

## Local Air Quality Management Helpdesk

### Local Air Quality Management Tools available for use by Local Authorities in the Review and Assessment Process

The table below provides a list of LAQM Tools available for use by Local Authorities in the Review and Assessment process.

Shortcuts to different sections are provided below:

[Monitoring – Diffusion Tubes](#)

[Monitoring – Particulate Matter](#)

[Monitoring – Other Tools](#)

[Background Concentrations](#)

[Emissions Tools](#)

[Screening Tools](#)

[Road Traffic Related Tools](#)

*Please ensure you read the background information before using the tools and regularly check back to the LAQM Support website for updates.*

If you require further information or support in using any of the LAQM Tools listed below, then please contact the LAQM Support Helpdesk:

Web: <https://laqm.defra.gov.uk/>

Telephone: +44 (0)800 032 7953

Email: [LAQMHelpdesk@uk.bureauveritas.com](mailto:LAQMHelpdesk@uk.bureauveritas.com)

The LAQM Support Helpdesk is operated by Bureau Veritas UK on behalf of Defra, the Devolved Administrations and the GLA.

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Title	Author	Last Updated	Content	Background information and Main Page	Tool Location
<b>Monitoring – Diffusion Tubes</b>					
Local Bias Adjustment and Precision Calculator	Ricardo-E&E	04-02-11	Assists diffusion tube users in calculating the precision and accuracy of their results, in co-location studies where diffusion tubes are compared with automatic analysers.	<a href="https://laqm.defra.gov.uk/bias-adjustment-factors/local-bias.html">https://laqm.defra.gov.uk/bias-adjustment-factors/local-bias.html</a> and <a href="https://laqm.defra.gov.uk/diffusion-tubes/precision.html">https://laqm.defra.gov.uk/diffusion-tubes/precision.html</a>	<a href="https://laqm.defra.gov.uk/documents/AEA_DifTPAB_v04.xls">https://laqm.defra.gov.uk/documents/AEA_DifTPAB_v04.xls</a>
National bias adjustment factors	Bureau Veritas/NPL	September 2017	A database of bias adjustment factors determined from Local Authority co-location studies throughout the UK.	<a href="https://laqm.defra.gov.uk/bias-adjustment-factors/national-bias.html">https://laqm.defra.gov.uk/bias-adjustment-factors/national-bias.html</a>	<a href="https://laqm.defra.gov.uk/assets/databasediffusiontubebiasfactorsv0917final.xls">https://laqm.defra.gov.uk/assets/databasediffusiontubebiasfactorsv0917final.xls</a>
<b>Monitoring – Particulate Matter</b>					
