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Stop Northampton Gateway Action Group

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Northampton Gateway TR050006

Further comments on response of Roxhill to questions from DfT on impact on AQ during construction.

**As invited, we are submitting these comments as an Interested Party in response to the reply given to the Department of Transport following its request for further supporting evidence to support the claim that impact on local receptors during construction would be 'negligible'.**

The impact on Air Quality during the construction phase cannot be disentangled from the overall impact once the site is operational. The following background facts are well established:

- Polluted air is a major and growing health risk and its harmful effects are well documented.
- Most Planning guidance at all levels supports the principle set out in the National Planning Policy Framework that new developments should not make existing pollution levels any worse.
- The proposed site is bounded by two AQMA's, parts of which already exceed legal AQ limits.
- Traffic volume, particularly diesel HGV traffic is forecast to rise significantly on this stretch of the M1.
- The 'Smart' motorway currently being constructed between Junctions 13 & 16, will widen the M1 and the increased traffic will move a lane nearer to residential areas.
- The proposed development will create a 20 metre high corridor along the M1 with the potential to deflect emissions from the M1 that are currently dispersed over open fields.

All these factors highlight the importance of accurate baseline AQ monitoring being carried out in the local communities around the site and the reliability of computer based forecasting and modelling of likely outcomes.

### **Baseline Monitoring**

South Northants Council has done little monitoring in the site area. It has only a few test locations because the site is farmland with few receptors other than wildlife habitat. South Northants District Council has never undertaken automatic monitoring in this area.

Northampton Borough Council does monitor the two AQMA's, one being the length of the M1 Junction 15 to 16 and the other a section of the A45. Almost two thirds of the additional HGV traffic trips generated by Northampton Gateway would pass through one or both of these AQMA's.

The nearest community is Collingtree and the direct impact will be on some 1370 households both existing and with planning permission. All these houses together with Allotments, a Cricket Club, a Tennis Club, a junior football training ground and a primary school, are within 100 metres of the M1 and A45.

How all this is monitored is set out in the 2018 NBC AQ Status Report. The M1 AQMA is monitored by one diffusion tube in Collingtree Village. There is another tube three miles away on the A43. The most recent reading from this **one** tube, showed a measure close to the legal limit.

The same Status Report describes monitoring of the A45 AQMA and concludes as follows:

*"As the monitoring locations are not sited near or at locations of exposure, this has caused large disparities between the NO<sub>2</sub> annual mean concentration before and after distance correction calculations were applied, and as a result a degree of uncertainty".*

Defra recommends that tube readings be validated by Automatic Continuous Analysing Equipment at nearby locations. NBC decommissioned all but one of its Automatic Monitors some years ago on grounds of cost.

Therefore, monitoring of the site area has been entirely dependent on diffusion tubes which are then adjusted using data from an automatic analyser 7 miles away. The nearest Defra automatic analyser is 10 miles away at Spring Park, Kingsthorpe.

The Institute of Environmental Management and Assessment has said that it wants to see independent monitoring of developers Environmental Impact Assessments and an audit of outcomes.

It is difficult to have confidence in the objectivity of both NBC and Roxhill when a 106 agreement is being negotiated to fund AQ improvements in the town centre. Collingtree Parish Council monitored 10 locations and the results were validated by the same laboratory used by NBC. These show validated results considerably higher than both NBC and Roxhill and included locations further from the M1, such as the Primary School

AQ testing has also been carried out by Parish Councils at various receptors in the surrounding villages of Milton Malsor, Roade, Blisworth and Towcester. The results indicate that there are significant 'hot spots' all around the proposed site. All these figures and tables are contained in the Part A submission of the SNG Action group.

A combined report of House of Commons Environmental committees in March this year concluded as follows:

*The current approach to monitoring and modelling is not operating at its full potential and is overly focused on demonstrating compliance. The modelling process is subject to substantial (+/-29%) uncertainty. Direct measurement of air pollution is much more accurate than estimation and modelling is likely to be. The Government should work with local government to obtain these more accurate measurements. Improved oversight of local monitoring stations by the responsible bodies is also needed to ensure they are properly sited and functioning.*

We believe that historic baseline monitoring of the site area has been inadequate and has under predicted Nitrogen Dioxide levels - and therefore the computer forecasts for both the construction and operational phases based on them are also likely to be unreliable.

