for the proposed storage of 4,472 tonnes of diesel on-site.

If you have any further questions about this matter or require more information on the comments provided, please contact Hannah Lyons on (02) 9995 5548 or at hannah.lyons@epa.nsw.gov.au.

Yours sincerely



GEORGE OREL

Unit Head – Regulatory Operation
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Attachment: Appendix A – EPA Comments on EIS

Appendix – EPA Comments on EIS

1. Air Quality

The EPA will provide comments upon completion of our review of the revised Air Quality Impact Assessment (AQIA) and RTS regarding the potential impacts to air quality.

2. Greenhouse Gas Emissions

The EPA has reviewed the S4 SSDA Climate Change Risk Assessment and Adaption Plan dated 23 April 2025 and the NEXTDC S4 Greenhouse Gas Assessment Report dated 9 July 2025.

Additional Recommendations

The EPA recommends that the documents listed above be reviewed by an independent expert to ensure they are compliant with the NSW Guide for Large Emitters.

3. Noise and Vibration Impact

The Revised Noise Impact Assessment (NIA) considers both the construction and operational phases of the development, including noise from maintenance testing of back-up power systems and their operation during emergency events (i.e. Critical Power Failure).

Construction Phase

In the EPA's Response to Submissions (RTS) dated 3 September 2024, the following comment was provided:

"The description of 'standard' construction mitigation in Section 7 of the NIA is generalised in nature and provides insufficient detail given the high exceedances of the construction noise management levels from the proposal. If the proposal is approved, there should be a thorough consideration of feasible and reasonable mitigation that is specific to the proposal (not generalised in nature) to minimise construction noise levels from the works."

In the proponent's Response to Submissions table, it is stated that a comprehensive and site-specific mitigation strategy will be developed once a detailed construction program and methodology are confirmed. The EPA recommends that the mitigation strategy be submitted during the application phase to allow for appropriate assessment prior to any approval being granted.

Operational Phase

The NIA indicates that minor exceedances of Project Noise Trigger Levels may occur during emergency operation (Critical Power Failure). The proponent should therefore identify whether feasible and reasonable mitigation measures can be implemented to achieve compliance in addition to the generator testing which will be limited to daytime hours, as proposed in Section 6.1.1 of the NIA.

The NIA states that if post-commissioning measurements identify annoying characteristics (e.g. low-frequency noise or tonality) they will further investigate mitigation measures. The EPA notes that data centres are known to produce low-frequency noise. Contingency measures must be provided by the proponent that could be implemented post-commissioning should such noise

characteristics be identified. This ensures the proponent is adequately prepared to respond to potential issues and maintain compliance with noise criteria.

Additional Recommendations

In addition to the EPA's recommended conditions of consent outlined in the RTS, the following should also be considered if the proposal is approved:

- Site-specific mitigation measures must be developed and submitted prior to the construction phase.
- Mitigation measures to address tonal or low-frequency noise characteristics must be considered and proposed prior to the commencement of operations, including contingency measures that can be implemented post-commissioning should such noise characteristics be identified.

4. Diesel Storage

In reviewing the revised documentation, the EPA notes that 4,472 kL of diesel will be stored in above-ground tanks, triggering the requirement for an Environment Protection Licence under Schedule 1 of the Protection of the Environment Operations Act 1997 (POEO Act) for chemical storage. This includes 16 × 136 kL bulk diesel tanks and 60 × 1,000 L generator day tanks per building.

In the RTS, the EPA previously requested:

"The proponent must provide further information on how the diesel storage tanks will be filled, including the location of the fill points, whether there is any secondary containment and/or cover, and whether fill protection controls such as shut-off valves and level alarms will be installed."

The proponent has stated that diesel will be delivered by tanker trucks parked adjacent to the bulk storage areas, with fill points located next to the fuel rooms containing the tanks. The EPA recommends that the applicant provide detailed design drawings showing where refuelling will occur and describe what bunding or spill mitigation measures will be installed to contain any potential spills during refuelling. This should also include the location of spill kits on site. No information has been provided on how the day generator diesel tanks will be refuelled.

The proponent has provided minimal information on diesel storage infrastructure, stating that it will comply with AS 1940:2017 – The Storage and Handling of Flammable and Combustible Liquids. In the Response to Submissions, it is noted that the day tanks are single-skinned but will be installed with "appropriate secondary containment." The remains unclear as to how single lined tanks and refuelling area will be bunded.

The location of diesel tanks remains unclear due to the absence of architectural drawings clearly identifying their placement. There are inconsistencies in the Amended RTS, with some sections referring to diesel storage in Buildings A, B–D, and E, while others refer only to Buildings AB and CD (comprising Buildings C and E). A map provided shows Buildings A, B, C, and D, but does not clarify diesel tank locations. As such, it is unclear where diesel tanks will be stored.

The proponent has stated that bulk fuel tanks will be fitted with overfill prevention valves, fill alarms, and independent high-high level sensors. The smaller day generator tanks will have level alarms and high-level sensors interlocked with motorised inlet valves to prevent overfilling.

Additional Recommendations

In addition to the EPA's recommended conditions of consent outlined in the RTS, the following should also be considered if the proposal is approved:

- If single-skinned day tanks are used, they must be installed with bunding capable of holding at least 110% of the tank's full capacity, in accordance with AS 1940:2017.
- The proponent must provide detailed site drawing showing the exact location of all diesel tanks, refuelling areas, bunding infrastructure, and spill kits.

5. Natural Gas

The Revised Preliminary Hazard Analysis states that natural gas is not stored on-site and is not transported into or out of the site boundaries. However, within the same report, Table 3: Threshold Quantities for Hazardous Materials lists a storage threshold of 100 kg for natural gas, with an annual movement exceeding 500 kg.

Additional Recommendations

The EPA's recommends that the following should also be considered if the proposal is approved:

- The proponent provide clarification regarding the presence, storage, and movement of natural gas on-site. Specifically, the proponent must confirm:
    - Whether natural gas will be used, stored, or transported on-site at any stage of the project;
    - If so, the quantities involved, and whether these exceed the thresholds outlined in relevant legislation or guidelines;
    - The purpose and location of any natural gas infrastructure (e.g. pipelines, connections, or appliances);
    - Whether the site design includes any risk mitigation measures associated with natural gas use or storage.

6. Contaminated Land

Based on the information provided, the EPA is reasonably satisfied that the site that was assessed consisting of Lot 305 in Deposited Plan 1275011 identified as 'Stage 3B' in DA 893.9/2013 (p1) was reported to be suitable for continued commercial/industrial use in the validation report and was reported to be suitable for the proposed data centre in the *Contamination and Remediation Status Letter*. The site auditor reports that the site is suitable for continued commercial/ industrial land use.

It is reported that unacceptable materials ACM and AF/FA that didn't comply with the validation criteria have been placed in the containment cell established in the 'Stage 3C' Area which does not form part of the proposed development.

Additional Recommendations

To ensure appropriate management of potentially contaminated material during construction, the EPA recommends the following:

1. Clarify the depth at which material classified as suitable for reuse “at depth only” was placed. As the proposed development may disturb material at depth then the depth at which the material was placed should be reported together with the Remedial Action Plan in order to determine whether the material at depth will be disturbed by the proposed Data Centre.
2. A Works Site Management Plan be prepared to ensure that the material at depth is appropriately managed to ensure that the material is reinstated or placed at the appropriate depth in future.
3. A validation report be prepared to validate that the material at depth remains at the appropriate depth after the proposed works.