



EPUK Guidance on Significance : Current and Updated

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Outline of Presentation

- **Introduction**
- **Current EPUK Guidance**
- **Issues for Consideration in Updated Guidance**





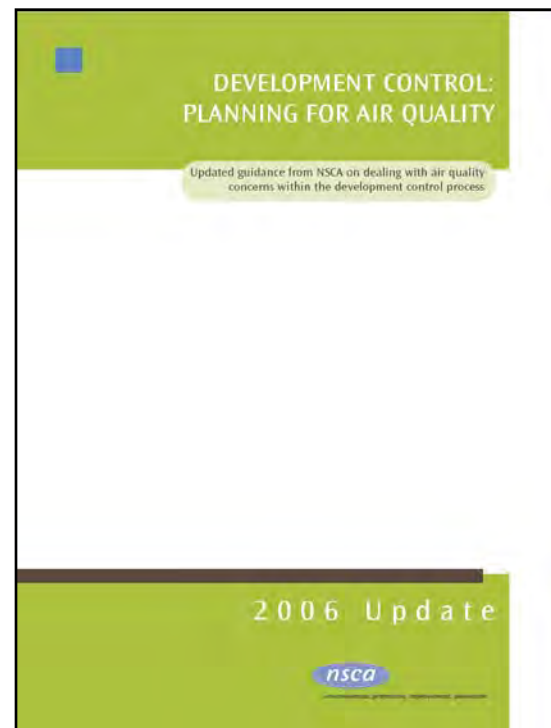
Bad Old Days!

- In past we used to produce reports without any real consideration of significance, other than to note concentrations were above or below the objectives
- From time to time EIA co-ordinators asked us to come up with descriptors for impacts, e.g. major, minor, insignificant (we usually tried to resist)
- We usually made up different criteria each time. A 'small' increase on one job would be a 'minor' increase on another or a 'very small' increase in yet another
- No consistency existed within AQC let alone between AQC and other consultancies

NSCA to the Rescue



- NSCA in its 2004 Guidance on planning and air quality introduced a flow chart to help local authority officers determine the significance of an air quality assessment
- In its update in 2006 further descriptors of significance were introduced separating those that form part of impact assessment from those to be used by local authorities in judging an application
- Guidance has been widely used and often cited in Public Inquiries



Key Elements of Current EPUK Guidance

- Separates:
 - significance in impact assessment reports
 - significance in relation to decision making
- Tightens up on terminology:
 - **magnitude** described with more neutral terms e.g. very small rather than insignificant
 - **significance** described with more judgemental terms, e.g. slight adverse or substantial adverse





Assessing Significance

- Example in Appendix 3 of descriptors
 - **Magnitude of change** – from very large to extremely small (no value judgement in descriptor)
 - **Significance** - taking account of magnitude and absolute level (involves use of terminology implying a judgement, e.g. “substantial adverse” or “negligible”)
- Key benefit is consistency of descriptors within an assessment and between assessments



Magnitude Descriptors

Magnitude of Change	Annual Mean NO ₂ / PM ₁₀	Days PM ₁₀ >50 µg/m ³
Very large	Increase/decrease > 25%	Increase/decrease > 25 days
Large	Increase/decrease 15-25%	Increase/decrease 15-25 days
Medium	Increase/decrease 10-15%	Increase/decrease 10-15 days
Small	Increase/decrease 5-10%	Increase/decrease 5-10 days
Very Small	Increase/decrease 1-5%	Increase/decrease 1-5 days
Extremely Small	Increase/decrease <1%	Increase/decrease <1 days

Significance Descriptors



Absolute Concentration in Relation to Objective	Change in Concentration					
	Extremely Small	Very Small	Small	Medium	Large	Very Large
Increase with Scheme						
Above Objective in Do-min	slight adverse	slight adverse	substantial adverse	substantial adverse	very substantial adverse	very substantial adverse
Below Objective in Do-min, Above with Scheme	slight adverse	moderate adverse	substantial adverse	substantial adverse	very substantial adverse	very substantial adverse
Below Objective with Scheme	negligible	slight adverse	slight adverse	moderate adverse	moderate adverse	substantial adverse
Well Below Objective with Scheme	negligible	negligible	slight adverse	slight adverse	slight adverse	moderate adverse