### **Impact of Dust during construction**

In its further questions to the applicant (EX 1.1.30) the Planning Inspectorate asked about the calculation of dust impact on residential receptors during construction. The applicant replied that a very small number of properties close to the M1 site boundary would be affected. A robust assessment would have included a substantial number of properties on Ash Lane/High Street South in Collingtree. The applicant has stated that dust, air pollution, noise and lighting impacts on Collingtree residents 'should' not be significant during construction. This has been challenged by Collingtree Parish Council based on everyday experience under current conditions. Due to the prevailing winds, even the current agricultural use of the site results in noise over and above the ambient noise of the motorway and during periods of harvest and fertiliser spreading, dust and airborne particles are deposited over a large area of the parish. This has always been accepted by the local community as an infrequent and understandable irritation; however the consequences of noise and dust from a 24 hour industrial site together with an Aggregates depot must inevitably create a health hazard. It must be remembered that construction of this development will involve the levelling of a sloping 500 acre site and its trees and hedgerows.

### **Carbon lifecycle calculations**

We have previously drawn attention to the failure of the applicant to answer the questions put by the Examining Authority following the Deadline 7 submission by Stop Roxhill Action Group. The question was as follows:

*"Q2. In its Deadline 7 response, Stop Roxhill Northampton Gateway suggests that, having regards to climate change, and whilst acknowledging the Applicant's 2019 Climate Change Summary (Doc 8.22 [REP6-015]), there is no additional content to provide insight or confidence of the total impact of the Proposed Development in lifecycle terms relating to carbon lifecycle calculations. Can the Applicant please comment?"*

In their reply Roxhill simply state that the Climate Change Summary, 'was a document which summarised and signposted' and that 'the Regulations do not prescribe how effects on climate should be assessed'. They say that the Applicant 'has carried out the assessment it feels is appropriate'. They also say that 'there is no requirement to assess the carbon or greenhouse gas emissions over the 'life-cycle' of a project in the EIA Regulations nor is it required in the NPSNN'. They go on to say 'However, the reality is that, such emissions can only be truly measured at source as they occur. Furthermore, there is no single approved methodology for evaluating and assessing greenhouse gas emissions nor are there established criteria or any defined significance thresholds. The Applicant takes the view that such an academic exercise has little value given the inherent uncertainties and the extensive assumptions upon which such an exercise is based'.

The applicant has therefore failed to address the issue of carbon lifecycle calculation.

It is widely acknowledged that large warehouses are problematical when dealing with issues of carbon lifecycles as highlighted in a study conducted by City University of London. In its introduction, the study states:

*"In recent years, there has been observed a continued growth of global carbon dioxide emissions, which are considered as a crucial factor for the greenhouse effect and associated with substantial environmental damages. Amongst others, logistic activities in global supply chains have become a major cause of industrial emissions and the progressing environmental pollution. Although a significant amount of logistic-related carbon dioxide emissions is caused by storage and material handling processes in warehouses, prior research mostly focused on the transport elements. The environmental impact of warehousing has received only little attention by research so far. Operating large and highly technological warehouses, however, causes a significant amount of energy consumption due to lighting, heating, cooling and air condition as well as fixed and mobile material handling equipment which induces considerable carbon dioxide emissions."*

<http://openaccess>

Similarly, in its response to the questions raised by the Department of Transport, the applicant has conceded that its assessments of impact on local receptors is largely 'qualitative' rather than being based on quantitative measures.

Finally, it is noted that 30 other parish councils around the site area have registered with the Planning Inspectorate, their concern over the cumulative impact of large scale development on levels of air, noise and light pollution. This widespread concern is further highlighted by the resolution of Northamptonshire County Council to oppose this proposed development on the grounds that '*local villages would be seriously affected by air, noise and light pollution that cannot be adequately mitigated against*'.

Rod Sellers On behalf of the Stop Northampton Gateway Action Group

22<sup>nd</sup> September 2019