

## **EXECUTIVE NOTE**

### **THE BATHING WATER (SCOTLAND) REGULATIONS 2008 SSI/2008/170**

The above instrument was made by the Scottish Ministers in exercise of the powers conferred by section 2(2) of the European Communities Act 1972 and all other powers enabling them to do so. The instrument is subject to negative resolution procedure.

#### **Policy Objectives**

The purpose of the instrument is to transpose the requirements of Directive 2006/7/EC of the European Parliament and of the Council concerning the management of bathing water quality (the 'Directive') (attached) into Scots law. The Directive's provisions must be transposed in 2008, although the dates by which obligations must be implemented are staged from 2008 onwards.

The Directive overhauls and will ultimately repeal the provisions relating to the protection of bathers' health in Council Directive 76/160/EEC concerning the quality of bathing water (the '1976 Directive'). These Regulations will likewise repeal the requirements pertaining to the 1976 Directive in the Bathing Waters (Classification)(Scotland) Regulations 1991.

The Regulations transpose the requirements of the Directive by establishing the necessary mechanisms designed to improve the protection of bathers' health, not only through the raising of water quality standards, but through the provision of information to allow bathers to make informed choices on whether to bathe or not.

The Regulations specify that the Scottish Ministers, the Scottish Environment Protection Agency (SEPA), and local authorities are responsible for meeting the various obligations under the Regulations. They also include an obligation on the owner of the land that is beside the bathing water to inform SEPA and local authorities in case of pollution in certain circumstances. The Regulations determine how bathing waters will be designated by the Scottish Ministers and provide that the length of the bathing season relating to each bathing water requires to be determined by them .

To meet the Directive's stricter water quality standards, the Regulations prescribe in the same way as the Directive that all bathing waters should be classified as either poor, sufficient, good or excellent from 2015. They also change the current assessment period during which bathing waters are assessed so that from 2015 onwards classification will be based on a number of years' assessments, to therefore give a truer overall picture of the quality of bathing waters and illustrate quality as a trend rather than as a single snapshot. Bathing waters will be classified under the Regulations on the basis of two microbial parameters, *Escherichia coli* and intestinal enterococci, rather than the 19 parameters required at present under the 1976 Directive. This introduces a more direct link as to the pollution risks to water quality in terms of public health. The Regulations also establish the frequency required for sampling and analysis for these parameters, as laid down in the Directive.

The Regulations specify the consultation requirements in order to meet the Directive's aim for increased public involvement in issues relating to bathing waters. In order to meet the Directive's requirement for greater public information, the Regulations require that local authorities and SEPA provide the necessary information through signage and by other means,

in order to ensure bathers are properly informed about the quality of the water in which they might wish to swim. The Regulations require that SEPA and local authorities provide early and appropriate warning advice of potential health risks.

Through the provision of such warnings and the adoption of appropriate management measures in order not to increase the risk to public health, the Regulations provide for the Directive's provision to discount a limited number of failing samples which have occurred during times of correctly predicted short-term pollution events. The Regulations also adopt the Directive's provision for a certain degree of flexibility in the sampling programme.

As well as protecting bathers from such microbiological parameters, the Regulations also transpose the Directive's requirements to provide protection to bathers from other potential health risks, including cyanobacteria, macro algae and marine phytoplankton and from waste at bathing waters.

The Regulations establish a duty on SEPA to devise a bathing water profile to identify the potential risks at each bathing water, and to engage interested parties in drawing this up. The profile is to be used to identify risks and establish a suitable plan to ensure compliance with the Directive.

The Regulations establish that Scottish Ministers and SEPA will be responsible for ensuring compliance with the Directive in that all bathing waters reach at least sufficient quality by 2015, except where this is technically infeasible or disproportionately expensive. Management measures are to be required where poor classification has been the outcome. The Regulations specify that compliance in this regard shall be achieved through SEPA exercising existing functions, including those set out in regulations made under the Water Environment and Water Services (Scotland) Act 2003.

### **Consultation**

Public consultation on the draft Regulations was carried out between November 2007 and February 2008. Consultation was web-based. Several hundred emails were sent out to inform stakeholders of the consultation exercise, including to public bodies (local authorities, health boards, SEPA, Scottish Natural Heritage, Scottish Water), non-governmental organisations (Marine Conservation Society, Scottish Environment LINK) and private individuals and bodies with an interest in bathing waters. Responses received were analysed and changes made to the Regulations as a result. Responses to the consultation, where respondents have allowed, been placed in the Scottish Government's library.

### **Financial effects**

The instrument will have some minor financial effects (on the basis of existing duties carried out under the 1976 Bathing Water Directive) on the Scottish Government, SEPA and local government. An assessment of these has been carried out in the attached final Regulatory Impact Assessment.

## Final Regulatory Impact Assessment

### The Bathing Water (Scotland) Regulations 2008 (transposing legal requirements of Directive 2006/7/EC)

1. This is the final Regulatory Impact Assessment (RIA) for the forthcoming Bathing Water (Scotland) Regulations 2008. The partial RIA was consulted upon in tandem with the draft Regulations in “Better bathing waters for all: Implementing the revised Bathing Water Directive in Scotland: Consultation on the draft Bathing Water (Scotland) Regulations 2008”<sup>1</sup>. The final RIA reflects changes made to the draft Regulations following consultation. It has been published to accompany the laying of the Regulations before Parliament.