Volatile correction model	Kings College	April 2012	Corrects TEOM concentrations to "gravimetric equivalent" values.	<a href="http://www.volatile-correction-model.info/">http://www.volatile-correction-model.info/</a>	<a href="http://www.volatile-correction-model.info/Correction/SelectTEOM.aspx">http://www.volatile-correction-model.info/Correction/SelectTEOM.aspx</a>
<b>Monitoring – Other Tools</b>					
Year adjustment factors for CO, benzene and 1,3 butadiene	Ricardo-E&E	10-07-02	For use with carbon monoxide, benzene, and 1.3-butadiene monitoring results to project concentrations in future years.	<a href="https://laqm.defra.gov.uk/review-and-assessment/tools/background-maps.html#YAF">https://laqm.defra.gov.uk/review-and-assessment/tools/background-maps.html#YAF</a>	<a href="https://laqm.defra.gov.uk/documents/yeafactorslaqm2001.xls">https://laqm.defra.gov.uk/documents/yeafactorslaqm2001.xls</a>
NO <sub>2</sub> fall off with distance	Bureau Veritas	April 2016	Estimates the annual mean nitrogen dioxide concentration at one distance from a road, using measurements made at a different distance from the same road.	<a href="https://laqm.defra.gov.uk/tools-monitoring-data/no2-falloff.html">https://laqm.defra.gov.uk/tools-monitoring-data/no2-falloff.html</a>	<a href="https://laqm.defra.gov.uk/documents/NO2-Fall-Off-With-Distance-from-Roads-Calculator-v4.1.xls">https://laqm.defra.gov.uk/documents/NO2-Fall-Off-With-Distance-from-Roads-Calculator-v4.1.xls</a>
NO <sub>x</sub> to NO <sub>2</sub> calculator	Ricardo-E&E	17-10-17	Derives NO <sub>2</sub> from NO <sub>x</sub> wherever NO <sub>x</sub> is predicted by modelling emissions from roads. The calculator can also be used to calculate the road component of NO <sub>x</sub> from roadside NO <sub>2</sub> diffusion tube measurements.	<a href="https://laqm.defra.gov.uk/review-and-assessment/tools/background-maps.html#NOxNO2calc">https://laqm.defra.gov.uk/review-and-assessment/tools/background-maps.html#NOxNO2calc</a>	<a href="https://laqm.defra.gov.uk/documents/NOx_to_NO2_Calculator_v6.1.xls">https://laqm.defra.gov.uk/documents/NOx_to_NO2_Calculator_v6.1.xls</a>
<b>Background Concentrations</b>					
Background maps (NO <sub>x</sub> , NO <sub>2</sub> , PM <sub>10</sub> & PM <sub>2.5</sub> )	Ricardo-E&E	November 2017	2015-2030 Background maps (NO <sub>x</sub> , NO <sub>2</sub> , PM <sub>10</sub> & PM <sub>2.5</sub> ).	<a href="https://laqm.defra.gov.uk/review-and-assessment/tools/background-">https://laqm.defra.gov.uk/review-and-assessment/tools/background-</a>	<a href="https://uk-air.defra.gov.uk/data/laqm-background-maps?year=2015">https://uk-air.defra.gov.uk/data/laqm-background-maps?year=2015</a>

