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Water Division
Scottish Executive
Area 1H
Victoria Quay
Edinburgh
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By email: waterdivision@scotland.gsi.gov.uk

Dear Sir/Madam

DIFFUSE WATER POLLUTION FROM RURAL LAND USE

Thank you for providing the Scottish Environment Protection Agency (SEPA) with the opportunity to comment on the above consultation document.

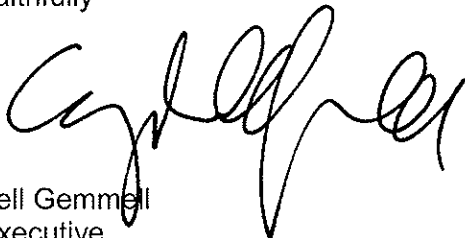
SEPA welcomes the Executive's proposed strategy for tackling diffuse water pollution from rural land use. Diffuse pollution, particularly arising from land used for agricultural production, has clearly been shown by SEPA to be a major pressure on Scotland's water environment.

Currently, Scotland lacks a comprehensive and effective approach to the protection of the water environment from diffuse pollution. Such a system is essential if the impact of diffuse source pollution on the quality of Scotland's water is to be addressed and the objectives of the Water Framework Directive met. SEPA therefore considers that it is essential that a strategy to address diffuse pollution be developed now so as to allow measures to be identified and put in place under the timetable set for river basin management planning.

Our detailed response to the consultation questions is given in the attached Annex.

As a public body committed to openness and transparency, SEPA feels it is appropriate that this response be placed on the public record. If you require further clarification on any aspect of this correspondence, please contact Rob Morris, Land Unit Manager, SEPA Corporate Office, at the address shown below.

Yours faithfully



Campbell Gemmell
Chief Executive

Enc



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ANNEX

SCOTTISH ENVIRONMENT PROTECTION AGENCY (SEPA) RESPONSE TO THE SCOTTISH EXECUTIVE DIFFUSE WATER POLLUTION FROM RURAL LAND USE CONSULTATION

1. Introduction

- 1.1 SEPA strongly support the proposals for a combination of simple, targeted and risk-proportionate regulatory controls supported and complemented by incentives, guidance and advice. We also recognise that if the approach is to be successful in addressing diffuse water pollution, it is important that unnecessary regulatory burdens are avoided, for both farmers and regulators alike.
- 1.2 SEPA also believes that the introduction of such a regime is necessary at this time to enable SEPA to prepare the river basin management plans required by the Water Framework Directive (WFD). Draft river basin management plans have to be published for consultation at the end of 2008. These plans must include the environmental objectives to be achieved for each water body and a summary of the measures to be used. Until a strategy for diffuse pollution has been established, SEPA cannot undertake the work necessary to determine what environmental improvements are achievable and hence what objectives should be set.
- 1.3 SEPA look forward to clarification of how the Scottish Executive see the diffuse pollution strategy being integrated into the river basin planning process established under WFD and of the roles and responsibilities of the Scottish Executive's Environment and Rural Affairs Department (SEERAD), SEPA and the various partner organisations in implementing the proposed approach. SEPA is clearly the lead organisation for WFD in Scotland and would therefore expect this to be evident in delivering a strategy to address diffuse water pollution.
- 1.4 The proposed regulatory regime for diffuse pollution control mirrors the structure of the Controlled Activities Regulations (CAR) for which SEPA is the regulator and which, among other things, establishes controls for abstractions, impounding works and point source discharges. The proposed approach would therefore allow SEPA to provide a 'one-stop-shop' for the sector and provide the efficiencies that a single regulator and a single system of controls bring in terms of regulatory costs.
- 1.5 SEPA strongly believes that the effectiveness of the proposed approach would be substantially enhanced if a network of catchment officers were established to deliver one to one advice to farmers, facilitating a partnership approach with relevant organisations, especially within 'the ERAD family'. SEPA is formulating proposals for this kind of approach based on the lessons being learned under Defra's Catchment Sensitive Farming initiative.
- 1.6 Although we expect the proposed regulatory regime to be relatively 'light' compared to other forms of regulation, such as licensing, we feel that the funding required to deliver the proposed regime needs to be scoped out as soon as possible. SEPA will be considering this issue in detail in its forward business plans.

