

# INVESTIGATION REPORT

addressed to the Department of Agriculture, Environment and Rural Affairs in relation to its compliance with The Conservation (Natural Habitats, etc.) Regulations (Northern Ireland) 1995 and The Environment (Northern Ireland) Order 2002 regarding the assessment of ammonia-related impacts from agricultural development on certain protected sites in Northern Ireland

October 2024

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# **Executive summary**

## Executive summary

This report concludes the Office for Environmental Protection's ('OEP') investigation examining the standing advice that the Department for Agriculture, Environment and Rural Affairs ('DAERA') provided to planning authorities and other competent authorities to assess the impacts of agricultural ammonia emissions on certain protected sites in Northern Ireland.

We set out our findings that DAERA failed to comply with environmental law through its use of the standing advice, until its withdrawal in December 2023, and had been aware of the legal risks associated with the use of the standing advice since at least May 2019.

Ammonia is a critical source of nitrogen for plant growth, but also has the potential to contribute to serious, long-term harm to the environment and human health if concentrations are allowed to exceed certain limits. Northern Ireland has a network of 394 protected sites designated for their high nature conservation value; 250 of which contain features which are sensitive to ammonia and atmospheric nitrogen.<sup>1</sup> These protected sites safeguard such features by placing legal restrictions on the granting of consents, permits and licences for certain plans, projects and operations.

There is a range of designations for protected sites in Northern Ireland, of which the following have been directly relevant to this investigation:

- a) **Special Areas of Conservation ('SACs')**: designated under The Conservation (Natural Habitats, etc.) Regulations (Northern Ireland) 1995 ('the Habitats Regulations').
- b) **Special Protection Areas ('SPAs')**: designated for birds under the Habitats Regulations.

**SPAs** and **SACs** are referred to as 'European sites' within this report. Under the Habitats Regulations, DAERA is required to establish a network of important high quality conservation sites that will make a significant contribution to conserving the habitats and species identified in EU Directives 92/43/EEC ('Habitats Directive') and 2009/147/EC ('Birds Directive').

- c) **Areas of Special Scientific Interest ('ASSIs')**: protected for their flora, fauna, geological or physiographical features and designated under The Environment (Northern Ireland) Order 2002.

Where we refer to 'protected sites' or 'sites', we are referring collectively to European sites and ASSIs.

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<sup>1</sup> DAERA, 'Future Operational Protocol to Assess the Impacts of Air Pollution on the Natural Environment – A Call for Evidence' (21 July 2023) <[www.daera-ni.gov.uk/future-operational-protocol-a-call-for-evidence](http://www.daera-ni.gov.uk/future-operational-protocol-a-call-for-evidence)> accessed 8 July 2024.

To comply with environmental law, DAERA must ensure that the advice it provides to competent authorities is consistent with the restrictions in place for protected sites. In particular, it must ensure that decision makers adopt a precautionary approach when assessing applications for planning permission and industrial consents. Therefore, requiring them to be satisfied, based on logical and empirical evidence, that proposals will not be likely to damage (in the case of an ASSI), or have an adverse effect on the integrity of the site(s) (in the case of a European site).

Until December 2023, DAERA's standing advice, commonly referred to as 'the Operational Protocol', directed competent authorities to apply thresholds which were not scientifically robust and risked screening out plans or projects which were likely to damage or have a significant effect on protected sites from the need for further assessment. It is our conclusion that this represented a failure to comply with environmental law.

This led us to send judicial review pre-action correspondence to DAERA and the Northern Ireland Environment Agency ('NIEA') in November 2023, following a decision from NIEA to lift a pause on the issuing of ammonia planning advice based on the Operational Protocol, which had been in place since the end of May 2023. Through this, we were successful in securing an immediate end to the provision of advice based on the Protocol, which was replaced with an 'Interim Air Pollution Decision and Advisory Framework' ('Interim Framework'). The Interim Framework would instead provide applicants and competent authorities with case and site-specific advice until an updated operational protocol could be approved by the Minister for Agriculture, Environment and Rural Affairs ('the DAERA Minister').

Following our legal analysis of the Interim Framework, and its supporting documents, we are now sufficiently assured that DAERA's current approach to providing advice can be supported legally and scientifically. We are therefore of the view that the provision of advice to competent authorities based on the Interim Framework, as it currently stands, does not constitute a failure to comply with environmental law.

With a future operational protocol currently being developed and anticipated for publication alongside an Ammonia Strategy later this year,<sup>2</sup> we note the DAERA Minister's commitment to ensuring future advice remains "evidence-based and capable of ensuring full compliance with environmental law".<sup>3</sup> Any revised operational protocol must reflect this commitment and should therefore be supported on logical and empirical grounds.

Regarding the Interim Framework that is currently in use, we make three further recommendations. These recommendations should also be considered in the development of any future operational protocol which replaces the Interim Framework:

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<sup>2</sup> Northern Ireland Assembly Deb 17 June 2024, vol 161, No 3, p 20.

<sup>3</sup> Northern Ireland Assembly Deb 19 February 2024, vol 154, No 1, p 38.

- **Recommendation 1:** In relation to European sites, the guidance document underpinning the Interim Framework would benefit from more clearly explaining the distinction between mitigation measures and compensatory measures when setting out how mitigation measures should be considered at the detailed assessment stage.
- **Recommendation 2:** It would be beneficial for there to be an explanation to the effect that it is only in instances of imperative reasons of overriding public interest that a plan or project can be approved where the assessment concludes that adverse effects on the integrity of the site cannot be excluded.
- **Recommendation 3:** Where assessments rely upon national initiatives aimed at delivering an overall trend towards reducing emissions, or spatially targeted measures designed to deliver reductions around specific sites, care must be taken to ensure such measures and initiatives have been secured and are legally certain at the time of assessment.

We commend the high levels of cooperation shown by the public authorities throughout our investigation, and acknowledge the challenges posed to civil servants who were working in the absence of ministerial oversight during many critical stages of our investigation. DAERA and the NIEA's constructive approach enabled us to secure comprehensive answers to our questions. We thank all those involved for the assistance they provided.

We also acknowledge the significant role played by the complainant in bringing this issue to our attention in their initial complaints.



# Introduction

# 1. Introduction

- 1.1 This report concludes the OEP's investigation into standing advice that DAERA provided to planning authorities and other competent authorities to assess the impacts of agricultural ammonia emissions on certain protected sites in Northern Ireland.
- 1.2 In accordance with paragraph 7 of Schedule 3 of the Environment Act 2021, we set out our finding that DAERA failed to comply with relevant environmental law through its use of the standing advice until its withdrawal in December 2023. We also set out why we are sufficiently assured that DAERA's current approach to providing such advice now complies with relevant environmental law.
- 1.3 To do this, we first outline the applicable legislative provisions and factual background to the investigation.





# **Legal framework**

## 2. Legal framework

- 2.1 As the Statutory Nature Conservation Body ('SNCB') for Northern Ireland,<sup>4</sup> DAERA provides advice to planning authorities and other competent authorities regarding the environmental impacts of new plans or projects on protected sites.<sup>5</sup> Acting through the NIEA, DAERA must be consulted whenever a development proposal is in, or is likely to have an effect on, an ASSI or European site.<sup>6</sup>
- 2.2 DAERA also acts as a competent authority itself, with the NIEA considering environmental impacts on DAERA's behalf before granting consents, permits and licences for intensive agricultural and industrial activities that require Pollution Prevention and Control ('PPC') permits.

### ***The Conservation (Natural Habitats, etc.) Regulations (Northern Ireland) 1995***

- 2.3 In exercising these functions, DAERA has obligations under the Habitats Regulations, as amended by The Conservation (Natural Habitats, etc.) (Amendment) (Northern Ireland) (EU Exit) Regulations 2019. This is the applicable law regarding the protection of European sites following the United Kingdom's departure from the EU.
- 2.4 Specifically, DAERA must comply with its duty under regulation 3 of the Habitats Regulations

'(1) A Northern Ireland Department...in exercise of their functions relative to nature conservation...shall secure compliance with the requirements of the Directives.'

