



Northern Ireland Environment Agency
Gníomhaireacht Comhshaoil Thuaisceart Éireann
Norlin Airlan Environment Agency

Revised Operational Protocol for assessing ammonia and air pollution impacts on the natural environment

A guide for planners and developers



Department of
**Agriculture, Environment
and Rural Affairs**

An Roinn

**Talmhaíochta, Comhshaoil
agus Gnóthaí Tuaithe**

Depairtment o'

**Fairmin, Environment
an' Kintra Matthers**

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Screening Assessment			
Step 1: Is there a sensitive site which may be affected?	Determine the 'Zone of Influence', depending on the type of proposal and identify if any nitrogen sensitive sites are affected.	Zones of Influence differ on the type of proposal and pollutant.	Refer to Appendix 2 to identify appropriate Zone of Influence. For Medium Combustion Plant (MCP), the MCP screening tool on APIS will identify designated sites based on the thermal capacity of a plant and location MCP screening tool Air Pollution Information System (apis.ac.uk)
		Designated sites to consider: • Areas of Special Scientific Interest (ASSIs) • Special Areas of Conservation (SACs) • Special Protection Areas (SPAs) • Ramsar sites	Details on the location of designated sites can be found here: Natural Environment Map Viewer Department of Agriculture, Environment and Rural Affairs (daera-ni.gov.uk) The free, online SCAIL - Simple Calculation of Atmospheric Impact Limits (ceh.ac.uk) tool is recommended as a screening tool. You can select either SCAIL Agriculture or SCAIL Combustion. A SCAIL user guide is available to guide you through the process.
Step 2: Can effects be recognised as being insignificant alone or in-combination?	Apply the <i>De-minimis</i> Threshold (DMT)	DMTs are: • 0.08% of the Critical Level for Ammonia	Refer to Appendix 3 .

Screening Assessment			
	Emissions are assessed against the DMT, by determining what the Process Contribution (PC) from the proposal is. The PC is a figure derived by comparing pollutant concentration or deposition from the proposal against the relevant Critical Level or Load for the site in question and is expressed as a percentage.	• 0.05% of the Critical Level for NOx • 0.09% - 0.13% of the Critical Load for Nitrogen deposition If a PC is below or equal to the DMT, it is screened out of further assessment.	
	Apply the Site Relevant Threshold (SRT). The SRT is used to identify those cases where the DMT is deemed too conservative. If any PC exceeds the DMT, a SRT must be calculated, and the PC of the proposal is then assessed against this.	SRTs range between Very Low and High and are an estimation of the predicted development density around the proposal between 2017-2030. SRTs range from: • 0.08% - 0.75% of the Critical Level for Ammonia • 0.05% - 0.29% of the Critical Level for NOx • 0.09% - 1.3% of the Critical Load for Nitrogen deposition If a PC is below or equal to the SRT, it is screened out of further assessment.	Refer to Appendix 4 .
Step 3: Undertake an In-combination Assessment	An in-combination assessment is required where the PC of the proposal is above the DMT and SRT but less than the screening threshold.	Screening Thresholds, also known as Test of Likely Significance (ToLS) thresholds are: • 1% of the Critical Level for Ammonia	Refer to Appendix 5 .

Screening Assessment			
	The assessment will consider the in-combination effects from other plans or projects whose effects could combine with the effects of the proposal.	• 0.4% of the Critical Level for NOx • 0.8% - 8.5% of the Critical Load for Nitrogen. If a PC, in combination with other plans or projects, is below or equal to the Screening Threshold, it is screened out of further assessment. If a PC alone or in combination with other plans or projects, is above the Screening Threshold, a detailed assessment must be undertaken.	

Detailed Assessment			
Step 4: Undertake a Detailed Assessment	Take account of Mitigation Measures: Mitigation measures may be effective in reducing emissions so that the PC falls below DMT/SRT/ToLS threshold.	Considerations when applying Mitigation measures: • proven efficacy from the manufacturer • appropriate conditions will be recommended to secure the implementation of the mitigation measures • if a novel mitigation measure or technology is proposed, further consultation with NIEA may be required.	Refer to Appendix 6 .
	Take account of Exceedance Levels: Determine the Predicted Environmental Level (PEL), which is the combination of existing	<i>Predicted Environmental Level (PEL) = Process Contribution PC (either concentration or deposition) +</i>	The background data for the grid square which is potentially affected can be found on the Air Pollution

Detailed Assessment			
	background levels of pollutants and the PC of the proposal.	<i>Background (either concentration or deposition)</i> Background pollution data for the UK is updated every year using the latest measurement data from the various networks around the UK.	Information Service (APIS) GIS map tool. APIS app Air Pollution Information System
	Take account of Spatially Targeted Measures	Spatially targeted measures aim to reduce high concentrations of ammonia and high levels of nitrogen deposition at the site in question in order to create 'room for development'.	A separate Site-specific programme is to be developed to take forward spatially targeted measures at Designated Sites, as part of DAERA's Combined Approach to Ammonia.
Step 5: Issue advice/make decision	Advice issued may include: • Air Quality Concerns Identified • Approval Subject to Conditions • Further Air Quality Assessment Required		