



ASSURING THE SAFETY, QUALITY AND EFFICACY  
OF VETERINARY MEDICINES

## **SHEEP DIP POLLUTION REDUCTION PROGRAMME Updated August 2007**

### **1. Introduction**

Sheep dip products, especially those containing cypermethrin, are having unacceptable impacts on the environment. Prompt action is needed if we are to safeguard our water and habitats and the reputation and viability of the sheep farming industry. The Environment Agency (EA) and the Veterinary Medicines Directorate (VMD) have produced this Pollution Reduction Programme (PRP), after consultation with relevant groups. (For more information about the environmental impacts of sheep dip and who we have developed this programme with, see page 10)

Cypermethrin dip products are currently suspended from the market. The actions in this PRP will help prevent further damage to our environment and establish a sound basis for determining the future of sheep dip products containing cypermethrin.

Whilst we focus on England and Wales, both the EA and VMD would wish that the principles of the PRP also cover Scotland and Northern Ireland.

### **2. What do we want to achieve?**

The objectives of the PRP are:

- to find and implement an overall solution that protects the environment, animal health and the health, social well being and economic viability of rural communities.
- to minimise the environmental risks from sheep dip chemicals and prevent further environmental damage;

- to ensure we can meet 'good ecological status' in watercourses affected by these chemicals, as required by the Water Framework Directive;

### **3. How will we measure success?**

We will measure our progress by assessing

- the number and severity of pollution incidents caused by sheep dip,
- the number of environmental quality standard (EQS) failures recorded for cypermethrin and diazinon at EA river monitoring sites,
- biological data collected at river sites in sheep farming areas,
- sheep health and welfare.

### **4. Taking action**

Tackling sheep dip pollution will require:

- urgent voluntary action on the part of farmers and their suppliers
- finding and putting in place the right mix of voluntary and regulatory measures to secure a long term sustainable solution
- good science to underpin our decision making and
- monitoring to check how effective our actions are being.

Over the first **twelve months** we will:

- i) ensure farmers and contractors adopt best practice when dipping through the "STOP every DROP" campaign led by farming representative groups, with input from regulators and others where necessary, and review and update supporting guidance and codes of practice.

This action will help to minimise the risk of pollution from sheep-dip whilst work is underway to deliver a sustainable solution to the problem.

- ii) identify and seek implementation of the best set of measures (voluntary and regulatory) to ensure a sustainable solution to the sheep dip pollution problem. We will take a risk-based approach and will look at a range of options. These will include *inter alia*: complete withdrawal of cypermethrin sheep dip products; continued use together with the introduction of further

controls (e.g. restricted geographical use of dipping chemicals, compulsory licensing of dipping equipment); an intensive sheep scab eradication programme involving a wide range of measures. To find the best overall solution, options will be appraised against the risks to animal welfare, the environment, human health and impacts on rural economies.

- iii) monitor rivers and streams in England and Wales in order to measure the extent of the problem and to provide a baseline against which improvements can be measured;
- iv) research and development to provide robust evidence to support decision-making.

The following action plan provides more detail and focuses on what we believe can be achieved in the first 12 months of the PRP. Success measures specific to each action are identified in the plan.

## **5. Responsibility for the PRP**

Implementation of the PRP will be shared by those who market and use sheep dip products, by government and regulators and by non-governmental bodies with concerns about the environmental impacts of sheep dip including angling and wildlife groups. A steering group consisting of representatives of the above interests will oversee all aspects of the PRP's implementation including measuring and reporting on progress.

The steering group will report on progress after 6 months and again after 1 year. The PRP is a "live document", subject to refinement as and when new information becomes available. For example, as some actions are completed, others may be agreed and taken forward by the steering group.

ACTION PLAN		Update August 2007
<b>1. Raising user awareness of the environmental risk associated with the use of sheep dip products and ensuring farmers and contractors adopt best practice when using sheep dip through the STOP every DROP campaign – led by farming representative organisations, with input from regulators and others where necessary.</b>		<b>Update</b>
<p>This action requires a mixture of voluntary and regulatory measures. It includes:</p> <p><i>1.1 Production of new guidance and reviewing / updating of existing guidance, as part of an industry led voluntary initiative for sheep dip</i></p> <ul style="list-style-type: none"> <li>• Laminated sheets to provide advice on environmental risks, best practices and flock management/treatments for sheep dip merchants, farmers, contractors and relevant regulatory staff</li> <li>• Guidance on the use of showers and jettors for farmers and contractors<sup>1</sup></li> <li>• A review and update of the HSE's leaflet on how to dip safely, enhancing the environmental messages</li> </ul>	<p><b>Success measures for the first 12 months</b></p> <ul style="list-style-type: none"> <li>• Guidance is produced or updated</li> <li>• Guidance is distributed and reaches a significant proportion of the target audience measured by market research (eg. Telephone questionnaire of a sample of farmers)</li> </ul>	<p><b>Stop Every Drop leaflet sent to all registered sheep farmers (51,000 in total) in June 2007 via the BWMB.</b></p> <p><b>Issue of showers and jettors covered in section 4.</b></p> <p><b>HSE have revised and issued safe dipping leaflet AS29(rev3)</b></p>

<sup>1</sup> Note: cypermethrin and diazinon based products are not approved for use in showers and jettors, but it is recognised that use of these application methods is increasing and therefore that guidance is needed.