- 2.5 Providing standing advice to competent authorities as a statutory consultee in the planning process constitutes the 'exercise of [such a] function relative to nature conservation', thereby engaging DAERA's obligation to 'secure compliance with the requirements of the Directives'. This refers to the requirements of the Habitats Directive<sup>7</sup> and Wild Birds Directive,<sup>8</sup> as these Directives are to be interpreted pursuant to regulation 2A and 8C(2) of the Habitats Regulations, following the UK's departure from the EU.
- 2.6 For the purposes of our investigation, relevant requirements are set out in Article 6.3 of the Habitats Directive:

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<sup>4</sup> The Conservation of Habitats and Species Regulations 2017, reg 5.

<sup>5</sup> The Conservation (Natural Habitats, etc.) Regulation (Northern Ireland) 1995, reg 43(3); The Environment (Northern Ireland) Order 2002, art 40(5).

<sup>6</sup> The Planning (General Development Procedure) Order (Northern Ireland) 2015, Sch 3, para 1(d).

<sup>7</sup> Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora [2013] OJ L 206/7.

<sup>8</sup> Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds [2009] OJ L 20/7.

'6.3 Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. In light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4 [which deals with exceptions for imperative reasons of overriding public interest], the competent national authorities **shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned** and, if appropriate, after having obtained the opinion of the general public' (emphasis added).

2.7 Article 6.3 of the Habitats Directive is transposed into Northern Ireland law by regulation 43 of the Habitats Regulations. Regulation 5 of those regulations establishes the 'competent authorities' for the purposes of regulation 43, which include government departments, district councils and other public bodies.

2.8 Hence, pursuant to its regulation 3 duty, DAERA must ensure that any advice it provides to planning authorities and other competent authorities on the potential impacts of air pollution, including ammonia, on European sites is consistent with a competent authority's obligations under the Habitats Regulations. This includes regulation 43, which provides:

'43. – Assessment of implications for European sites in Northern Ireland and European offshore sites

- (1) A competent authority, before deciding to undertake, or give any consent, permission or other authorisation for, a plan or project which –
  - a) is likely to have a significant effect on a European site in Northern Ireland or a European offshore marine site (either alone or in combination with other plans or projects), and
  - b) is not directly connected with or necessary to the management of the site,
- (2) A person applying for such consent, permission or other authorisation shall provide such information as the competent authority may reasonably require –
  - a) to enable the competent authority to determine whether an assessment under paragraph (1) is required; or
  - b) for the purposes of an assessment under paragraph (1)
- (3) In relation to a European site in Northern Ireland, the competent authority shall for the purposes of –

- a) determining whether an assessment is required for a plan or project under paragraph (1); or
  - b) the assessment under paragraph (1)  
consult with the Department and have regard to any representations made by it within such reasonable time as the competent authority may specify.
- (4) The competent authority shall, for the purposes of any assessment relating to a European offshore marine site, consult the Joint Nature Conservation Committee and have regard to any representations made by that committee within such reasonable time as the competent authority may specify.
  - (5) The competent authority shall, if it considers it appropriate, take such steps as it considers necessary to obtain the opinion of the general public.
  - (6) In light of the conclusions of the assessment, and subject to regulation 44, the authority shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the European site in Northern Ireland or the European offshore marine site (as the case may be).
  - (7) In considering whether a plan or project will adversely affect the integrity of the site concerned, the authority shall have regard to the manner in which it is proposed to be carried out or to any conditions or restrictions subject to which it is proposed that the consent, permission or other authorisation should have been given.'

2.9 In complying with regulation 43, a competent authority should follow the steps in the Habitats Regulations Assessment ('HRA') process:

- a) **Screening:** a competent authority must establish whether a plan or project not directly connected with or necessary to the management of one or more European site/European marine sites is likely to have a significant effect of those sites, either alone or in combination with other plans or projects, in view of the site's conservation objectives (regulation 43(1)).
- b) **Appropriate Assessment:** where the plan or project is likely to have a significant effect, a competent authority must make an appropriate assessment of its implications in view of the site's conservation objectives (regulation 43(1)).
- c) **Consultation:** for the purposes of the appropriate assessment, and in relation to European sites, a competent authority must consult DAERA and have regard to any representations it makes within the specified time limit (regulation 43(3)).
- d) **Decision:** a competent authority must only agree to the plan or project after having ascertained that it will not adversely affect the integrity of the

site (regulation 43(6)), unless it can be shown that it is necessary for 'imperative reasons of overriding public interest' and compensatory measures can be taken to maintain the overall coherence of the site or integrity of the European site network (regulations 44 and 48).

- 2.10 Mitigation measures may not be taken into account at the screening stage,<sup>9</sup> but may, in certain circumstances, be considered at assessment stage providing there is sufficient certainty that harm will be avoided.<sup>10</sup>

### ***The Environment (Northern Ireland) Order 2002***

- 2.11 As well as being subject to obligations in relation to European sites under the Habitats Regulations, article 28 of The Environment (Northern Ireland) Order 2002 ('the Environment Order') sets out provisions in relation to the designation of ASSIs and includes rules governing decisions to authorise operations which are 'likely to damage' special features, as well as a general duty to further the conservation and enhancement of those features.

- 2.12 Article 38 of the Environment Order sets out:

'(1) A public body shall have the duty set out in paragraph (2) in exercising its functions so far as their exercise is likely to affect the flora, fauna or geological, physiographical or other features by reason of which an ASSI is of special scientific interest.

(2) The duty is to take reasonable steps, consistent with the proper exercise of the body's functions, to further the conservation and enhancement of the flora, fauna or geological, physiographical or other features by reason of which the ASSI is of special scientific interest.'

- 2.13 This duty applies to public bodies, including Northern Ireland government departments and district councils.

- 2.14 Article 40 of the Environment Order applies where the permission of a public body is needed before operations may be carried out and requires that:

'(2) Before permitting the carrying out of operations likely to damage any of the flora, fauna or geological, physiographical or other features by reason of which an ASSI is of special scientific interest, a public body shall give notice of the proposed operations to the Department.'

- 2.15 This provision applies even if the operations would not take place on land included in an ASSI. A public body must take DAERA's advice into account in

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<sup>9</sup> *In the matter of an Application by Chris Murphy for Judicial Review* [2017] NICA 51.

<sup>10</sup> Case C-164/17 *Grace and Sweetman v An Bord Pleanála* [2018] at [50].

deciding whether to grant permission and, if so, in relation to imposing conditions on the permission.<sup>11</sup>

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<sup>11</sup> The Environment (Northern Ireland) Order 2002, art 40(5).



# **Factual background**

## 3. Factual background

### *The Operational Protocol*

- 3.1 Ammonia is a pungent, colourless gas which is formed from the biological and chemical breakdown of organic matter, such as animal waste from farming. It is a source of nitrogen for plant growth, but also has the potential to contribute to serious, long-term harm to the environment and human health.
- 3.2 To assist with discharging the duties set out above in the context of assessing ammonia-related impacts, the NIEA, on behalf of DAERA, published Standing Advice Note 19, entitled 'Livestock Installations and Ammonia – Advice for Planning Officers and Applicants Seeking Planning Permission for Livestock Installations which may impact on Natural Heritage, Issue 02, June 2017'. This was commonly referred to as 'the Operational Protocol' and was developed in 2012, before being updated in 2017.
- 3.3 The Operational Protocol provided guidance and screening criteria for use by competent authorities when assessing the impacts of agricultural ammonia emissions associated with certain applications for planning permission and industrial consents. This set the basis for the NIEA's planning advice, whilst also providing a decision-making framework for relevant licensing and permitting applications.
- 3.4 Once an application had been received, the guidance stated that the first step was to determine whether any protected sites fell within the proposal's 'zone of influence'. The zone of influence is the area around the prospective emission source (e.g. poultry shed) which has the potential to be impacted by atmospheric nitrogen and its deposition. If no sites could be located within this zone – set at 7.5km for sources of emissions associated with livestock – competent authorities would be able to exclude an application from further assessment for a particular pollutant on the grounds that it was not likely to damage, or cause adverse effects to, any ASSI or European site.
- 3.5 For proposals which fell within the zone of influence, the Operational Protocol provided that a modelling calculation should be undertaken using the Simple Calculation of Atmospheric Impact Limits ('SCAIL') screening tool. SCAIL is an online model for assessing the impact from agricultural and combustion sources on (amongst other things) areas of habitat such as a European site. An estimate of emissions provided by the model should then have been assessed against a screening threshold, by determining the 'process contribution' of the pollution source as a percentage of a protected site's Critical Level.<sup>12</sup>

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<sup>12</sup> See Annex for definition.