2. Only two of the 18 individual responses to the consultation commented directly on the partial RIA. Their comments related to the investment Scottish Water would need to plan for to ensure their assets comply with the revised Directive’s standards. We have not amended the RIA to take account of these comments as costs of compliance with the Directive’s microbiological standards will be factored through a separate impact assessment of the Water Framework Directive’s (2000/60/EC)<sup>2</sup> River Basin Management Plan, to which bathing waters are an integral part

#### Purpose and intended effect of measure

#### The Objective

3. The objective of the Regulations is to transpose the parts of the revised Bathing Water Directive (2006/7/EC)<sup>3</sup> into Scots law that are not already met under existing legislation. The revised Directive will eventually repeal the provisions of the existing Directive (76/160/EEC)<sup>4</sup>, which is largely implemented in Scotland by the Bathing Water (Classification) (Scotland) Regulations 1991<sup>5</sup>. The revised Directive introduces greater protection for bathers, not only through stricter microbiological standards, but with new requirements to provide the public with information on the quality of bathing waters, therefore allowing them to make informed choices on whether they wish to bathe or not. To further public health protection, the revised Directive also requires management measures for non-bacteriological pollution at bathing waters, including pollution from cyanobacteria, marine phytoplankton, macro algae, litter and other waste.

4. It is important to note that while the Regulations require SEPA to ensure compliance with the Directive’s bacteriological standards is achieved by 2015 (the timescale required by the Directive), the Regulations themselves do not set the measures by which this will be achieved. It is expected that SEPA will utilise existing powers under the Water Environment (Controlled Activities) (Scotland) Regulations 2005<sup>6</sup> for tackling sources of pollution that may impact on bathing water quality<sup>7</sup>. This RIA does not make reference to costs incurred

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<sup>1</sup> Scottish Government (2007) *Better bathing waters for all: Implementing the revised Bathing Water Directive in Scotland: Consultation on the draft Bathing Water (Scotland) Regulations 2008*

<sup>2</sup> [http://eur-lex.europa.eu/LexUriServ/site/en/oj/2000/l\\_327/l\\_32720001222en00010072.pdf](http://eur-lex.europa.eu/LexUriServ/site/en/oj/2000/l_327/l_32720001222en00010072.pdf)

<sup>3</sup> [http://eur-lex.europa.eu/LexUriServ/site/en/oj/2006/l\\_064/l\\_06420060304en00370051.pdf](http://eur-lex.europa.eu/LexUriServ/site/en/oj/2006/l_064/l_06420060304en00370051.pdf)

<sup>4</sup> <http://ec.europa.eu/water/water-bathing/directiv.html>

<sup>5</sup> [http://www.opsi.gov.uk/si/si1991/Uksi\\_19911609\\_en\\_1.htm#end](http://www.opsi.gov.uk/si/si1991/Uksi_19911609_en_1.htm#end)

<sup>6</sup> <http://www.opsi.gov.uk/legislation/scotland/ssi2005/20050348.htm>

<sup>7</sup> [http://www.opsi.gov.uk/legislation/scotland/ssi2008/ssi\\_20080054\\_en\\_1](http://www.opsi.gov.uk/legislation/scotland/ssi2008/ssi_20080054_en_1)

through the use of other regulatory measures to ensure compliance. The potential impact of this other legislation in meeting the requirements of the revised Bathing Water Directive will be examined as part of an overall impact assessment of the Water Framework Directive's River Basin Management Plan mentioned previously in paragraph 2. This assessment will be carried out for the Scottish Government and is intended for completion late 2008.

## **The Background**

5. The 1976 Bathing Water Directive was among the first environmental Directives introduced by the European Commission. Its aim was to protect bathers from pollution, primarily microbiological from human sewage sources. As within the rest of Europe, significant investment by Scottish Water and its predecessors in treatment works has reduced the risk of pollution of bathing waters from raw sewage. It was against this background of improved compliance, a greater scientific understanding of the risks that bacteria can have, and a higher awareness of what triggers pollution events, that the European Commission undertook to revise its Directive.

6. Adopting microbiological parameters from the World Health Organisation, the standards proposed by the revised Directive were to be much more stringent than those in the current Directive. The revised Directive also increases public participation in matters relating to bathing waters, and puts more onus onto the operators of bathing waters and public bodies to provide information to bathers to allow them to make informed decisions as to where and when they wish to bathe.

7. Various other provisions were agreed during the finalising of the Directive, which the Scottish Government had a say on through its input into the UK line during the negotiations. These included the addition of another classification, 'sufficient', to give four in total (poor, good and excellent being the others). Without this additional classification, it is likely that many more Scottish bathing waters would have been deemed poor once classification begins under the revised Directive from 2015, even though sufficient quality still provides the necessary protection to bathers. Provisions were also introduced to allow the discounting of poor results during short term pollution events when prior warning of the risks of bathing at such times is given to potential bathers.

8. The Directive finally came into force on 24 March 2006, following a lengthy negotiation process. It repeals the existing Directive at the end of 2014, while its provisions come into effect in stages from March 2008 onwards. Our draft Regulations propose to transpose the Directive at the latest dates given by the Directive, in conjunction with the rest of the UK. This gives the opportunity for SEPA to adapt their science to the new regime, for local authorities to install the necessary information to bathers and to get acquainted with their new responsibilities. Stakeholders such as Scottish Water, SEPA and the farming industry will also have an opportunity to work together to ensure all Scotland's bathing waters meet compliance with the sufficient standard of the Directive by 2015.

## **Rationale for Government Intervention**

9. Article 18 of the revised Bathing Water Directive requires that Member States shall bring into force the law, regulations and administrative provisions necessary to comply with the Directive by 24 March 2008. As it is EU legislation, Scottish Ministers are bound by the

Scotland Act 1998 to fully transpose all the provisions of the revised Bathing Water Directive.

## **Consultation**

10. Prior to the consultation paper to which the partial RIA was part of<sup>8</sup>, the Scottish Government had previously outlined its initial thoughts on implementing the Directive. These were published in March 2006 in the strategy paper, “Better bathing waters: meeting the challenges of the revised Bathing Water Directive in Scotland”<sup>9</sup> to coincide with the Directive coming into force.

## **Within Government**

11. The Division within the Scottish Government responsible for producing this RIA has consulted internally on its contents with those areas with a policy interest, for example, economists, agriculture, tourism, public health, local government and the water industry. Consultation also took place with the Scottish Environment Protection Agency, Scottish Water and Local Authorities (including with the Convention of Scottish Local Authorities).