- 1.7 Finally, it is essential that clear and explicit links are made to the goals, actions and indicators of the forthcoming update to the Forward Strategy for Scottish Agriculture. Delivering on the water environment and natural resource protection more generally, within the context of this Strategy will be very important. Ensuring that the Scottish Rural Development Plan is well aligned to such objectives will also be required. Ultimately, if Scottish agriculture is to be a leading player in protecting and improving the environment, land managers will need to engage with WFD and assist in developing as well as implementing solutions.

Response to the consultation questions

- 1. Do you agree that we have accurately identified the water quality issues that need to be addressed? If not, why and what supports your view?**

Yes. The information contained in SEPA's 'Characterisation Report' for the Scotland River Basin District (RBD) is the result of the most comprehensive risk assessment of Scotland's water resources ever undertaken and shows that diffuse pollution is a significant pressure on Scotland's water resources. A total of 488 (24.3%) river, 57 (18.4%) loch, 18 (45%) transitional, 59 (13.1%) coastal and 21 (19.8%) groundwater bodies are at risk of not achieving the WFD's environmental objectives.

The same risk assessment has also been undertaken for the Solway-Tweed RBD such that the 'Characterisation Report' for this area also confirms diffuse pollution as being one of the predominant causes of water bodies being 'at risk' of not meeting WFD objectives.

Agriculture is clearly shown to be the most significant cause of diffuse water pollution, although it is not invariably the most severe. As such, we agree that the most important water quality issues have been identified.

Urban run-off is responsible for some of the most polluted waters in Scotland and will be addressed, at least in part, through CAR. Other important pressures identified include forestry and acidification.

- 2. Do you consider there are other problems not identified?**

The consultation accurately summarises the findings of SEPA's 'Characterisation Report' and correctly targets the most extensive problems first. The strategy should also indicate when the other diffuse pressures identified in the 'Characterisation Report' will be tackled. Further consideration needs to be given to rural land uses other than agriculture and forestry, for example, land used for recreational or amenity purposes.

- 3. What aspects do you consider may require regulation or to be more rigorously controlled using existing powers of enforcement?**

The WFD requires activities that may cause pollution of the water environment to be authorised. Agriculture is the most extensive cause of diffuse pollution in Scotland and therefore requires to be authorised along similar lines to other industries. The current proposals represent the lightest touch of regulation possible and are rightly designed to be proportionate to risk. Agricultural and forestry activities that could potentially pose a risk to the water environment include; fertiliser and manure management, livestock management, cultivation practices, pesticide use, run-off from farm steadings, felling and harvesting of trees. The nature of diffuse pollution is such that

losses of pollutants are individually insignificant but at the catchment scale have a detrimental effect. The severity of the impact is often determined by landscape factors. This supports the need to have a targeted approach and catchment scale roll-out of measures. For this reason we believe realising the WFD environmental objectives is unlikely to be achieved through voluntary action alone.

As the consultation points out existing regulation, with the exception of the Nitrates Directive, and existing powers of enforcement have not been designed to address diffuse pollution explicitly. The scale of the problem and WFD implementation requires an effective strategy using new and existing pieces of legislation relevant to diffuse pollution control. In particular, it will be important for the existing EC Nitrates, Bathing Waters (and proposed revised Directive) and Habitats Directives to work effectively within the context of WFD.

Visible and effective enforcement, accompanied by appropriate advice, of 'Good Agricultural and Environmental Condition' (GAEC) and Nitrate Vulnerable Zone (NVZ) Action Programme Regulations, could assist with meeting 'good status' and will need to relate closely to WFD processes and objectives. Clearly, Common Agricultural Policy (CAP) reform could provide a very important part of the overall framework for protecting soil under agricultural management as well as in taking action against agricultural nitrate pollution.

Key to the success of regulation, when required, are the powers of enforcement. Although SEPA might serve notices to prevent individually significant sources of pollution in practice this is very difficult to enforce. It is essential that other enforcement options are explored. SEPA is committed in principle to exploring how administrative penalties might be applied as an additional sanction in various regimes. Administrative penalties are flexible sanctions imposed by the regulator and are being explored as part of the Macrory Review for England and Wales. SEPA believes that there may be merit in looking at the application of this concept to diffuse pollution issues.

