

Audit Summary Report

									IN PHASE 2	
PCM Link	57832		Road/Location	A63, Kingston-upon-Hull					Area	12
PCM predictions of NO₂ concentrations (µg/m³)										
Year	2018	2019	2020	2021	2022	2023	2024	2025	2026	
PCM Modelled NO ₂ concentration (µg/m ³)	44	41	39	37	34	33	31	29	28	
HE Indicative Modelled NO ₂ Concentration (µg/m ³)	42	40	37	35	33	31	30	28	27	
Qualifying Feature										
Satellite imagery indicates Public Access within 15m of the PCM link										
Air Quality Monitoring?										
No										
Is the Air Quality Monitoring within 10m, to support Phase 2 decision?										
No										
The indicative air quality modelling indicates that there are no exceedances of the Limit Value in 2019, however at this stage there is no local air quality monitoring data to validate the outputs of the air quality modelling. It is therefore recommended that the PCM Link is taken forward to Phase 3 to confirm the outputs of the indicative modelling and to ensure that mitigation measures are not required.										
Mitigation required?										
Yes										
Possible Mitigation Options										
KEY:	✘ - Not possible			✔ - Possible			? - More research required			
Option	Feasible to bring compliance forward?		Summary							
Source – reducing emissions from the SRN										

Electric vans	x	<p>Research completed for Highways England indicates that it would only be possible to bring forward a maximum of 250 electric vans over the next few years in any one location. To achieve this would require the creation of a specialist centre.</p> <p>Based on the observed speed of between 40mph and 50mph along this PCM link, it has been calculated that 250 electric vans would equate to an NO₂ reduction of less than 0.1µg/m³ along this link. As such, the implementation of this measure would not achieve an earlier compliance date.</p>
Traffic Management	x	A panel of specialists including traffic and air quality have reviewed regional traffic management options for the 86 PCM links. The panel concluded that there are no obvious traffic management solutions.
Speed Management	x ¹	The existing speed limit along the A63 is 40mph. Consequently, no reduction in speed limit would provide any improvement in NO ₂ concentrations along this link.
Bus Retrofit	x ²	A review of this PCM link using satellite imagery has not identified any bus stops along the route. As such, it is assumed that there is minimal bus usage along this road which will result in no discernible reduction in NO _x emissions and therefore, this measure is not being progressed.
HGV Retrofit	?	A review of traffic data for this PCM link has identified approximately 5,500 HGVs travelling along this link. Theoretically, a HGV retrofit scheme could reduce annual mean NO ₂ concentrations by 1.1µg/m ³ . However, no accredited retrofit system is currently available for HGVs nor is it known the mechanism for delivery. As such, it is anticipated that this measure would require a government led scheme for delivery and Highways England is not able to progress this measure at this time.
Pathway – preventing the emissions reaching receptors		
9.5m high barrier	x	<p>Emerging evidence based on from air quality monitoring research undertaken by Highways England indicates a 2 – 5µg/m³ reduction in annual mean NO₂ concentrations behind a 9.5m overhanging barrier.</p> <p>A review of this SRN PCM link indicates there are no residential properties within 15m of the road along the entire length of this link. The initial step would be to see if it was possible to make changes to the public access to enable compliance and Highways England would only consider a barrier at this location if directed to do so by DfT / Ministers.</p>
Tunnels / canopies, Bypass	x	The current programme to build a tunnel / canopy or a bypass is estimated to be at least between 5 – 10 years. This means that none of these measures could be delivered earlier than the reported compliance date set out in the

		PCM model.
Receptor – dealing with concentrations at the affected receptors		
Any other local measures	✘	<p>Footpaths</p> <p>Footpaths are located within 15m along the PCM link. A review of the existing footpaths has identified that there is no potential alternative route for footpath mitigation.</p> <p>Low Friction Road Surfacing</p> <p>At this time there is no empirical evidence on the effects on NOx emissions and is not being assessed as a measure to support compliance in the shortest timescale possible.</p> <p>Mechanical Filtration</p> <p>There are no residential properties within 15m along this PCM link.</p>
Summary		
<p>This audit report has identified:</p> <ul style="list-style-type: none"> • There is no existing air quality monitoring along the PCM link. • Retrofit HGVs may also support in bringing forward compliance, however a government led scheme is required for delivery. • The indicative air quality modelling does not indicate any exceedances of the Limit Values beyond 2019, however this link will be taken through to Phase 3 to confirm that no mitigation measures are required. • Assessment to date has indicated that there are no deliverable viable measures for this PCM link to achieve compliance sooner. 		
Recommendation		
It is recommended that PCM link 57832 is taken forward to Phase 3 for more detailed assessment.		
Supporting Activities		
Additional air quality monitoring commissioned and underway.		
JAQU Comments		
<p>¹ Legal requirement to make a Temporary Traffic Regulation Order</p> <p>² Requires JAQU to deliver</p>		