## **Public Consultation**

12. The partial RIA was published alongside the draft Regulations for a full public consultation. The consultation ran from 15 November 2007 until 6 February 2008. It was sent to a wide range of stakeholders, including beach operators, farming interests, tourism bodies and to community groups with a close interest in Scotland’s existing bathing waters. 18 individual responses to the consultation were received (plus an additional 20 as part of a campaign), including from non-governmental organisations, public bodies including local authorities and health boards, and those representing the farming and water industry. These have been made available at the Scottish Government library.<sup>10</sup> A report on the consultation will be published on the Scottish Government website shortly. As stated previously, only two respondents commented on the RIA.

## **Changes to the Regulations following public consultation**

13. Having actively listened to stakeholders’ views on our initial Regulatory proposals, a number of changes have been made to the Regulations. While these changes are relatively minor in nature and without any significant resource implication, they have necessitated some changes to the costs and benefits associated with these Regulatory proposals.

14. The changes can be summarised as follows:

15. *Local authorities to have responsibility for bathing waters in terms of signage and cleaning up waste rather than designating bathing water operators (Regulations 8 and 16).* This change was considered necessary because it ensures a more consistent approach in the management of bathing waters and allows actions to be undertaken quicker. This amendment affects relatively few of the existing sites, as the majority are already in effect controlled by

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<sup>8</sup> Scottish Government (2007) op cit

<sup>9</sup> Scottish Executive (2006) *Better bathing waters: meeting the challenges of the revised Bathing Water Directive in Scotland*. [www.scotland.gov.uk/bathingwaterstrategy](http://www.scotland.gov.uk/bathingwaterstrategy)

<sup>10</sup> Scottish Government Library, K Spur, Saughton House, Broomhouse Drive, Edinburgh, EH11 3XD.

local authorities, who would have been classed as the bathing water operator under the original proposals.

16. *Increased co-operation with health boards in determining the health risks during exceptional/abnormal events, from cyanobacteria and from marine phytoplankton and macro algae (Regulations 13-15).* Health boards and local authorities correctly pointed out that health boards already have an important role to play in providing advice during similar events and occurrences, so the Regulations have been amended to ensure that local authorities are able to tap into this expertise.

17. *Obligation to meet “sufficient” quality status by 2015 (through CAR and other existing regulatory provisions) (Regulation 4).* This simply sets out legally what we have already stated in the consultation paper, and meets a requirement of the Directive. As stated earlier, the Regulations do not introduce the measures by which compliance with the microbiological parameters is to be achieved.

18. *Consultation with Scottish Natural Heritage where protected habitats are concerned regarding appropriate management measures (Regulations 15 and 16).* Scottish Natural Heritage were concerned that certain remedial measures could affect the biodiversity at protected areas (for example, the removal of seaweed) so we have ensured that the local authority consults with them before undertaking such measures.

19. *SEPA to consult with interested parties, including local authorities, health boards, SNH, Scottish Water and farmers in drawing up the profile of the bathing water (Regulation 6).* This ensures that those with responsibilities for ensuring compliance (e.g. local authorities and health boards) and those whose activities might impact on compliance (e.g. Scottish Water and farmers) have an opportunity to feed into the process of devising the bathing water profile, as well as being given early notification of any actions that they might have to undertake.

## **Options**

- Option 1: No Regulations (the “do nothing approach”). This would not meet the requirements of the Directive.
- Option 2: Bringing the Regulations’ provisions into force earlier than required under the Directive. This would meet and exceed the requirements of the Directive.
- Option 3: Extending the Regulations’ provisions outwith the bathing season, namely signage requirements and monitoring. This would still meet and exceed the requirements of the Directive.
- Option 4: Bringing the Regulations’ into force by the latest dates allowed under the Directive. This would meet the requirements of the Directive.

## **Costs and benefits**

## **Sectors and groups affected**

20. In considering the costs and benefits of each of the options, it is important that the various sectors and groups on which the proposed Regulations will impact are properly identified and considered. This RIA recognises that the following bodies and individuals might be affected by the different options:

- Bathers (as well as other water users)
- Local authorities
- Scottish Environment Protection Agency (SEPA)
- Scottish Water (in terms of providing information)
- Tourism interests
- Health boards

21. Bathing water operators have been removed from the earlier list featured in the partial RIA of the groups affected due to the change to the Regulations outlined in paragraph 15 above.

22. While the Regulations require compliance with the sufficient standards by 2015, as mentioned in paragraph 3 (above), they will not be setting the measures by which this will be achieved. Therefore, stakeholders who may be required to undertake measures to ensure compliance, for example, Scottish Water and farmers, will not be affected by these Regulations for such matters, but rather through other legislation through which these Regulations' compliance aims will be met. Equally, we have not attempted to quantify the benefits that the new Directive will certainly bring – improvements to public health, the benefit to tourism and the value that the public put on having clean bathing waters. These issues will be explored in the Government's assessment of the environmental, economic and social impacts of the River Basin Management Plans, of which bathing waters are a part.

23. Consultees were invited to identify any further sectors or organisations not listed in the bullets in paragraph 13 that they believed might be impacted upon by the Regulations. There were no responses to this question.

## **Benefits**

24. *Option 1:* Option 1 is the baseline against which Options 2, 3 and 4 can be compared. It would not involve any new implementation or policy costs. Continuing to monitor bathing waters under the current regime would benefit local authorities in that they would not face any obligations, as they will under the revised Directive. SEPA would be able to continue sampling for the old parameters, rather than having to develop expensive techniques for the new ones. Bathers would continue to be protected under a known regime.