Significance Descriptors

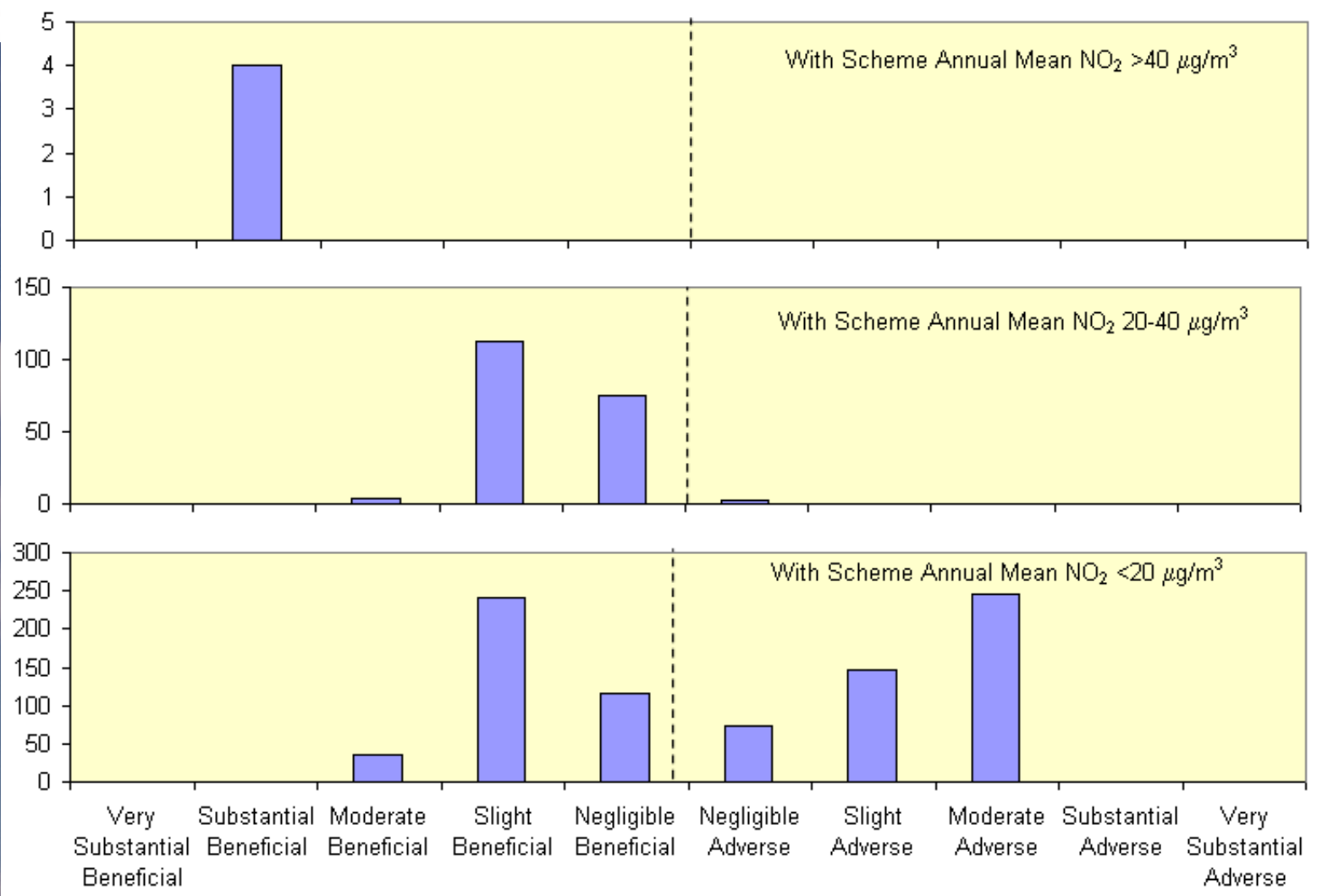


Absolute Concentration at New Properties in Relation to Objective	Number of New Properties Exposed to Concentration			
	0-20	20-100	100-500	>500
Above Objective	slight adverse	moderate adverse	substantial adverse	very substantial adverse
Below Objective but not Well Below	negligible	negligible	slight adverse	slight adverse
Well Below Objective	negligible	negligible	negligible	negligible

