

DAVID PERES DA COSTA

London Borough of Camden
Planning Solutions Team
Contact Camden Reception
5 Pancras Square
London
N1C 4AG

24 July 2019

Dear David,

RE: 369-377 KENTISH TOWN ROAD – AIR QUALITY ASSESSMENT

The London Borough of Camden have reviewed and provided comments on the Air Quality Assessment (carried out in April 2019) for 369-377 Kentish Town Road (application ref: 2019/0910/P); this document provides clarifications and responses to each of the comments and should be read in conjunction with XCO2's Air Quality Assessment (5/4/2019).

ON-SITE EMISSIONS

The London Borough of Camden have raised the following regarding on-site emissions:

“While the original strategy proposed communal gas boilers which both AQAs refer to, the Supplementary Energy Statement dated April 2019 proposes heat pumps as an “alternative strategy”. The later AQA report of similar date does not refer to heat pumps. It is not clear what the status of this proposal is in relation to the scheme and the Air Quality Assessment.”

XCO2's response:

With the proposed Air Source Heat Pump system, there will be no building related on-site emissions associated with the proposed scheme; this means local NOx emissions will not be present as a result; therefore, an Air source Heat Pump system is an improvement upon the Gas Boiler system with regards to emissions.

IMPACTS ON OCCUPANTS

The London Borough of Camden have raised the following regarding Impacts of air quality on occupants:

“In the April 2019 AQA, the 2016 baseline background concentrations from Defra mapping are cited. The AQA should compare the Defra mapping with the nearest automated monitoring station data (Bloomsbury) for background concentrations, and use the higher of the two. The AQA does not state the model inputs and assumptions used eg what data is used for the background concentrations and vehicle emission factors in the development year. The AQA should state the model details and assumptions, including these data. It should show that it has used the baseline year data for both, instead of predicted data.”

XCO2's response:

There are two points raised in Camden's commentary above. Regarding the first point, it should be noted that Bloomsbury is not considered the nearest automatic monitoring station because the Islington Arsenal automatic monitoring station is over 1km closer to the site; this is the data that has been presented within the report. Bloomsbury is 3.4km away and is not considered representative of the development site's location. The assessment used the highest background NO₂ concentration (2013-2017) measured at the nearest background diffusion tube monitoring site (Lady Margaret Road), which is just 640m from the site; this concentration is higher than both the mapped and automatic monitoring data; this is the worst-case background concentration for the site and highlights the conservative approach adopted for the assessment.

With regards to the second point, the Air Quality Assessment clearly states the background concentrations that were used in Table 6 of the report. It should be noted that the data is worst-case. The input parameters are presented in detail in Appendix B. Emission factors and background concentration for 2016 were used.

Camden have also raised the following:

"The March 2019 AQA refers to whole house ventilation with NO_x, PM₁₀ and PM_{2.5} filtration. The April 2019 AQA states that NO_x filtration is included only at first floor level due to residential use exceeding the long term AQ limit for NO_x. The commercial and access uses of the ground floor are argued not to require. Cycle spaces are proposed. No further mitigation measures is proposed in either report"

XCO2 response:

The Air Quality assessment carried out by XCO2 in April 2019 supersedes the March 2019 assessment as the conclusions in XCO2's report were based on dispersion modelling information, which is seen as a more accurate approach to Air Quality assessments. Based on the method of assessment adopted, which as explained in some of the previous comments has been conservative, no further mitigation measures were deemed necessary other than the ones included within XCO2 report (in April 2019).

AIR QUALITY NEUTRAL

The London Borough of Camden have raised the following:

"The scheme meets the building emissions benchmarks for AQN. The reports have not calculated transport emissions to compare with the benchmarks. The reasons provided for not undertaking this part of AQN do not cite any guidance as justification and are not recognised. The TE calculation and TEB comparison should be undertaken for the post-development scenario."

XCO2's response:

The proposed development is car-free, therefore, the Air Quality Neutral assessment for transport emissions is not deemed relevant.

CONSTRUCTION IMPACT RISKS

The London Borough of Camden have raised the following:

"Both AQA reports claim a low risk scheme: The claims are not backed up by sufficient evidence from the IAQM guidance. Each assessment stage should be detailed against the criteria and shown what the value is and why they are assessed as such."

Summary Dust Risk			
Demolition	Earthworks	Construction	Trackout
Low Risk	Low Risk	Low Risk	Low Risk
Low Risk	Low Risk	Low Risk	Low Risk
Negligible	Negligible	Negligible	Negligible

Table 7 Air Quality Construction Dust Risk Assessment.