- 3.6 A screening threshold is usually expressed as the amount of pollution from an individual emission source, below which associated effects can be properly ignored, whether the proposal is assessed alone or in combination. This is on the basis that the effects of proposals which fall below a threshold will not undermine the conservation objectives of a site, nor make a meaningful contribution to a significant effect. Specifically, the Operational Protocol stated that:

‘if the SCAIL is 1% or over of the [Critical Level] for designated sites...then there is the potential for significant effects and the application may require more detailed air quality modelling. A detailed air impact assessment (modelling) is always required where the designated site or priority habitat has reached its capacity regarding permitted input or that the initial SCAIL screening has exceeded permitted input’.<sup>13</sup>

- 3.7 As a result, where a proposal on its own contributed less than 1% of a site’s Critical Level, the Operational Protocol advised that it be ‘screened out’ and considered for approval without the need for further assessment. In other words, proposals with a process contribution below 1% could automatically be considered not to damage or cause adverse effects to any ASSI or European site, irrespective of whether safe pollution levels were already exceeded.
- 3.8 Where the process contribution of a proposal was greater than or equal to 1%, it was to be assessed ‘in-combination’ with other proposals which also had a process contribution of 1% or above, from a baseline position of 1 January 2012 (i.e. when the Operational Protocol was first introduced). Even where the Critical Level of the protected site had already been exceeded, the Operational Protocol permitted an additional 10% of the Critical Level as a sum of the in-combination assessment.<sup>14</sup> After this 10% had been reached, the Operational Protocol stated that the site was to be considered ‘closed’ to further developments with process contributions of 1% or above of the Critical Level.<sup>15</sup> The Operational Protocol did not require the consideration of the cumulative impacts from proposals with a process contribution below 1% of the Critical Level.

### ***Decision to investigate***

- 3.9 Between March 2021 and June 2022, the OEP received several complaints pertaining to planning approvals granted by eight planning authorities. Though the complaints identified a range of different planning decisions, each complaint broadly alleged that local planning authorities had not followed the

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<sup>13</sup> DAERA, ‘Standing Advice Note 19: Livestock Installations and Ammonia’ (2017) 5.

<sup>14</sup> DAERA, ‘Standing Advice Note 19: Livestock Installations and Ammonia’ (2017) 4.

<sup>15</sup> DAERA informed us that the additional loading threshold for ASSIs was 20% until 2015/2016 when it was changed to 10% in line with the threshold for European sites.

requisite environmental assessment processes, before granting planning permission for intensive agricultural developments.

- 3.10 Drawing on information received through these complaints, we suspected that the way thresholds were being used in the Operational Protocol may indicate a potential failure to comply with the Habitats Regulations. This focus was later extended after information provided by DAERA led us to suspect that there had also been a failure to comply with the Environment Order.
- 3.11 We considered these potential failures to be serious and decided to launch an investigation on 23 May 2023. Given that advice provided in accordance with the Operational Protocol guided planning authorities to use thresholds, our principal concern was that planning authorities could be led into making planning decisions which did not lawfully or accurately assess the environmental impacts of proposals on protected sites.
- 3.12 The provision of such advice could also allow the expansion of agricultural development in proximity to protected sites which were, and still are, experiencing the effects of excessive ammonia pollution. A 2022 report for the UK Department for Environment, Food and Rural Affairs ('Defra') examined trends in Critical Load and Critical Level exceedances in the UK. It found that 98% of SACs, 83% of SPAs, and 96% of ASSIs in Northern Ireland had nitrogen deposition rates which exceeded their Critical Load.<sup>16</sup> Further, 100% of SACs, 100% of SPAs and 99.7% of ASSIs were found to have ammonia concentrations higher than  $1 \mu\text{g m}^{-3}$  (the long-term annual average Critical Level for lichens and mosses and for ecosystems in which they are important).<sup>17</sup>
- 3.13 This scale of exceedance already negatively impacts many of Northern Ireland's most sensitive habitats and plant species, particularly those which are important for climate resilience, such as lowland raised bog, blanket bog and ancient woodland. DAERA's draft Ammonia Strategy refers to studies on the effects of excessive, locally deposited ammonia concentrations and nitrogen deposition to sensitive sites in Northern Ireland which have shown clear evidence of direct damage to sensitive species, as well as signs of nutrient enrichment affecting the species diversity and habitat condition.<sup>18</sup>
- 3.14 The impact of ammonia on human health is also well known and is similarly acknowledged in DAERA's draft Ammonia Strategy.<sup>19</sup> Ammonia can persist

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<sup>16</sup> Ed Rowe and others 'Trends Report 2022: Trends in critical load and critical level exceedances in the UK' (UKCEH, 2022) <[uk-air.defra.gov.uk/library/reports?report\\_id=1087](https://uk-air.defra.gov.uk/library/reports?report_id=1087)> accessed 8 July 2024.

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<sup>18</sup> DAERA, 'Draft Ammonia Strategy for Northern Ireland Consultation' (2023) 16 <[www.daera-ni.gov.uk/consultations/draft-ammonia-strategy-northern-ireland-consultation](https://www.daera-ni.gov.uk/consultations/draft-ammonia-strategy-northern-ireland-consultation)> accessed 8 July 2024.

<sup>19</sup> DAERA, 'Draft Ammonia Strategy for Northern Ireland Consultation' (2023) 20 <[www.daera-ni.gov.uk/consultations/draft-ammonia-strategy-northern-ireland-consultation](https://www.daera-ni.gov.uk/consultations/draft-ammonia-strategy-northern-ireland-consultation)> accessed 8 July 2024.

for long periods of time in the atmosphere and be transported for long distances. It can react with other air pollutants like nitrogen dioxide and sulphur dioxide to form ammonium aerosols, which are precursors for secondary inorganic fine particulate matter ('PM'), specifically PM2.5 and PM10.

3.15 The World Health Organization's Air Quality and Health Unit states:

'PM is capable of penetrating deep into the lung[s] and enter[s] the bloodstream causing cardiovascular (ischaemic heart disease), cerebrovascular (stroke) and respiratory impacts. Both long-term and short-term exposure to particulate matter is associated with morbidity and mortality from cardiovascular and respiratory diseases. Long-term exposure has been further linked to adverse perinatal outcomes and lung cancer. In 2012, it was classified as a cause of lung cancer by WHO's International Agency for Research on Cancer'.<sup>20</sup>

3.16 Queen's University Belfast's 'Air Pollution and Mortality on the Island of Ireland 2023' report estimates that 'there were over 2,600 premature deaths across the island of Ireland associated with exposure to ambient PM2.5 air pollution in 2019 – over 900 in [Northern Ireland] and almost 1,700 in [the Republic of Ireland]'.<sup>21</sup>

3.17 DAERA's draft Ammonia Strategy attributes 97% of ammonia emissions to the agriculture sector.<sup>22</sup> If adopted, this strategy is intended to set targets for reducing the sector's ammonia emissions and a corresponding programme of reduction, mitigation and restoration measures.

***Pre-existing concerns regarding the Operational Protocol***

3.18 Prior to the OEP's investigation, excessive ammonia pollution and nitrogen deposition across Northern Ireland's protected sites, combined with some key judicial decisions (discussed at paragraphs 4.2 - 4.7), had already led planning authorities and the Department for Infrastructure to express concerns about the extent to which the thresholds set out in the Operational Protocol were compliant with environmental law.<sup>23</sup>

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<sup>20</sup> WHO, 'Air quality, energy and health: Types of pollutants' <[www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants](http://www.who.int/teams/environment-climate-change-and-health/air-quality-and-health/health-impacts/types-of-pollutants)> accessed 8 July 2024.

