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## **A further consultative document on the proposed Control of Substances Hazardous to Health (Amendment) Regulations 2004**

This consultative document is issued by the Health and Safety Commission in compliance with its duty to consult, under sections 16(2) and 50(3) of the Health and Safety at Work etc. Act 1974, bodies which appear to it to be appropriate before submitting proposals for the making of Regulations and the issue of Approved Codes of Practice.

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to reach him no later than 28 May 2004

The Commission tries to make its consultation procedure as thorough and open as possible. Responses to this consultative document will be lodged with the Health and Safety Executive's Information Centres after the close of the consultation period where they can be inspected by members of the public or be copied to them on payment of the appropriate fee to cover costs.

Responses to this consultative document are invited on the basis that anyone submitting them agrees to their response being dealt with in this way. Responses, or part of them, will be withheld from the Information Centres only at the express request of the person making them. In such cases, a note will be put in the index to the responses identifying those who have commented and have asked that their views, or part of them, be treated as confidential.

Many business e-mail systems now automatically append a paragraph stating the message is confidential. If you are responding to this CD by e-mail and you are content for your responses to be made publicly available, please make clear in the body of your response that you do not wish any standard confidentiality statement to apply.

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# CONSULTATIVE DOCUMENT

**A further Consultative Document on the proposed Control of  
Substances Hazardous to Health (Amendment) Regulations 2004**

**CONSULTATIVE DOCUMENT**

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# **A FURTHER CONSULTATIVE DOCUMENT ON THE PROPOSED CONTROL OF SUBSTANCES HAZARDOUS TO HEALTH (AMENDMENT) REGULATIONS 2004**

## **EXECUTIVE SUMMARY**

1. The Control of Substances Hazardous to Health Regulations 2002 (COSHH) aims to protect people from the harmful health effects of substances used at work. It does this by requiring employers to carry out a risk assessment and as a result to take steps either to prevent exposure or to control the risks to their employees (or others who may be affected) from such substances. However, in a few cases, where risks are high or difficult to control, it imposes restrictions on the supply or use of the substances. Many of these supply and use restrictions stem from the EC's Marketing and Use Directive (76/769/EEC). COSHH is supported by an Approved Code of Practice (ACoP) which gives practical advice on compliance.
2. In this Consultative Document the HSC proposes:
  - restriction of the supply and use of high chromium VI cement;
  - extension to all merchant ships of the existing disapplication of COSHH and of the Control of Lead at Work Regulations 2002 (CLAW) to sea-going merchant ships; and
  - clarification of the wording of regulation 9(1) of COSHH (and the equivalent regulation 8(1) in CLAW) in respect of the scope of the duty to maintain exposure control measures, together with some related changes to the COSHH and CLAW ACoPs.
3. The above changes would be introduced by the Control of Substances Hazardous to Health (Amendment) Regulations 2004 (COSHH 2004). These Regulations will also introduce a new occupational exposure limit framework for hazardous substances (for further details see CD 189).

## **CEMENT**

4. Modern cements (and preparations containing cement such as concretes, mortars and grouts) may contain elevated levels of chromium VI. Chromium VI in dry cement poses little risk but, once wet, it can be a cause of allergic contact dermatitis in those whose skin is exposed to it.
5. Allergic contact dermatitis is a painful, disfiguring condition which, in severe cases, can be disabling. Once sensitisation to chromium VI in cement has occurred subsequent exposure, even slight, may cause recurrence of the symptoms and affected individuals can find it necessary to give up their jobs.

The Health and Safety Executive (HSE) estimates that each year there are 200 to 400 new cases of allergic contact dermatitis due to chromium VI in cement in Great Britain, the majority in the construction industry. No significant reduction in these figures has been seen in recent years.

6. Significant reductions in allergic contact dermatitis, however, have been reported in European countries which only permit the supply of cement and cement preparations that have a low soluble chromium VI content. Cement manufacturers and suppliers in those countries lower the soluble chromium VI content of their product by adding a reducing agent (typically ferrous sulphate) which reacts with the chromium VI when water is added to the cement. Provided the cement is stored appropriately, the reducing agent remains effective for approximately 6 months.

### ***EC Directive on cement***

7. In response to the problem of allergic contact dermatitis, a new European Directive (see Appendix 1) was adopted on 18 June 2003. This included an EU-wide restriction on the placing on the market and use of cement and cement preparations which contain high levels of soluble chromium VI. HSE represented the United Kingdom in negotiations on the Directive and liaised closely with the UK cement industry and other relevant stakeholders.

8. Directive 2003/53/EC of the European Parliament and of the Council (the 26<sup>th</sup> Amendment to the Marketing and Use Directive):

- prohibits the placing on the market or use of cement or cement preparations which contain, when hydrated, more than 2 parts per million (ppm) of soluble chromium VI;
- requires that where cement or cement preparations have a soluble chromium VI content of 2 ppm or less, when hydrated, *due to the presence of a reducing agent*, their packaging should be marked with information on the period of time for which the reducing agent remains effective (i.e. packing date, suggested storage conditions and suggested storage period); and
- permits the placing on the market and use of cement or cement preparations not meeting the two requirements above only when it is for use in totally automated and fully enclosed processes, where there is no possibility of contact with the skin.

The Directive is binding on the UK and other EU member States.

Note: The Directive also imposes restrictions on nonylphenol (NP) and nonylphenol ethoxylate (NPE). Persons interested in the NP or NPE restrictions should contact the Department of the Environment, Food and Rural Affairs (DEFRA helpline - 08459 33 55 77) which has responsibility for their implementation.

## ***Implementation of the Directive's restriction on cement by way of COSHH and CHIP***

9. Schedule 2 to COSHH has been used previously to implement supply and use restrictions on various substances by prohibiting the supply and use of particular hazardous substances in certain circumstances. HSC considers that it would be appropriate to use it to implement the supply and use restriction on high chromium VI cement and cement preparations. For this purpose, COSHH 2004 would amend COSHH as described in Part A of Appendix 2 of this CD.

10. HSC proposes to implement the requirements for marking cement packaging using Schedule 5 Part II B of the Chemicals (Hazard Information and Packaging for Supply) Regulations 2002 (CHIP), which already contains other similar requirements on warning phrases. For this purpose, COSHH 2004 would amend CHIP as described in Part A of Appendix 2 of this CD.

11. In accordance with the requirements of the Directive, it is proposed that COSHH 2004 should be made and published by 16 July 2004 (or as soon as possible thereafter) and that the amendments it makes to COSHH and CHIP in respect of cement and cement preparations be binding on dutyholders from 17 January 2005.

12. No changes to the COSHH ACOP are proposed in respect of this matter.

13. **Question 1 – Do you agree the proposed additions to Schedule 2 to COSHH and Schedule 5 to CHIP that will give effect to the supply and use restriction on cement and cement preparations?**

14. Estimated costs and benefits of the restriction on cement and cement preparations are set out in the preliminary regulatory impact assessment (Appendix 5). The cost to Industry over 10 years is estimated at £28-29M and the value of the expected reduction in allergic contact dermatitis is estimated at £18-53M.

15. **Question 2 – Do you have any comments in relation to costs and benefits of the restriction on cement and cement preparations?**

## **DISAPPLICATION OF COSHH AND CLAW TO ALL SHIPS**

16. COSHH 2004 provides an opportunity to modify regulation 3(3) of COSHH and regulation 3(3) of the Control of Lead at Work Regulations 2002 (CLAW).

17. Regulation 3(3) of COSHH and CLAW currently disapply those Regulations in respect of sea-going ships in the following terms:

“3(3) The duties imposed by these Regulations shall not extend to the master or crew of a sea-going ship or to the employer of such persons in relation to the normal shipboard activities of a ship’s crew under the direction of the master.”

As drafted, therefore, both COSHH and CLAW do apply to the master or crew of non-sea-going ships, such as those on inland waterways and those that serve the Isle of Wight and Scottish Islands.

18. Following a review of river safety since the 1989 “Marchioness” disaster, Lord Justice Clarke’s Report on the Thames Safety Inquiry called for the rationalisation of health and safety legislation in relation to non-sea-going ships. It recommended that merchant shipping health and safety legislation should apply to non-sea-going ships, and for this to be enforced by the Maritime and Coastguard Agency (MCA).

19. The HSC approved the Inquiry’s recommendation and so in broad terms, the HSE and MCA enforcement demarcation between ship and shore work is that HSE is responsible for legislation and enforcement on shore and the MCA for enforcement on ships, i.e. both sea-going and non-sea-going. There are exceptions, however, e.g. when a ship’s crew and shore-side workers work together in loading or unloading cargo or carrying out repairs, the Health and Safety at Work etc. Act 1974 applies and HSE enforces. Further detailed information on the HSE and MCA enforcement demarcation is set out in the *Memorandum of Understanding between the Health and Safety Executive, the Maritime and Coastguard Agency and the Marine Accident Investigation Branch for health and safety enforcement activities etc. at the water margin and offshore*. A copy of the Memorandum can be viewed on the HSE website at: [www.hse.gov.uk/spd/spdmar.htm](http://www.hse.gov.uk/spd/spdmar.htm)

20. To implement the revised demarcation policy, it was necessary for the MCA to amend the Merchant Shipping and Fishing Vessels (Health and Safety at Work) Regulations 1997 and for HSE to amend a number of its health and safety regulations. The latter include the disapplication to sea-going ships in regulation 2(1) of the Management of Health and Safety at Work Regulations 1999 (MHSWR) as well as in regulations 3(3) of COSHH and CLAW.