4. Do you consider that advice on water pollution risks, within the PEPFAA Code and/or the Forest and Water Guidelines, is effective? If not, what else is required?

There are several sections in the PEPFAA code that are relevant to diffuse pollution control and SEPA considers that it could be used as a basis from which GBRs for agriculture might be developed. The Code stops short of providing technical guidance required by farmers and their advisers to address diffuse pressures on the ground.

The Forest and Water Guidelines also contain useful information to minimise diffuse pollution from forestry operations. They, in conjunction with the Forest and Soil Guidelines (revised edition in preparation) could form a useful basis for GBR development for forestry.

Codes of practice need to be supported by advice, demonstration and training for farmers and foresters and should be developed in consultation with industry representatives. An effective delivery mechanism for free advice needs to be developed, especially for agriculture. SEPA would therefore strongly support a programme that delivered such advice at an individual land manager level within priority catchments and will come forward with a proposal for a comparable programme of work to that being undertaken by a partnership of DEFRA, the Environment Agency and Natural England.

SEPA is developing a package of guidance for advisors on the implementation of best management practices to address diffuse agricultural pollution which will be available in 2006. It is hoped that this guidance will be used by the free advisory service referred to above.

5. Which measures to protect watercourses would you wish to see eligible for financial support under the planned Tier 3 of LMCs?

SEPA submitted initial thoughts for tier 3 of Land Management Contracts (LMCs) in a letter to SEERAD dated 23 December 2004. Since then, SEPA has provided a list of measures to the Natural Resources Technical Working Group chaired by SEERAD.

Key measures are:

- diffuse pollution audit to be carried out by an advisor. SEPA will be launching an audit in 2006 which will include an assessment of nutrient use (fertilisers and animal manures), use of crop protection chemicals and soil management;
- fencing and provision of water troughs;
- buffer strips. These need to be permanent and of a width and nature that is determined by risk;
- constructed farm wetlands for treating lightly contaminated farm steading run-off;
- biobeds for pesticide handling and washdown;
- restoration of wetlands and floodplains;
- reversion of rivers to their natural state (i.e. better morphology through meanders, polls, riffles etc;)
- farmer led education and awareness raising initiatives (i.e. workshops and demonstration farms).

Catchment scale implementation of measures will be fundamental to achieving improvements in water quality. If funding is to be spent on buffer strips then that should be on the condition that a significant proportion, covering all high risk areas, of the watercourse is buffered.

6. Do you agree with the idea for self-audit/environmental checklist of the farm's environmental practice?

SEPA supports the concept of self audit, in principle, but it is not clear how this sits within the overall strategy. An audit that is designed to help ensure that a farmer complies with GBRs could be extremely valuable, especially if supported by advice. It will be important to ensure that links are made to 'The 4 Point Plan', 'Farm Soils Plan' as well as land management plans (once introduced under the SRDP) and CAP cross-compliance and GAEC.

SEPA's Diffuse Pollution Audit guidance could provide a useful starting point for the development of a self-audit. The environmental checklist should be specific to the farming activity carried out as well as to the potential environmental impact from that activity, which may be specific to the catchment in question.

7. We think it is important to help farmers/foresters/land managers understand the likelihood of water pollution from their enterprise. What is most likely to be effective?

- **Advice/guidance/training/codes of practice/voluntary initiative etc?**
- **Seminars/farm visits/catchment officers?**
- **Structured Auditing?**

SEPA believes that a combination of the above approaches would provide the most effective means of diffuse pollution control, backed up by proportionate regulation. It is our belief that farm visits to deliver one-to-one advice by catchment officers represents the most effective means of delivering diffuse pollution mitigation measures.

SEPA has used this kind of approach in a case study project in 2002 which explored the potential to address diffuse pollution on 6 working farms. In this study an audit was used to select measures and assess how the farmers could be supported in deploying such measures. This is described in a report available at:

http://www.sepa.org.uk/publications/technical/imp_env_man/index.htm.

