

Audit Summary Report

Version	Jan25	Commission No.	5	Phase 3	
Census ID	6061	Road/Location	M60, Bury	Area	NW
Predictions of NO₂ concentrations (µg/m³)					
Year		2023	2024	2025	2026
NH Modelled NO ₂ concentrations (µg/m ³)		37	34	31	28
Qualifying Feature					
Satellite imagery indicates sensitive receptors and public access within 15m from the SRN link.					
Air Quality Monitoring?					
Yes					
Is the Air Quality Monitoring within 10m, to support Phase 1 decision?					
No					
Whilst there is air quality monitoring at each end of this link, no monitoring has been conducted adjacent to the main carriageway at a location representative of the relevant qualifying feature (a residential garden within 15m of the M60). As such, modelling has been completed to determine nitrogen dioxide (NO₂) concentrations in this area. Modelled concentrations indicate that NO₂ concentrations are below the annual mean limit value and no further action is required along this link.					
Mitigation required?					
No – modelling at the nearest qualifying feature is below the annual mean NO ₂ limit value, with a calculated concentration of 37µg/m ³ in 2023.					
Summary					
This audit report has identified: - Review of satellite imagery indicates that a residential gardens and a footpath are located within 15m of the M60. - Air quality modelling using ADMS-Roads has been undertaken. - Modelling results at all relevant qualifying features are below the annual mean NO₂ limit value in 2023.					

Recommendation
It is recommended that link 6061 does not require further consideration and stops at the end of Phase 3.
Supporting Activities
None
JAQU Comments

Audit Summary Report

Version	Jan25	Commission No.	5		Phase 1				
Census ID	16569	Road/Location	A59, Sefton					Area	10
Predictions of NO₂ concentrations (µg/m³)									
Year	2018	2019	2020	2021	2022	2023	2024	2025	2026
PCM Modelled NO ₂ concentration (µg/m ³)	30	28	27	26	24	23	22	21	20
Qualifying Feature									
Satellite imagery indicates public access within 15m from the SRN link.									
Air Quality Monitoring?									
Yes									
Is the Air Quality Monitoring within 10m, to support Phase 1 decision?									
Yes									
Air quality monitoring has been undertaken at a location representative of relevant receptors over recent years. Monitoring data from 2023 shows concentrations below the annual mean NO ₂ concentration of 40µg/m ³ .									
Mitigation required?									
No – monitoring located on the nearest qualifying feature is below the annual mean NO ₂ limit value, with a measured concentration of 31µg/m ³ in 2023.									
Summary									
This audit report has identified: No exceedance of the annual NO₂ limit value along this SRN link.									
Recommendation									
It is recommended that SRN link 16569 does not require further consideration and stops at the end of Phase 1.									
Supporting Activities									

None
JAQU Comments

Audit Summary Report

Version	Jan25	Commission No.	5	Phase 3
Census ID	17918	Road/Location	M60, Stockport	Area NW
Predictions of NO₂ concentrations (µg/m³)				
Year		2023	2024	2025
NH Modelled NO ₂ concentrations (µg/m ³)		36	33	31
Qualifying Feature				
Satellite imagery indicates public access and sensitive receptors within 15m from the SRN link.				
Air Quality Monitoring?				
Yes				
Is the Air Quality Monitoring within 10m, to support Phase 1 decision?				
No				
The local authority has undertaken monitoring in this area in recent years. The closest diffusion tube to the M60 in this location is Stockport 20, located approximately 20m to the south of link 17918. Annual mean NO₂ concentrations were measured at 30.7µg/m³ in 2023 at this location. As the closest qualifying feature along this link is a footpath located approximately 12m from the carriageway, this concentration has been distance corrected using Defra's NO₂ fall Off with Distance Calculator. The distance corrected result is 33.0µg/m³, which is below the annual mean NO₂ concentration of 40µg/m³. However, as the nearest qualifying feature is located on the northern side of the M60, downwind of the carriageway, concentrations at this location have the potential to be greater than the southern side of the motorway. As such, modelling was completed to determine nitrogen dioxide (NO₂) concentrations at this location. Modelled concentrations indicate that NO₂ concentrations are below the annual mean limit value at the qualifying feature and no further action is required along this link.				
Mitigation required?				
No – modelling at the nearest qualifying feature is below the annual mean NO ₂ limit value, with a calculated concentration of 36µg/m ³ in 2023.				
Summary				
This audit report has identified:				

- No exceedance of the annual NO₂ limit value along this SRN link.