<p>1.2 A review of present labelling on sheep dip products with the relevant manufacturers and strengthening of messages about</p> <ul style="list-style-type: none"> <li>• Environmental toxicity</li> <li>• Amount of time sheep must be kept away from water post dipping.</li> </ul> <p>1.3 A review of the UK Code of Practice on the Protection of Groundwater: Use and disposal of sheep dip compounds, and provision to Defra, of detailed recommendations on how to strengthen the document.</p> <p>1.4 Action to ensure 'suitably qualified persons' (SQPs) at merchant outlets are trained (via existing routes, e.g. AMTR<sup>2</sup>A on the environmental toxicity of sheep dip</p>	<ul style="list-style-type: none"> <li>• Review is completed</li> <li>• If needed, changes to the labels are requested via the regulatory process and approved.</li> <li>• Updates needed are identified and communicated to DEFRA</li> <li>• Training routes are identified</li> <li>• SQPs undertake training/ receive guidance (to be measured by market research, e.g. telephone survey).</li> </ul>	<p><b>Action pending receipt of full evidence base from the PRP and the manufacturers.</b></p> <p><b>Some minor modifications were made 2006.</b></p> <p><b>All SQP's are to receive CPD (Continuous Professional Development) from September 2008.</b></p>
<p>1.5 Changes to the Certificate of Competence in the Safe Use of Sheep Dips</p> <ul style="list-style-type: none"> <li>• Changes are made to the Veterinary Medicines Regulations requiring that users as well as purchasers of sheep dip hold a Certificate of Competence</li> </ul> <p>The content of the units that form part of the Certificate is reviewed and updated</p>	<ul style="list-style-type: none"> <li>• New regulation is approved and the requirement enforced</li> <li>• The content of the Certificate is updated</li> </ul>	<p><b>Completed 2006. All users of dip require a CoC by 31 December 2008 at the latest.</b></p> <p><b>Completed 2006.</b></p>

<sup>2</sup> AMTRA – Animal Medicines Training Regulatory Authority – an independent regulatory body concerned with design, validation and certification of training courses in animal medicines. They ensure the marketing and distribution of animal medicines in the UK is undertaken in a responsible manner by AMTRA qualified persons

<p>1.6 Existing initiatives and schemes are reviewed to ascertain whether they could be used more effectively to ensure best practice in the management of sheep dip</p> <ul style="list-style-type: none"> <li>• Environmental risk management tools used by farmers</li> <li>• Farm assurance schemes</li> <li>• Government rural strategies / plans</li> <li>• Cross-compliance, Agri-environment initiatives</li> </ul>	<ul style="list-style-type: none"> <li>• Review is completed</li> <li>• Potential links/changes are made</li> </ul>	<p><b>Revised set of Best Practice Measures are being communicated via Catchment Sensitive Farming &amp; Farm Assurance Schemes.</b></p>
<p><b>2. Identifying the best option of measures to secure a sustainable solution to the sheep dip problem – led by the EA and VMD</b></p>		<p><b>Update</b></p>
<p>Commissioning of a study to identify the best option for responding to the risks and impacts associated with sheep dip. This will follow the principles of a Regulatory Impact Assessment, and undertake an analysis of the costs and benefits associated with options for tackling the problem, including :</p> <ul style="list-style-type: none"> <li>• Withdrawal of cypermethrin sheep dip products</li> <li>• Continued use with extra control measures</li> <li>• An intensive sheep-scab eradication programme involving a wide range of measures</li> </ul>	<p><b>Success measures</b></p> <ul style="list-style-type: none"> <li>• The study is delivered within 6 months</li> <li>• Identification of a sustainable solution to the cypermethrin sheep-dip pollution problem.</li> </ul>	<p><b>Study completed April 2007.</b></p> <p><b>Highlighted limited return as part of a scab eradication scheme (SES) or permanent ban as preferred options.</b></p> <p><b>Some data gaps identified; costs of treatment and control, costs of SES and resistance and costs of monitoring and enforcement</b></p>

