

13 March 2020

630.12671.00400-L01-v1.0.docx

A W Edwards Pty Limited
Level 1, 131 Sailors Bay Road
NORTHBRIDGE NSW 2063

Attention: Dino DiPaolo

Dear Dino

**Lane Cove West Data Centre
SSD-9741-MOD-1
Air Quality Impact Assessment**

The letter from Mr James Boyle [A/Unit Head Sydney Industry Environment Protection Authority (EPA)] to Mr Patrick Copas of Industry Assessments, NSW Department of Planning, Industry and Environment (DPE), dated 5 March 2020, notes that an Air Quality Impact Assessment (AQIA) was not included as a part of modification application SSD-9741-MOD-1.

EPA recommend that an AQIA is included in accordance with the "Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales", 2016 (the Approved Methods) including:

1. Generator specifications, electrical generation capacity and generator fuel rate to assess against the criteria for a scheduled activity
2. Assessment of emissions from the generators against the POEO (Clean Air) Regulation standards of concentration
3. Assessment of offsite impacts from the operation of the proposed generators in strict accordance with the Approved Methods.

SLR Consulting Australia Pty Ltd (SLR) were engaged by A W Edwards Pty Ltd to conduct a Level 1 (as described in the Approved Methods) AQIA in accordance with the Approved Methods, reported in SLR Report 630.12761.0400-R01 (attached).

The AQIA addresses the above three matters identified by EPA finding the following:

1. The generator specifications are such that the combined electricity generation is a scheduled activity under the POEO Act, Schedule 1, Clause 17 (**Table 1**).

Table 1 POEO Act Schedule 1, Clause 17, Scheduled Activity: Generator Specifications

POEO Act Scheduled Activity Criteria	SSD-9741-MOD-1	Criteria Met
Internal combustion engine	Yes	YES
Situated in metropolitan area	Lane Cove	YES
Fuel consumption > 3 MJ/s	116 units x 4.4 MJ/s = 510 MJ/s	YES
Electricity generation > 30 MW	116 units x 1.996 MW = 228 MW	YES
NO ₂ or NO or both, as NO ₂ equivalent > 450 mg/m ³	14.5 g/kWh; 5.8 m ³ /s = 1,365 mg/m ³	YES
Scheduled Activity		YES

2. However, Clause 17 does not apply to the generation of electricity by means of plant (that is emergency standby plant) that is operating for less than 200 hours per year. The testing regime of the generators is less than 200 hours per year and the operation of all generators in a power outage is not expected to exceed 200 hours per year (**Table 2**).

Table 2 POEO Act Schedule 1, Clause 17 Exemption for Emergency Standby Plant Electricity Generation

POEO Act Scheduled Activity Exemption Criteria	SSD-9741-MOD-1	Criteria Met
Operation < 200 hours per year	Testing Regime: 20 minute per unit 2 units per day 5 days per week (Monday to Friday) 52 weeks per year = 174 hours / year	YES
	Emergency Operation: <10 hours per year*	YES
	Testing Regime plus Emergency Operation: <184 hours per year*	YES
Clause 17 Exemption		YES

* anticipated

A level 1 assessment of offsite impacts due to generator testing, assessed in accordance with the Approved Methods using worst-case meteorological data, are found to comply with the relevant assessment criteria at the nearest sensitive receptors (**Table 3**).

Table 3 Predicted Maximum 1-hour Average NO₂ GLCs at Sensitive Receptors (µg/m³)

Receptor horizontal distance from source (m)	NO _x Incremental GLC	O ₃ Background	NO ₂ (OLM) Incremental GLC	Background	Cumulative GLC	Criterion	Compliance
400 m	263	163	183	46	229	246	Yes
500 m	263		183		229		Yes
600 m	257		182		228		Yes
700 m	248		181		227		Yes
800 m	238		180		226		Yes
900 m	212		177		223		Yes
1000 m	190		175		221		Yes

The modelling study has incorporated a number of conservative assumptions and the predicted offsite impacts are anticipated to be over-predictions of potential worst-case impacts. In addition, in accordance with the Approved Methods, the modelling outcomes incorporate the maximum predicted incremental impact and the maximum background concentration to obtain a worst-case cumulative impact.

Nevertheless, the results of the modelling indicate compliance with the assessment criteria.

Yours sincerely

JASON SHEPHERD
Principal - Air Quality

Checked/
Authorised by: JC