Recommendation

It is recommended that SRN link 17918 does not require further consideration and stops at the end of Phase 3.

Supporting Activities

None

JAQU Comments

Audit Summary Report

Version	Jan25	Commission No.	5	Phase 3	
Census ID	26043	Road/Location	M32, Bristol	Area	2
Predictions of NO₂ concentrations (µg/m³)					
Year		2023	2024	2025	2026
NH Modelled NO ₂ concentrations (µg/m ³)		34	31	29	26
Qualifying Feature					
Satellite imagery indicates sensitive receptors and public access within 15m from the SRN link.					
Air Quality Monitoring?					
Yes					
Is the Air Quality Monitoring within 10m, to support Phase 1 decision?					
No					
Whilst there is air quality monitoring located along this SRN link, no monitoring has been conducted adjacent to the main carriageway at a location representative of the relevant qualifying feature (a residential property within 15m of the M32). As such, modelling has been completed to determine nitrogen dioxide (NO₂) concentrations in this area. Modelled concentrations indicate that NO₂ concentrations are below the annual mean limit value and no further action is required along this link.					
Mitigation required?					
No – modelling at the nearest qualifying feature is below the annual mean NO ₂ limit value, with a calculated concentration of 34µg/m ³ in 2023.					
Summary					
This audit report has identified: • No exceedance of the annual NO₂ limit value along this link.					
Recommendation					
It is recommended that link 26043 does not require further consideration and stops at the end of Phase 3.					

Supporting Activities
None
JAQU Comments

Audit Summary Report

Version	Jan25	Commission No.	5	Phase 3					
Census ID	46050	Road/Location	M60, Salford					Area	NW
Predictions of NO₂ concentrations (µg/m³)									
Year	2023	2024	2025	2026	2027	2028	2029	2030	2031
Distance Correction Monitored NO ₂ concentration (µg/m ³)	50	47	44	42	39	37	34	32	30
Qualifying Feature									
Satellite imagery indicates sensitive receptors and public access within 15m from the SRN link.									
Air Quality Monitoring?									
Yes									
Is the Air Quality Monitoring within 10m, to support Phase 1 decision?									
No									
The nearest local authority diffusion tube to the M60 along this link is Salford 63 which is located on a lamppost within Greenacre Lane, approximately 23m from the motorway. There are residential properties within 15m of the M60 and the back gardens of these properties are within 4m of the motorway. Due to the difference in distance between the monitoring location and residential gardens, the monitoring data has been distance corrected. The distance corrected result is above the limit value with a corrected concentration of 50µg/m³ in 2023.									
Mitigation required?									
Yes– based on distance corrected monitoring data.									
Possible Mitigation Options									
KEY:		✗ - Not possible		✓ - Possible		? - More research required			
Option	Feasible to bring compliance forward?		Summary						
Source – reducing emissions from the SRN									

Traffic Management	x	No traffic management options have been identified which could help bring forward compliance along this SRN link.
Pathway – preventing the emissions reaching receptors		
Air quality barrier	?	Air quality monitoring undertaken by National Highways indicates that barriers of different heights can achieve reductions of around 5µg/m³ in annual mean NO₂ concentrations in an area close to the barrier. A feasibility study will be required to assess whether it is possible to construct a vertical barrier, capable of achieving a minimum reduction of 5µg/m³ NO₂ concentration, alongside the M60 at the location of the identified qualifying features.
Receptor – dealing with concentrations at the affected receptors		
Any other local measures	x	Footpaths There are no footpaths within 15m of this SRN link.
Complementary Measures – measures either not brought forward by National Highways or not being implemented purely for air quality reasons		
Local Authority Clean Air Zone (CAZ) / London Ultra Low Emission Zone (ULEZ)	✓	At the time of preparing the Audit Report for this link (January 2025), GMA have proposed significant changes to their charging CAZ. It is understood that it is no longer a charging CAZ, although the specific measures contained in the updated CAZ are unknown nor their impact on the SRN.
Summary		
This audit report has identified: - Distance corrected local authority monitoring is above the annual mean NO₂ limit value in 2023. - Amongst potential mitigation measures available for this SRN link, an air quality barrier has been identified for further assessment.		
Recommendation		
Distance corrected local authority air quality monitoring, undertaken in 2023, is above the annual mean NO₂ limit value. As part of this audit report, National Highways has considered a range of measures to support compliance in the shortest possible timeframe, where necessary. An air quality barrier has been identified for further investigation for this link. It has been concluded that an air quality barrier may be feasible to bring forward compliance with the limit values along this SRN link. However, further work is required to determine whether this		

measure is viable and deliverable in this locality. Following completion of this feasibility study, the date the limit value will be met will be reviewed.