It is vital to link local water pollution issues to local land managers. This is an important first step, often overlooked, to an effective mitigation of diffuse pollution. When this link is made land managers often change practices voluntarily at little or no cost. Farm scale audits will be the key means by which catchment officers manage diffuse pollution.

There is also a need for a programme of inspection and audit similar to that undertaken by SEPA in relation to the SEERAD Bathing Water Strategy paper. This work highlighted how one to one advice can achieve excellent co-operation from farmers. Diffuse pollution control will require land management advice at an individual farm and field scale. Investment in building good working relationships to achieve compliance and the adoption of best management practices will therefore be needed.

8. Do you agree that farming should be subject to a regulatory structure similar to that already planned for other activities under CAR?

Yes. The WFD requires activities likely to cause pollution of the water environment to be authorised. Agriculture is the most extensive cause of diffuse pollution in Scotland and therefore requires to be authorised along similar lines to other industries.

The proposed regulatory approach will provide parity with other industries carrying out activities likely to cause pollution. We believe the proposed regulatory structure will provide a level playing field for the industry while allowing the targeting of measures to those areas where they are required. National GBRs will be co-developed with industry and so only those not following agreed best practice will need to change practices. Targeted GBRs provide a means by which measures can be targeted to areas where they are required rather than nationally and will be proportionate to risk, thereby minimising the regulatory burden on the industry.

In addition, regulations will provide a key means by which persistent diffuse pressures can be addressed that was not possible previously due to difficulties with enforcement. In England and Wales, Defra plan that the Anti-Pollution Works Notice provisions should be applied more widely in support of the Catchment Sensitive Farming Initiative. We believe that Notice provisions

might have a role but that their effectiveness generally for addressing land use and management practices would be both expensive and bureaucratic. The GBR approach proposed represents the lightest touch of regulation available.

9. Do you agree that measures should be introduced as early as possible to enable us to meet WFD Targets?

SEPA believes that GBRs need to be developed in 2006 to fit in with the River Basin Management Planning timetable set by the WFD. Draft programmes of measures and objectives need to be prepared by 2008 for the first draft River Basin Management Plans, with the final plan prepared by 2009. Measures to address diffuse pollution will form part of the programme of measures presented in the River Basin Management Plans. The timetable on page 33 of the consultation does not refer to the River Basin Management Plan itself, draft and final, required in 2008 and 2009 respectively. We see this as a highly significant omission and crucial to the case for timely introduction of measures

Measures are required now which allows industry time to adapt to the new regime. Also water bodies are likely to take a significant time to recover from pollutant impacts. Therefore implementation will be necessary in sufficient time to achieve 'good status'.

10. Are you content that there should be general binding rules (GBRs) for activities which contain potentially polluting practices?

Yes. The WFD requires activities that may cause pollution of the water environment to be authorised. Agriculture is the most extensive cause of diffuse pollution in Scotland and therefore requires to be authorised along similar lines to other industries.

GBRs are intended to ensure effective regulation of activities, without the need for licensing, thereby reducing the regulatory burden on the industry. Licensing of individual farms would be extremely resource intensive and unwelcome at this stage. GBRs represent the lightest touch of regulation possible and should be developed in consultation with industry. Wherever possible they should be based on accepted standards of good practice.

11. Do you agree that specific problems in "at risk" catchments should be dealt with through targeted GBRs to be developed in consultation with the industry?

SEPA believes that the different tiers of regulation proposed in the consultation provide a flexible system of regulatory controls that are targeted and proportionate to the environmental risk. Such a system will help avoid unnecessarily increasing the regulatory burden for all concerned.

Targeted GBRs should offer an efficient means of delivering additional targeted action in areas in which the risk from diffuse pollution is not adequately addressed by the national GBRs.

As with the national GBRs, the development of the rules themselves provides an opportunity for the sector and other interested parties to contribute their knowledge and experience in helping identify cost-effective and practicable ways of reducing the contribution of land-management activities to diffuse pollution problems. This will give the sector an important say in how best to manage its impacts on the water environment and provide the Scottish Executive and the

regulator with confidence that the rules take account of the practicalities of managing land for agriculture and forestry.

