

ASSESSMENT OF AIR POLLUTION IMPACT FOR HABITATS REGULATIONS**J.P. Shi¹, C. Sidle¹, B. Ng¹, L. Pope², C. Powlesland³**¹*Air Quality Modelling and Assessment Unit, The Environment Agency, Cambria House, Cardiff, UK*²*The Environment Agency, Reading, UK*³*The Environment Agency, Bristol, UK*

This paper aims to discuss and demonstrate the assessment approach developed and adopted by the Environment Agency, English Nature and Countryside Council for Wales, for determining applications for authorisation under the Pollution Prevention and Control Regulations in relation to requirements of the Habitats Directive. The approach comprises 4 stages:

1. Identifying relevant applications by establishing whether the Habitats Regulations apply;
2. Assessing likely significant effect of the installation alone or in-combination with other plans/projects;
3. Undertaking appropriate assessment of the in-combination impact for the European site in terms of its conservation objectives and local conditions, considering both long- and short-range transport;
4. Determining the application based on implications of the assessment and other socio-economic considerations.

Stage 3 is the most difficult part of the assessment. The methodology needs to be practical, robust and scientifically based. Long-range transport from the 42 big UK power stations and refineries, other UK sources as detailed in the National Emission Inventory, and European background levels are modelled. Results are compiled in the Environment Agency's "European Sites" database along with relevant critical loads for each protected feature. Both dry and wet deposition fluxes due to releases from the installation in the authorisation application and other significant local sources are estimated in the short-range modelling study. The assessment needs to address the issue of double counting of contributions from local sources and uncertainties in the predicted impacts. Examples are given to demonstrate this approach and highlight the practical challenges of implementing the Habitats Directive in environmental regulation.