25. *Options 2 and 4:* There are clear benefits from implementing the Directive, particularly in relation to better health protection, especially for children who are more susceptible to illness from polluted water than adults. Bathing in waters contaminated by faecal pollution can lead to illness, such as gastroenteritis. Research<sup>11</sup> carried out for the Government shows that families with children are the most common users of Scottish beaches, with these children more likely to be present in the water than any other users. The research also showed that the two most important factors for those visiting Scottish beaches

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<sup>11</sup> Scottish Executive/TNS Travel and Tourism (2004) *Bathing Water Use in Scotland*  
<http://www.scotland.gov.uk/Publications/2004/04/19210/35645>

were the cleanliness of the beach and of the water. A third of the Scottish population also stated that one of their reasons for going to a beach was to go paddling, swimming or to take part in other activities in or on the water. Therefore the better protection that the revised Directive offers brings clear benefits to a very large number of people, not only reducing the risk to them of becoming ill, but potentially reducing the burden on the health service and reducing time spent off work/education due to illness.

26. However, as we have said previously, the Regulations only implement part of the Directive, and the immediate focus of this RIA is the benefits that the Regulations themselves will bring. We have listed below what we perceive would be the main benefits to arise from these Regulations. The benefits from pursuing either Option 2 or 4 would be the same – the only difference is that the benefits from following Option 2 would be achieved earlier. Following Option 3, which only considers the extension of provisions under the Regulations, would provide greater protection and information over a longer period than just during the bathing season.

27. Designation of bathing waters – the revised Directive requires Ministers to designate bathing waters where it is expected a large number of people may practise bathing. Currently designations have been made where there has been local support for doing so. This does not protect bathers at unidentified sites which might have heavy usage, but have lacked local support. The new provision will address that imbalance. This must come into force from 2008, the earliest date for either Option 2 or 4, and is irrelevant to Option 3. The Regulations would also allow the de-designation of sites that have little usage. This will bring direct savings in terms of the obligations required at bathing waters under these Regulations.

28. Bathing water profiles – SEPA are required to compile a profile on every bathing water which will clearly inform the public about the potential health risks due to bacteriological, cyanobacterial, macro algae and/or marine phytoplankton contamination from bathing at a particular site. This needs to be achieved by 24 March 2011 at the latest. How early this could be implemented for Option 2 is dependent on when a working group established by Member States and the Commission to discuss this further delivers its outcomes. This is irrelevant to Option 3. We have also changed the Regulations post consultation for SEPA to consult when compiling the profiles.

29. Monitoring, assessing and classifying bathing waters under new parameters – The new parameters to be monitored, intestinal enterococci and *Escherichia coli*, give a more up-to-date scientific indication of the risks to bathers' health from microbiological pollution. They are stricter, therefore further enhancing public health. The flexibility allowed in sampling also ensures that SEPA's resources can be better directed to sampling the water on the days when bathers are actually likely to be present. Assessing and classifying bathing waters on a number of years data presents a truer picture of the overall quality, rather than the traditional snapshot approach. Classification under the Directive is required at the latest by 2015. Based on four years of data, it could conceivably be undertaken by 2011, if Option 2 were to be followed. Sufficient quality or above should be met by 2015. Again if Option 2 was to be followed, this could be set for possible achievement for 2011 at the earliest. This would also allow an additional four years for compliance to be met before the Directive's deadline of 2015 is reached.



30. Monitoring for longer than the bathing season (Option 3) would provide water quality information to members of the public who chose to use bathing waters outwith the traditional bathing season.

31. The other parts of the UK are proposing to begin classifying from 2015, with monitoring commencing in 2012. As the UK reports on compliance against the microbiological parameters as a whole, if Scotland were to begin annual classifications prior to 2015, then these could not be separately recorded under the UK's return if another option, rather than Option 4 were followed.

32. Public information including signage and other information – The revised Directive puts great emphasis on the need for the public to be informed of the quality of bathing waters that they might wish to use. Every designated bathing water in Europe will require to have signage erected, giving clear advice to bathers. There are clear benefits from having signage at beaches to inform the public about the quality of the water and potential risks to their health. By providing this advice, local authorities will be able to show that they are protecting the health of bathers using sites within their area boundaries, particularly as local authorities already have existing obligations in terms of public health. In 2003 the Government trialled the use of electronic variable messaging signs at a number of bathing waters in Scotland which were able to inform bathers of the potential quality of the bathing water<sup>12</sup>. Market research<sup>13</sup> carried out following installation of the signs showed that signage was positively received by the majority of potential bathers, with 80% stating that the sign had increased their awareness of water quality at the site they were visiting.

33. Information will also need to be made available over the internet and through other means, further giving the public an opportunity to make an informed choice on whether to bathe. The Regulations also clarify who is responsible for providing information and when – a clear benefit to bathers by removing the current ambiguity.

34. While information must be provided by 2012, the exact format of signage is still being determined by the Commission in conjunction with Member States, so it is not yet possible to determine how early this provision could be brought in. While we cannot make a clear distinction between Options 2 and 4 at this stage, it would be normal to expect local authorities to be updating and/or installing signage in the years running up to the signage requirement coming into force, as signage has a finite lifespan. There would obviously be financial benefits to local authorities in allowing them to install new signs to the Directive's design prior to 2012, if this saved them having to install temporary signage until 2012 (Option 2) that they would be intending to install anyway. There would obviously be a direct benefit to bathers if the information was made available earlier. It is also unclear whether local authorities will choose to display signage all year round, as is the case with many existing bathing beach signs. If they do (Option 3), this would provide important information to users outwith the bathing period.

35. The revised Directive also allows samples to be discounted during certain pollution events, provided information is given to the public regarding the risk to their health. This will require SEPA to give proactive warnings to bathers or advise local authorities where it

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<sup>12</sup> Scottish Executive/Faber Maunsell (2003/2004) *Bathing water signage pilot project*  
[www.scotland.gov.uk/bathingwaters](http://www.scotland.gov.uk/bathingwaters)

<sup>13</sup> Scottish Executive/mruk (2004) *Assessing the effectiveness of variable messaging signs to inform beach users about bathing water quality*. <http://www.scotland.gov.uk/Topics/Environment/Water/15561/VMSREPORT>

has identified such risks, who in turn will advise bathers. The variable messaging signs mentioned above, and which are now operated by SEPA, have trialled this provision. This benefits bathers in that a warning is given of predicted current pollution, and the discounted sample would thus not be representative of when people would normally be bathing. There may be some benefit in providing predictive warnings to users outwith the bathing season (Option 3), although the requirement for discounting would not be necessary. Information also needs to be provided to warn the public of other potential pollution events – these are discussed below.