SEPA expects the regulatory cost of targeted GBRs to be low compared with other forms of regulation, such as licensing. All farmers in a catchment identified as being at risk from diffuse pollution and requiring targeted action would simply have to register with the regulator. They would then have to comply with the activity-specific rules set out in the relevant targeted GBR rather than have to enter into a resource intensive process of agreeing measures locally with the regulator.

SEPA agrees that the use of licensing with site-specific conditions should only be considered for those cases where there are significant and persistent problems that cannot be successfully addressed using the targeted GBRs.

12. Do you agree with the proposed approach of combining regulations (GBRs) with the development of guidance, support and the promotion of voluntary action?

Yes. SEPA agrees that a combination of measures provides the best approach. Such an approach will only be effective if farmers are supported through one to one advice (i.e. via catchment officers), however. Indeed, it is apparent from SEPA's involvement in catchment management plans to date that if significant resource is allocated to the provision of one to one advice then it is likely that the need for regulation will diminish or not be needed at all. Co-operation is key to achieving effective implementation of measures.

In addition, detailed consideration should be given to the closer alignment of WFD objectives and farm support payments. This is matter which is increasingly being discussed at EU level and on which further developments are likely.

An excellent example of voluntary action on behalf of the farming industry is "The Voluntary Initiative" (TVI). This initiative was formulated as an alternative package to the introduction of a pesticides tax in April 2001. Impressive progress has been made in terms of developing information, advice, training and planning tools for farmers who use crop protection chemicals. It will be important that the good progress made under TVI is maintained and that increasingly its objectives and outputs focus on meeting WFD objectives at a local level.

13. Do you agree that the proposed GBRs and a suite of supportive measures is the right approach? What should they include?

Yes. It is more likely that regulations and support together will achieve the desired effect.

Supportive measures should include the measures as outlined in 5 above via LMCs, a network of catchment officers to deliver a partnership approach and one-to-one advice for farmers as well as appropriate technical guidance. The scope for economic instruments that encourage changes in land use and/or management practices should also be considered.

14. How might the proposed approach best be developed?

GBRs should be developed in consultation with industry and associated advisors to ensure buy-in to the proposed measures. The industries should also take a leading role in raising awareness of the GBRs. The GBR development for agriculture could be facilitated through a sub-group of the Scottish Agricultural Pollution Group. For forestry, work on developing GBRs should be led by the Forestry Commission with support from relevant partner organisations including SEPA.

A significant amount of work will be required to develop the strategy, in terms of how the approach will work in practice, relative roles and responsibilities of partner organisations, suitable measures for inclusion in the proposed approach. The River Basin Planning Advisory Group network will be established in 2006 and could provide a supporting consultation mechanism for the development of GBRs.

SEPA's risk assessment results will be used to prioritise areas for action. The partnership approach will be facilitated via the River Basin Planning Area Advisory Groups and sub-groups thereof. Catchment officers will play a crucial role in this process and would provide the much needed one-to-one advice for farmers. It is expected that SEPA would be the regulator for the second tier targeted approach.

15. Are there any further factors we need to take into account?

It is important that funding requirements for the proposed approach are assessed as soon as possible along with roles and responsibilities of the various partner organisations.

The consultation does not consider the use of economic incentives such as trading schemes where an environmental limit and credits are exchanged. These should be explored.

Source control, for example, reducing the nitrogen and phosphorus content of livestock feeds and fertilisers, will form an important component of long term diffuse pollution control. SEERAD should make clear what work is to be progressed in this area.

16. How should the Executive work most effectively with the agricultural sector?

Consultation with the NFU Scotland, the Scottish Rural Property and Business Association and Scottish Crofting Foundation will be key as well as with other representative bodies such as the Crop Protection Association, Agricultural Industries Confederation and National Association of Agricultural Contractors.

Again, a network of catchment officers providing free advice on diffuse pollution mitigation would be extremely beneficial.

The Executive could ensure that SEPA and other organisations have a valuable role in training partners in assessing diffuse pollution pressures and in implementing measures to address these pressures.

17. Can a similar approach be used for forestry as for agriculture?

Yes. Forestry has been shown to have a significant impact on the water environment as detailed in the 'characterisation report'. We believe that the approach described in the consultation is also suitable for forestry activities.

This will require development of appropriate GBRs which must be supported by advice, training and incentives as well as inspections and effective enforcement.

