



Air Quality Management Plan

V2

Technical Report Number: 202321207M1207C/1

Our Reference: 202321207M1207C

Client: Mr Gill

Site: 47 Coldharbour Lane Hayes, UB3 3EE

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Site Address:	47 Coldharbour Lane Hayes, UB3 3EE
Client:	Mr Gill
Client Address:	47 Coldharbour Lane Hayes, UB3 3EE
Submitted To:	London Borough of Hillingdon
Submitted By:	Harley Parfitt
Date:	5/3/2023

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REVISION HISTORY:

REVISION	DESCRIPTION	DATE	PREPARED	APPROVED
V1	For client comment	12/04/2023	Harley Parfitt	Harley Parfitt
V2	Incorporating boiler spec	03/05/2023	Harley Parfitt	Harley Parfitt

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1.0 INTRODUCTION

1.1 Background

- 1.1.1 Compliance4Buildings Ltd was appointed by Mr Gill to provide an Air Quality Management Plan (AQMP) for the proposed redevelopment of 47 Coldharbour Lane Hayes, UB3 3EE.
- 1.1.2 The proposal comprises a second-floor extension and conversion of the property into 2x flats.
- 1.1.3 The planning application (2538/APP/2023/229) has been granted by the London Borough of Hillingdon (LBH), the local planning authority, subject to conditions. One planning condition relates to air quality and states:

"No development approved by this permission shall be commenced until an air quality management plan has been submitted to and approved in writing by the Local Planning Authority. The plan shall demonstrate that the development will be at least air quality neutral. Works shall be carried out in accordance with the approved details and thereafter maintained as such."

- 1.1.4 This AQMP provides the necessary information to discharge this planning condition and includes an air quality neutral assessment, following the simplified approach.
- 1.1.5 Where assumptions have been made in this AQMP, these are based on the professional experience of the author (see Section Appendix A).

2.0 AIR QUALITY NEUTRAL ASSESSMENT

2.1 Consultation

2.1.1 The proposed scope of work was sent to LBH's Environmental Health Officer, via email, on the 6th of April 2023, asking for comment. On the 11th of April 2023, they responded stating that they would accept the simplified approach for minor development, despite being within an AQFA. .

2.2 Methodology and Guidance

2.2.1 An Air Quality Neutral Assessment compares a proposed development against benchmarks for transport and building emissions. These benchmarks set out the maximum allowable emissions of NO_x and PM based on the size and use class of the proposed development. All development must be air quality neutral for both transport and building emissions.

2.2.2 All development, unless specifically excluded, are required to undertake an Air Quality Neutral Assessment. Major development, and in some cases minor development in Air Quality Focus Areas (AQFAs), are required to calculate total emissions of NO_x and PM for both building and transport. However, minor developments can follow a simplified assessment procedure, in most cases. Guidance on the benchmarks and how to conduct an AQNA are provided by the Greater London Authority ¹.

2.3 Local Air Quality Management

2.3.1 The proposed development is located within the LBH's Air Quality Management Area (AQMA), which is declared for exceedances of the annual mean AQS for nitrogen dioxide (NO₂).

2.4 Air Quality Focus Area

2.4.1 The proposed development is located within the Hayes Air Quality Focus Area (AQFA). AQFAs are areas of known poor air quality and high levels of residential exposure. As the proposal is in an AQFA, GLA guidance suggests the more detailed air quality neutral assessment method may be required.

2.5 Building Emissions

2.5.1 A minor development can be classified as air quality neutral with respect to building emissions if the new heating system meets any of the following criterion:

- the new heating system is a heat pump or other zero-emission heat source.
- the new heating system includes one or more individual gas boilers with NO_x emissions rated at less than 40 mg/kWh.
- the development is connecting to an existing heat network.

2.5.2 The proposed development will be heated with gas boilers and as such, to achieve air quality neutrality with respect to building emissions the new gas boiler must have a NO_x emissions rate of less than 40mg/kWh.

¹ GLA (2023) Air Quality Neutral London Plan Guidance [online: <https://www.london.gov.uk/programmes-strategies/planning/implementing-london-plan/london-plan-guidance/air-quality-neutral-aqn-guidance>]

2.5.3 The proposed boiler (Compact combi boiler²) has an emission rate of 32mg.NOx/kWh and therefore the proposed development will be air quality neutral with respect to building emissions. An extract from the specification of the combi-boiler is included below.

Figure 2:1: Specification sheet for proposed Compact Combi Boiler.

Compact combi boilers	Unit of measure	Compact	Compact
Boiler type		Combi	Combi
Model output	kW	24	28
Article number (horizontal flue & filter)		0010043988	0010043989
Article number (vertical & filter)		0010043992	0010043993
Gas Council number		47-019-63	47-019-64
Lift weight	kg	25,6	26,5
Performance			
NOx (En 15502-2-1)	mg/kWh	27	32
ErP efficiency	%	92	93
ErP decibel rating (sound power)	dBa	52	54
ErP efficiency (heating/DHW)	A+++ to D / A+ to F	A/A	A/A
Heating and hot water			
Hot water flow rate	L/min	9.9	11.5

2.6 Transport Emissions

2.6.1 A minor development can be classified as air quality neutral with respect to transport emissions if they do not exceed the maximum parking standards set out in policies T6 and T6.1 to T6.5 of the London Plan. The parking standards depend on the site's PTAL score and whether it is in Outer or Inner London.

2.6.2 The LBH is in Outer London and the proposed development has a PTAL score of 4. In line with London Plan Policy T6.1, the proposal could have up to 1.5 car parking spaces and still be classified as air quality neutral.

2.6.3 The proposed development is car free and therefore can be concluded to be air quality neutral with respect to transport emissions, despite being located within an AQFA.

² <https://www.glow-worm.co.uk/trade/products/compact-combi-boiler-46784.html>

3.0 CONCLUSION

- 3.1.1 Greenavon was appointed by Mr Gill to provide an Air Quality Management Plan to support a planning application for the redevelopment of 47 Coldharbour Lane Hayes, UB3 3EE.
- 3.1.2 A condition of the planning application requires that an Air Quality Management Plan demonstrate that the development will be at least air quality neutral.
- 3.1.3 The proposed development is car free and incorporates low NOx boilers (NOx emissions rated at less than 40 mg/kWh) and will, therefore, be air quality neutral with respect to building and transport emissions.
- 3.1.4 Whilst it is recognized that Air Quality Neutral guidance states that even minor development *may* require a full air quality neutral assessment in AQFA. It is not considered appropriate for this minor proposal which will be compliant with the benchmarks and is a redevelopment and is therefore not a new a source of pollution. The LBH agreed with this proposed approach.
- 3.1.5 This Air Quality Management Plan includes the necessary information to discharge the planning condition. The proposal is therefore considered compliant with all national and local air quality policy

APPENDIX A: PROFESSIONAL EXPERIENCE

Harley Parfitt, BSc (Hons), MSc, MIAQM

Mr Parfitt has six years' experience in environmental modelling and assessment, mostly relating to air quality and odours. He has extensive experience in the calculation of emissions to air for both local air quality assessments and odour. For air quality, he also has extensive expertise in modelling the atmospheric dispersion of pollutants for comparison against regulatory limits and for assessment of health and environmental impacts. He has prepared assessments in support of Environmental Impact Assessments (EIA), permit applications and planning applications (under both Town and Country Planning Act (TCPA) and Development Consent Order (DCO) regimes). He has particular experience in modelling road transport sources and odours from sewage treatment works.



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