21. The Management of Health and Safety at Work and Fire Precautions (Workplace) (Amendment) Regulations 2003 amended regulation 2(1) of HSE’s MHSWR 1999. They remove those Regulations’ reference to “sea-going ship” and define “ship” in similar terms to those used in the Merchant Shipping Act. The effect was to amend the MHSWR so that they do not apply to the master and crew of any type of merchant ship (whether used at sea or on inland waters) in respect of normal ship-board activities, but that they do apply when shore-based workers work alongside the crew, e.g. during dock operations. Corresponding changes were also made to MCA enforced Regulations; the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Amendment) Regulations 2001 amended the 1997 Merchant Shipping Regulations and applied them to non-sea-going ships.

## ***COSHH and CLAW***

22. The proposed revisions of regulation 3(3) of COSHH and of CLAW are described in Part B of Appendix 2. Both sets of Regulations will not apply to merchant ships, whether at sea or on inland waterways, unless there are work activities being carried out that involve the use of shore-based workers. COSHH and CLAW will continue to apply to ships of the Royal Navy because the Merchant Shipping Act does not apply to them. The Regulations will also apply to offshore installations when they are covered by the Health and Safety at Work etc. Act 1974 (Application Outside Great Britain) Order 2001. No changes to the COSHH ACOP or the CLAW ACOP are proposed in respect of this matter.

**23. Question 3 - Do you agree the proposed amendment to regulation 3(3) of COSHH and CLAW that will give effect to the enforcement demarcation between ship and shore work agreed by HSE and the MCA?**

24. The proposal is essentially for a change of regulatory authority and applicable legislation. No longer subject to COSHH and CLAW, non-sea-going ship operators would instead be subject to requirements of marine legislation. On this basis, HSC believes that the cost of the proposed change to operators will be negligible. The replacement of HSE by MCA in this area of regulation is expected to be cost-neutral and should result in more efficient and effective enforcement by MCA staff who are specialists in marine operations.

**25. Question 4 – Do you have any comments in relation to costs and benefits of the amendment to regulation 3(3) of COSHH and CLAW?**

## **CLARIFICATION OF THE WORDING OF REGULATION 9(1) OF COSHH AND 8(1) OF CLAW**

26. Regulation 6 of COSHH requires employers to assess the risks to their employees (and others who may be affected) arising from their use of substances hazardous to health. Regulation 7 of COSHH requires employers to prevent exposure to substances hazardous to health so far as is reasonably practicable for them to do so, or to put in place such measures as are needed to adequately control exposure. Regulations 5 and 6 of CLAW impose similar duties in respect of lead.

27. Regulation 9(1) of COSHH and regulation 8(1) of CLAW require employers to maintain the measures they have taken to control exposure of persons to substances hazardous to health and to lead. The purpose of this regulation is to ensure that the effectiveness of exposure controls does not decline over time.

28. It is HSC's view that although the definition of "control measure" in both COSHH and CLAW makes clear that such measures are not limited to

“hardware” controls (e.g. ventilation systems) but include also “software” controls (e.g. systems of work and supervision), the current wording of regulations 9(1) and 8(1) may mislead dutyholders in to assuming that the duty to maintain controls applies only to the former. This possibility is increased by the fact that all the other paragraphs in each of those regulations prescribe specific duties in relation to particular types of “hardware” control, e.g. local exhaust ventilation.

29. HSC considers that the wording should be improved and proposes, therefore, that regulation 9(1) of COSHH and 8(1) of CLAW be recast as described in Part C of Appendix 2. Furthermore, HSC proposes, as set out in Appendix 4, a number of related changes and other minor improvements to the COSHH and CLAW ACOPs.

**30. Question 5 – Do you agree the proposed revision of the wording of regulation 9(1) of COSHH and regulation 8(1) of CLAW and the related changes to the COSHH and CLAW ACOPs?**

31. No costs or benefits have been associated with this proposal because it is essentially clarificatory in nature.

## **INVITATION TO COMMENT**

32. The HSC has a duty under sections 16(3) and 50(3) of the Health and Safety at Work etc. Act 1974 to consult appropriate organisations before submitting regulatory proposals for new regulations to the Government and that is the purpose of this document. It is being sent to a wide range of organisations that are concerned with preventing or controlling employees’ exposure to substances hazardous to health, and a list of the organisations and individuals concerned is at Appendix 6. The Consultative Document can be freely photocopied, and is also available on the HSE web-site at [www.hse.gov.uk/consult](http://www.hse.gov.uk/consult). Alternatively, further copies can be obtained free from HSE Books at the address on the back cover. However, if you want more than one copy, a charge will be made to cover the cost of packaging and handling.

33. The HSC would welcome your response to the questions raised in this Consultative Document. For convenience, all the questions concerned appear in bold type in the main text of the document, and to make things easier, they are also set out on the reply form at Appendix 7 that you may find helpful to use when replying, but you can let us have your comments in any form. If you are replying on behalf of an organisation, it would be helpful if you would tell us what that organisation does, and what it aims are. Please attach additional pages if necessary. We will acknowledge all responses and give full consideration to the substance of arguments in the development of proposals; we may also contact you again if, for example, we have a query.

34. The HSC tries to make its consultation procedure as thorough and as open as possible. Copies of the responses to this Consultative Document will be lodged at HSE’s Information Centres after the close of the consultation

period. Members of the public may inspect them or obtain copies on payment of the appropriate fee to cover our costs. The two HSE Information Centres are located at:

London Information Centre  
Rose Court, 2 Southwark Bridge  
London SE1 9HS

Sheffield Information Centre  
Broad Lane  
Sheffield S3 7HQ

35. Responses to this Consultative Document are invited on the basis that anyone submitting them agrees to their being dealt with in this way. Responses, or parts of them, will be withheld from the Information Centres only at the express request of the person making them. In such cases a note will be put in the index to the responses identifying those who have commented and asked that their views, or part of them, be treated as confidential.

36. If you reply to this Consultative Document in a personal capacity, rather than as a post holder of an organisation, you should be aware that information you provide may constitute “personal data” in the terms of the Data Protection Act 1998. For the purposes of this Act, HSE is the “data controller” and will process the data for health, safety and environmental purposes. HSE may disclose these data to any person or organisation for the purposes for which it was collected, or where the Act allows disclosure. You have the right to ask for a copy of the data and to ask for inaccurate data to be corrected.

37. Please send your comments in writing or by e-mail to:

Michael J Ryan  
Policy Group – Chemicals and Flammables Policy Division  
Health and Safety Executive  
7 NW, Rose Court  
2 Southwark Bridge  
London SE1 9HS  
Tel: 020 7717 6140  
E-mail: [michael.ryan@hse.gsi.gov.uk](mailto:michael.ryan@hse.gsi.gov.uk)

to arrive no later than [28th May 2004].

38. If you are not satisfied with the way in which this consultation exercise has been conducted, we want to know and we want to put things right. Please write to Mr W D Macdonald, Health and Safety Executive, Rose Court, 2 Southwark Bridge, London SE1 9HS. He will investigate your complaint and tell you what he is going to do about it. We aim to reply to all complaints within 10 working days. If you are not satisfied with the outcome of your complaint, you can raise the matter with the Director-General of HSE – Timothy Walker, at the same address. You can also write to your MP to take up the case with us. Your MP may refer the matter to the Parliamentary Commissioner for Administration (the Ombudsman) who will investigate your complaint.

Please complete and enclose this form with your reply to this consultative document.

In your view how well does this Consultative Document (COSHH (Amendment) Regulations 2004 – cement, etc) represent the different policy issues involved in this matter? <b>[Tick one box]</b>	<input type="checkbox"/> Very well	<input type="checkbox"/> Well
	<input type="checkbox"/> Not well	<input type="checkbox"/> Poorly

Is there anything else you particularly liked or disliked about this consultation exercise? [Please add extra sheets if you wish.]