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PM <sub>2.5</sub> )				<a href="#">maps.html</a>	
NO <sub>2</sub> Adjustment for NO <sub>x</sub> Sector Removal	Bureau Veritas	November 2017	NO <sub>2</sub> Adjustment for NO <sub>x</sub> Sector Removal.	<a href="https://laqm.defra.gov.uk/review-and-assessment/tools/background-maps.html#NOxsector">https://laqm.defra.gov.uk/review-and-assessment/tools/background-maps.html#NOxsector</a>	<a href="https://laqm.defra.gov.uk/documents/NO2-Adjustment-for-NOx-Sector-Removal-Tool-v6.0.xlsb.zip">https://laqm.defra.gov.uk/documents/NO2-Adjustment-for-NOx-Sector-Removal-Tool-v6.0.xlsb.zip</a>
Background maps (SO <sub>2</sub> , CO, benzene & 1,3-butadiene)	Ricardo-E&E	2003	2001 Background maps (SO <sub>2</sub> , CO, benzene & 1,3-butadiene).	<a href="https://laqm.defra.gov.uk/review-and-assessment/tools/background-maps.html">https://laqm.defra.gov.uk/review-and-assessment/tools/background-maps.html</a>	<a href="https://uk-air.defra.gov.uk/data/laqm-background-maps?year=2001">https://uk-air.defra.gov.uk/data/laqm-background-maps?year=2001</a>
Background maps for Northern Ireland (based on NIOS co-ordinates)	Ricardo-E&E	November 2017	Background maps for Northern Ireland (based on NIOS co-ordinates).	<a href="https://laqm.defra.gov.uk/review-and-assessment/tools/background-maps.html">https://laqm.defra.gov.uk/review-and-assessment/tools/background-maps.html</a>	<a href="https://uk-air.defra.gov.uk/data/laqm-background-maps?year=2015">https://uk-air.defra.gov.uk/data/laqm-background-maps?year=2015</a>
Background maps for Scotland	Ricardo-E&E	April 2014	Background maps for NO <sub>2</sub> and PM <sub>10</sub> for use in review and assessment.	<a href="http://www.scottishairquality.co.uk/data/mapping?view=data">http://www.scottishairquality.co.uk/data/mapping?view=data</a>	<a href="http://www.scottishairquality.co.uk/data/mapping?view=data">http://www.scottishairquality.co.uk/data/mapping?view=data</a>
<b>Emissions Tools</b>					
Road Transport Emission Factors Toolkit	Bureau Veritas	November 2017	The toolkit allows the user to calculate vehicle emissions for multiple road links based on vehicle fleet composition, traffic speeds and road type. This version supersedes any previous road transport emission factors made available.	<a href="https://laqm.defra.gov.uk/review-and-assessment/tools/emissions-factors-toolkit.html">https://laqm.defra.gov.uk/review-and-assessment/tools/emissions-factors-toolkit.html</a>	<a href="https://laqm.defra.gov.uk/documents/EFT2017_v8.0.zip">https://laqm.defra.gov.uk/documents/EFT2017_v8.0.zip</a>
Exempt Model - dealing with cold start emissions	Ricardo-E&E	26-11-08	Calculates the excess emissions from vehicles with cold engines. There are 2 spreadsheets – basic and advanced.	<a href="https://laqm.defra.gov.uk/review-and-assessment/tools/emissions.html#exempt">https://laqm.defra.gov.uk/review-and-assessment/tools/emissions.html#exempt</a>	<a href="https://laqm.defra.gov.uk/documents/Cold_Start_v1.0.xls">https://laqm.defra.gov.uk/documents/Cold_Start_v1.0.xls</a> and <a href="https://laqm.defra.gov.uk/documents/Cold_Start_Advanced_v1.0.xls">https://laqm.defra.gov.uk/documents/Cold_Start_Advanced_v1.0.xls</a>
Emission factors database	Ricardo-E&E	2017	This database contains the emissions factors used in the 2015 UK National Atmospheric Emissions Inventory (NAEI), as well as factors specially designed for local inventories.	<a href="http://naei.beis.gov.uk/">http://naei.beis.gov.uk/</a>	<a href="http://naei.beis.gov.uk/data/">http://naei.beis.gov.uk/data/</a>

