



DOC20/856326-2

Mr Shaun Williams
Senior Environmental Assessment Officer Industry Assessments
NSW Department of Planning, Industry and Environment
Level 29, 320 Pitt Street
SYDNEY NSW 2000

Email: shaun.williams@planning.nsw.gov.au

Dear Mr. Williams,

SEARs for the proposed Kemps Creek Data Centre (SSD-10101987)

I refer to the Department of Planning, Industry and Environment's (DPIE) request for the NSW Environment Protection Authority's (EPA) input into the Secretary's Environmental Assessment Requirements (SEARs) for the proposed the Kemps Creek Data Centre (SSD-10101987) located at 707-711, 713-755, 757-769 Mamre Road, Kemps Creek NSW.

The EPA understands the application seeks consent for the construction and operation of a data centre comprised of the following:

- Construction of two, 2-storey developments comprised of approximately three (3) x 36MW data centres
- 60 generators for the data halls and one (1) generator for the substation
- A new High Voltage (HV) switchyard to service the site

Scheduled Activity

Based on review of the information provided, it is unclear whether the proposal will require an environment protection licence (EPL) under the *Protection of the Environment Operations Act 1997* (the POEO Act). The EPA notes the "Request for Secretary's Environmental Assessment Requirements" (Request for SEARs), prepared by Willow Tree Planning and dated 16 October 2020, states that a review of relevant thresholds under Schedule 1 of the POEO Act will be reviewed for the proposed development.

The EPA recommends the proponent consider whether an EPL will be required under the following:

- I. Clause 9 of Schedule 1 of the POEO Act for chemical storage, petroleum products storage. If the proposal has a capacity for more than 2000 tonnes of diesel storage, an EPL would be required.
- II. Clause 17 of Schedule 1 of the POEO Act for electricity generation for metropolitan electricity works (internal combustion engines). This does not apply for stand-by plant that is operated for less than 2001 hours per year.

Phone 131 555
Phone +61 2 9995 5555
(from outside NSW)

TTY 133 677
ABN 43 692 285 758

Locked Bag 5022
Parramatta
NSW 2124 Australia

4 Parramatta Square
12 Darcy St, Parramatta
NSW 2150 Australia

info@epa.nsw.gov.au
www.epa.nsw.gov.au

Electricity Generation

The EPA understands that the proposal will include the installation of back-up generators for emergency power purposes. The EPA requests further information be provided on the back-up generators, including:

- a) number of back-up generators proposed;
- b) individual capacity (in terms of megawatts and megajoules per second);
- c) maximum operating time in an emergency situation;
- d) testing procedure, frequency and duration;
- e) confirmation that testing will be carried out individually or in clusters; and
- f) justification of the need to test during the evening or at night.

The Environmental Impact Statement (EIS) should definitively state whether scheduled testing will exceed that 200-hour annual limit. If the testing time is definitively stated to be less than 200 hours per annum, then DPIE may want to consider adding a condition of consent reflecting this.

Alternatively, if testing time could exceed 200 hours per year, then the proposed activity may meet the trigger for Clause 17, schedule 1 of the POEO Act. Please note that the EPA would consider 'operating' to include testing, if testing involves starting the generator. In addition, the definition of 'plant' in this scheduled activity includes all generators on the premises, not each individual generator.

Chemical Storage

The EPA understands that each generator will have a belly tank with two (2) fuel compartments, one supplying the Ground Floor generator and one supplying the Level 1 generator. The report also mentions that there will be 30 belly tanks in total on the Ground Level with each belly tank supporting approximately 32kL of fuel, across two (2) separate compartments. There will also be two (2) smaller generator belly fuel tanks at the Ground Level serving the base-build.

The EPA requests clarification on the total volume of diesel proposed to be stored at the premises and the capacity of the tanks in which the diesel is to be stored. Under Clause 9 of the POEO Act, an activity requires a licence if there is a capacity to store more than 2,000 tonnes of petroleum products (which includes diesel).

Information on the location and design of chemical bunding and containments should also be included in the EIS. If diesel storage tanks are above ground, bunding requirements are set out in *AS 1940:2017 The storage and handling of flammable and combustible liquids*.

Noise

The proponent's Scoping Report states that a Noise Impact Assessment (NIA) will be undertaken as part of the EIS to assess whether the proposed development will exceed the relevant acoustic emissions criteria and to address the potential impacts regarding noise. The EPA understands that backup electricity generators can produce significant noise, and in addition to utilising the generators during a power failure, they are also operated for routine maintenance.

The NIA should be prepared in accordance with the *Noise Policy for Industry (2017)*. The noise assessment should include all activities occurring at the premises, including the operation, and testing, of specific diesel generators that will be used for backup electricity generation.

Air Quality

The EPA notes that an Air Quality Impact Assessment (AQIA) will be undertaken as part of the EIS to assess air quality impacts from the proposed development, with focus on emissions from the back-up generators.

The proponent should ensure that the AQIA adequately assesses the impacts from the proposed collective activities (including testing of the generators) and is prepared in accordance with *Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales (2016)*.


The air quality assessment must include:

- Generator specifications, including final number, individual and total engine electrical capacity, fuel rate and emission rates/concentrations and parameters
- Justification for the proposed back-up power source and any alternatives considered
- Scenarios which assess construction works, realistic operations, regular back-up generator testing and a justified worst-case scenario of all generators in operation
- An assessment of emission concentrations from the back-up generators for, but not limited to polycyclic aromatic hydrocarbons (PAHs), particulates, CO, SO₂, VOCs and oxides of nitrogen (NO_x)
- An assessment of impacts for criteria pollutants and a discussion and evaluation of the probabilities/likelihood of exceedances for the worst-case scenario
- Details of generator engine performance, any mitigation, management and monitoring measures (including for back-up generators) required to ensure compliance with section 128 of the *Protection of the Environment Operations Act 1997*.

Further Correspondence

In view of the above factors, the EPA requests further consultation on the proposal following submission of the Environmental Impact Statement (EIS). If you have any questions about this advice, please contact Rhys Inez at rhys.inez@epa.nsw.gov.au or on 9995 6359.

Yours sincerely



29 October 2020

ERIN BARKER
Unit Head Metropolitan West Operations
Regulatory Operations Metropolitan