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**DIRECTIVE 2003/53/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL**

**of 18 June 2003**

**amending for the 26th time Council Directive 76/769/EEC relating to restrictions on the marketing and use of certain dangerous substances and preparations (nonylphenol, nonylphenol ethoxylate and cement)**

(Text with EEA relevance)

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community, and in particular Article 95 thereof,

Having regard to the proposal from the Commission <sup>(1)</sup>,

Having regard to the opinion of the European Economic and Social Committee <sup>(2)</sup>,

Acting in accordance with the procedure laid down in Article 251 of the Treaty <sup>(3)</sup>,

Whereas:

- (1) The risks posed to the environment by nonylphenol (NP) and nonylphenol ethoxylate (NPE) have been assessed in accordance with Council Regulation (EEC) No 793/93 of 23 March 1993 on the evaluation and control of the risks of existing substances <sup>(4)</sup>. The assessment identified a need to reduce those risks and, in its opinion of 6 and 7 March 2001, the Scientific Committee on Toxicity, Ecotoxicity and the Environment (CSTEE) confirmed that conclusion.
- (2) NP is classified as a 'priority hazardous substance' in Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy <sup>(5)</sup>. Pursuant to Article 16(6) of that Directive, the Commission is to submit proposals of control for the cessation or phasing-out of discharges, emissions and losses of such substances.
- (3) Commission Recommendation 2001/838/EC of 7 November 2001 on the results of the risk evaluation and the risk reduction strategies for the substances: acrylaldehyde; dimethyl sulphate; nonylphenol phenol, 4-nonyl-, branched; tert-butyl methyl ether <sup>(6)</sup>, adopted within the framework of Regulation (EEC) No 793/93, proposed a risk limitation strategy for NP and NPE, recommending in particular that restrictions be placed on their marketing and use.

- (4) In order to protect the environment the Commission is invited to consider an amendment to Council Directive 86/278/EEC of 12 June 1986 on the protection of the environment, and in particular of the soil, when sewage sludge is used in agriculture <sup>(7)</sup>, with a view to establishing a concentration limit value for NP and NPE in sewage sludge that is to be spread on land.

- (5) In order further to protect the environment, the placing on the market and the use of NP and NPE should be restricted for specific uses which result in discharges, emissions or losses to the environment. However, the restriction concerning co-formulants in pesticides and biocides should be without prejudice to the validity of existing national authorisations of pesticides or biocidal products containing NPE as a co-formulant, which have been granted before the entry into force of this Directive, until they expire.

- (6) Scientific studies have also shown that cement preparations containing chromium VI may cause allergic reactions in certain circumstances, if there is direct and prolonged contact with the human skin. All uses of cement bear the risk of direct and prolonged contact with the human skin, with the exception of controlled closed and totally automated processes.

- (7) The CSTEE has confirmed the adverse health effects of chromium VI in cement.

- (8) Individual protection measures are necessary, but not sufficient to prevent skin contact with cement. Moreover, according to the hierarchy of protection provisions contained in Council Directive 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work (Fourteenth individual Directive within the meaning of Article 16(1) of Directive 89/391/EEC <sup>(8)</sup>), the employer is to ensure as a priority that the level of exposure is reduced to as low a level as possible when substitution is impossible, and apply individual protection measures only where exposure cannot be prevented by other means.

<sup>(1)</sup> Proposal of 16 August 2002 (not yet published in the Official Journal).

<sup>(2)</sup> OJ C 133, 6.6.2003, p. 13.

<sup>(3)</sup> Opinion of the European Parliament of 27 March 2003 (not yet published in the Official Journal) and Council Decision of 19 May 2003.

<sup>(4)</sup> OJ L 84, 5.4.1993, p. 1.

<sup>(5)</sup> OJ L 327, 22.12.2000, p. 1. Directive as amended by Decision No 2455/2001/EC (OJ L 331, 15.12.2001, p. 1).

<sup>(6)</sup> OJ L 319, 4.12.2001, p. 30.

<sup>(7)</sup> OJ L 181, 4.7.1986, p. 6. Directive as last amended by the 1994 Act of Accession.

<sup>(8)</sup> OJ L 131, 5.5.1998, p. 11.

(9) In order to protect human health, it therefore appears necessary to restrict the placing on the market and the use of cement. In particular, the placing on the market and the use of cement or cement preparations containing more than 2 ppm chromium VI should be restricted in the case of activities where there is a possibility of contact with the skin. In controlled closed and totally automated processes this is not the case, and they should therefore be exempted. Reducing agents should be used at the earliest possible stage, i.e. at the point of cement production.

(10) In order further to protect human health, the Commission is invited to consider an amendment to Annex I to Directive 98/24/EC so as to establish a binding occupational exposure limit value for dust.

(11) The use of chromium VI has already been prohibited by Directive 2000/53/EC of the European Parliament and of the Council of 18 September 2000 on end-of-life vehicles <sup>(1)</sup> and by Directive 2002/95/EC of the European Parliament and of the Council of 27 January 2003 on the restriction of the use of certain hazardous substances in electrical and electronic equipment <sup>(2)</sup>. Other uses of chromium VI are being examined in the framework of a risk assessment, and the Commission is invited to propose as soon as possible the appropriate legislation to address any risks identified.

(12) Council Directive 76/769/EEC of 27 July 1976 on the approximation of the laws, regulations and administrative provisions of the Member States relating to restrictions on the marketing and use of certain dangerous substances and preparations <sup>(3)</sup> should be amended accordingly.

(13) The objective of this Directive is to introduce harmonised provisions with regard to NP, NPE and cement, thus preserving the internal market whilst ensuring a high level of protection for health and the environment, as required by Article 95 of the Treaty.

(14) The adoption of a harmonised testing method is desirable for the application of this Directive as regards the content of chromium VI in cement but should not delay the entry into force of this Directive. Therefore, the Commission, in accordance with Article 2a of Directive 76/769/EEC, should establish such a method. The testing method should preferably be developed at European level, if appropriate by the European Committee for Standardisation (CEN).

(15) This Directive does not affect the Community legislation laying down minimum requirements for the protection of workers, such as Council Directive 89/391/EEC of 12 June 1989 on the introduction of measures to encourage improvements in the safety and health of workers at work <sup>(4)</sup>, and individual directives based thereon, in particular Council Directive 90/394/EEC of 28 June 1990 on the protection of workers from the risks related to exposure to carcinogens at work (Sixth individual Directive within the meaning of Article 16(1) of Directive 89/391/EEC) <sup>(5)</sup> and Directive 98/24/EC,

HAVE ADOPTED THIS DIRECTIVE:

#### Article 1

1. Annex I to Directive 76/769/EEC is hereby amended as set out in the Annex to this Directive.

2. The validity of existing national authorisations of pesticides or biocidal products containing NPE as a co-formulant, which have been granted before the entry into force of this Directive, shall not be affected by this Directive until they expire.

#### Article 2

A harmonised testing method for the application of point 47, cement, of Annex I to Directive 76/769/EEC shall be adopted by the Commission in accordance with the procedure laid down in Article 2a of that Directive.

#### Article 3

Before 17 July 2004 Member States shall adopt and publish the provisions necessary to comply with this Directive. They shall forthwith inform the Commission thereof.

They shall apply these provisions from 17 January 2005.

Where these provisions are adopted by Member States, they shall contain a reference to this Directive or shall be accompanied by such reference on the occasion of their official publication. The methods of making such reference shall be laid down by the Member States.

#### Article 4

This Directive shall enter into force on the day of its publication in the *Official Journal of the European Union*.

<sup>(1)</sup> OJ L 269, 21.10.2000, p. 34. Directive as amended by Commission Decision 2002/525/EC (OJ L 170, 29.6.2002, p. 81).

<sup>(2)</sup> OJ L 37, 13.2.2003, p. 19.

<sup>(3)</sup> OJ L 262, 27.9.1976, p. 201. Directive as last amended by Directive 2003/36/EC of the European Parliament and of the Council (OJ L 156, 25.6.2003, p. 26).

<sup>(4)</sup> OJ L 183, 29.6.1989, p. 1.

<sup>(5)</sup> OJ L 196, 26.7.1990, p. 1. Directive as last amended by Directive 1999/38/EC (OJ L 138, 1.6.1999, p. 66).

*Article 5*

This Directive is addressed to the Member States.

Done at Luxembourg, 18 June 2003.

*For the European Parliament*  
*The President*  
P. COX

*For the Council*  
*The President*  
G. DRYS

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## ANNEX

The following points 46 and 47 shall be added to Annex I of Directive 76/769/EEC:

<p>46.</p> <p>(1) Nonylphenol <math>C_6H_4(OH)C_9H_{19}</math></p> <p>(2) Nonylphenol ethoxylate <math>(C_2H_4O)_n C_{15}H_{24}O</math></p>	<p>May not be placed on the market or used as a substance or constituent of preparations in concentrations equal or higher than 0,1 % by mass for the following purposes:</p> <p>(1) industrial and institutional cleaning except:</p> <ul style="list-style-type: none"> <li>— controlled closed dry cleaning systems where the washing liquid is recycled or incinerated,</li> <li>— cleaning systems with special treatment where the washing liquid is recycled or incinerated;</li> </ul> <p>(2) domestic cleaning;</p> <p>(3) textiles and leather processing except:</p> <ul style="list-style-type: none"> <li>— processing with no release into waste water,</li> <li>— systems with special treatment where the process water is pre-treated to remove the organic fraction completely prior to biological waste water treatment (degreasing of sheepskin);</li> </ul> <p>(4) emulsifier in agricultural teat dips;</p> <p>(5) metal working except:</p> <ul style="list-style-type: none"> <li>— uses in controlled closed systems where the washing liquid is recycled or incinerated;</li> </ul> <p>(6) manufacturing of pulp and paper;</p> <p>(7) cosmetic products;</p> <p>(8) other personal care products except:</p> <ul style="list-style-type: none"> <li>— spermicides;</li> </ul> <p>(9) co-formulants in pesticides and biocides.</p>
<p>47. Cement</p>	<p>(1) Cement and cement-containing preparations may not be used or placed on the market, if they contain, when hydrated, more than 0,0002 % soluble chromium VI of the total dry weight of the cement.</p> <p>(2) If reducing agents are used, then without prejudice to the application of other Community provisions on the classification, packaging and labelling of dangerous substances and preparations, the packaging of cement or cement-containing preparations shall be legibly and indelibly marked with information on the packing date, as well as on the storage conditions and the storage period appropriate to maintaining the activity of the reducing agent and to keeping the content of soluble chromium VI below the limit indicated in paragraph 1.</p> <p>(3) By way of derogation, paragraphs 1 and 2 shall not apply to the placing on the market for, and use in, controlled closed and totally automated processes in which cement and cement-containing preparations are handled solely by machines and in which there is no possibility of contact with the skin.'</p>