36. Management measures at bathing waters affected by cyanobacterial pollution – The Regulations require where cyanobacteria is present and a health risk identified, measures must be taken to reduce the threat to bathers, including its possible removal by the local authority. This is tied to the profile, so does not need to come into force until 2011 at the latest. Cyanobacteria can be very harmful to public health, so there is a very real benefit from this provision. However, it is also extremely rare in Scottish bathing waters, so there is unlikely to be too great a call for action to remove it. The Scottish Government has already issued guidance<sup>14</sup> for minimising the risks to public health from cyanobacteria. This includes options for its removal. The Regulations provide in legislation what is already largely suggested in the guidance, including duties on local authorities. The Government would also expect public bodies to follow the guidance, which is not limited to the bathing season, including providing information, so that earlier adoption of this measure prior to 2011 (or outwith the season) does not bring any extra benefits. Changes made post consultation require that health boards are suitably consulted.

37. Management measures at bathing waters affected by macro-algae and marine phytoplankton proliferation – The Regulations also require that where the profile indicates a tendency for the proliferation of macro-algae and marine phytoplankton, suitable management measures are undertaken. This would include signage erected by the local authority as well as its possible removal where it is determined a health risk or unacceptable. Changes made post consultation require that health boards are suitably consulted. This is a new provision, and its inclusion would protect bathers from the serious health risks that can develop from algal blooms. However, there is equally little evidence of marine phytoplankton exhibiting a health risk in Scottish waters, so no action would be required for the vast majority of bathing waters. We also propose some flexibility in determining whether macro-algae or seaweed is a health risk or is unacceptable, so that local authorities will only be required to take action in certain cases. We have also amended the Regulations so that Scottish Natural Heritage are consulted where macro algal removal is proposed for a bathing water protected under the Habitats Directive (92/43/EEC)<sup>15</sup> or in a Site of Special Scientific Interest<sup>16</sup>. Option 2 would suggest bringing this into force earlier than 2011, the date by which the Directive requires us to do so. While there may be some benefits in doing so earlier, even though the perceived risk in Scotland is so low, it requires SEPA to have properly profiled any risks, which SEPA are only now beginning to undertake. There would be benefits in undertaking such management measures outwith the bathing season (Option 3).

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<sup>14</sup> Scottish Executive Health Department (2007) *Blue-Green Algae (Cyanobacteria) in Inland and Inshore Waters: Assessment and Minimisation of Risks to Public Health*

<http://www.scotland.gov.uk/Resource/Doc/175959/0049536.pdf>

<sup>15</sup> <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CONSLEG:1992L0043:20070101:EN:PDF>

<sup>16</sup> Nature Conservation (Scotland) Act 2004

38. Management measures at bathing waters affected by other pollution – The Regulations require that regular inspections are carried out for pollution such as tarry residues, glass, plastic, rubber and other waste, and for remedial action to be carried out where necessary. We now propose that local authorities should be responsible for remediating the bathing waters that they are responsible for – the benefit here is that this ties in with existing waste legislation and does not introduce a new regime at odds with current practice, except in terms of a longer timescale. The vast majority of Scottish bathing waters would have fallen into local authorities being classified as the bathing water operator, had this proposal remained. Local authorities will have an interest in ensuring the bathing water is cleaned of waste in terms of its tourism value to the local economy, protection of public health and importantly, already have the mechanisms in place for doing so. The Regulations only cover the bathing water area – other parts of the beach are covered under existing waste legislation – and in practice, most local authorities already clean the exposed tidal parts of the bathing water, when in the process of cleaning their beaches, so any additional costs are likely to be minimal. It is also proposed that Scottish Natural Heritage are informed where the bathing water is protected. There would undoubtedly be benefits to those using bathing waters from introducing such management measures at the earliest opportunity in line with Option 2, and outwith the season (Option 3).

39. Relevant local authority duties – The Regulations propose that each relevant local authority identifies an official who has overall responsibility for the duties under this legislation. The benefit of this is that it will clarify the point of contact for Ministers, SEPA and other bodies with the local authorities and avoid some of the ambiguity that exists at present. This does not mean that local authorities need to recruit additional staff. We would expect them to utilise existing officials where necessary. This provision would only need to be brought into force when the other duties on local authorities commence.

## **Costs**

40. *Option 1:* As well as being legally indefensible (the Scotland Act 1998 requires that Ministers meet their European obligations), this option would be politically and financially costly. Failure to make these Regulations would prevent the transposition of the Directive and would lead to infraction proceedings being raised by the European Commission against the UK, with the potential for heavy fines imposed on the Member State if steps are not taken to redress this issue. These fines may have to be met out of Scottish Government funds, impacting on the service it provides to the people of Scotland. The Scottish Government would also be failing to protect the health of bathers in Scotland if it did not adopt the new regime. This would have knock on costs to beach operators and the tourist industry, with possibility of Scottish beaches being labelled dirty. Also, as bathing waters are protected areas under the Water Framework Directive, any failure to implement the Directive could mean that we have failed to properly implement the WFD.

41. *Options 2, 3 and 4:* The costs associated with introducing these Regulations will certainly be higher than if we were to maintain the existing regime. However, as we have already explained, the option of retaining the status quo is not legally viable. This leaves Options 2, 3 and 4 as the only ones possible. The difference in costs between Option 4 and the others, is that they would have to be met earlier under Option 2, while there would be additional pressures on resources if the year round provisions of Option 3 were to be chosen.

