

A14
Cambridge to Huntingdon
improvement scheme
Development Consent Order Application

HE/A14/EX/211

TR010018

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Air Quality Monitoring Update Statement

October 2015

The Infrastructure Planning (Examination Procedure) Rules 2010

A14 CAMBRIDGE TO HUNTINGDON IMPROVEMENT SCHEME

AIR QUALITY MONITORING UPDATE STATEMENT

1. This document sets out Highways England's position on air quality monitoring at Deadline 13.
2. Throughout the examination Highways England's technical consultants have maintained the position that post-construction air quality monitoring is neither appropriate nor necessary – see, for example, Appendix 7 of Highway's England's submissions following the Issue Specific Hearings in September 2015 (applicant reference: HE/A14/EX/153; PINS reference: REP10-037). The assessment and modelling undertaken to date are robust, and show that the scheme is low risk for air quality impacts and will not have any significant adverse effects on air quality. Highways England stands by these submissions.
3. However, Highways England is also aware that Cambridge City Council, South Cambridgeshire District Council and Huntingdonshire District Council feel very strongly on this topic.
4. Having further reviewed the various submissions made by all of these local authorities on air quality issues, and in light of a meeting that took place on 27 October with Cambridge City Council, Highways England has been reconsidering its position on air quality monitoring.
5. Whilst Highways England maintains that its position presented to date is the reasonable and correct one, as a gesture of goodwill, and in the interests of effective collaboration, which Highways England values and will look to continue during the construction and operation of the A14 scheme, the decision has been taken to provide air quality monitoring prior to and during construction, and for a period of three years from the opening of the scheme to traffic.
6. For clarity, this air quality monitoring will be provided by Highways England in the two locations identified in Cambridge City Council and South Cambridgeshire District Council's areas in the Statement of Common Ground submitted by Cambridge City Council, Huntingdonshire District Council and South Cambridgeshire District Council at Deadline 10 of the examination¹. Specifically, the historic South Cambridgeshire District Council monitoring location close to Bar Hill and at, or close to, the junction of Histon Road and Huntingdon Road in the city of Cambridge. Highways England will also provide the diffusion tube monitoring at the locations sought by Huntingdonshire District Council.
7. Highways England will share any data from the monitoring sites with the local authorities and will expect a reciprocal arrangement, whereby data from existing air quality monitoring sites is made available to Highways England.
8. It is proposed that the totality of this data be analysed by Highways England in consultation with both local authorities. If any material worsening of the air quality can be directly attributable to the A14 scheme, Highways England agrees to work with the local authorities to define and agree suitable mitigation measures, which would need to be approved by the Secretary of State for Transport following consultation with the local planning authorities.
9. To secure this, Highways England has included the proposed following new requirement at paragraph 16 of Part 1 of Schedule 2 to the revised draft Development Consent Order submitted alongside this note at Deadline 13:

¹ PINS document reference: REP10-031

Air quality monitoring

~~X~~—(1) No part of the authorised development may commence until the undertaker has installed—

- (a) continuous air quality monitors in respect of oxides of nitrogen or fine particles at PM10 or PM 2.5 fractions at or close to—
 - (i) the junction of Histon Road and Huntingdon Road in the city of Cambridge; and
 - (ii) the historic South Cambridgeshire District Council monitoring location close to Bar Hill; and
- (b) diffusion tube monitors in eight locations to be agreed with Huntingdonshire District Council in Huntingdon, Brampton, Fenstanton, Alconbury, Offord Cluny and Hilton,

and the monitors have subsequently been operated by the undertaker so that data covering an uninterrupted period of at least [2] months has been obtained by the undertaker.

(2) The undertaker must operate the monitors installed under sub-paragraph (1) during construction of the authorised development and for a period of three years from the opening of the authorised development for public use.

(3) During the time periods mentioned in sub-paragraph (2)—

- (a) the undertaker must make all data obtained from the monitors available to the relevant planning authority; and
- (b) each relevant planning authority must supply to the undertaker all air quality monitoring data obtained from its existing air quality monitors.

(4) If, following analysis by the undertaker in consultation with the relevant planning authority of the monitoring data mentioned in sub-paragraph (3), it reasonably appears that the authorised development has materially worsened air quality at the sites mentioned in sub-paragraph (1), the undertaker will discuss with the relevant planning authority the provision of a scheme of mitigation which the undertaker must submit to the Secretary of State for approval.

(5) Before considering whether to approve the scheme of mitigation, the Secretary of State must consult the relevant planning authority.

(6) The scheme of mitigation approved under sub-paragraph (4) must be implemented by the undertaker.

- 10. Highways England will continue to discuss the precise form of the requirement with the local authorities as necessary.
- 11. Highways England hopes that this provides an agreed way forward with the local authorities and considers that this should also allay the Examining Authority's concerns on air quality monitoring.
- 12. At the Issue Specific Hearing on the draft DCO on 22 October 2015, the Examining Authority asked Highways England to comment on the local authority proposals, particularly the monitoring locations. Notwithstanding Highways England's revised position, this work has been carried out and is attached at **Appendix 1** to this note.

APPENDIX 1

COMMENTS ON LOCAL AUTHORITY AIR QUALITY MONITORING PROPOSALS

Note on requested monitoring locations and specification

This note has been prepared in response to the request from the Examining Authority (ExA) at the Issue Specific Hearing on the draft DCO on 22 October 2015 to clarify Highways England's response to Cambridge City Council, South Cambridgeshire District Council and Huntingdonshire District Council's (together, "the Councils") submissions to date requesting air quality monitoring during the operational phase of the scheme. This note specifically responds to the points raised in the joint statement of common ground submitted by the Councils (PINS reference: REP10-031) ("JSOCG").