## Appendix 2

In this Appendix:

- “COSHH” means the Control of Substances Hazardous to Health Regulations 2002,
- “CHIP” means the Chemicals (Hazard Information and Packaging for Supply) Regulations 2002,
- “CLAW” means the Control of Lead at Work Regulations 2002, and
- “COSHH ACOP” and “CLAW ACOP” mean the respective Approved Codes of Practice for those Regulations

### **Part A - Cement and cement preparations**

1. Implementation of requirement in Directive 2003/53/EC to restrict supply and use of high chromium VI cement and cement preparations – this will be effected by way of draft regulation 2(g) of COSHH 2004.
2. Implementation of requirement in Directive 2003/53/EC to mark packages of reduced chromium VI cement and cement preparations – this will be effected by way of draft regulation 3 of COSHH 2004.

No changes are proposed to the COSHH ACOP in respect of this matter

### **Part B - Ships**

1. Disapplication of COSHH to all merchant ships – this will be effected by way of draft regulation 2(b) of COSHH 2004.
2. Disapplication of CLAW to all merchant ships – this will be effected by way of draft regulation 4(a) of COSHH 2004.

No changes are proposed to the COSHH ACOP or CLAW ACOP in respect of this matter

### **Part C - Clarification of duty to maintain exposure control measures**

1. Clarification of regulation 9(1) of COSHH – this will be effected by way of draft regulation 2(e) of COSHH 2004.
2. Clarification of regulation 8(1) of CLAW – this will be effected by way of draft regulation 4(b) of COSHH 2004.

See Appendix 4 for related changes to the COSHH and CLAW ACOPs.



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DRAFT STATUTORY INSTRUMENTS

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## 2004 No. 00

## HEALTH AND SAFETY

The Control of Substances Hazardous to Health (Amendment)  
Regulations 2004

<i>Made</i> - - - -	<i>Day Month 2004</i>
<i>Laid before Parliament</i>	<i>Day Month 2004</i>
<i>Coming into force</i> - -	<i>Day Month 2004</i>

The Secretary of State, being the Minister designated(a) for the purpose of section 2(2) of the European Communities Act 1972(b) in relation to the abolition of restrictions on the import or export of goods, in the exercise of the powers conferred on him by the said section 2(2) and sections 15(1), (2), (4) and (6)(b), and 82(3)(a) of, and paragraphs 1(1), 8, 9, 10, 11, 13(1), 14, 15 and 16 of Schedule 3 to the Health and Safety at Work etc. Act 1974(c) hereby makes the following Regulations:

**Citation and Commencement**

1. These Regulations may be cited as the Control of Substances Hazardous to Health (Amendment) Regulations 2004 and shall come into force on [] 2004, except for regulations 2(g) and 3, which shall come into force on 17th January 2005.

2. In the Control of Substances Hazardous to Health Regulations 2002(d)—

(a) Omitted (see Note following Regulations);

(b) in regulation 3, for paragraph (3) substitute the following paragraph—

“(3) These Regulations shall not apply to the master or crew of a ship or to the employer of such persons in respect of the normal shipboard activities of a ship’s crew which—

(a) are carried out solely by the crew under the direction of the master; and

(b) are not liable to expose persons other than the master and crew to a risk to their health and safety,

and for the purposes of this paragraph “ship” includes every description of vessel used in navigation, other than a ship forming part of Her Majesty’s Navy.”

(c) Omitted (see Note following Regulations);

(d) Omitted (see Note following Regulations);

(e) in regulation 9, for paragraph (1) substitute the following paragraph—

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(a)  
(b)  
(c)  
(d)

“(1) Every employer who provides any control measure to meet the requirements of regulation 7 shall ensure that—

- (a) in the case of plant and equipment, including engineering controls and personal protective equipment, it is maintained in an efficient state, in efficient working order, in good repair and in a clean condition; and
- (b) in the case of the provision of systems of work and supervision and of any other measure, it is reviewed at suitable intervals and revised if necessary.”;

(f) Omitted (see Note following Regulations);

(g) to the end of Schedule 2 add—

(i) in column 1 the entry—

“13. Cement and cement-containing preparations which contain, when hydrated, more than 0.0002% soluble chromium (VI) of the total dry weight of the cement.”; and

(ii) to correspond with it in column 2 the entry—

“Supply and use for all purposes except for controlled and totally automated processes in which cement and cement-containing preparations are handled solely by machines and in which there is no possibility of contact with the skin.”; and

(h) Omitted (see Note following Regulations).

### **Amendment of the Chemicals (Hazard Information and Packaging for Supply) Regulations 2002**

**3.** In the Chemicals (Hazard Information and Packaging for Supply) Regulations 2002(a) for paragraph 11 of Schedule 5 Part II B substitute the following paragraph—

“**11.**—(1) The packaging of any cement or cement preparation which would contain, when hydrated, more than 0.0002% soluble chromium (VI) of the total dry weight of the cement but for the use of reducing agents shall be marked with information on the packing date, and on the storage conditions and the storage period appropriate to maintaining the activity of the reducing agent and to preventing the content of soluble chromium (VI) from exceeding 0.0002% of the total dry weight of the cement, unless it is supplied or used for controlled and totally automated processes in which cement and cement-containing preparations are handled solely by machines and in which there is no possibility of contact with the skin.

(2) The packaging of any cement or cement preparation containing, when hydrated, more than 0.0002% soluble chromium (VI) of the total dry weight of the cement shall bear the inscription:

“Contains chromium (VI). May produce an allergic reaction.”,

unless the preparation is already classified and labelled as a sensitiser with phrase R43.”.

### **Amendment of the Control of Lead at Work Regulations 2002**

**4.** In the Control of Lead at Work Regulations 2002(b)—

(a) in regulation 3, for paragraph (3) substitute the following paragraph—

“(3) These Regulations shall not apply to the master or crew of a ship or to the employer of such persons in respect of the normal shipboard activities of a ship’s crew which—

- (a) are carried out solely by the crew under the direction of the master; and
- (b) are not liable to expose persons other than the master and crew to a risk to their health and safety,

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(a) S.I. 2002/1689

(b) S.I. 2002/2676

and for the purposes of this paragraph “ship” includes every description of vessel used in navigation, other than a ship forming part of Her Majesty’s Navy.”; and

(b) in regulation 8, for paragraph (1) substitute the following paragraph—

“(1) Every employer who provides any control measure to meet the requirements of regulation 6 shall ensure that—

- (a) in the case of plant and equipment, including engineering controls and personal protective equipment, it is maintained in an efficient state, in efficient working order, in good repair and in a clean condition; and
- (b) in the case of the provision of systems of work and supervision and any other measure, it is reviewed at suitable intervals and revised if necessary.”.

Signed by authority of the Secretary of State

Day Month 2004

*Des Browne*  
Minister of State  
Department for Work and Pensions

## SCHEDULE

Regulation 2(h)

Omitted (see Note following Regulations).

### EXPLANATORY NOTE

*(This note is not part of the Regulations)*

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Note: The version of COSHH 2004 reproduced above is incomplete as it omits certain provisions which relate to implementation of a new Occupational Exposure Limit Framework. These provisions are excluded because they were described in an earlier Consultative Document (CD 189) and are not relevant to the issues addressed here.



**Draft changes to Approved Codes of Practice and Guidance**

**Control of substances hazardous to health. The Control of Substances Hazardous to Health Regulations 2002. Approved Code of Practice and Guidance (L5)**

Paragraph 158, replace with:

“The objective of this regulation is to ensure that every element of a control measure performs as originally intended, and continues to adequately control the exposure of employees to substances hazardous to health. This includes the identification of any significant deterioration in any element of the control measure, and the taking of any necessary corrective steps. The frequency of any checks carried out will depend on the likelihood of significant deterioration of that particular element of the control measure and its importance.”

Paragraph 159, replace with:

“Anyone who checks the effectiveness of any element of a control measure should have the competence to do so. The degree of theoretical and practical knowledge required will increase with the likelihood of control failure, the seriousness of the consequences, and the complexity of the control measure.”

Paragraph 160, replace with:

“‘Maintenance’ means any work carried out to sustain the efficiency of control measures, and not just work carried out by maintenance workers. It includes visual checks on any equipment relevant to the control of exposure, inspection, servicing, observation of systems of work, and any remedial work to maintain the effectiveness of control measures.”