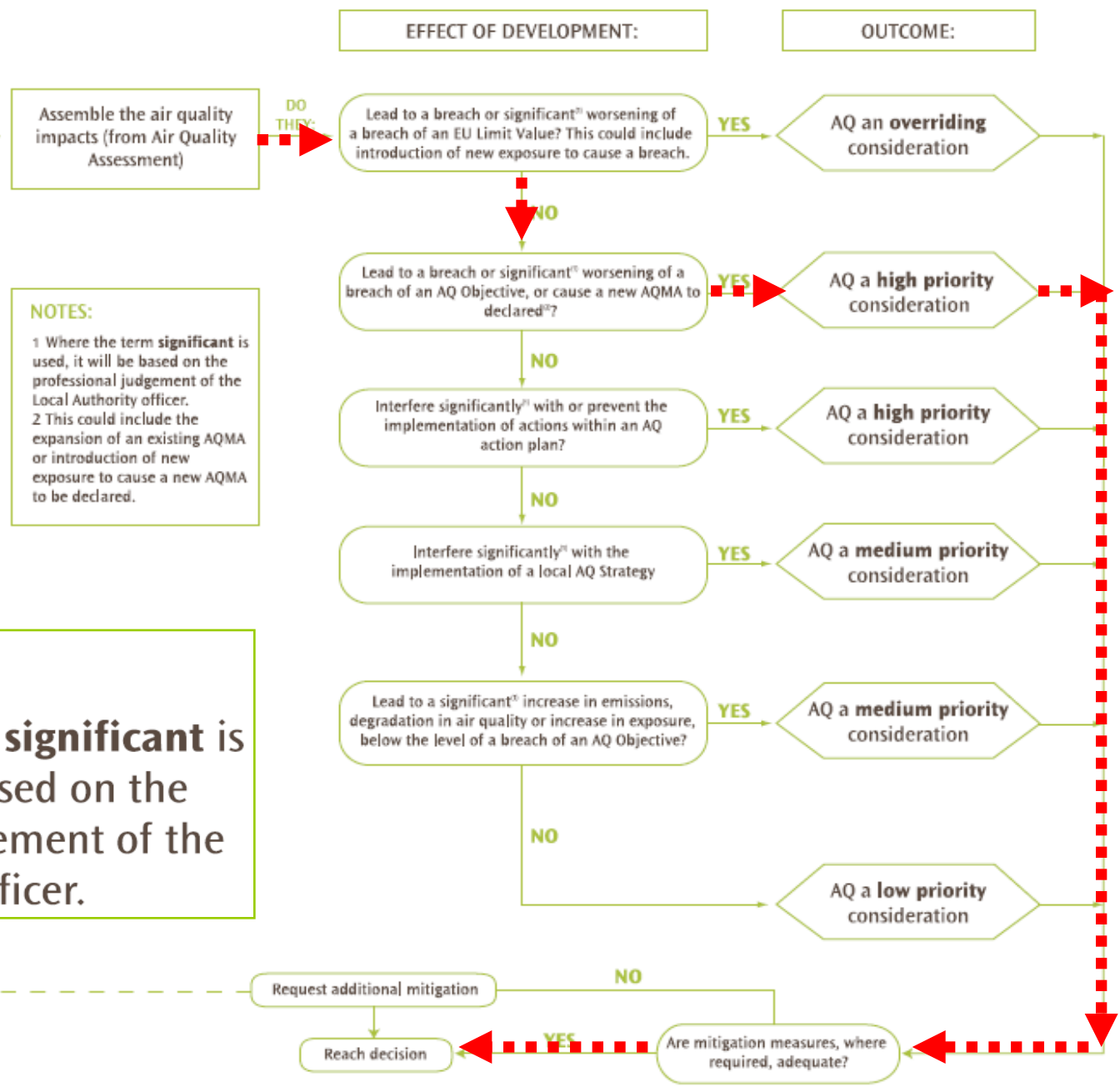


Example Outcome

Aberdeen Western Peripheral Route