Specification and funding

The specification and funding set out in the JSOCG have been considered by Highways England. No further comments on this specification or funding costs are required. As set out in the main body of the submission to which this note is attached, Highways England has agreed with the Councils' request for monitoring at their specified locations.

Council Requests

As requested by the ExA, this section provides information on the requested monitoring locations set out in the JSOCG in terms of existing air quality concentrations and the potential impact from the scheme as noted within the Environmental Statement.

A. Cambridge City Council

Location	Existing air quality concentration	Impact from the scheme
Junction of Histon and Huntingdon Road new monitor – with a cost of £10-15k per year	Local authority monitoring has recorded concentrations around $25\mu\text{g}/\text{m}^3$ (objective is $40\mu\text{g}/\text{m}^3$) There was no requirement to assess the exact location as the effects of traffic on this junction were predicted to be negligible.	Negligible. As noted in HE/A14/EX/172 (PINS reference: REP11-007) traffic modelling for the A14 proposals shows that overall traffic volumes at the junction of Huntingdon and Histon Road will reduce with the scheme in place, with a reduction of 381 vehicles per day on Huntingdon Road and a negligible increase of 90 vehicles per day on Histon Road.

B. South Cambridgeshire Council

Location	Existing air quality concentration	Impact from the scheme
<p>Bar Hill – New monitor – £10-15k per year</p>	<p>Local authority monitoring was carried out at this location from 2008 to 2012. Concentrations in 2012 were recorded just below the air quality objectives (annual mean NO₂ 39µg/m³). Concentrations are unlikely to be exceeding the objective in 2020.</p> <p>The exact location was not assessed in the ES as there are no sensitive receptors at that location. Receptors in Bar Hill and along the A14 were included in the assessment.</p>	<p>A predicted increase in NO₂ concentrations with the scheme of less than a 2µg/m³ along this part of the A14.</p> <p>Annual mean NO₂ concentration at receptors on the A14 south of Bar Hill that are most representative of conditions at the monitoring site are predicted to be approximately between 30µg/m³ and 31µg/m³ in the do minimum scenario and between 31.5µg/m³ and 31.7µg/m³ in the do something.</p>
<p>Impington (existing monitor) maintenance fees of £7-9k per year</p>	<p>Local authority monitoring has recorded annual mean NO₂ concentrations approximately 24µg/m³ in 2014 and PM₁₀ is approximately 26µg/m³.</p>	<p>A predicted decrease in annual mean NO₂ concentrations along this part of the A14.</p> <p>The annual mean NO₂ concentrations are predicted to be approximately between 22µg/m³ and 27µg/m³ in the do minimum scenario and between 21µg/m³ and 26µg/m³ in the do something.</p>

C. Huntingdonshire Council

Location	Existing air quality concentration	Impact from the scheme
Huntingdon – near Blethan Drive (existing location)	Local authority monitoring has recorded annual mean NO ₂ concentrations of - 22µg/m ³	A predicted decrease in NO ₂ concentrations. The predicted annual mean NO ₂ are: Do minimum 25µg/m ³ Do something 21.8µg/m ³
Huntingdon Ring Road (existing location)	Local authority monitoring has recorded annual mean NO ₂ - 40-45µg/m ³ concentrations of (exceeding objective at present)	A predicted decrease in NO ₂ concentrations. The predicted annual mean NO ₂ concentrations are: do minimum 32µg/m ³ do something 27µg/m ³
Huntingdon Brampton Road (existing location)	Local authority monitoring has recorded annual mean NO ₂ concentrations of - 40-27µg/m ³ (exceeding objective at present at worst case locations)	A predicted decrease in NO ₂ concentrations. The predicted annual mean NO ₂ concentrations are: do minimum 31µg/m ³ do something 27µg/m ³
Brampton – Laws Crescent	Local authority monitoring has recorded annual mean NO ₂ concentrations of - 27µg/m ³	A predicted negligible impact. The predicted annual mean NO ₂ concentrations are: do minimum 14.6µg/m ³ do something 14.4µg/m ³
Fenstanton – Hilton Road	Local authority monitoring has recorded annual mean NO ₂ concentrations of - 28µg/m ³	A predicted decrease in NO ₂ concentrations. The predicted annual mean NO ₂ concentrations are: do minimum 28.5µg/m ³ do something 22.6µg/m ³
Alconbury – Lords Way	No existing monitoring – predicted annual mean NO ₂ concentrations in 2020 are below 20µg/m ³	A predicted small increase in NO ₂ concentrations. The predicted annual mean NO ₂ concentrations are: do minimum 16.4µg/m ³ do something 17.7µg/m ³
Brampton – Hansell Road	Local authority monitoring has recorded annual mean NO ₂ concentrations of- 19µg/m ³	A predicted negligible impact. The predicted annual mean NO ₂ concentrations are:

		do minimum 14.5µg/m ³ do something 15µg/m ³
Offord Cluny High Street	Local authority monitoring has recorded annual mean NO ₂ concentrations of - 26µg/m ³	Predicted negligible impact. Predicted annual mean NO ₂ do minimum concentrations are: do minimum 10µg/m ³ do something 10µg/m ³
Hilton – The Paddocks (800m south of the scheme)	Local authority monitoring has recorded annual mean NO ₂ concentrations of- 21µg/m ³	Predicted negligible impact. No modelling results were predicted for this location as traffic impacts were predicted to be below the DMRB screening criteria at this location which is also well over the 200m within which air quality is assessed.