In addition, when a decision around the Greater Manchester CAZ has been reached the Audit Reports will be updated at that time taking into account the impacts attributed to the CAZ.

Supporting Activities

JAQU Comments

Audit Summary Report

Version	Jan25	Commission No.						5	Phase 3		
Census ID	74215	Road/Location						A13, Thurrock		Area	5
Predictions of NO₂ concentrations (µg/m³)											
Year	2022	2023	2024	2025	2026	2027	2028	2029	2030		
Distance Corrected Monitored NO ₂ concentration (µg/m ³)	42	40	38	36	34	32	30	28	26		
Qualifying Feature											
Satellite imagery indicates public access within 15m from the SRN link.											
Air Quality Monitoring?											
Yes											
Is the Air Quality Monitoring within 10m, to support Phase 1 decision?											
No											
Although there is no monitoring at the location of the qualifying feature, a review of all the local authority monitoring in the nearby area has identified a diffusion tube located approximately 25m from the same roundabout. It is considered that the traffic volume and composition of the traffic in this location are similar enough to the traffic adjacent to the qualifying feature that it can be used to help inform limit value compliance alongside the footpath. The distance corrected monitored concentration is 42µg/m³ in 2022. Using Defra's future year NO₂ projection factors, the limit value is expected to be met in 2023.											
Mitigation required?											
No, based on distance corrected monitoring data projected forward to 2023, the limit value is met and no measures are required.											
Summary											
This audit report has identified: Review of satellite imagery indicates that a qualifying feature (footpath) is located within 15m of link 74215 at the A1306/A282 roundabout											

• A monitoring location was identified adjacent to the roundabout where the qualifying feature is located. • Distance corrected monitoring results projected forward to 2023 were below the annual mean NO₂ limit value.
Recommendation
It is recommended that link 74215 does not require further consideration and stops at the end of Phase 3.
Supporting Activities
Proposed monitoring at a lamppost located on the qualifying feature.
JAQU Comments

Audit Summary Report

Version	Jan25	Commission No.	5	Phase 3					
Census ID	74457	Road/Location	A5103, Princess Parkway					Area	NW
Predictions of NO₂ concentrations (µg/m³)									
Year	2023	2024	2025	2026	2027	2028	2029	2030	2031
Monitored NO ₂ concentration (µg/m ³)	50	47	44	42	39	37	34	32	30
Qualifying Feature									
Satellite imagery indicates public access within 15m from the SRN link.									
Air Quality Monitoring?									
Yes									
Is the Air Quality Monitoring within 10m, to support Phase 1 decision?									
Yes									
Air quality monitoring has been undertaken at a location representative of relevant receptors over recent years. Monitoring data from 2023 shows concentrations approaching and exceeding the annual mean NO ₂ concentration of 40µg/m ³ , with measured concentrations ranging between 37µg/m ³ – 50µg/m ³ .									
Mitigation required?									
Yes – based on existing monitoring data.									
Possible Mitigation Options									
KEY:		✗ - Not possible		✓ - Possible		? - More research required			
Option	Feasible to bring compliance forward?		Summary						
Source – reducing emissions from the SRN									
Traffic Management	?		Proposed traffic management measures cover a range of potential local interventions including traffic diversions, changes in signal timing at junctions or small-scale junction alterations.						

		A feasibility study will be progressed to investigate whether there are any potential local traffic management interventions and their deliverability for this section of the SRN.
Pathway – preventing the emissions reaching receptors		
Air quality barrier	?	Air quality monitoring undertaken by National Highways indicates that barriers of different heights can achieve reductions of around 5µg/m³ in annual mean NO₂ concentrations in an area close to the barrier. A feasibility study will be required to assess whether it is possible to construct a vertical barrier, capable of achieving a minimum reduction of 5µg/m³ NO₂ concentration, alongside the A5103 at the location of the identified qualifying features.
Receptor – dealing with concentrations at the affected receptors		
Any other local measures	×	Footpaths A footpath is located within 15m of this SRN link is along the length of both sides of this road. As such, it is unlikely that there is a potential alternative route for these footpaths.
Complementary Measures – measures either not brought forward by National Highways or not being implemented purely for air quality reasons		
Local Authority Clean Air Zone (CAZ) / London Ultra Low Emission Zone (ULEZ)	✓	At the time of preparing the Audit Report for this link (January 2025), GMA have proposed significant changes to their charging CAZ. It is understood that it is no longer a charging CAZ, although the specific measures contained in the updated CAZ are unknown nor their impact on the SRN.
Summary		
This audit report has identified: - National Highways monitoring located on the footpaths within 15m of the link, has identified exceedances of the limit value in 2023. Therefore, the link will be reviewed for mitigation measures. - Local traffic management and air quality barriers are proposed to be investigated.		
Recommendation		
Air quality monitoring undertaken in 2023 has identified exceedances of the limit values along SRN link 74457. In completing the assessment for this SRN link, National Highways has considered a range of measures to support compliance in the shortest possible timeframe. Local traffic management and air quality barriers are proposed to be investigated further for this link.		