<sup>21</sup> Duncan McVicar and others, 'Air Pollution and Mortality on the Island of Ireland: Estimating Local All-Cause and Circulatory Mortality Burdens Associated with Fine Particulate Matter Pollution in Northern Ireland and the Republic of Ireland' (Queen's University Belfast, 2023) 7 <[pureadmin.qub.ac.uk/ws/portalfiles/portal/456933823/air\\_pollution\\_and\\_mortality\\_on\\_the\\_island\\_of\\_ireland\\_report.pdf](http://pureadmin.qub.ac.uk/ws/portalfiles/portal/456933823/air_pollution_and_mortality_on_the_island_of_ireland_report.pdf)> accessed 8 July 2024.

<sup>22</sup> DAERA, 'Draft Ammonia Strategy for Northern Ireland Consultation' (2023) 22 <[www.daera-ni.gov.uk/consultations/draft-ammonia-strategy-northern-ireland-consultation](http://www.daera-ni.gov.uk/consultations/draft-ammonia-strategy-northern-ireland-consultation)> accessed 8 July 2024.

<sup>23</sup> CM Reference AE1/23/989778 – Submission to Minister of Agriculture, Environment and Rural Affairs regarding decision on current application of DAERA Operational Protocol and provision of statutory advice on assessing air pollution impacts on priority habitats (21 May 2020) para 16.

3.19 Notably, the Shared Environmental Service ('SES')<sup>24</sup> implemented new internal guidance in May 2019 which conflicted with the Operational Protocol. This guidance instructed SES staff to carry out assessments under the Habitats Regulations based on reduced thresholds, whereby certain proposals would only be excluded from further assessment if they had a process contribution below 0.1% of a site's Critical Level, rather than 1%. It also reduced the 10% in-combination threshold, irrespective of whether a site was already in exceedance of its Critical Level, to 1%, meaning that any plans or projects predicted to exceed this threshold, alone or in-combination, would likely be considered to have an adverse effect on site integrity.

3.20 When giving evidence to the Committee for Agriculture, Environment and Rural Affairs ('AERA Committee') on 22 April 2021, the Head of Planning for Mid and East Antrim Borough Council, who also had direct responsibility for SES, explained that:

"In preparing that guidance, SES was influenced by recent case law in the Netherlands, which found that threshold levels for ammonia that were being treated as being insignificant were contrary to the Habitats Directive. The levels being treated as being insignificant in the Netherlands were considerably lower than the equivalent being applied in Northern Ireland. SES was also influenced by the fact that DAERA had previously advised that the critical levels of ammonia at which ecological damage occurs had already been exceeded at 98% of Northern Ireland's special areas of conservation".<sup>25</sup>

3.21 SES' guidance was withdrawn on 24 February 2020,<sup>26</sup> following the Ulster Farmers' Union ('UFU') seeking leave for judicial review to challenge its use. However, when asked by the AERA Committee, the same official denied that this was indicative of a lack of confidence in the guidance itself:

"The guidance was withdrawn because, at that time, we were given a commitment by the chief executive of NIEA that the updated operational protocol would be published in four to six weeks... Given the reassurance that we had been given by NIEA that its policy was going to be published in a matter of weeks and the fact that we knew that any judicial review would run into the hundreds of thousands of pounds of public money, I think that the correct decision was to reach

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<sup>24</sup> SES is a body jointly funded by council planning authorities in Northern Ireland to provide expert advice in relation to Habitats Regulations Assessments.

<sup>25</sup> AERA Committee, 'Official Report: Minutes of Evidence' (22 April 2021) <[www.daera-ni.gov.uk/consultations/draft-ammonia-strategy-northern-ireland-consultation](http://www.daera-ni.gov.uk/consultations/draft-ammonia-strategy-northern-ireland-consultation)> accessed 8 July 2024.

<sup>26</sup> CM Reference AE1/23/989735 – Email to DAERA from redacted source regarding SES' decision to withdraw its internal guidance (24 February 2020).

agreement with the Ulster Farmers' Union and not proceed, and that is what we did".<sup>27</sup>

- 3.22 SES and the planning authorities did not revert to providing advice in accordance with the Operational Protocol after SES' guidance was withdrawn. Instead, several Ministerial submissions provided to the OEP outline a new process that was submitted to the High Court in response to the withdrawal of UFU's legal challenge. Under this process, SES continued to assess the impact of ammonia-emitting applications on a case-by-case basis. If such an assessment could not rule out adverse effects on the integrity of the site concerned, yet conflicted with the conclusion that would have been reached by following the Operational Protocol, SES reconsulted with the NIEA. Such a consultation read:

'SES has prepared an Appropriate Assessment on behalf of a Planning Authority acting as a Competent Authority, see attached. The conclusion of the Appropriate Assessment is that the potential for an adverse effect on site integrity of one or more International Sites, as a result of this project, cannot be excluded such that no reasonable scientific doubt remains as to the absence of such effects. In the context of Regulation 43 of the Conservation (Natural Habitats, etc.) Regulations (Northern Ireland) 1995 SES is seeking the representation of NIEA in its role as Statutory Nature Conservation Body. Does NIEA agree with the findings of this Appropriate Assessment?'<sup>28</sup>

- 3.23 As planning authorities were explicitly reconsulting NIEA in its capacity as the SNCB under the Habitats Regulations, NIEA officials were placed in a difficult position. As to respond based on scientific evidence, which is required under the Regulations, would likely mean contradicting earlier planning advice given in accordance with the Operational Protocol. A letter sent from DAERA to the OEP on 7 August 2023 explained that direction was therefore sought from the DAERA Minister on three separate occasions between 21 May 2020 and February 2021. From the information that we received during our investigation, it is clear that no Ministerial direction was provided.
- 3.24 In a meeting with the OEP on 19 June 2023, NIEA officials confirmed that they did not consider themselves to be able to respond to these re-consultations in the absence of a new direction from the Minister. The former Minister had previously directed officials to continue using the Operational Protocol until a replacement had been developed.<sup>29</sup> As planning authorities

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<sup>27</sup> AERA Committee, 'Official Report: Minutes of Evidence' (22 April 2021) <[www.daera-ni.gov.uk/consultations/draft-ammonia-strategy-northern-ireland-consultation](http://www.daera-ni.gov.uk/consultations/draft-ammonia-strategy-northern-ireland-consultation)> accessed 8 July 2024.

<sup>28</sup> AERA Committee, 'Official Report: Minutes of Evidence' (22 April 2021) <[www.daera-ni.gov.uk/consultations/draft-ammonia-strategy-northern-ireland-consultation](http://www.daera-ni.gov.uk/consultations/draft-ammonia-strategy-northern-ireland-consultation)> accessed 8 July 2024.

<sup>29</sup> CM Reference AE1/23/991031 – Submission decision (SUB-1351-2020) regarding current application of DAERA statutory advice on assessing air pollution impacts on priority habitats (13 June 2020).

were not willing to progress applications until receiving a response from the NIEA,<sup>30</sup> this led to significant delays in the planning system once it transpired that the delivery of a revised operational protocol would be delayed.

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<sup>30</sup> CM Reference AE1/23/989768 – Submission to Minister of Agriculture, Environment and Rural Affairs regarding handling of planning reconsultations under the Habitats Regulations (16 October 2020) para 9.



