29 January 2009

Your ref: HRA_CRoW NVZv1

Our ref: 09/10-138

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Dear Bethany

Assessment for applications for use of the Nitrate Vulnerable Zone derogation from the Livestock Manure Nitrogen Farm Limit

Thank you for your letter of 7th January in which you formally consult Natural England on the Habitats Regulations Assessment (HRA) and the Countryside and Rights of Way Act (CRoW) 2000 Assessment for use of the Nitrate Vulnerable Zone (NVZ) derogation from the Livestock Manure Nitrogen (LMN) Farm Limit.

Natural England is seriously concerned about the adverse impacts of eutrophication of both fresh and marine waters, particularly in designated sites, by nitrogen (N) from point and diffuse sources. For this reason, Natural England supported the reduction to 170kg/ha for organic manure in NVZs and we strongly support any measures or initiatives designed to drive levels of N pollution down to assist ecological improvement.

You will be aware from information gathered by the Environment Agency and Natural England during the Review of Consents process that a number of marine Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) have been identified as being adversely impacted by eutrophication to which agriculture contributes sources of N (these are attached to this letter as appendix 1).

In addition, there is well documented evidence (e.g. James et al, 2003) that N is a limiting nutrient in several of the Site of Special Scientific Interest (SSSI) lakes in the Meres and Mosses in the North West of England, some with (SAC) or Ramsar status. Natural England is of the view that reducing the input of N across the catchments of the water bodies listed in appendix 2, would promote their recovery toward favourable condition.

In the case of the marine Natura 2000 sites, Defra has requested an implementation plan to address all risks to the achievement of favourable conservation status. That plan identifies NVZs as a tool in addressing europhication concerns.

Issuing a derogation to apply up to 250 Kg LMN/ ha on farms within the catchments of these freshwater and marine sites has the potential to delay the recovery of these sites from eutrophication impacts and hence achievement of favourable condition.

James, C., Fisher, J., Moss, B. (2003). Nitrogen driven lakes: The Shropshire and Cheshire Meres: Arch. Hydrobiol. 158(2) 249–266.

Although conclusive evidence may not be available at present to determine that allowing individual derogations of 250 kg N/ha would have a clear Adverse Effect on Integrity (AEOI), the Habitats Regulations require a precautionary approach to be adopted. However, we recognise that the significance of this information, held by both organisations, has not been highlighted through the consultation process until now. We also acknowledge the limitations of the current assessment process, namely:

- (1) The difficulty in determining risks to site integrity from individual applications within these catchments.
- (2) The requirement under any 'in combination' assessment to consider all the nutrient input pathways across the catchments.
- (3) Whilst the precautionary principle could lead to a conclusion of 'can't conclude no AEOI', we recognise that refusing a derogation on this basis for an individual applicant for one year only would need to be supported with a robust evidence case, which both the Environment Agency and Natural England need more time to properly consider.

We recognise that any derogation would be for 2010 only, thus the adverse effects of a single-season derogation are likely to be limited. We acknowledge the reasons given in the HRA for the Environment Agency considering that the scale or magnitude of the effects of the derogation will not be significant, alone or in combination. In particular, we understand that the more stringent conditions on farming practices imposed on derogation applicants, is intended to ensure that nutrient application is more effectively managed on these farms than would otherwise be the 'norm'.

You have also stated in your CRoW assessment, that the risk maps that farmers in NVZs have to produce must show areas where they are not allowed to spread organic manure for reasons such as SSSIs or agri-environment agreements and that a land-owner or occupier must give Natural England written notice before beginning any of the operations listed in the notification, or before allowing someone else to carry out these activities.

Therefore, taking all these issues into account, we suggest a risk-based approach is adopted for the 2010 application round as follows:

- Any applications for derogation that are received by Defra or the Environment Agency for farm holdings within the catchments of the sites identified in appendix 1 and 2, will result in the details of the holding being passed to the relevant regional leads in Natural England.
- In those sites we would expect to work with the Environment Agency to understand
 the consequences of derogations in combination for site integrity, and in the case of
 marine sites for consistency with the implementation plan required by Defra. The
 modelling programme undertaken by Environment Agency to inform actions to
 address diffuse pollution affecting SSSIs under the England Catchment Sensitive
 Farming Delivery Initiative may be an important part of this process.
- These catchments should also be included in the monitoring programme to gather evidence required by the EU for assessment of the derogation process.

Following this year's round of applications for derogations, we advise that an assessment of the *potential* for AEOI on international, or adverse effect on SSSI interest features be carried out, prior to the derogation process being put in place for next year. Then, if necessary, a screening and subsequent assessment process can be introduced.

I believe that the above is a fair reflection of our informal discussions to date and provides clear advice on a way forward for this year. If you would like to discuss any of the issues raised in this note in more detail then please contact Glen Cooper on 0300 060 4063 or at glen.cooper@naturalengland.org.uk.

Yours sincerely

Rob Cooke

Director Environmental Advice and Analysis

Appendix 1 - List of SACs and SPAs impacted by eutrophication identified through EA Review of Consents Process:

- Solent Maritime SAC
- Solent and Southampton Water SPA
- Chichester and Langstone Harbour SPA
- Portsmouth Harbour SPA
- Lindisfarne SPA
- Teesmouth and Cleveland SPA
- Poole Harbour SPA
- Chesil and the Fleet SAC
- Fal and Helford SAC
- Morecambe Bay SAC

Appendix 2 - SSSI catchments in the Meres and Mosses Natural Area where Natural England has requested that EA advise Natural England of NVZ derogation applications

SSSI Name	Catchment area (ha)
Fenns and Whixall Moss cSAC	2275
Oak Mere cSAC	253
Abbots Moss cSAC	N/Area
Clarepool Moss cSAC	52
Wybunbury Moss cSAC	46
Brown Moss cSAC	90
Aqualate Mere Ramsar site	6227
Berrington Pool Ramsar site	56
Betley Mere Ramsar site	500
Bomere, Shomere & Betton Pools, Ramsar site	117
Chapel Mere Ramsar, Norbury Meres and Bar Mere SSSI	1915
Cole Mere and White Mere Ramsar sites	451
Cop Mere Ramsar site	1401
Fenemere Ramsar site	1117
Hatch Mere and Flaxmere Ramsar site	359
Marton Pool Ramsar site	513
Morton Pool & Pasture Ramsar site	98
Quoisley Meres Ramsar site	136
Rostherne Mere and The Mere, Mere Ramsar site and	1749
Tabley Mere SSSI	
Sweat Mere & Crose Mere Ramsar site	534
Tatton Meres Ramsar site	N/A
Ossmere Ramsar and Combermere SSSI	947
Maer Pool SSSI	181
Shrawardine Pool SSSI	64

NB All SACs are also Ramsar sites; all SACs and Ramsar sites are also SSSI.

Bold – catchment area presented as combined figure for 2 or 3 adjoining SSSI catchments