Proof of Evidence Volume 5/3 5th September 2014

THE METROPOLITAN BOROUGH OF STOCKPORT (HAZEL GROVE (A6) TO MANCHESTER AIRPORT A555 CLASSIFIED ROAD) COMPULSORY PURCHASE ORDER 2013

THE METROPOLITAN BOROUGH OF STOCKPORT (HAZEL GROVE (A6) TO MANCHESTER AIRPORT A555 CLASSIFIED ROAD) (SIDE ROADS) ORDER 2013

THE HIGHWAYS ACT 1980

-and-

THE ACQUISITION OF LAND ACT 1981

THE HIGHWAYS (INQUIRIES PROCEDURE) RULES 1994 COMPULSORY PURCHASE (INQUIRIES PROCEDURE) RULES 2007

REFERENCE: LAO/NW/SRO/2013/40 and LAO/NW/CPO/2013/41

A proof of evidence relating to the AIRQUALITY aspect of the A6 to Manchester Airport Relief Road

-of-

Paul Colclough

BSc (Hons) MSc CChem MRSC

on behalf of

The Metropolitan Borough Council of Stockport acting on its behalf and on behalf

-of-

Manchester City Council

-and-

Cheshire East Borough Council

VOLUME 3 – APPENDICES

Appendix A – Construction Mitigation

Construction Phase

The proposed mitigation measures for construction phase related dust are described below. These measures will be implemented by the contractor through a Construction Environmental Management Plan (CEMP) / Code of Construction Practice (CoCP). The plan will include:

- The identification of a nominated Environmental Site Manager;
- Notification procedures where potentially significant dust generating activities are required;
- Method statements for the control of dust in such locations and complaint receipt; and
- Management procedures to ensure issues are addressed should they be raised by the public.
- Mitigation which will be put in place to address the identified impacts includes:
- Roads and accesses will be kept clean;
- Grout or cement-based materials will be mixed using a process suitable for the prevention of dust emissions;
- Fine material will not be stockpiled to an excessive height in order to prevent exposure to wind and/or dust nuisance;
- Dust generating activities (e.g. cutting, grinding and sawing) will be minimised and weather conditions considered prior to conducting potentially dust emitting activities;
- If possible, plant will be located away from site boundaries close to residential areas;
- Water will be used as a dust suppressant where applicable;
- Drop heights from excavators to crushing plant will be kept to a minimum.
- Distances from crushing plant to stockpiles will be kept to the minimum practicable to control dust generation associated with the fall of materials;
- Skips will be securely covered;
- Soiling, seeding, planting or sealing of completed earthworks will

be completed as soon as reasonably practicable following completion of earthworks;

- Dust suppression and the maintenance of the surface of access routes will be appropriate to avoid dust as far as practicable, taking into account the intended level of trafficking;
- Wheel wash facilities at major site exits
- Material will not be burnt on site; and
- Engines will be switched off when not in operation.

These are measures which will both reduce the magnitude and duration of dust deposition for all receptors. In relation to those receptors with the highest risk, located downwind and within 20m from the construction site, the measures will ensure that the temporary impact relative to the identified receptors will generally be only slight adverse for the construction period.

Appendix B

Operational Phase Significance (Environmental Protection UK (EPUK))

Relevant guidance for determining the significance of the operational development on local air quality is provided by EPUK (Environmental Protection UK (EPUK) (2010) Development Control: Planning for Air Quality 2010 Update).

The magnitude of change in air pollutant concentration descriptors is presented in Table B1

The significance descriptors that take account of the magnitude of changes (both adverse and beneficial) and the concentration in relation to the relevant air quality objectives are presented in Table B2.

Table B1Magnitude of Change – Concentration Changes of NO2and PM10

Magnitude of Change	Annual Mean NO ₂ / PM ₁₀	Days PM10 more than 50 μg.m ⁻³
Large	Increase/decrease more than 4 μg.m ⁻³	Increase/decrease more than 4 days
Medium	Increase/decrease between 2 - 4 μ g.m ⁻³	Increase/decrease between 2 - 4 days
Small	Increase/decrease between 0.4 - 2 μg.m ⁻³	Increase/decrease between 1 - 2 days
Imperceptible	Increase/decrease less than 0.4 μg.m ⁻³	Increase/decrease less than 1 day

Table B2 Impact Descriptors for Annual Mean changes of NO_2 and PM_{10} at a considered receptor

Absolute Concentration in	Change in Concentration					
Relation to objective / Limit Value	Small	Medium	Large			
Increase With Development						
Above Objective / Limit Value With Scheme (>40 μg.m ⁻³)	Slight Adverse	Moderate Adverse	Substantial Adverse			
Just Below Objective / Limit Value With Scheme (36 – 40 µg.m ⁻³)	Slight Adverse	Moderate Adverse	Moderate Adverse			
Below Objective / Limit Value With Scheme (30 – 36 μg.m ⁻³)	Negligible	Slight Adverse	Slight Adverse			
Well Below Objective / Limit Value With Scheme (<30 µg.m-3)	Negligible	Negligible	Slight Adverse			

Absolute Concentration in	Change in Concentration					
Value	Small	Medium	Large			
Decrease With Development						
Above Objective / Limit Value Without Scheme (>40 μg.m ⁻³)	Slight Beneficial	Moderate Beneficial	Substantial Beneficial			
Just Below Objective / Limit Value Without Scheme ($36 - 40$ μ g.m ⁻³)	Slight Beneficial	Moderate Beneficial	Moderate Beneficial			
Below Objective / Limit Value Without Scheme (30 – 36 μ g.m ⁻³)	Negligible	Slight Beneficial	Slight Beneficial			
Well Below Objective / Limit Value Without Scheme (<30 µg.m ⁻³)	Negligible	Negligible	Slight Beneficial			

Note: 'Well below objective' – less than 75% of the relevant objective level. An 'imperceptible' change (see Table 3) would be described as 'negligible'.