42. Designation of bathing waters – The revised Directive requires that we designate bathing waters where we expect a large number of bathers to be present. Following surveys undertaken in 2003, the Government identified a potential additional eleven bathing waters in its 2004 consultation paper on bathing water identifications<sup>17</sup>. These will bring costs for monitoring, providing information and meeting the various management measures. It is accepted that there will be additional costs in terms of meeting compliance, but these are not considered in this RIA. Equally, there is the possibility of delisting sites which do not have heavy usage, and sites may be de-designated after measures have already been put in place, for example signage. To meet the requirements of the Directive, sites would still have to be considered on the basis of usage during the bathing season, rather than at other times.

43. Bathing water profiles – SEPA already undertake analysis of the impacts on bathing waters and report on these in their Pollution Reduction Plans, so it is expected that the requirement to complete profiles will not have significant cost implications, although there is now also the requirement for SEPA to consult with others. There may also be cost savings in that the Plans are updated each year, whereas profiles only need to be updated every two to four years depending on the bathing water classification. These Plans are also available on SEPA's website all year round, as it would be expected for the Profiles.

44. Monitoring, assessing and classifying bathing waters under new parameters – It is accepted that the Regulations' monitoring, assessment and classification regime will bring new costs to SEPA. SEPA currently operate on a fixed sampling basis, so utilising a sampling calendar will not pose any additional problems or costs. However, the revised Directive allows for flexible sampling and the Regulations make provision for this. If SEPA are to undertake flexible sampling, it would put more strain on their monitoring capability, especially due to the distances between some bathing waters and SEPA offices, and the possible need for on-call weekend cover to provide this flexibility. The Directive also requires more investigative sampling to show that pollution events are over. Again, we recognise that this might put a strain on SEPA's monitoring operations, especially if this requires rapid testing methods, which are still at an embryonic stage. If monitoring were to be undertaken outwith the season (Option 3), this could lead to quite substantial operational costs for SEPA, particularly at a time when there would traditionally be little use of the bathing water for bathing.

45. Public information including signage and other information – A central tenet of the revised Directive is the requirement to provide members of the public with information about potential risks to their health from bathing. This role falls on SEPA and the local authorities. All bathing waters must have a sign installed by the 2012, which lists the information required under Regulation 8. This will be the responsibility of the local authority. As signs may need to include specific symbols determined by the Commission, it is too early to say what the exact format the sign may take. Signs will also have to carry the bathing water's current classification, although rather than a new sign, it is likely that this could be an adhesive or some other addition. However, a bare basic fixed panel type sign is likely to cost only a few hundred pounds apiece, although installation and potential design costs also need to be factored in. If a common design is developed for Scotland, this could bring costs down considerably. As the majority of bathing waters are coastal, signs will generally have a fairly

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<sup>17</sup> Scottish Executive (2004) *Consultation on proposals for a bathing water identification strategy Paper 2004/7*  
<http://www.scotland.gov.uk/consultations/environment/bwisc-00.asp>

limited lifespan, although this is very much dependent on how exposed the sign is to the elements, and what it is made of.

46. It will be important to let local authorities know in advance of these forthcoming requirements, so as to avoid unnecessary expense of purchasing new signs that do not meet the Directive's requirements. However, until the Commission's working group has determined the design of the symbols to be used, we are not in a position to know what will be required, so any signs installed prior to this will need to be replaced, at extra expense to the bathing water operator. Option 2 cannot be considered until the Commission delivers its verdict.

47. Local authorities will also have to factor in vandalism or accidental damage, as well as weathering and corrosion/rot so it is likely that signs may have to be replaced on average around once every decade or so. Signs will be required to provide information where bathing is permanently advised against. Not only will this have cost implications in terms of providing the sign, but the requirement to provide a permanent warning may dissuade people from visiting the bathing water, which may impact on the local economy (however, the research into the effectiveness of the variable messaging signs somewhat surprisingly suggested that only around 20% of people thought that it influenced their behaviour<sup>18</sup>).

48. Some local authorities may chose to keep their signs up all-year-round (Option 3), as occurs at present and this would have a direct bearing on the lifespan of the sign, with the sign needing to be replaced more frequently than signage only installed during the bathing season.

49. Local authorities will be responsible for ensuring that an updating of the sign is undertaken to indicate when an abnormal situation occurs, or where there is a cyanobacterial, macro-algae or marine phytoplankton proliferation. They will also be responsible for informing the public when short-term pollution is predicted in the absence of a SEPA variable messaging sign, with SEPA providing them with the relevant information. This will incur not only the cost of producing a temporary addition to the main bathing water sign, having a main sign that can be adapted, but also local authority time in installing the additional warning, and modelling work by SEPA to enable the predictions to be made. However, local authorities have in the past posted warnings to potential bathers of pollution incidents, perceiving it as a wider public health duty to do so.

50. Where the SEPA sign is present, SEPA is responsible for advising that pollution is present or predicted. SEPA currently has ten signs inherited as part of a Scottish Government project. Their aim is to increase this number to over twenty at sites where prediction is possible. SEPA also undertake the prediction work necessary to inform of short-term pollution events, which includes the use of a network of river gauges. There are two types of cost associated with SEPA's signage. Capital expenditure of signage is around £30-40,000 per sign. This also includes the purchase of additional rain gauges where necessary. Computer software was also specially developed which had a one-off capital cost of £10,000. There are also annual running costs including the installation and removal of signs at the start and end of each season, as well as staffing costs to operate the signs. SEPA intend to increase the number of signs prior to 2012 (which would meet the requirements of Option 2), but this is dependent on internal funding and suitable modelling of the bathing water. Having the

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<sup>18</sup> Scottish Executive/mruk (2004) ibid

signs installed prior to 2011 would have higher operational and capital costs for SEPA than if Option 4 were chosen, although it must be remembered that ten signs are already an integral part of SEPA's current bathing water work.

51. If SEPA were to keep the signs installed outwith the bathing season, there would be considerable extra costs incurred, not only in maintaining and replacing the signs, but through the need to undertake the monitoring and modelling necessary to provide the necessary predictions.

