



Ms A Villate
RCKa Architects
29-31 Cowper Street
London
EC2A 4AT

25th January 2021
Project Ref: 01.0050.003 Camden Road

Dear Ms Villate

AQN Assessment: Camden Road, NW1

Planning application reference 2020/3737/P relates to the following proposal:

Redevelopment of the site to include demolition of existing hostel building and the erection of a new 4-6 storey plus basement hostel building (sui generis use) with external stairwell and rear balconies to all levels; erection of 2 x single storey garden buildings; associated works including installation of plant equipment, parking and access arrangements and tree and landscaping works. (Information for the purpose of consultation: the proposed development provides 39 units, which comprise 36 x studios, 2 x 1-beds and 1 x 1-bed wheelchair accessible unit). Camden Road Hostel 248-250 Camden Road London NW1 9HE

The London Plan (Section 7.14) includes a policy relating to 'air quality neutral development' and aims to bring forward developments that are air quality neutral or better and that do not degrade air quality in areas where EU limit values (or air quality objectives) are not currently achieved. For all qualifying developments, the design and operation must ensure that it does not exceed stated air quality neutral (AQN) benchmarks for building design and transport.

The air quality assessment submitted with the application confirms that the scheme does not generate nitrogen dioxide or particulate matter as a result of:

1. No traffic emissions for this 'car free' development; and
2. No building NO₂ or PM₁₀ emissions due to the use of air source heat pumps rather than fossil fuelled biomass / CHP units.

For this reason, the air quality assessment concludes that (at zero) the development emissions are lower than The London Plan emission benchmarks. Notwithstanding this, Camden Council has requested that full AQN calculations are presented.

Development Benchmarking

The emission benchmarking calculation relies on information relating to the size of the building and the planning use class(es).

- The planning use (a hostel) is comparable with Class C3 residential.
- The GIA of the development is 1539m².

Building Emission Benchmark (BEB)

Two Building Emission Benchmarks (BEBs) have been defined; one for NO_x and one for PM₁₀, for a series of land-use classes. The SPG Appendix 5 benchmarks are included with this letter.

- NO_x: 26.2 x 1539 = 40321.8 g/annum
- PM₁₀: 2.28 x 1539 = 3508.92 g/annum

The Energy & Sustainability Statement (ref: 4565 DSN04 r2) by E3 dated 19th May 2020 describes the energy and sustainability approach for the proposed development, in particular the use of a hybrid variable refrigerant flow (HVRF) air source heat pump system rather than a boiler / CHP units fuelled by natural gas (for example).

As such the building emissions will be:

- NO_x: 0 x 1539 = 0 g/annum
- PM₁₀: 0 x 1539 = 0 g/annum

The building emissions are 0 g/annum for both NO_x and PM₁₀ and are therefore lower than the BEBs for a development of this size and planning use class.

Transport Emission Benchmark (TEB)

Two Transport Emission Benchmarks (TEBs) have been defined; one for NO_x and one for PM₁₀, for a series of land-use classes. The SPG Appendix 5 benchmarks are included with this letter.

The SPG Appendix 6 benchmarks are included with this letter. The lowest of these is for developments within a clean air zone (CAZ) and for purposes of this calculation it is this value that has been applied.

- NO_x Residential (C3): 234 g/dwelling/annum
- PM₁₀ Residential (C3,C4): 40.7 g/dwelling/annum

There are a total of 39 residential units (dwellings) in the proposed scheme, meaning that the TEBs are as follows:

- NO_x: 234 x 39 = 9126.0 g/annum
- PM₁₀: 40.7 x 39 = 1587.3 g/annum

The Planning Statement for the scheme describes that there is one accessible parking space and 22 cycle parking spaces. There are no spaces supplied with the individual residences. As such it is a 'traffic free development' and the transport emissions will be negligible.


The transport emissions are 0 g/annum for both NO_x and PM₁₀ and are therefore lower than the TEBs for a development of this size and planning use class.

Conclusion

I trust that the calculations detailed above address the Council requirements in relation to the NO_x and PM₁₀ benchmarking for this scheme. Should you wish to discuss the scope further or require clarification of any matter please do not hesitate to contact me using the contact details below.

Yours Sincerely



Matt Stoaling
Director
Tel: 

APPENDIX 5. 'AIR QUALITY NEUTRAL' EMISSIONS BENCHMARKS FOR BUILDINGS

Two Building Emission Benchmarks (BEBs) have been defined; one for NO_x and one for PM₁₀, for a series of land-use classes. The benchmarks are expressed in terms of g/m²/annum. The gross floor area (GFA) is used to define the area. For the less common types of development it will be for the developer to provide convincing evidence for which BEB should be used.

Land Use Class	NO _x (g/m ²)	PM ₁₀ (g/m ²)
Class A1	22.6	1.29
Class A3 - A5	75.2	4.32
Class A2 and Class B1	30.8	1.77
Class B2 - B7	36.6	2.95
Class B8	23.6	1.90
Class C1	70.9	4.07
Class C2 ¹	68.5	5.97
Class C3 ¹	26.2	2.28
D1 (a)	43.0	2.47
D1 (b)	75.0	4.30
Class D1 (c -h)	31.0	1.78
Class D2 (a-d)	90.3	5.18
Class D2 (e)	284	16.3

Source: Air Quality Neutral Planning Support Update: GLA 80371, April 2014

APPENDIX 6: 'AIR QUALITY NEUTRAL' EMISSIONS BENCHMARKS FOR TRANSPORT

Land use			
	CAZ	Inner	Outer
NO_x (g/m²/annum)			
Retail (A1)	169	219	249
Office (B1)	1.27	11.4	68.5
NO_x (g/dwelling/annum)			
Residential (C3)	234	558	1553
PM₁₀ (g/m²/annum)			
Retail (A1)	29.3	39.3	42.9
Office (B1)	0.22	2.05	11.8
PM₁₀ (g/dwelling/annum)			
Residential (C3,C4)	40.7	100	267

Source: Air Quality Neutral Planning Support Update: GLA 80371, April 2014