It has been concluded that local traffic management measures or air quality barriers may be feasible to bring forward compliance with the limit values along this SRN link. However, further work is required to determine whether these measures are viable and deliverable in this locality. Following completion of the feasibility studies, the date the limit value will be met will be reviewed.

In addition, when a decision around the Greater Manchester CAZ has been reached the Audit Reports will be updated at that time taking into account the impacts attributed to the CAZ.

Supporting Activities

Air quality monitoring is ongoing alongside this link.

JAQU Comments

Audit Summary Report

Version	Jan25	Commission No.	5	Phase 3					
Census ID	91270	Road/Location	A3, Guildford	Area 3					
Predictions of NO₂ concentrations (µg/m³)									
Year	2023	2024	2025	2026	2027	2028	2029	2030	2031
Monitored NO ₂ concentration (µg/m ³)	68	64	60	57	53	50	47	43	41
Qualifying Feature									
Satellite imagery indicates public access and residential properties within 15m from the SRN link.									
Air Quality Monitoring?									
Yes									
Is the Air Quality Monitoring within 10m, to support Phase 1 decision?									
Yes									
National Highways have undertaken monitoring alongside the A3 for a number of years. Measured annual mean NO ₂ concentrations in 2023 range from 23 – 68µg/m ³ at locations representative of qualifying features along this link.									
Mitigation required?									
Yes									
Based on National Highways monitoring, concentrations are above the limit value at a number of locations considered representative of qualifying features. As such there is a requirement for mitigation measures for link 91270.									
Possible Mitigation Options									
KEY:		✗ - Not possible		✓ - Possible		? - More research required			
Option	Feasible to bring compliance forward?		Summary						
Source – reducing emissions from the SRN									

Traffic Management	x	Guildford Borough Council on behalf of National Highways commissioned a traffic management study looking at potential interventions for traffic using the A3. The report found no viable local traffic management measures, based on existing Guildford Borough Council or Surrey County Council policies that could be delivered on the A3 to bring forward the date of compliance.
Pathway – preventing the emissions reaching receptors		
Air quality barrier	x	Air quality monitoring undertaken by National Highways indicates that barriers of different heights can achieve reductions of around 5µg/m³ in annual mean NO₂ concentrations in an area close to the barrier. It is not considered feasible to build a barrier in this location.
Receptor – dealing with concentrations at the affected receptors		
Any other local measures	✓	Footpaths Footpaths are located within 15m along the SRN link. Work has already started to close the footpath alongside the A3 for the adjoining section of the A3, covered by SRN PCM Link 17336. This programme of works has been extended along the A3 to encompass SRN PCM link 91270, and consequently, this link does not require a new feasibility study to investigate the closure of the footpath.
Complementary Measures – measures either not brought forward by National Highways or not being implemented purely for air quality reasons		
Local Authority Clean Air Zone (CAZ) / London Ultra Low Emission Zone (ULEZ)	x	Guildford Borough Council has not implemented a CAZ within their borough.
Summary		
This audit report has identified: - Air quality monitoring has identified exceedances over recent years at a number of locations considered representative of qualifying features along the SRN link. - Work has already started to close the adjoining section of the footpath alongside the A3 and this programme of works has been extended to encompass SRN PCM link 91270.		
Recommendation		

Air quality monitoring undertaken in 2023 alongside SRN link 91270 has measured NO₂ concentrations above the annual mean limit value. Concentrations projected forward have indicated that exceedances will remain beyond 2030.

In completing the assessment for this SRN link, National Highways has considered a range of measures to support compliance in the shortest possible timeframe.

It has been concluded that it is possible to close the footpath located alongside the eastern carriageway of the A3, and work is ongoing to progress this measure.

Supporting Activities

JAQU Comments