52. Management measures at bathing waters affected by cyanobacterial pollution – We have already said that the occurrence of cyanobacterial pollution at Scottish bathing waters is very rare. Even if it were to occur, the recent Government document on blue-green algal outbreaks<sup>19</sup> already requires that local health boards and authorities have a plan of action to deal with any risk, so any additional costs are likely to be minimal. Public information is also required under the guidance, similar to the duty under the Regulations to update the bathing water sign. If there is an outbreak, removal would incur costs; equally failure to do so by leaving the scum lying could potentially damage the local tourist economy.

53. Management measures at bathing waters affected by macro-algae and marine phytoplankton proliferation – The potential costs associated with management measures for macro-algae and marine phytoplankton need to be considered separately. The Regulations require that management measures are undertaken where it is determined by the interested parties that a proliferation either poses a health risk or is unacceptable. Risks from marine phytoplankton blooms, in the form of a scum or mat, are similar to those for cyanobacteria, but like cyanobacteria, occurrences in Scottish bathing waters are negligible. Any costs associated would be for warning signs (see above) and possible removal, similar to those for cyanobacteria. Due to the potential health risk of marine phytoplankton blooms (such as red tide), it is likely that the proliferation would be judged in terms of its health impact rather than its acceptability.

54. Macro-algae, otherwise known as seaweed, are in turn more likely to be considered on their acceptability rather than their health risk. We believe guidance, similar to the Government's existing Code of Practice on Litter and Refuse<sup>20</sup>, may be required in order to help determine what is acceptable, also taking account of Scottish Natural Heritage's habitat concerns. Where macro-algae is classed as unacceptable, costs to local authorities will be similar to those incurred for the current removal of litter from beaches for which they are responsible. Costs are dependent on the type of bathing water (stony or sandy foreshore), physical access and the variety of macro-algae present. As it is an organic material, it is also probable that local authorities would have to ensure disposal is not through landfill in future, except where heavily contaminated through waste.

55. Management measures at bathing waters affected by other pollution – In terms of costs incurred for the removal of waste from bathing waters, this is also dependent on the nature and possible protected status of the bathing water (whether mechanical means can be used or hand picking only), and the form of waste present. For practical reasons, we would expect the beach operator to focus on the removal of waste from the part of the bathing water exposed at low tide. Certain types of waste that may be washed ashore would fall more

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<sup>19</sup> Scottish Executive Health Department (2007) *ibid*

<sup>20</sup> Scottish Executive (2006) *Code of Practice on Litter and Refuse* <http://www.littercode.org/>

specifically within the ambit of other forms of regulation in terms of its removal, largely due to its immediate risk to human health i.e. chemical containers. For the majority of bathing waters, local authorities already have a duty to remove litter from above the high water mark (where most waste is likely to be deposited) under the Environment Act 1990 and at a frequency greater than that proposed under the Regulations. In practice, most local authorities already clear below this mark where they can and as such the cost of removing waste is going to be fairly negligible in terms of existing duties.

56. Relevant local authority duties – We would expect local authorities to identify a point of contact from within their current staff who have an existing responsibility in this area, rather than needing to recruit, in order to save on additional expense.

### **Preferred option**

57. Option 4 has been identified as the preferred option on the basis that it delivers the benefits to bathers in a timeframe suitable for stakeholders to adapt to the measures required. This would allow SEPA to adapt their scientific capabilities to the new regime (sampling is not yet carried out under the new parameters) and rapid testing, required for short term and other pollution events, is still at the research stage. It would also allow local authorities to install the necessary information to bathers once the Commission and Member States have determined what will need to be provided, and to properly plan for their other new responsibilities, without any undue rush.

58. Option 1 is neither legally, politically or financially viable, and as such its costs outweigh the few advantages it may have. Option 2 would obviously cost more than Option 4 in that duties on SEPA, local authorities and others would have to be undertaken earlier. While there would be benefits in implementing parts of the Directive earlier, for other sections, the requirements are already being met – for example cyanobacteria – or still unclear – signage or the sampling methodology. It would therefore make sense to follow the timescale provided for under the Directive. This after all was the result of measured consideration between the European Parliament, the Commission and the Member States. Option 4 also provides for transposition of the Directive at the same time proposed for the rest of the UK, which makes sense, as the Commission will only consider completion of transposition of the Directive on a UK basis.

59. Option 3 has obvious attractions in that it would provide potential water users with information about water quality out with the bathing season, as well as putting measures in place to reduce certain types of pollution should they occur. However, the aim of the Directive is to protect bathers, and Scotland's climatic conditions mean that bathing is very rarely practised out with the summer months. If there are no bathers to protect, this leaves little rationale for regular monitoring, SEPA predictive signage or management measures to be carried out outside of the bathing season under this Directive. There may well be fixed signage up all year round, but we would leave that to the discretion of the individual local authority, rather than unnecessarily encouraging signage for periods when such information is not required, especially as they have a limited lifespan. As we have already said, general management proposals already exist for dealing with algal blooms and local authorities would still be responsible for cleaning amenity beaches out of season, albeit less frequently. On the basis that bathers are unlikely to be present out with the bathing season, Option 3 can be discounted, as the costs to SEPA and local authorities outweighs the benefits to any bathers present.

## **Pollution control measures**

60. Meeting the requirements of the revised Bathing Water Directive is an integral part of the existing Water Framework Directive (2000/60/EC). The legislation to implement the pollution control requirements of the Water Framework Directive are already in place. As stated in paragraph 3, this RIA does not examine the potential costs and benefits of using the pollution control measures already made under other legislation as these have either been subject to separate RIAs or will be examined in the Scottish Government's forthcoming assessment of impacts of the River Basin Management Plans, which includes compliance with the revised Directive. In order to achieve compliance with the revised Bathing Water Directive's standards it is envisaged SEPA will utilise the powers under the Water Environment (Controlled Activities) (Scotland) Regulations 2005, newly supplemented with the diffuse pollution General Binding Rules. The completed RIA for the 2005 Regulations<sup>21</sup> is available on the Government's website, whilst that for the General Binding Rules will be available shortly.