# Analysis

## 4. Analysis

### ***The law on decision-making thresholds***

- 4.1 The use of thresholds to help decision makers determine when further assessment is required is not in itself problematic. Indeed, the exceedance of a threshold is not determinative, it simply requires that further assessment is undertaken to assess whether damage is likely (in the case of an ASSI) or, in the case of a European site, that it will not be possible to avoid adverse effects to site integrity.
- 4.2 Judgment handed down in the High Court of England and Wales has set out, in relation to assessments under The Conservation of Habitats and Species Regulations 2017, that where impacts are very low, they can be properly disregarded.<sup>31</sup> Nevertheless, in relation to European sites, decision makers must adopt a precautionary approach at each stage of the HRA process.<sup>32</sup> This means that at the screening stage the competent authority must proceed to an appropriate assessment if a risk of a significant effect on the European site cannot be excluded.<sup>33</sup> However, there must be credible evidence that the risk is real, rather than purely hypothetical.<sup>34</sup>
- 4.3 Case law sets out that such a judgement must be based on ‘logical and empirical’ evidence,<sup>35</sup> and must further demonstrate that those plans likely to be exempted using thresholds will not have an adverse effect on the integrity of the European sites concerned.<sup>36</sup> In the *Wealden* case, the Court found that the threshold used by the statutory consultee in the assessment of vehicle movements could not be supported on logical and empirical grounds and therefore effectively circumvented an appropriate assessment of the application in combination with other plans and projects in the area. The Court held that this had clearly breached the provisions of the Habitats Directive.
- 4.4 While the *Wealden* case is a case of the England and Wales High Court, it is likely to be persuasive authority for Courts in Northern Ireland that thresholds contained in the Operational Protocol (or any other guidance document published by a competent authority) must be based on logical and empirical evidence in order to comply with the Habitats Regulations.
- 4.5 The precautionary approach also applies post-screening stage, if the plan or project is subject to appropriate assessment. The assessment must be robust

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<sup>31</sup> *Wealden DC v SoS and Lewes DC* [2017] EWHC 351 (Admin).

<sup>32</sup> Case C-127/02 *Waddenzee* [2004] ECR I-7448 at [58].

<sup>33</sup> *Alternative A5 Alliance* [2013] NIQB 30.

<sup>34</sup> *Newry* [2015] NIQB 65 at [65-66].

<sup>35</sup> *Wealden DC v SoS and Lewes DC* [2017] EWHC 351 (Admin) at [101].

<sup>36</sup> Joined Cases C-293/17 and C-294/17 *Coöperatie Mobilisation for the Environment and Others (Dutch Nitrogen Ruling)* [2018] ECLI C-882 at [4].



and based on the best scientific evidence available. Where the competent authority is unable to rule out reasonable scientific doubt in respect of adverse effects on the European site, then it cannot approve the plan or project.

- 4.6 In *Waddenzee* the Court of Justice of the European Union ('CJEU') addressed the test to be applied when any decision is taken in reliance upon an appropriate assessment, setting out that:

'It is therefore apparent that the plan or project in question may be granted authorisation only on the condition that the competent national authorities are convinced that it will not adversely affect the integrity of the site concerned...where doubt remains as to the absence of adverse effects on the integrity of the site linked to the plan or project being considered, the competent authority will have to refuse authorisation'.<sup>37</sup>

- 4.7 Further case law from the CJEU, in interpreting the Habitats Directive, sets out that this precautionary approach means that there is little scope for competent authorities to permit a plan or project to proceed where the conservation status of a natural habitat is unfavourable. In those circumstances, 'the possibility of authorising activities which may subsequently affect the ecological situation of the sites concerned seems necessarily limited'.<sup>38</sup>

- 4.8 This concept is engaged in Northern Ireland in the context where the conservation status of European sites is unfavourable by virtue of widespread Critical Load/Level exceedance.

- 4.9 In summary, when determining if thresholds established by the Operational Protocol comply with environmental law for the purposes of the Habitats Regulations, the following tests apply:

- a) The precautionary approach applies in the assessment of applications.
- b) Thresholds are justifiable but there must be a clear rationale to ensure that any plans or projects which are excluded from assessment through the application of thresholds can be properly ignored.
- c) Screening thresholds cannot be applied 'blindly', so even where a very low threshold is set there must be scope in the screening process to consider other plans or projects which are under the threshold. This therefore ought to guard against any proliferation of plans or projects being screened out,

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<sup>37</sup> Case C-127/02 *Waddenzee* [2004] ECR I-7448 at [56].

<sup>38</sup> Joined Cases C-293/17 and C-294/17 *Coöperatie Mobilisation for the Environment and Others (Dutch Nitrogen Ruling)* [2018] ECLI C-882 at [103].

as each individually is beneath the threshold, but cumulatively, an assessment of the polluting effects of each ‘in-combination’ with the others would mean that adverse effects from their emitting qualities could not be ruled out. This is also in accordance with the CJEU’s decision in the Dutch Nitrogen case and means there must be no reasonable scientific doubt that plans or projects falling under thresholds and therefore excluded will have no adverse effect.

- d) The Dutch Nitrogen ruling also establishes that where the conservation status of European sites is already unfavourable, approving subsequent plans or projects which will contribute further nutrient loading will be ‘necessarily limited’.

4.10 In relation to the Environment Order, DAERA must designate an ASSI if land is of special scientific interest due to its environmental features. Where an ASSI is potentially affected by a proposal, article 40 requires permission of a public body to be granted before any operations ‘likely to damage’ the features for which the site has been designated can be carried out. As outlined above, thresholds can be used in general and can therefore also be applied on an initial basis to determine whether a proposal is likely to damage the ASSI in question.

4.11 Whilst decision-makers have more discretion with decisions affecting ASSIs than they do in relation to European sites, a precautionary approach is still appropriate in early assessment stages to ensure that any relevant proposals are progressed for more detailed consideration.<sup>39</sup>

### ***Review of the Operational Protocol***

4.12 To inform our investigation in light of the legal principles set out above, we requested information from DAERA and the NIEA by letter of 18 May 2023. DAERA responded on 7 August 2023, providing us with materials concerning its use of the Operational Protocol. This information revealed that, in May 2019, DAERA had been made aware that the thresholds within the Operational Protocol most likely were not consistent with DAERA’s legal obligations under the Habitats Regulations.

4.13 Turning firstly to the 1% threshold, in May 2019 DTA Ecology (‘DTA’) provided a report to DAERA entitled ‘Review of Current Operational Policy and Recommendations on a Revised Policy’. At section 3.2 the authors explained in some detail the requirements from the relevant case law concerning the setting of a threshold. In section 4 the authors provided an analysis of the Operational Protocol in light of that case law. In doing so, DTA concluded that ‘given the credible evidence for a risk of proliferation within the agricultural

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<sup>39</sup> JNCC, ‘Main Report: Guidance on Decision-making Thresholds for Air Pollution’ (2021) 5 <[hub.jncc.gov.uk/assets/6cce4f2e-e481-4ec2-b369-2b4026c88447](https://hub.jncc.gov.uk/assets/6cce4f2e-e481-4ec2-b369-2b4026c88447)> accessed 8 July 2024.

sectors it is considered inherently unlikely that the blanket use of the 1% can be supported on logical and empirical grounds'.<sup>40</sup>

- 4.14 By way of example, DTA analysed data from a register of applications for agricultural development within 7.5km of a protected site. This register is maintained by the NIEA and records the process contribution from proposals which have been permitted since 1 January 2012. When considering sources which contribute, individually, less than the 1% threshold, DTA's analysis found that for each site the relative contribution from such sources equated to between 13-47% of the permitted increases in ammonia pollution since 2012.<sup>41</sup> Despite this, these developments, and their combined contribution, were screened out without further assessment by the application of the Operational Protocol.
- 4.15 Consequently, the blanket application of the Operational Protocol, and the ensuing failure to recognise the creeping cumulative impact from proposals which fell beneath the 1% threshold, clearly failed to guard against a proliferation of developments which, in-combination, could otherwise have adverse effects or be likely to damage protected sites. In the words of the High Court in the *Wealden* decision, its application 'removed the premise of the HRA – that a cumulative assessment is required – and brought about a clear breach of Article 6(3) of the Habitats Directive'.<sup>42</sup>
- 4.16 The Operational Protocol also stated that even developments with a process contribution exceeding 1% could be considered not to have adverse effects, or be likely to cause damage, where the combined contribution of proposals (granted consent after January 2012) had not yet exceeded 10% of a site's Critical Level. This was true even where the Critical Level had already been exceeded by existing background emissions.
- 4.17 DTA's May 2019 report also considered that, in the absence of further explanation, the blanket application of this 10% threshold could not be supported on logical and empirical grounds. Specifically:

'The application of a generic effect threshold without the need to take account of the scale of the existing critical load / level exceedance, the distribution and relative importance of the habitats which might be affected in view of the ability of the site to make a full contribution to the achievement of favourable conservation status, does not appear to be supported on logical or empirical grounds'.<sup>43</sup>

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<sup>40</sup> CM Reference AE1/23/989782 – DTA, 'Contract for HRA Advice on Development of Ammonia Road Map and Revision of Operational Policy' (1 May 2019) 4.2.7.