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1 * 1km emission estimates	Ricardo-E&E	2017	Provides high level emission estimates for 2015 for each 1 * 1km grid square in the UK.	<a href="http://naei.beis.gov.uk/data/mapping">http://naei.beis.gov.uk/data/mapping</a>	<a href="http://naei.beis.gov.uk/data/map-uk-das">http://naei.beis.gov.uk/data/map-uk-das</a>
Point source emission estimates	Ricardo-E&E	2014	Provides emissions by point source (i.e. for the large power generation and industrial sources).	<a href="https://www.gov.uk/guidance/uk-pollutant-release-and-transfer-register-prtr-data-sets">https://www.gov.uk/guidance/uk-pollutant-release-and-transfer-register-prtr-data-sets</a>	<a href="http://prtr.defra.gov.uk/full-dataset">http://prtr.defra.gov.uk/full-dataset</a>
<b>Screening Tools</b>					
DMRB	Highways Agency	07-07. Work is currently underway to update it.	A road transport screening tool for use by Local Authorities in USAs.	<a href="https://www.gov.uk/guidance/standards-for-highways-online-resources">https://www.gov.uk/guidance/standards-for-highways-online-resources</a>	Contact the Helpdesk the more information
Industrial Emissions Screening Tool	Bureau Veritas	06-04-17	A screening tool for NO <sub>2</sub> , PM <sub>10</sub> , SO <sub>2</sub> , Benzene and 1,3-Butadiene to assess whether the industrial plant of concern needs further assessment.	<a href="https://laqm.defra.gov.uk/review-and-assessment/tools/emissions.html#industrial">https://laqm.defra.gov.uk/review-and-assessment/tools/emissions.html#industrial</a>	<a href="https://laqm.defra.gov.uk/assets/industrial-emissions-screening-tool3.xls">https://laqm.defra.gov.uk/assets/industrial-emissions-screening-tool3.xls</a>
Stack height calculator for SO <sub>2</sub> from small boilers	Bureau Veritas	Unknown	A chimney height calculation spreadsheet for sulphur dioxide emissions from small boilers.	<a href="https://laqm.defra.gov.uk/review-and-assessment/tools/modelling.html">https://laqm.defra.gov.uk/review-and-assessment/tools/modelling.html</a> and <a href="https://laqm.defra.gov.uk/documents/SupplementaryAssistanceonStackHeight.pdf">https://laqm.defra.gov.uk/documents/SupplementaryAssistanceonStackHeight.pdf</a>	<a href="https://laqm.defra.gov.uk/documents/stackheightcalcs.xls">https://laqm.defra.gov.uk/documents/stackheightcalcs.xls</a>
Biomass Emissions Screening Tool	Bureau Veritas	06-04-17	A screening tool for NO <sub>2</sub> , PM <sub>10</sub> and PM <sub>2.5</sub> to assess whether the biomass plant of concern needs further assessment.	<a href="https://laqm.defra.gov.uk/review-and-assessment/tools/emissions.html#biomass">https://laqm.defra.gov.uk/review-and-assessment/tools/emissions.html#biomass</a>	<a href="https://laqm.defra.gov.uk/assets/biomass-emissions-screening-tool7.xls">https://laqm.defra.gov.uk/assets/biomass-emissions-screening-tool7.xls</a>
CHP Emissions Screening Tool	Bureau Veritas, EPUK, IAQM	28-03-12	A screening tool for NO <sub>2</sub> to assess whether the CHP plant of concern needs further assessment.	<a href="https://laqm.defra.gov.uk/review-and-assessment/tools/emissions.html#CHP">https://laqm.defra.gov.uk/review-and-assessment/tools/emissions.html#CHP</a>	<a href="http://www.iaqm.co.uk/text/guidance/e-puk/chp_aq_tool.xls">http://www.iaqm.co.uk/text/guidance/e-puk/chp_aq_tool.xls</a>
Derivation of Screening Criteria for Review and Assessment of	Air Quality Consultants	20-09-08	This report is related to the air quality impacts of airport operations.	<a href="https://laqm.defra.gov.uk/review-and-assessment/tools/modelling.html">https://laqm.defra.gov.uk/review-and-assessment/tools/modelling.html</a>	<a href="https://uk-air.defra.gov.uk/reports/cat06/0810291343_Screening_Criteria_for_Airports_Final_27-10-08.pdf">https://uk-air.defra.gov.uk/reports/cat06/0810291343_Screening_Criteria_for_Airports_Final_27-10-08.pdf</a>

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Airports					
<b>Road Traffic Related Tools</b>					
Annual Average Daily Traffic Flows	DfT	2016	Provides estimated traffic flows on every link of the 'A' road and motorway network in Great Britain. The data are for the years 2000 to 2016.	<a href="http://www.dft.gov.uk/traffic-counts/">http://www.dft.gov.uk/traffic-counts/</a>	Various datasets available for download
Road Traffic and Speed statistics	DfT	2017	Average daily motor vehicle flows by road class, GOR and country.	<a href="https://www.gov.uk/government/publications/road-traffic-speeds-and-congestion-statistics-guidance">https://www.gov.uk/government/publications/road-traffic-speeds-and-congestion-statistics-guidance</a>	Various tables available for download
TEMPRO	DfT	2017	Trip End Model Presentation Program – can be used to provide summaries of traffic growth using data from the National Transport Model.	<a href="https://www.gov.uk/government/collections/tempro">https://www.gov.uk/government/collections/tempro</a>	<a href="https://www.gov.uk/government/publications/tempro-downloads/tempro">https://www.gov.uk/government/publications/tempro-downloads/tempro</a>