Paragraph 162, replace with:

“All control measures in use should be visually checked, where possible, at appropriate intervals and without undue risk to maintenance staff. In the case of LEV and work enclosures, such checks should be carried out at least once a week.”

Paragraph 168, replace with:

“In the case of LEV plant, the requirements set out in paragraph 178 should be met. For all other engineering controls, the examination and test should be sufficient, to reveal any defect or latent defect.”

Heading above paragraph 185, replace with:

“Accommodation for, and checking of, personal protective equipment”

After paragraph 185, insert new paragraph:

“186. All PPE should be checked regularly to ensure that it continues to function and provide effective protection. The types of checks should be suited to that item of PPE and be able to detect significant deterioration. The more likely the performance of a particular item of PPE is to deteriorate, the

more often it needs checking. Whoever does this work should be sufficiently knowledgeable and trained to identify deterioration and significant faults. Equipment, which has deteriorated significantly or is faulty, should be effectively repaired or disposed of safely.”

**Control of lead at work. The Control of Lead at Work Regulations 2002. Approved Code of Practice and Guidance (L132)**

Paragraph 168, replace with:

“The objective of this regulation is to ensure that every element of a control measure performs as originally intended, and continues to adequately control the exposure of employees to lead. This includes the identification of any significant deterioration in any element of the control measure, and the taking of any necessary corrective steps. The frequency of any checks carried out will increase with the likelihood of significant deterioration of that particular element of the control measure and its importance.”

Paragraph 169, replace with:

“‘Maintenance’ means any work carried out to sustain the efficiency of control measures, and not just work carried out by maintenance workers. It includes visual checks on any equipment relevant to the control of exposure, inspection, servicing, observation of systems of work, and any remedial work to maintain the effectiveness of control measures.”

Paragraph 178, replace with:

“In the case of LEV plant, the requirements set out in paragraph 185 should be met. For all other engineering controls, the examination and test should be sufficient, to reveal any defect or latent defect.”

After paragraph 210, insert new heading and two new paragraphs:

“Accommodation for, and checking of, personal protective equipment

211. Employers should ensure that accommodation is provided for PPE so that it can be safely stored or kept when it is not in use. The adequacy of the accommodation will vary according to the quantity, type and its use, eg peg, (labelled) lockers, shelves or containers etc. The storage should be adequate to protect the PPE from contamination, loss or damage by (for example) harmful substances, damp or sunlight. Where quantities of PPE are stored, equipment which is ready for use should be clearly segregated from that which is awaiting repair or maintenance. Where PPE becomes contaminated during use, the accommodation should be separate from any the employer provides for ordinary clothing and equipment. Employers may also have duties under the Workplace (Health, Safety and Welfare) Regulations 1992 to provide accommodation for PPE.

212. All PPE should be checked regularly to ensure that it continues to function and provide effective protection. The types of checks should be suited to that item of PPE and be able to detect significant deterioration. The more likely the performance of a particular item of PPE is to deteriorate, the

more often it needs checking. Whoever does this work should be sufficiently knowledgeable and trained to identify deterioration and significant faults. Equipment, which has deteriorated significantly or is faulty, should be effectively repaired or disposed of safely.”



**INITIAL REGULATORY IMPACT ASSESSMENT OF THE EUROPEAN  
COMMISSION PROPOSAL TO RESTRICT THE MARKETING AND USE OF  
CHROMATE-RICH CEMENT**

***PURPOSE AND INTENDED EFFECT***

**Issue and Objectives**

1. Cement is used in construction materials such as concrete, mortar and grouting. Due to modern cement production processes, the naturally occurring trivalent chromium content in the cement is oxidised to form hexavalent chromium (chromium VI). While all cement can potentially cause irritant dermatitis, cement that contains chromium VI (higher chromate cement) also has the potential to cause allergic contact dermatitis that can lead to permanent sensitivity or even disability. The European Parliament has agreed a new amendment to the Marketing and Use Directive (76/769/EEC) to restrict the marketing and use of cement and cement containing preparations where the level of chromium VI exceeds 2 ppm. This restriction applies to all cement and activities where there is the possibility of a risk of contact with the skin. However, higher chromate cement or cement containing preparations produced in controlled closed and totally automated systems, are exempt from this restriction. This Regulatory Impact Assessment has been adapted to reflect the final text of the agreed Amendment Directive.

2. Some Member States (MS) have already implemented national legislation, which either bans the use of chromium rich cement outright, or in activities where there is a risk of skin contact, as now required by this new Directive.

3. The aim of this Directive is to reduce the number of cases of allergic contact dermatitis each year.

**Risk assessment**

4. The highest risk of exposure to chromium VI in cement occurs once cement is mixed with water. The principal health effects are skin irritation, which may lead to irritant dermatitis and allergic contact dermatitis. Workers who are exposed to wet cement on a regular basis are most at risk of developing allergic contact dermatitis. Workers most at risk of exposure are bricklayers, tile layers and grouters, workers in floor construction and those who carry out maintenance and repair work, all of whom are employed in the construction sector.

5. It is very difficult to estimate the numbers of new cases of allergic contact dermatitis each year due to chromates in cement. The majority of construction workers are peripatetic, and unlikely to visit a GP. If they do, very few would be referred to a dermatologist, and if referred, they may not visit a dermatologist who reports to EPIDERM (the HSE – sponsored national skin surveillance project). Epiderm received notification of, on average, 43

new cases of allergic or mixed allergic and irritant contact dermatitis a year, due to chromates in cement. HSE believes 43 new cases per year to be erroneously low and applied a multiplication factor of 10.

6. An alternative to the 430 new cases per year has been estimated using additional data sources. In an attempt to allow for the absence of cases seen by occupational physicians data from the Occupational Physicians Reporting Activity (OPRA) scheme has been examined. OPRA, a sister scheme to EPIDERM, cannot provide figures specifically for allergic contact dermatitis. To allow for the missing occupational physician cases the relationship between EPIDERM and OPRA cases was used to extrapolate a figure for those in the construction industry that would have been seen by occupational physicians. This led to an average figure of 73 new cases per year of allergic contact dermatitis due to chromate cement. This figure does not take account of underreporting or under-identification of cases.

7. To further build on the EPIDERM/OPRA estimate a comparison was made to the Self Reported Work-Related Illness (SWI) survey on skin disease. The 1995 SWI estimated 12,000 new cases of work-related skin disease per year (95% confidence interval of 3,000 to 22,000). This compares with around 4,000 cases per year reported to EPIDERM/OPRA. Thus we can gauge that underreporting to carry a factor of 3. Thus the estimate of 73 becomes 219 new cases per year. The rest of this paper will therefore indicate a range of 219 to 430 new cases per year of contact dermatitis caused by chromate rich cement.

### **IMPLICATIONS FOR UK CEMENT MANUFACTURING INDUSTRY**

8. Reducing the levels of chromium VI in cement is a relatively straightforward process. A reducing agent is added to the cement to reduce the level of chromium VI present. Due to its technical properties and reasonable cost, ferrous sulphate is currently considered by some MS to be the best reducing agent.

9. Considering the Directive's exemption for cement used in controlled closed or totally automated processes, it has been necessary to estimate how much of the cement manufactured in the UK would be subject to the restriction. Approximately 70%<sup>1</sup> of the cement manufactured in the UK is bagged and bulk cement (for the ready-mixed concrete and pre-cast concrete markets) and, in HSE's judgement, carries a significant risk of contact. The remaining 30% of the cement, sold in bulk, is used in automated procedures or in a closed operation with a lower risk of worker contact, however this could still lead to contact with the skin, eg cleaning machinery.

10. Where the cement poses the possibility of a risk of contact with the skin (most likely in bagged or bulk cement), the Directive calls for a reducing agent to be added to the cement at the earliest possible stage. This could be best achieved where the cement manufacturer uses a mechanical process to add

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<sup>1</sup>British Cement Association, [www.bca.org.uk](http://www.bca.org.uk)

ferrous sulphate to the cement after the final grinding stage of production. It has been noted by the British Cement Association that some Scandinavian cement works add the ferrous sulphate during the grinding stage of production.

## **INFORMATION SOURCES AND BACKGROUND ASSUMPTIONS**

11. The scale of existing ill health caused by chromium VI in cement has been estimated from case reports, the HSE Epidemiology and Medical Statistics Unit (EPI-DERM) survey of occupational ill health, the Occupational Physicians Reporting Activity (OPRA) scheme and the Self Reported Work-Related Illness (SWI) surveys. Additional sources were the Danish Technological Institute, and the National Chemicals Inspectorate Chemical Products and Biotechnical Regulations, 1998. The costs to the cement industry of implementing the Directive are estimated using information on likely costs from the UK industry as well as other Member States where the proposed restriction is already applied.

## **TECHNICAL ASSUMPTIONS**

### **DISCOUNTING**

12. Costs are discounted at a rate of 3.5% per annum following HM Treasury guidelines. Discounting allows for individuals' observed preferences towards current spending, and rising real income over time. Health and Safety benefits are discounted at 1.5% again following HM Treasury guidelines. Costs and benefits are shown at 2001 values.