<sup>41</sup> CM Reference AE1/23/989782 – DTA, 'Contract for HRA Advice on Development of Ammonia Road Map and Revision of Operational Policy' (1 May 2019) 4.4.1.

<sup>42</sup> *Wealden DC v SoS and Lewes DC* (2017) EWHC 351 (Admin) [112].

<sup>43</sup> CM Reference AE1/23/989782 – DTA, 'Contract for HRA Advice on Development of Ammonia Road Map and Revision of Operational Policy' (1 May 2019) 4.3.2.

- 4.18 In other words, as most European sites and ASSIs exceed their Critical Levels/Loads in Northern Ireland, and this 10% threshold was being applied irrespective of any recognition of the damage caused by such exceedance, no clear rationale could be provided to demonstrate why proposals excluded by the threshold would not have an adverse effect or be likely to damage the sites concerned.
- 4.19 At no stage in our investigation, or in any of the material provided to us, has DAERA sought to provide an explanation for, or otherwise justify the legality of, either threshold set out in the Operational Protocol. Indeed, DAERA provided the OEP with a memo from the then Chief Executive of the NIEA, dated 11 December 2019, addressed to the Deputy Secretaries and Permanent Secretary of DAERA concerning options to replace the Operational Protocol.<sup>44</sup> After analysing the case law, it stated as follows at paragraphs 11 and 12:

‘The 2012 protocol sets thresholds which:

- a) are not supported by clear evidence that would enable a competent authority to conclude that there will be no adverse effect;
- b) apply “blindly”; and
- c) in light of factual evidence of the increasing levels of ammonia emissions and critical load exceedance in Northern Ireland as well as the emerging scientific evidence on environmental impacts from ammonia/nitrogen, make it unlikely there can be no reasonable scientific doubt that plans and projects falling within the thresholds in the protocol will have no adverse effect.

Therefore, there is a high risk that decisions based on the 2012 protocol will be subject to successful legal challenge.’

- 4.20 Following an analysis of all the available evidence, we are therefore in agreement with the conclusions drawn by DTA in its May 2019 report. The Operational Protocol provided advice, underpinned by thresholds which were applied blindly and did not accord with the precautionary principle, in that they were not supported by logical and empirical evidence which would enable a competent authority to exclude the likelihood of damage or adverse effects on a given European site or ASSI.

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<sup>44</sup> CM Reference AE1/23/989787 – Memo to Deputy Secretaries and Permanent Secretary of DAERA regarding the consideration of options to replace the Operational Protocol for assessment of air pollution impacts (11 December 2019).

- 4.21 While responsibility for making planning decisions and issuing industrial consents sits with the relevant competent authority, DAERA nevertheless needed to ensure that any standing advice accurately explained what was required for decision makers to assess applications in compliance with their legal obligations. Not doing so represented a serious failure to comply with both the Habitats Regulations and the Environment Order.

***Pause, reinstatement and cessation of the Operational Protocol***

- 4.22 Having drawn these conclusions, we noted that the NIEA had already written to the Heads of Planning at all council planning authorities at the end of May 2023 to advise them that a decision had been taken to pause the issuing of ammonia planning advice pending further consideration of use of the Operational Protocol.<sup>45</sup>
- 4.23 As the issuing of PPC farm permits and variations had already been placed on hold pending further advice from the former Minister,<sup>46</sup> this pause meant that any risk to the environment caused by competent authorities making decisions based on advice based on the Operational Protocol was reduced. DAERA subsequently launched a Call for Evidence on a revised Operational Protocol on 21 July 2023, which the OEP responded to on 22 September 2023.
- 4.24 The NIEA subsequently wrote to the OEP on 29 September 2023, advising that it was resuming offering advice based on the Operational Protocol. This decision was taken notwithstanding the fact the investigation was live and we were, as outlined above, in receipt of information from DAERA which confirmed that there was no rational or scientific basis for the thresholds that were being relied upon and that the extant Operational Protocol was therefore unlikely to comply with environmental law.
- 4.25 In response to our request for an explanation, the NIEA wrote to us on 13 October 2023. It referenced the Northern Ireland (Executive Formation etc) Act 2022, as amended by the Northern Ireland (Interim Arrangements) Act 2023, and explained:

‘NIEA has determined that there is not sufficient additional information or evidence, that wasn’t already available to the Minister when he gave instructions for officials to continue to apply the Operational Protocol, to make a new decision that would change or set aside the policy/instructions set out by the former Minister’.

- 4.26 Concerned about the potential for serious damage to the natural environment which the use of the Operational Protocol posed, we sent judicial review pre-

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<sup>45</sup> CM Reference AE1/23/990996 – Draft letter to planning authorities regarding the pausing of advice on agricultural consultations (May 2023).

<sup>46</sup> CM Reference AE1/23/991788 – First day briefing for DAERA Permanent Secretary (April 2022) 24.

action correspondence regarding DAERA and the NIEA's decision of 29 September 2023. In our correspondence, we sought an immediate end to the provision of ammonia planning advice to all planning authorities based on the Operational Protocol, until such time as revised and legally compliant guidance had been adopted.

- 4.27 On 18 December 2023, the OEP received confirmation via letter from the Departmental Solicitor's Office<sup>47</sup> that DAERA had directed the NIEA to cease providing advice based on the Operational Protocol. Instead, the NIEA would adopt a new assessment approach – the Interim Framework – which would provide applicants and competent authorities with case and site-specific advice on an interim basis, until an updated operational protocol could be approved by the DAERA Minister. On that basis we decided it was no longer necessary to pursue judicial review of DAERA's decision of 29 September to resume providing advice based on the Operational Protocol.

### ***Interim Air Pollution Decision and Advisory Framework***

- 4.28 For the purposes of our investigation, the most relevant elements of the Interim Framework can be divided into three categories:
- a) **Application of De-minimis Thresholds:** A de minimis effect can be described as 'inconsequential', 'nugatory' or 'trivial'. All such terms are synonymous and are used to describe process contributions which can be properly ignored as they are not likely to cause damage or risk adverse effects irrespective of other considerations. DAERA's 2012 Operational Protocol set this figure at 1% of the Critical Level for European sites and ASSIs, meaning that where the process contribution of a proposal 'alone' is below this, no further air quality assessment is required. The Interim Framework reduces this threshold to 0.08%.
  - b) **Application of Site Relevant Thresholds (SRTs):** De minimis thresholds are derived on a worst-case scenario, meaning there are some situations in which they will be overly precautionary. Where site-based information can support such a view (e.g. where the site in question is inherently less sensitive to air quality, or subject to lower levels of development pressure), the Interim Framework allows for competent authorities to apply a less restrictive Site Relevant Threshold ('SRT'). The SRT can be identified by taking account of the characteristics and specific environmental conditions at the site concerned, with the Interim Framework focussing on development pressure (i.e. the likelihood of other proposals coming forward over a given period of time). Therefore, whilst the 0.08% threshold must continue to be used in 'high' development pressure scenarios, this can be raised to either 0.20% ('medium'), 0.34% ('low') or 0.75% ('very low') depending on the individual site in question.