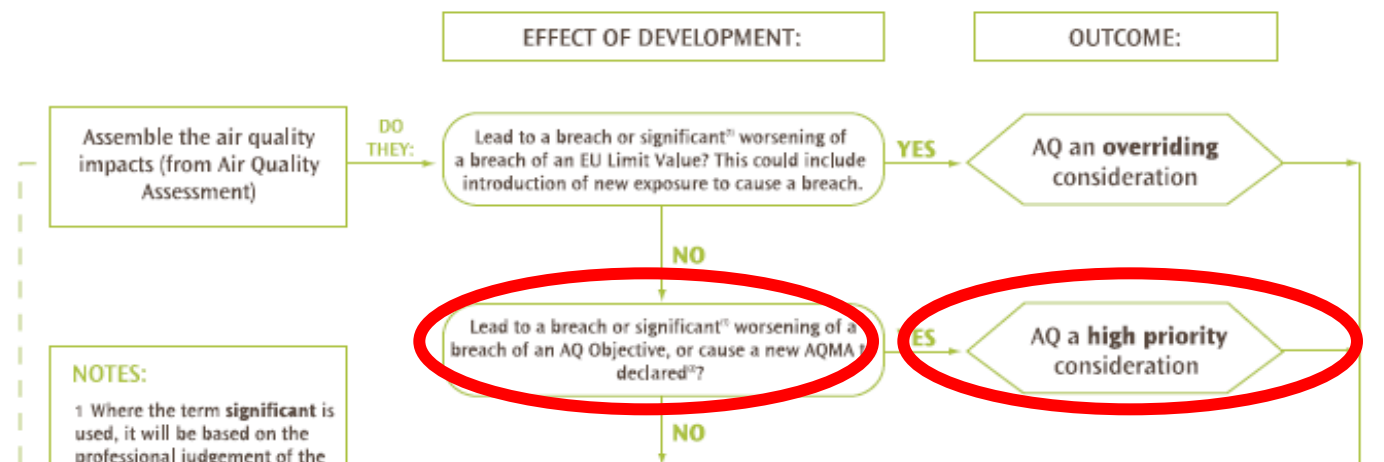
Steps for Local Authority to Assess Significance