Table 8: Risk of Dust Impacts Prior to Mitigation

Dust Source	Emission Magnitude	Human Health Risk	Dust Soiling Risk	Overall Risk
Demolition	Negligible	Negligible	Negligible	Negligible
Earthworks	Small	Low	Low	Low
Construction	Small	Low	Low	Low
Trackout	Small	Negligible	Low	Low

As an example, the IAQM for Dust Emissions Magnitude are reproduced below and the applicant would need to confirm for each stage that the Medium and Large criteria do not apply and that the Small criteria do apply, including but not limited to the highlighted examples.

Construction stage	Large	Medium	Small
Demolition	Total building volume >50,000 m ³ , potentially dusty construction material (e.g. concrete), on-site crushing and screening, demolition activities >20 m above ground level;	Total building volume 20,000 m ³ – 50,000 m ³ , potentially dusty construction material, demolition activities 10-20 m above ground level;	Total building volume <20,000 m ³ , construction material with low potential for dust release (e.g. metal cladding or timber), demolition activities <10m above ground, demolition during wetter months.
Earthworks:	Total site area >10,000 m ² , potentially dusty soil type (e.g. clay, which will be prone to suspension when dry due to small particle size), >10 heavy earth moving vehicles active at any one time, formation of bunds >8 m in height, total material moved >100,000 tonnes;	Total site area 2,500 m ² – 10,000 m ² , moderately dusty soil type (e.g. silt), 5-10 heavy earth moving vehicles active at any one time, formation of bunds 4 m - 8 m in height, total material moved 20,000 tonnes – 100,000 tonnes;	Total site area <2,500 m ² , soil type with large grain size (e.g. sand), <5 heavy earth moving vehicles active at any one time, formation of bunds <4 m in height, total material moved <20,000 tonnes, earthworks during wetter months.
Construction:	Total building volume >100,000 m ³ , on site concrete batching, sandblasting.	Total building volume 25,000 m ³ – 100,000 m ³ , potentially dusty construction material (e.g. concrete), on site concrete batching.	Total building volume <25,000 m ³ , construction material with low potential for dust release (e.g. metal cladding or timber).
Trackout:	>50 HDV (>3.5t) outward movements ¹⁶ in any one day ¹⁷ , potentially dusty surface material (e.g. high clay content), unpaved road length >100 m;	10-50 HDV (>3.5t) outward movements ¹⁶ in any one day ¹⁷ , moderately dusty surface material (e.g. high clay content), unpaved road length 50 m – 100 m;	<10 HDV (>3.5t) outward movements ¹⁶ in any one day ¹⁷ , surface material with low potential for dust release, unpaved road length <50 m.

The highlighted examples above are among those that have in the past been incorrectly assigned in AQAs for major schemes in Camden. The same approach should be taken for each stage of the risk assessment, not just Dust Emission Magnitude.

XCO2's response:

Firstly, please note we respond here only in relation to the report that was carried out in April 2019 which, as per previous responses, supersedes the report dated March 2019.

While we appreciate some of the above highlighted examples may have been incorrectly assigned within Air Quality assessments in previous major schemes in Camden, we think it is too onerous to go to the other extreme and potentially misapply the guidance on a fairly small scheme like the development at 369-377 Kentish Town Road. XCO2 have over 10 years of experience in carrying out Air Quality assessments for developments of various scales and have used the Construction Dust guidance with appropriate professional judgement for the Kentish Town Road scheme. For example, we think that it would not be reasonable to overlook that the site is considered a minor development (355m²) and the proposed build volume is just 6,000m³. With the exception of the earthworks

phase, when a very small number of earthmoving vehicles will be in operation on site, there will be few or no vehicles driving over un-made surfaces and therefore trackout of dusty material from the site will be minimal. Whilst it cannot be guaranteed that the demolition and earthworks will be undertaken in wetter months, the scale is such that the magnitude of the dust emission is likely to be minimal. Furthermore, concrete batching will not be undertaken on site for this development given its scale. The assessed risk of dust impacts as low is considered reasonable for this site and any dust emissions should be well controlled with standard best practice mitigation.

CONCLUSION

In summary, XCO2's Air Quality Assessment (dated: April 2019) for the proposed development at 369-377 Kentish Town Road has considered and addressed all aspects of current policy and guidance formulating appropriate recommendations for the scheme.

I hope the above provides sufficient clarification to the points raised by the team at Camden but if you have any additional comments or questions, please do not hesitate to contact us.

Kind regards,

KOSTAS MASTRONIKOLAOU
ASSOCIATE