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<sup>47</sup> The legal representatives instructed by DAERA/NIEA in this matter

- c) **In-combination Assessment:** Regulation 43 of the Habitats Regulations requires an assessment to be undertaken either alone or in-combination with other plans and projects. Assessments in respect of ASSIs will also need to take account of cumulative impacts.<sup>48</sup> Therefore, if the process contribution of a proposal ‘alone’ exceeds the de minimis threshold and SRTs, an in-combination assessment is required to assess the effects from other proposals which could combine with the effect of the proposal. A threshold may equally be applied to in-combination assessments, subject to the tests set out at paragraph 4.9. The Operational Protocol set a threshold at 10% of the Critical Level, even where protected sites were already in exceedance of their Critical Level. The Interim Framework reduces this to 1%, with only proposals that exceeded the de minimis threshold and SRTs included in such an assessment. Moreover, the use of any threshold within the Interim Framework is excluded for sites with an existing exceedance of Critical Level/Loads where there is evidence of an impending risk of extinction (due to air pollution) of a species that forms an important part of the qualifying feature.

- 4.29 Following DAERA’s letter of 18 December 2023, we requested further information from the NIEA to facilitate an analysis of the Interim Framework. We also met with DAERA and NIEA officials on 30 January 2024, in which the latter provided a breakdown of the Interim Framework and the scientific evidence underpinning its development. On 15 April 2024, the NIEA sent us a guidance document designed to assist its staff in the application of the Interim Framework.<sup>49</sup>
- 4.30 In our view, this evidence demonstrates that the Interim Framework has been developed in a way that is sufficiently consistent with the Joint Nature Conservation Committee’s (‘JNCC’) ‘Guidance on Decision-making Thresholds for Air Pollution’ report (‘DMT Report’)<sup>50</sup> to be supported on logical and empirical grounds. This report was commissioned by JNCC on behalf of the Inter-agency Air Pollution Group<sup>51</sup> and Defra, and defines a magnitude of change in ammonia emissions, over a period of time, for which there is no credible evidence of a real risk that the ability to achieve conservation objectives for ammonia will be undermined. This provides an evidence base which can be relied upon for setting thresholds which will only exclude proposals from further assessment which will be of no ecological consequence, and therefore not be likely to damage or cause adverse effects to protected sites even where those sites are in exceedance.

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<sup>48</sup> JNCC, ‘Main Report: Guidance on Decision-making Thresholds for Air Pollution’ (2021) 6 <[hub.jncc.gov.uk/assets/6ccea4f2e-e481-4ec2-b369-2b4026c88447](https://hub.jncc.gov.uk/assets/6ccea4f2e-e481-4ec2-b369-2b4026c88447)> accessed 8 July 2024.

<sup>49</sup> NIEA, ‘Draft Air Pollution Decision and Advisory Framework: Assessing the Impact of Air Pollution on the Designated Site Network’ (unpublished, 2024).

<sup>50</sup> JNCC, ‘Main Report: Guidance on Decision-making Thresholds for Air Pollution’ (2021) <[hub.jncc.gov.uk/assets/6ccea4f2e-e481-4ec2-b369-2b4026c88447](https://hub.jncc.gov.uk/assets/6ccea4f2e-e481-4ec2-b369-2b4026c88447)> accessed 8 July 2024.

<sup>51</sup> To support harmonisation and evidence sharing across the UK on air pollution, JNCC coordinates an inter-agency Air Pollution Group, consisting of representatives from JNCC and all UK country nature conservation bodies.

- 4.31 Starting with the de minimis threshold, the DMT Report identifies 0.08% as an appropriate threshold value which can be applied to all decisions for on-site emission sources.<sup>52</sup> This is based on an assessment, carried out in advance, which models the combined effects of numerous individual proposals to ensure that the cumulative effects of developments excluded from further assessment will not, over a period of time, undermine the achievement of a site's conservation objectives. Further details of this modelling can be found in a supporting Technical Report produced by Air Quality Consultants,<sup>53</sup> which provides the full underlying evidence base for the approaches set out in the DMT Report.
- 4.32 Similarly, the DMT Report provides a clear rationale for the use of SRTs where a de minimis threshold has been exceeded. It acknowledges that the latter is derived on a precautionary basis, which assumes a high development pressure and a large number of proposals whose cumulative effects might, over time, be excluded from further assessment by the application of a threshold. Therefore, where site-based information is available to support a view that 0.08% is overly precautionary, the authors state that it is possible to apply an SRT.<sup>54</sup> Section 4.2 of the DMT Report sets out a series of SRTs based on development pressure. The fact that these same values are reflected in DAERA's Interim Framework – the guidance document which references section 4.2 of the DMT Report<sup>55</sup> – provides us with sufficient assurance that this element of DAERA's advice can also be supported on logical and empirical grounds.
- 4.33 Finally, in relation to in combination thresholds, we are similarly assured by the approach set out in the Interim Framework. Previously, the Operational Protocol's blanket 10% threshold could not be rationalised because it was being applied irrespective of any recognition of the damage caused by existing Critical Load/Level exceedance at protected sites. This is no longer the case, with the Interim Framework establishing several 'exception scenarios' whereby thresholds do not apply if a site is in exceedance and certain conditions are met. For example, where there is evidence of an impending risk of extinction of a species that forms an important part of the qualifying feature. These scenarios are mirrored in section 3.2 of the DMT Report.

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<sup>52</sup> JNCC, 'Main Report: Guidance on Decision-making Thresholds for Air Pollution' (2021) 13 <[hub.jncc.gov.uk/assets/6cce4f2e-e481-4ec2-b369-2b4026c88447](https://hub.jncc.gov.uk/assets/6cce4f2e-e481-4ec2-b369-2b4026c88447)> accessed 8 July 2024.

<sup>53</sup> JNCC, 'Technical Report: Decision-making Thresholds for Air Pollution' (2021) <[data.jncc.gov.uk/data/6cce4f2e-e481-4ec2-b369-2b4026c88447/JNCC-Report-696-Technical-FINAL-WEB.pdf](https://data.jncc.gov.uk/data/6cce4f2e-e481-4ec2-b369-2b4026c88447/JNCC-Report-696-Technical-FINAL-WEB.pdf)> accessed 8 July 2024.

<sup>54</sup> JNCC, 'Main Report: Guidance on Decision-making Thresholds for Air Pollution' (2021) 14-17 <[hub.jncc.gov.uk/assets/6cce4f2e-e481-4ec2-b369-2b4026c88447](https://hub.jncc.gov.uk/assets/6cce4f2e-e481-4ec2-b369-2b4026c88447)> accessed 8 July 2024.

<sup>55</sup> NIEA, 'Draft Air Pollution Decision and Advisory Framework: Assessing the Impact of Air Pollution on the Designated Site Network' (unpublished, 2024) 25.



4.34 These exceptions will not apply every time a site is in exceedance. However, while the Dutch Nitrogen case refers to approvals against a background of unfavourable environmental conditions being ‘necessarily limited’, this is not an absolute prohibition. The DMT Report recommends taking a purposive approach in the interpretation and application of the in combination assessment requirements set out under the Habitats Directive, particularly where air quality assessments are concerned.<sup>56</sup> With this in mind, we are content that the reduction of the 10% threshold to 1% under the Interim Framework strikes an acceptable balance against having a logical and empirical scientific basis to consider proposals on an interim basis while a final revised operational protocol is being developed.

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<sup>56</sup> JNCC, ‘Main Report: Guidance on Decision-making Thresholds for Air Pollution’ (2021) 29 <[hub.jncc.gov.uk/assets/6cce4f2e-e481-4ec2-b369-2b4026c88447](https://hub.jncc.gov.uk/assets/6cce4f2e-e481-4ec2-b369-2b4026c88447)> accessed 8 July 2024.