### **APPRAISAL PERIOD**

13. The costs and benefits of adopting the proposed restriction are estimated over a ten-year period.

## ***BENEFITS***

### **Health and safety benefits**

14. The benefits of the restriction will come from the reduction in the risk of developing allergic contact dermatitis in the construction industry. HSE estimates that there are at least 219 new cases of allergic, or mixed allergic and irritant, contact dermatitis due to chromates in cement a year. Studies in Member States such as Finland and Denmark, where cement has been chromate-reduced for several years, have indicated a reduction in the rate of allergic contact dermatitis of at least 66%, and more usually 100%, in the construction industry. It is therefore assumed that applying the restriction to the 70% of cement that is either bagged or ready-mixed, is likely to lead to a reduction of 66% in the number of new cases of allergic contact dermatitis a year. The UK would expect to see a reduction of at least 66% once the restriction comes into force. If those employers using the "controlled closed

and totally automated systems” are applying and following good working practices when maintaining or repairing such machinery, then we could expect to see up to a 100% reduction if the cement manufacturers comply fully.

### COSTS OF WORK-RELATED ALLERGIC CONTACT DERMATITIS

15. Allergic contact dermatitis costs the individual, the employer and society as a whole. The most significant direct costs fall to individuals (and equivalently society) in loss of actual or potential income (equivalent to productivity), and in the suffering of the individuals involved. These are estimated below. Firms also incur direct costs in employee absence, administration, recruitment and retraining. Finally, costs are incurred by the rest of society in medical treatment and recuperation.

Quantified costs are as follows:

- a) The loss of income through absence from work or through having to change jobs or take early retirement
- b) Expenditure on medical treatment
- c) Pain and suffering of those affected

16. Administrative costs to firms in dealing with absence, recruitment or retraining have not been estimated. To further elaborate on the costs of training, HSE’s Field Operations Directorate estimate that the construction industry have an employee turnover of 10%. Therefore the construction industry face high training costs to new employees. Those leaving the construction industry may move onto benefits or other employment and thus may need to be re-trained. Such costs have not been quantified here due to the lack of suitable data. Any work-related illness has wider effects on those concerned and their families, which also remain unquantified.

### LOSS OF INCOME

17. There are no UK data dealing with the employment effects on workers with confirmed occupational allergic contact dermatitis. Medical studies indicate that the condition can be severe and debilitating, while studies from other Member States suggest that allergic contact dermatitis can have a varying effect on workers’ employment. It is assumed, therefore, that 10% of UK sufferers change their jobs as a result of allergic contact dermatitis.

18. A follow-up study of workers with confirmed occupational asthma found that the median reported income loss of workers who changed jobs was £3888<sup>2</sup> per case per year. It is assumed that workers who leave the construction industry as a result of allergic contact dermatitis suffer the comparable average income loss, given that occupational asthma is prevalent

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<sup>2</sup> ‘Health, Employment and Financial Outcomes in Workers with Occupational Asthma’, Gannon, Weir et al, British Journal of Medicine 1993.

in industries employing workers with similar skills to construction, such as timber and woodworking and vehicle repair.

19. The value of lost output can be proxied by the wages paid to the worker by the employer. These are gross earnings, plus a 30% allowance for non-wage labour costs (employer's national insurance etc), uprated in to 2001 prices in line with nominal earnings' growth. This gives a loss of output figure of around £6800<sup>3</sup> per case.

20. Some allergic contact dermatitis sufferers will take time off work during the year as a result of their illness. While this is likely to result in only a partial income loss to individuals (because of sick payments etc) there will be costs to employers and society through loss of output and extra administration.

21. The SWI 95 Self-reported Work-related illness Survey reveals that, of those who take time off work, the average number of days' absence per year due to skin disease was 11 per case. It is assumed that of the remaining 90%, half the sufferers of allergic contact dermatitis take, on average, 11 days off each year because of their illness. Based on average earnings in manual occupations in the construction industry (New Earnings Survey 2000), plus an allowance for non-wage labour costs, 11 days absence costs society £860<sup>4</sup> in lost income (2001 prices) per case.

22. For the remaining 45% of allergic contact dermatitis sufferers it is assumed that they do not take time off work and therefore do not experience any loss of income.

23. Therefore the average annual loss of output associated with an individual case of allergic contact dermatitis in the construction industry is estimated as:

$$(0.10 \times £6800) + (0.45 \times £860) + (0.45 \times £0) = \mathbf{£1067} \text{ per case per year}$$

### MEDICAL TREATMENT

24. In 1999, HSE estimated the average treatment costs of illnesses and accidents leading to different durations of absence<sup>5</sup>. In 2001 prices, the average cost of treating an illness (or accident) that does not lead to absence from work is £33 and the average cost of treating an illness leading to 11 days absence from work is £130 - £723. These costs include prescription charges, GP visits, the cost of hospital outpatient and any in-patient services.

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<sup>3</sup> [(Median reported income loss, 1992) x (earnings growth 1992 – 2001, 33.9%)] x 1.30 to add in 30% non-wage costs.

<sup>4</sup> {[(Average hourly wage, 2000 prices) + (30% of average hourly wage for non-wage labour costs)] uprated by 5.1% in line with nominal earnings growth 2000 - 2001} x hours in a day x number of days absent

=

{[(7.13) + (2.14)] x 1.051} x 8 x 11 = £857.36

<sup>5</sup> The costs to Britain of workplace accidents and work-related ill health in 1995/1996, HSE books 1999 ISBN 0-7176-1709-2.

25. The average cost of treatment of a case of allergic contact dermatitis in the construction industry is estimated as

$$\begin{aligned}\text{Minimum} & \quad (0.45 \times \text{£}33) + (0.55 \times \text{£}130) = \text{£}86 \\ \text{Maximum} & \quad (0.45 \times \text{£}33) + (0.55 \times \text{£}723) = \text{£}410\end{aligned}$$

### PAIN AND SUFFERING

26. This section uses monetary values for pain, grief and suffering published by HSE 1999, based on stated preference studies, which rank different illnesses by their severity. The length of time taken off work is used as a proxy for severity.

27. A non-permanently incapacitating illness, involving absence of over 1 calendar week, involves a welfare loss of around £2080 in 2001 prices. An illness that does not require taking time off work will not result in any loss of income but there will still be an element of pain and suffering. A notional allowance of £170 is assumed for the pain and suffering from minor cases of ill health.

28. The loss in terms of pain and suffering of the average case of allergic contact dermatitis is estimated as:

$$(0.45 \times 170) + (0.55 \times 2080) = \text{£}1220$$

29. This is not an estimate of the value of pain and suffering each year. It is an estimate for pain and suffering, in present value terms, expressed by how much individuals are willing to pay to avoid having allergic contact dermatitis.

### OVERALL COSTS OF ALLERGIC CONTACT DERMATITIS

30. The estimates of loss of income and medical treatment range between £1,149 and £1,476 a year. Discounting over a ten-year period gives a present value per case of around £10,620 - £13,430.

31. Adding these costs to the estimated present value of pain and suffering yields an average cost per case of allergic contact dermatitis (in the construction industry) of £11,840 - £14,650, in present value terms. **£13,244** is taken as a midpoint. This figure represents the average benefit to society, over a ten-year period, of preventing an individual from contracting allergic contact dermatitis in 2001.

### TOTAL REALISABLE BENEFITS OF CONTROL MEASURES

32. Given the estimated number of new cases each year ranging from 219 to 430, and the estimated cost of each case, the total benefit to society of preventing 66 – 100% of new cases of allergic contact dermatitis each year, over a ten-year period, is £18 million - £27 million and £35 million - £53 million respectively in present value terms.

33. In addition, the restriction can be expected to mitigate existing cases. No explicit allowance is made for this further potential benefit.

34. Regulation of chromate levels in cement should be seen within the wider context of a shortage of skilled workers in the construction industry. The Construction Industry Training Board has predicted that over the next five years, 350 000 extra construction workers will be needed to meet this skills shortage. Reducing chromate levels in cement should also have the long-term benefit that fewer skilled workers will leave the industry as a result of ill health. Retaining workers will benefit construction firms by reducing recruitment and training costs, although these benefits cannot be quantified.

## **COSTS**

### **Business sectors affected**

35. The application of the restriction to all cement, except that used in controlled closed and totally automated systems, will result in costs falling on the cement manufacturing industry. In 2001, 11.9 million tonnes of cement were sold in the UK. Three large firms manufactured 90% of this. The remaining 10% consists of some imported cement and UK-manufactured cementitious material.

### **Compliance costs to business**

36. The new Directive states that chromate-rich cement may not be placed on the market for activities where there is the possibility of contact to the skin. In addition, where a reducing agent is used, the packaging of cement or cement preparations shall be marked with information on the packing date, storage conditions and storage period during which the content of soluble chromium VI is below 0.0002% of the total dry weight of the cement.