## **Small/Micro Firms Impact Test**

61. As we have said earlier, the Regulations do not introduce new measures for tackling the potential pollution risk to bathing waters. Any impact of the Regulations on farmers and businesses within bathing waters with private sewerage systems will be from existing legislation under the Water Environment and Water Services (Scotland) Act 2003 which transposes the WFD. This will be considered in the Government's forthcoming impact assessment for the River Basin Management Plans.

62. Since the post consultation change from bathing water operator to local authority, it is not envisaged that any private businesses will be directly affected by the Regulations. SEPA and/or local authorities might require access to their land in carrying out duties, but this would not be intended as a disruption to their business. Signs may be placed on their land, although it would be the intention of both SEPA and the local authorities to locate such signage on public land as a preference. Notification of poor classification, pollution events or that the bathing water is no longer designated due to the risk to bathers' health could possibly have a knock on effect on businesses who rely on beach visitors for their trade. The Regulations require that measures (through the Controlled Activities Regulations) are undertaken to reduce and or remediate this impact. However, where such measures fail, and warnings must be posted, the paramount importance of protecting public health must override the concerns of such businesses.

63. The Scottish Government consulted with groups and organisations that represented the interests of small and micro businesses that might be affected. The Government actively sought responses from such businesses and their representatives, although only one response, from NFU Scotland, came from an organisation which fitted this criteria.

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<sup>21</sup> Scottish Executive (2005) *Policy Statement and Regulatory Impact Assessment accompanying the Controlled Activities Regulations* <http://www.scotland.gov.uk/Publications/2005/05/0995747/57481>



## **Legal Aid Impact Test**

64. The draft Regulations consulted upon introduced rights of appeal (Regulation 20) against SEPA's determination of the bathing water operator, and against notices or proposed actions from a relevant local authority. As in a very small number of cases, a private individual could have been identified as the bathing water operator, it was considered prudent to determine whether the right of appeal could possibly introduce any additional burdens on the legal aid fund. However, with the removal of the obligations on private individuals, the right of appeal has been omitted from the Regulations, and therefore there will be no impact on the legal aid fund.

## **Test Run of business forms**

65. The draft Regulations do not introduce any business forms.

## **Competition assessment**

66. We do not expect the draft Regulations to have any impact on competition. The Directive requires that all bathing waters reach the same sufficient standard or above by 2015, except where this is technically infeasible or disproportionately expensive. We accept that certain sites will initially be of better quality than others by the nature of their location and lack of potential pollution threats. It might also be determined that other sites may never reach sufficient and bathing be advised against on a permanent basis. This may well have a bearing on future beach usage, with the public more likely to visit a bathing water which exhibits good quality, than from using a 'dirty' beach, which the Regulations will require the operator to display signage indicating poor water quality. However, rather than distorting competition between beach operators, the standards set by the Directive and introduced by the Regulations are applicable to all and are designed to provide an equal level of health protection across all European Member States. The measures to achieve compliance in Scotland (separate from these Regulations), will be determined by the level of risk of failure at each bathing water, with the aim of achieving at least sufficient status.

## **Monitoring**

67. The Scottish Government, local authorities and SEPA will be responsible for monitoring compliance with the Regulations.

## **Post-implementation review**

68. The European Commission will assess whether, in their view, Member States are correctly transposing the revised Directive. The Bathing Water (Scotland) Regulations 2008 will be assessed by the Commission once they are forwarded on as evidence that Scotland, as part of the UK, is complying with the Directive. The Regulations that directly transpose the Directive's requirements would also have to be reviewed if the Commission chooses to amend the Directive in future, as they have proposed. Measures included in the Directive, in relation to waste, cyanobacteria, macro algae and marine phytoplankton may be periodically assessed, and certainly within ten years, to determine their effectiveness.

## **Summary and recommendation**

69. As mentioned in paragraph 57 above, Option 4 has been recommended as the preferred option on the basis that it delivers the benefits to bathers during the periods that it is expected they will bathe and in the timeframe suitable for those on whom the Regulations place duties to adapt to their roles. This includes the scientific, assessment and information provision work required from SEPA; the signage responsibilities and remediation and restoration measures from local authorities; and for Ministers to properly determine the processes and refine policy than if earlier implementation was chosen. The Option 4 timescale also allows for proper working arrangements and appropriate communication channels to be established; therefore ensuring that implementation of the Regulations (and the Directive) is successful on the ground.

## **Declaration and publication**

### **Ministerial Statement**

I have read the Regulatory Impact Assessment and I am satisfied that the benefits justify the costs.

Michael Russell  
Minister for Environment  
April 2008

## **Annex - Implementation and delivery plan under recommended option**

### Main obligations:

- 2008 - Regulations made  
Designation of bathing waters under revised Directive (Scottish Ministers)
  
- 2011 - Bathing water profiles established (SEPA)  
Monitoring for cyanobacteria, macro algae and marine phytoplankton (SEPA) and other waste (SEPA, local authorities)  
Management measures in terms of short-term pollution (SEPA)  
Management measures at bathing waters in abnormal situations and exceptional circumstances (local authorities)  
Management measures at bathing waters affected by cyanobacterial, macro algae and marine phytoplankton proliferation (local authorities)  
Management measures at bathing waters affected by other pollution (local authorities)
  
- 2012 - Monitoring and assessment of microbiological parameters (SEPA)  
Public information (SEPA, local authorities)
  
- 2015 - Classification of bathing water in terms of microbiological compliance as sufficient or above (SEPA)  
Management measures for poor bathing waters (SEPA)
  
- 2020 - All bathing waters classified as poor for five consecutive years to be determined as former bathing waters with permanent advice against bathing given (Scottish Ministers, SEPA and local authorities)