# **Findings and recommendations**

## Findings and recommendations

- 5.1. The previous Operational Protocol was developed in 2012. Throughout our investigation, DAERA and NIEA officials have maintained that, at the time of development it reflected all relevant UK wide guidance and was comparatively strict when considered against the thresholds adopted by other UK conservation bodies.
- 5.2. However, since 2012 the body of scientific evidence on the impact of air pollution on protected sites has greatly increased, as has the size and intensification of the agricultural sector. It is no longer possible to question whether existing levels of ammonia across Northern Ireland represent a threat to the integrity of protected sites.<sup>57</sup>
- 5.3. As a result, it is clear from the material provided by DAERA that there is no longer a clear rationale or scientific basis for the thresholds that were set out in the Operational Protocol. We therefore conclude that DAERA's use of the Operational Protocol failed to comply with environmental law; through failing to comply with its obligations under regulation 3 of The Conservation (Natural Habitats, etc.) Regulations (Northern Ireland) 1995 in relation to the protection of European sites, and article 38 of the Environment (Northern Ireland) Order 2002 regarding ASSIs.
- 5.4. Whilst it is difficult to pinpoint the exact moment at which this failure began, the existence of DTA's review of the Operational Protocol demonstrates that DAERA has been aware of this risk since at least May 2019.
- 5.5. In providing advice in accordance with the Operational Protocol, DAERA risked exposing Northern Ireland's protected sites, which were already subject to excessive levels of ammonia pollution, to further damage from decisions to approve planning applications and other industrial consents.
- 5.6. In contrast, following our analysis of the Interim Framework, and its supporting documents, we are sufficiently assured that DAERA's current approach to providing advice can be supported on logical and empirical grounds. We are therefore of the view that the provision of advice to competent authorities in accordance with the Interim Framework does not constitute a failure to comply with environmental law.
- 5.7. With a future operational protocol currently being developed and anticipated for publication alongside an Ammonia Strategy later this year,<sup>58</sup> we note the

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<sup>57</sup> CM Reference AE1/23/989/782 – DTA, 'Contract for HRA Advice on Development of Ammonia Road Map and Revision of Operational Policy' (1 May 2019) 5.1.3.

<sup>58</sup> Northern Ireland Assembly Deb 17 June 2024, vol 161, No 3, p 20.

DAERA Minister's commitment to ensuring future advice remains "evidence-based and capable of ensuring full compliance with environmental law".<sup>59</sup> Any revised operational protocol must reflect this commitment and should therefore be supported on logical and empirical grounds.

5.8. Regarding the Interim Framework that is currently in use, we make three further recommendations. These recommendations should also be considered in the development of any future operational protocol which replaces the Interim Framework:

**Recommendation 1:** In relation to European sites, the guidance document underpinning the Interim Framework would benefit from more clearly explaining the distinction between mitigation measures and compensatory measures when setting out how mitigation measures should be considered at the detailed assessment stage.

**Recommendation 2:** It would also be beneficial for there to be an explanation to the effect that it is only in instances of imperative reasons of overriding public interest that a plan or project can be approved where the assessment concludes that adverse effects on the integrity of the site cannot be excluded.

**Recommendation 3:** Where assessments rely upon national initiatives aimed at delivering an overall reducing emissions trend, or spatially targeted measures designed to deliver reductions around specific sites, care must be taken to ensure such measures and initiatives have been secured and are legally certain at the time of assessment.

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<sup>59</sup> Northern Ireland Assembly Deb 19 February 2024, vol 154, No 1, p 38.



# Annex

## Annex: Glossary

| Term  | Description  |
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| <b>Ammonia</b>                                    | Ammonia is a pungent, colourless gas which is formed from the biological and chemical breakdown of organic matter, such as animal waste from farming. Once ammonia has been formed, it can travel through the air in the direction of the prevailing wind and can be added to the land through the process of nitrogen deposition. This can occur either through the 'dry deposition' of nitrogen compounds, including ammonia, relatively close to the source of the ammonia, or by 'wet deposition' in rainfall, which can be carried much further away from the original ammonia source.  |
| <b>Appropriate Assessment</b>                     | A Habitats Regulations Assessment (HRA) must be undertaken in accordance with The Conservation (Natural Habitats, etc.) Regulations (Northern Ireland) 1995 to determine if a plan or project has the potential to affect the qualifying features of a European site. The Appropriate Assessment is Stage 2 of the HRA, following Stage 1 (Test of Likely Significance), which focuses exclusively on the qualifying features of the European site and conservation objectives for those features. A plan or project not directly connected with or necessary to the management of a European site can only be authorised if it can be ascertained that it will not adversely affect the integrity of any European site, unless there are no alternative solutions, it can be shown that the plan or project is necessary for 'imperative reasons of overriding public interest' and compensatory measures will be taken to maintain the overall coherence of the European site network. |
| <b>Area of Special Scientific Interest (ASSI)</b> | ASSIs provide statutory protection for the best examples of Northern Ireland's flora, fauna, geological or physiographical features under The Environment (Northern Ireland) Order 2002.   |
| <b>Assessment in Advance</b>                      | An assessment carried out in advance for the purpose of: i) examining the cumulative effects of nitrogen deposition on designated sites, and ii) determining decision making thresholds.   |
| <b>Competent Authority</b>                        | Includes government departments, district councils and statutory undertakers, and any trustees, commissioners, board or other persons who, as a public body and not for their own profit, act under any statutory provision for the improvement of any place or the production or supply of any commodity or service.  |
| <b>Critical Level</b>                             | Estimate of the concentration of pollutants in the atmosphere above which direct adverse effects on receptors such as plants and ecosystems may occur. Expressed in units of atmospheric nitrogen, micrograms of pollutant per cubic metre ( $\mu\text{g}/\text{m}^3$ ).   |
| <b>Critical Load</b>                              | Estimate of exposure, in the form of deposition, of one or more pollutants, above which direct adverse effects on receptors such as plants and ecosystems may occur. Expressed in units of kilograms of nitrogen deposited per hectare per year ( $\text{kg}/\text{ha}/\text{year}$ ).   |
| <b>Deposition</b>                                 | The transfer of a pollutant carried in the atmosphere to the biosphere i.e. where a pollutant settles onto a surface (vegetation or the ground).   |
| <b>Exceedance</b>                                 | Where the concentration of a pollutant is greater than the Critical Level or the annual deposition of nitrogen per hectare is greater than the Critical Load.  |

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| <b>In-combination Assessment</b>  | A formal assessment of the effects of 'other plans and projects' which are relevant at the point at which a specific plan or project is subject to assessment.  |
| <b>Mitigation Measure</b>   | A measure which is intended to avoid or reduce harmful effects upon a protected site.   |
| <b>Nitrogen</b>   | Reactive atmospheric forms of nitrogen e.g. nitric oxide and nitrogen dioxide (collectively referred to as NO <sub>x</sub> ) and ammonia, rather than molecular nitrogen (N <sub>2</sub> ).   |
| <b>On-site Emissions</b>  | Emissions released directly from a specific location, typically a development site where emissions are produced or used (as distinct from emissions from road traffic generated by a project)   |
| <b>Process Contribution</b>   | The additional nitrogen loading to the site as a result of the plan or project.   |
| <b>Protected Site</b>   | In this report, protected site means: <ul style="list-style-type: none"> <li>• Areas of Special Scientific Interest (ASSIs) designated under The Environment (Northern Ireland) Order 2002</li> <li>• Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) designated under The Conservation (Natural Habitats, etc.) Regulations (Northern Ireland) 1995.</li> </ul> |
| <b>Screening Threshold</b>  | Thresholds that are used to define limits of ammonia concentrations or nitrogen deposition below which the effects of a plan or project are not considered significant, either alone or in-combination with other plans and projects. Contributions of a project or plan above the threshold may require further investigation.   |
| <b>Special Area of Conservation (SAC) and Special Protection Area (SPA)</b> | In relation to Northern Ireland, protected areas of habitat designated under Regulations 6 and 8A respectively of The Conservation (Natural Habitats, etc.) Regulations (Northern Ireland) 1995.  |
| <b>Zone of Influence (Zoi)</b>  | A specific distance beyond which it is unlikely that a particular emission source would have harmful impacts on a sensitive habitat. The Zoi approach is used to enable competent authorities to safely exclude proposals from further environmental assessment for a particular pollutant. The Zoi differs depending on the proposal type/size etc.                                      |