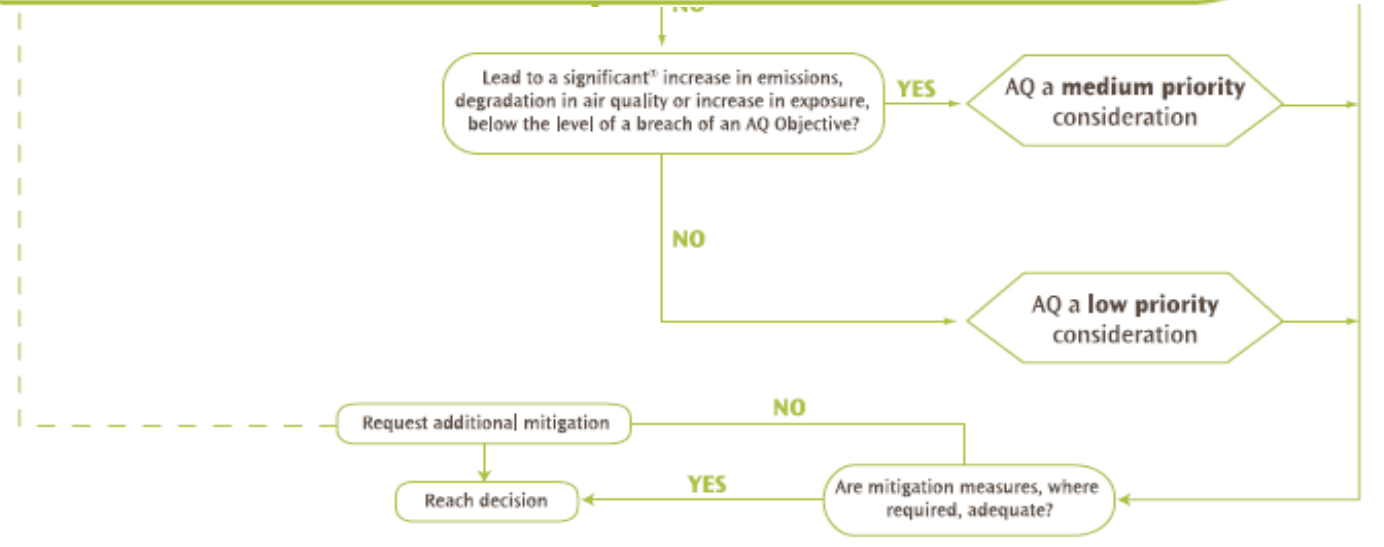
NOTES:

1 Where the term **significant** is used, it will be based on the professional judgement of the Local Authority officer.

Figure 1: Steps for local authority to assess the significance of air quality impacts of a development proposal



Lead to a breach or significant⁽¹⁾ worsening of a breach of an AQ Objective, or cause a new AQMA to be declared⁽²⁾?





Significance Outcome

- Over-riding Consideration
 - Require mitigation to remove 'over-riding' impacts. If still 'over-riding' strong presumption for recommendation for refusal on air quality grounds
- High Priority Consideration
 - Ensure measures to minimise 'high priority' impacts are appropriate. Consider compensation/offsetting. Depending on scale of impacts – numbers affected; absolute levels; magnitude of changes; suitability of measures to minimise impacts – may be appropriate to recommend refusal
- Medium Priority Consideration
 - Seek mitigation to reduce 'medium priority' impacts. Offsetting and compensation may be considered. Unlikely refusal would be recommended
- Low Priority Consideration
 - Encourage use of readily available measures to mitigate, offset or compensate for impacts, where appropriate



Update – Starting Point

- Need to be clear about purpose of describing significance
- In my view two key purposes:
 1. To help describe impacts within an air quality assessment
 - in a formal EIA, to allow comparison of all impacts using standard approach
 2. To help planners reach a decision on
 - whether to refuse planning permission
 - how much mitigation to require



Update – Starting Point

- Significance required for
 - Impacts of development on surrounding area during operation
 - Impacts of surrounding area on conditions within the development for people
 - Separately for people and ecosystems
 - Impacts during construction(?)



Update – Starting Point

- Significance should take into account:
 - magnitude of change
 - whether or not standards are exceeded (and by how much?)
 - numbers of people exposed to a) changes b) levels above standards
 - And possibly
 - duration of impacts
 - Sensitivity of receptor (children, elderly etc.)

Update – Challenges

- How to incorporate numbers of people exposed to: a) changes b) levels above standards?
- How to describe overall significance if both increases and decreases (WebTAG?)
- Are magnitude descriptors at right break points?
- Should magnitude be absolute not %?
- Should going from below to above objective be given different significance?
- What about PM_{2.5}?
- Significance descriptors for low concentrations, e.g.
 - how can a 'very large' increase in annual mean NO₂ from 4 to 5.5 µg/m³ be a moderate adverse impact?



Final Thoughts

- Consistency must help in the preparation and evaluation of air quality assessments
- Radical changes to current guidance could be disruptive
- Some changes would be helpful



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