37. The 10 year costs to business of this restriction are presented below.

### **INITIAL COSTS**

#### **EQUIPMENT**

38. The Directive requires the reducing agent to be added to the cement at the earliest possible stage in manufacture. Cement manufacturing firms will therefore have to install appropriate machinery to add ferrous sulphate (or another reducing agent) to the silos of cement at this early stage (ie during the grinding stage). The machinery required includes tanks to hold the ferrous sulphate (or other reducing agent) and equipment to convey it into the silo, together termed a 'dosing unit'. Other equipment such as filters and level devices may also incur a cost.

39. This equipment is assumed to last longer than ten years, i.e. there should be no replacement costs within the ten-year appraisal period.

40. Based on industry estimates, it will be assumed that one dosing unit is required for every 300 000 tonnes of cement treated a year. The capital cost of each dosing unit is assumed to be £125 000 - £150 000 (2001 prices). The industry noted that the assessment of costs should be based on the worst case number of dosing units. However, some cement plants have equipment (such as blenders) that can act as effective substitutes for dosing units. Similarly, some plants may not need to comply with the restriction if they comprise the exempted "controlled closed and totally automated systems" described in the Directive. It is worth noting that no further cost information was provided by industry to enable HSE to evaluate these cost estimates.

41. In 2001, 11.9 million tonnes of cement was sold in the UK, of which around 2.4 million tonnes were bagged, and 5.9 million tonnes were ready-mixed. The total initial capital cost will therefore be £3.5 million - £4.2 million for 28 dosing units to cover bagged and ready-mixed cement.

42. These costs will be incurred in the first year of implementation, Annually recurring costs of 10% of initial costs are assumed for maintenance. The ten-year maintenance cost in present value terms is therefore £3.0 million - £3.6 million.

## **RECURRING COSTS**

### **DATESTAMPING/LABELLING**

43. The Directive requires the labelling of the reducing agent (eg ferrous sulphate) to show information on the packing date, the storage conditions and the storage period appropriate to maintaining the activity of the reducing agent. At present each bag of cement is labelled and date-stamped individually. Adding a sentence to the label giving the additional information should not impose any significant costs.

### **SHELFLIFE**

44. If properly stored, in moisture resisting bags, chromate-reduced cement has a shelf life of 6 months. This falls to about 2 months if it is stored incorrectly. Ordinary cement has an indefinite shelf life. However there should be no additional costs due to tighter stock handling, as cement is typically in the marketplace within days or hours of manufacture, and the turnover time is a matter of weeks. MS such as Denmark have overcome this problem by using special packaging, which maintains the shelf life.

### **STORAGE**

45. Chromate-reduced cement is stored in 3-ply moisture-retaining bags, whereas ordinary cement is stored in 2-ply bags. However there is no evidence to suggest that switching to 3-ply bags will impose additional costs on cement manufacturers. In Member States already implementing the Directive, 3-ply bags are the same price, or sometimes cheaper, than the 2-ply bags.

## TESTING

46. The cement industry will have to conduct regular tests as a form of quality control, to check chromate levels in their cement. This will enable cement manufacturing firms to make sure that enough reducing agent has been added to the cement and that the reduction time is sufficient. The need to adopt a harmonised testing method is recognised in the Directive and the European Commission has been called upon to establish such a method preferably through the European Committee for Standardisation (CEN). This could take a number of years to achieve, however, but Member States were unwilling to delay the Directive until a test method was established. In the interim, Member States will need to use their own test methods or adopt those used elsewhere in the EU to ensure chromium VI levels in cement do not exceed 2ppm. HSE judges that the costs to the UK cement industry will not be significant, given that firms already test for chromates in cement.

## REDUCING AGENT

47. Estimates of the quantity of ferrous sulphate required to achieve a sufficient reduction of chromate VI in cement vary. A study in 1973<sup>6</sup> found that the amount of ferrous sulphate required to achieve a complete reduction of chromium VI was small: 0.1-0.2%. The current industry estimate is 0.5%. HSE judges that an appropriate assumption for calculating costs is 0.3% ferrous sulphate.

48. In 2001, 11 854 000 tonnes of cement was sold in the UK, of which around 2 370 800 was bagged and 5 927 000 ready-mixed. Total demand for ferrous sulphate would be 24 892 tonnes. Given the price of ferrous sulphate as £100/tonne, the total annual cost of ferrous sulphate would be £2.5 million. This cost would recur annually. The 10-year net present cost of the reducing agent is £21.5 million.

## Costs to HSE

49. Costs are likely to be small and contained within existing resources.

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<sup>6</sup> Fregert and Gruvberger

## Total costs to society

TABLE 2

£Thousands, 2001 prices

	INITIAL COSTS*		ANNUALLY RECURRING COSTS		10-YEAR NET PRESENT VALUE
	MIN	MAX	MIN	MAX	
<b>BAGGED/MIXED CEMENT</b>					
EQUIPMENT	3 500	4 200	350	420	6 513 – 7 815
FERROUS SULPHATE			2 489	2 489	21 427
<b>TOTAL</b>	3 500	4 200	2 839	2 909	<b>27 940 – 29 242</b>

## ANNUAL COSTS

TABLE 3

£ Thousands, 2001 prices, undiscounted costs

	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10
Bagged/mixed cement	6 339 - 7 109	2 839 – 2 909	2 839 – 2 909	2 839 – 2 909	2 839 – 2 909	2 839 – 2 909	2 839 – 2 909	2 839 – 2 909	2 839 – 2 909	2 839 – 2 909

Note that all costs are policy costs. There should be no implementation costs as the affected firms are already very familiar with the requirements of the proposal.

## **IMPACT ON SMALL BUSINESSES, CHARITIES AND VOLUNTARY ORGANISATIONS**

50. Buying and adding ferrous sulphate will cost cement manufacturers about 30p per tonne of cement. Swedish experience has indicated that the price of cement increased by about 1% after implementation of the Directive. If the restriction is applied to all cement, it will not affect small construction businesses disproportionately. However, if it is applied only to bagged and ready-mixed cement, then small firms will face disproportionate costs, since the majority of users of bagged cement are small firms. The question is

whether a small price increase will be enough to affect the small firms involved in 'low volume' activities that use bagged cement.

51. Seven firms were contacted, all with less than 30 employees, including bricklayers, roofers, tilers, and builders. None of these firms expressed serious concerns about a small increase in the price of cement. However there were worries that there could be further opportunistic price increases in the future. There were also worries about the proper storage of reduced-chromate cement on site, as it is more susceptible to hot conditions. However, the general consensus was that a small price increase would not affect small firms too much.

### ***COMPETITION ASSESSMENT***

52. The cement industry has a highly concentrated market structure, with 90% of production controlled by three large firms. However, the proposed requirement to manufacture reduced-chromate cement would not affect any one of these firms more than the others. Since there will not be any differential effects, the proposed Directive should not affect market structure or competition in the cement industry. Nor should it lead to higher set-up costs for new firms, that existing firms would not have to meet. Costs should fall on firms in proportion to their cement production. The closest thing to fixed costs are the initial outlay on equipment (dosing units), these however increase with the quantity of cement produced. Thus smaller firms do not face higher costs than larger as no economies of scale are anticipated.

53. The Directive requires the chromium VI in cement to be reduced by means of a reducing agent. Although ferrous sulphate is by far the most common such agent, it is not the only chemical that can be used to achieve the same effect. In practice, however, ferrous sulphate is expected to be the reducing agent most used. There is understood to be ample capacity in the UK to produce sufficient ferrous sulphate (ferrous sulphate is produced as a by-product from other industrial processes and considerable tonnage is produced each year). This should alleviate any concerns about the creation of the potential for anti-competitive practices in the short-term, in the market for ferrous sulphate..

54. The issue of costs being passed downstream, to consumers of cement, does not have serious implications for competition. If the restriction is applied to all cement, all construction firms will be affected in proportion to the amount of cement they use in a year. If the restriction is applied only to bagged and ready-mixed cement, small firms will be affected more relative to large firms, but these two groups within the construction sector do not generally compete for the same business.

### ***ENVIRONMENTAL IMPACTS***

55. There are no direct environmental effects of the proposals, other than the health benefits detailed above.

## BALANCE OF COSTS AND BENEFITS

56. Applying the restriction to bagged and mixed cement will cost about £28.6 million (mid-point) in present value terms. The estimation of the benefits relies on evidence from other MS, which suggests a decrease of between 66% and 100% in new cases of allergic contact dermatitis. It is assumed that the benefits of reducing the bagged and ready mixed cement coupled with stringent safety measures on the remaining automated processes should find us closer to the higher end of this reduction.

57. Table 4 shows that according to the present estimates, the cost-benefit ratio ranges from a minimum of 1 : 0.6 to a maximum of 1 : 1.9. It is clear that whether or not total benefits are greater than total costs depends entirely on the number new cases of contact dermatitis occurring each year.