<p>In assessing these options the following factors will be considered:</p> <ul style="list-style-type: none"> <li>• Implications for wildlife</li> <li>• Implications for animal health (including potential for increased resistance of internal and external parasites to remaining products)</li> <li>• Human health issues</li> <li>• Alternatives to sheep dipping in the UK and abroad</li> <li>• Relevant world-wide research on antiparasitic treatments for sheep</li> <li>• Use of control measures, such as flock management and biosecurity measures, restricted use in high-risk areas, compulsory licensing and inspection of dips etc.</li> <li>• Implications for existing or proposed scab eradication programmes.</li> </ul>	<p>Evidence which the VMD will consider in providing advice to the Defra Minister when requesting a decision on the future of cypermethrin-based sheep dip products</p>	<p><b>Control options paper for options 2 &amp; 3 being drafted.</b></p>
<p><b>3. Monitoring rivers and streams nationally in order to measure the extent of the problem and to provide a baseline against which improvements can be measured - led by the EA</b></p>		<p><b>Update</b></p>
<p>Targeted environmental monitoring is conducted outside of Wales to better identify the scope and magnitude of sheep dip impacts nationally</p> <ul style="list-style-type: none"> <li>• A network of UK monitoring sites is set up providing a base line of chemical and biological data on sheep dip impacts, and tracking trends over time (i.e. a sheep dip pollution indicator)</li> <li>• Existing monitoring data collected by the wool textile industry is reviewed for use as an additional</li> </ul>	<ul style="list-style-type: none"> <li>• The monitoring programme is established and results delivered</li> <li>• The sheep dip pollution indicators show trends over time and help measure progress towards the PRP's objectives</li> </ul>	<p><b>Targeted monitoring 2006–07 completed. Report sent to steering group.</b></p> <p><b>Sub set of sites to be used during 2007- 08 monitoring.</b></p> <p><b>Data used in options study.</b></p>

pollution indicator		
<b>4. Science to support the PRP - led by the EA and VMD</b>		
<ul style="list-style-type: none"> <li>• Environmental Quality Standards (EQSs) for cypermethrin and diazinon are reviewed in light of new information on ecotoxicity</li> <li>• Research is conducted to investigate exposure pathways around the farm and confirm the length of time sheep should be kept away from water post dipping</li> <li>• Comprehensive knowledge is gained on international practices for the treatment of ecto-parasite conditions in sheep (i.e. scab, blow fly, and other conditions for which sheep dip products are presently used for in the UK)</li> </ul>	<ul style="list-style-type: none"> <li>• EQSs are reviewed and revised if required within 12 months</li> <li>• Farm exposure project is completed by Dec 06</li> <li>• Review of information completed within 6 months, and in time to inform options appraisal (action 2).</li> </ul>	<p><b>Review complete and consultation underway via UKTAG.</b></p> <p><b>Completed by CSL Feb 2007</b></p> <p><b>Further R &amp; D actioned by VMD on showers/jettors</b>  <a href="http://www.defra.gov.uk/science/funding/competitions.htm">http://www.defra.gov.uk/science/funding/competitions.htm</a></p>

## Further information

If you need further details on the environmental impacts of sheep dip chemicals, background to the suspension of cypermethrin-based sheep dip products and the EA's and VMD's positions, please visit our web sites

- <http://www.environment-agency.gov.uk/business/444304/1224648/1231233/1231241/>
- <http://www.vmd.gov.uk/general/sheepdip/sheepdips.htm>

You can also contact Spence Seaman ([js.seaman@environment-agency.gov.uk](mailto:js.seaman@environment-agency.gov.uk)) for further details.

## **Annex 1      Impacts of sheep dip**

Routine monitoring and targeted investigations by the EA have shown that the use of sheep dip products (via dips, showers and jettors), and subsequent management of treated flock is causing environmental pollution in watercourses that is affecting wildlife. There are too many breaches of environmental quality standards and too many pollution incidents. We are particularly concerned about the use of dips containing the insecticide cypermethrin. Moreover, detailed investigations in Wales show that incidents are more frequent and the extent of environmental contamination more severe than previously thought.

## **Annex 2      Consultation history**

The EA presented this evidence to the VMD in May 2005 and they agreed that action was needed. In September 2005, the EA and VMD met with representatives from farming organisations, environmental NGOs with interests in fishing and wildlife, sheep dip manufacturers, the wool textile industry, government and relevant regulatory authorities to discuss the actions needed to prevent environmental damage caused by sheep dips. We used the outcomes from this meeting and views obtained from other groups including the Veterinary Products Committee and the EA's regional environment and fisheries committees to develop a draft PRP.

The draft PRP was consulted on early in 2006. A range of organisations including regulators and associations representing farmers, anglers, veterinarians, manufacturers and wildlife interests responded to the consultation. Two strong opposing positions emerged. The first focused on the potential threat to sheep farming and animal health and welfare if product availability was restricted and the other on the severe environmental consequences if the products containing cypermethrin remained in use. Most respondents agreed that prompt action was needed to prevent further environmental damage. This PRP takes on board the comments we received.

In the light of the evidence of environmental pollution from the routine use of cypermethrin sheep dip products and the availability of alternative products for sheep ectoparasite control, the Defra Minister suspended the Marketing Authorisations for the cypermethrin sheep dips on 21 February 2006. The suspension was made on a precautionary basis until more information becomes available on how these products can be used without resulting in an unacceptable impact to the environment. The suspension allows existing stocks of products that were on merchants shelves and in farm stores prior to 21 February to be used. No new stocks can be ordered, purchased or used.