TABLE 4

£Thousands, 2001 prices

COSTS AND BENEFITS	INITIAL COSTS AND BENEFITS	RECURRING COSTS AND BENEFITS	10 YEAR NET PRESENT VALUE
<b><u>COSTS</u></b>			
<b>BAGGED/MIXED CEMENT</b>			
Equipment	3 500 - 4 200	350 - 420	6 513 - 7 815
Ferrous sulphate	nil	2 489	21 425
Labelling	nil	Nil	Nil
Shelf life	nil	nil	nil
Storage	nil	nil	nil
Testing	nil	nil	nil
Total costs to industry	3 500 - 4 200	2 839 - 2 909	27 940 - 29 242
Total costs to HSE	nil	nil	nil
<b>TOTAL QUANTIFIED COSTS</b>	3 500 - 4 200	2 839 - 2 909	<b><u>27 940 - 29 242</u></b>
<b><u>TOTAL BENEFITS</u></b>			<b><u>66% - 100%</u></b>
<b><u>219 cases / year</u></b>		13 244	<b><u>17 918 - 27 149</u></b>
<b><u>430 cases / year</u></b>	-	13 244	<b><u>35 182 - 53 307</u></b>

\*Costs are rounded to the nearest 1000. Total costs may not add up due to rounding.

58. It is worth noting considerable uncertainties surround these estimates, and these have been detailed in the 'Uncertainties' section. In the main, they suggest that benefits have been underestimated and costs have been under and over – estimated at different points

## **UNCERTAINTIES**

59. Uncertainties are divided into three categories: those that imply that costs have been overestimated, those implying that benefits have been underestimated, and the hidden costs due to the nature of the ill health being described and the construction sector – seen to be the industrial group most at risk from higher chromate cement.

### **Overestimated costs**

60. The data for initial capital rely entirely on the cement industry's own estimates of the costs that firms will face. The cost of each dispensing unit (£125 000 – £150 000) conflicts with the view from European cement producers who are already implementing the directive. Several producers in Member States have said that they did not face any extra equipment costs and simply incorporated the process using existing equipment. However, the UK industry has said one of its producers incurred costs while operating cement kilns in in other European countries, although no costing were provided to HSE.

61. Furthermore, the quantity of ferrous sulphate required to reduce chromate VI may well have been overestimated. The requirement is likely to be less in the UK given that untreated cement in the UK is much lower in chromium VI than cement in Europe. UK Portland cement has typically 7-8 ppm chromates, and always less than 15 ppm, whereas untreated Danish cement is around 40.5 ppm chromates.

### **Underestimated benefits**

62. Assumptions made in estimating the benefits are also subject to considerable uncertainty. Firstly, the reported number of new cases of allergic contact dermatitis due to chromates in cement (219 - 430 a year) is calculated from a number of sources, including the EPIDERM Survey, OPRA and the SWI 95. There are limitations to these data sources (eg. restricted to dermatologists who participate voluntarily in the scheme; provision of only sample data on cases of dermatitis and other skin diseases; entirely voluntary self-reporting) which may reflect a level of under-reporting.

### **Hidden costs**

63. However, dermatologists will only see the most severe cases of allergic contact dermatitis. Non-specialist doctors or occupational health physicians who do not report to the scheme treat many cases, and not all dermatologists participate in the scheme, so the 219 cases should, in HSE's judgement, be

regarded as a minimal estimate of the true incidence of work-related disease. The true number of new cases a year could be substantially greater than the present range, and total benefits from the proposal would multiply accordingly. It is also worth considering other factors relating to workers in the construction sector that may also demonstrate a higher level of under-reporting.

64. Many workers in the construction sector are self-employed or peripatetic, moving from project to project. Such workers may find registration with a local GP or even ready access to a GP difficult to arrange. The absence of easy access to a GP could dissuade workers from seeking medical advice for what is often seen as a skin irritation, the potential seriousness of which may not be realised by the worker.

65. It is understood that some workers in the construction sector may be employed illegally on a 'cash-in-hand' basis. Such informal or local arrangements could again dissuade workers from seeking GP's advice if there was a risk of their illegal employment being uncovered.

66. Elsewhere in this assessment, HSE has indicated the assumed 10% turnover of workers in the construction sector may be the result of allergic contact dermatitis cases. Whereas this 10% incurs a loss of income, the sector must also bear the cost of retraining skilled labourers (such as bricklayers). Those affected who seek employment elsewhere will also face retraining. Precise costings are difficult to assess.

67. The 219 - 430 cases a year are occupational cases. There may be many more cases among people who do not work in the construction sector, but use cement independently for DIY. Again, total costs to society of 'consumer cases' of allergic contact dermatitis, and the benefit of reducing chromates in cement, would be higher. For instance, the average loss of income per case would increase disproportionately, assuming that the income of the average sufferer of 'consumer dermatitis' is higher than the income of the average sufferer of 'construction-dermatitis'.

68. While benefits have been calculated using a range of reduction levels of the disease, from 66 – 100%, there has been a 100% reduction in new cases in member states that already reduce their cement. The reduction in the UK could be close to 100%.

69. Finally, several assumptions have been made regarding the effects of the illness on the individual. In calculating the average loss of income associated with a case of the disease it was assumed:

a) That the number of day's absence from work in a case of allergic contact dermatitis is 11. This is the average for all skin diseases and may well be higher for allergic contact dermatitis, which is a more serious skin disease.

b) That only half of sufferers take time off. Again, the number may be higher.

70. In calculating the average cost of treatment of the disease it was assumed:

c) That the HSE 1999 average cost for treatment of an illness requiring 1-4 weeks' absence was appropriate. This took treatment to constitute about 3 GP consultations, 1 outpatient visit and 1 in-patient visit. Treatment for allergic contact dermatitis may be longer running and more costly, as it may well continue after the worker returns to work.

### **Enforcement, sanctions, monitoring and review**

71. Enforcement arrangements and sanctions will be determined during the transposition of the Directive into UK law. The implementing regulations will be monitored and reviewed in accordance with HSE's normal procedures – a review is likely once the implementing regulations have been in force for 2-3 years.

### ***CONTACT POINT AND DATE***

Michael J Ryan  
Dermal risks and chemical carcinogens policy unit  
Chemicals and Flammables Policy Division

1 January 2004



## LIST OF ORGANISATIONS AND PEOPLE CONSULTED

### National Government

Cabinet Office:

European Secretariat  
Regulatory Impact Unit

Central Office of Information

Department for Environment, Food and Rural Affairs: Chemicals and  
Biotechnology Division

Department of Health

Department of Trade and Industry:

Chemical and Biotechnology Branch  
Small Firms Policy Branch

Department for Work and Pensions: Health and Safety Sponsorship Division

Foreign and Commonwealth Office: European Union Department

HM Customs and Excise: Safety, Health and Absence

HM Treasury

Home Office:

H.M. Fire Services Inspectorate  
Health and Safety Services

Lord Chancellor's Department

Ministry of Defence, Directorate of Safety, Environment and Fire Policy

National Assembly for Wales

Northern Ireland Office

Office of the Deputy Prime Minister

Scottish Executive

Scotland Office: Industry Department

Wales Office:

Environment Division  
Industry & Training Policy Division

### Other Government Organisations

Civil Aviation Authority

Countryside Commission

Environment Agency

Environment Council

Government of Gibraltar

Health and Safety Executive Northern Ireland (HSENI)

House of Commons Library

House of Lords Library

Laboratory of the Government Chemist

Law Commission

Maritime and Coastguard Agency

National Consumer Council

Natural Environment Research Council

Scottish Environmental Protection Agency

Scottish Law Commission  
Scottish Parliament Information Centre  
Small Business Service  
UK Permanent Representation to the European Union  
Welsh Development Agency

### **Local Government Organisations**

Association of Local Authorities of Northern Ireland  
Convention of Scottish Local Authorities  
Local Government Association

### **Government Advisory Committee**

Members of the Advisory Committee on Toxic Substances

### **Representatives of small firms and the self-employed**

Alliance of Independent Retailers  
Association of Independent Businesses  
CBI Smaller Firms Council  
Federation of Small Businesses  
National Federation of Self-Employed and Small Businesses Ltd  
Small Business Service

### **Employers' Organisations**

Association of British Insurers  
Association of Bronze and Brass Founders  
British Adhesives and Sealants Association  
British Association of Chemical Specialities  
British Battery Manufacturers Association  
British Bronze and Brass Ingots Manufacturers Association  
British Cement Association  
British Chemical Engineering Contractors Association  
British Coatings Federation Ltd  
British Colour Makers Association  
British Foundry Association  
British Glass Manufacturers Confederation  
British Metal Castings Council  
British Metal Finishing Suppliers Association  
British Metallurgical Plant Constructors Association  
British Non-Ferrous Metals Federation  
British Pottery Managers Association  
British Precast Concrete Federation Ltd  
British Safety Industry Federation  
Britpave  
Builders Merchant Federation  
Castings Development Centre  
Chartered Institute of Building

Chartered Institute of Building Services Engineers  
Chemical Industries Association Ltd  
Confederation of British Industry  
Construction Confederation  
Electric Battery Manufacturers Association  
Electrical Contractors Association Ltd  
Engineering Employers Federation  
Federation of Master Builders  
Ferrous Alloys and Metal Producers Association  
Forum of Private Business  
Foundry Trade Equipment and Supplies Association  
Lead Development Association International  
Metal Finishing Association  
Mortar Industry Association  
National Association of Waste Disposal Contractors  
National Pharmaceutical Association  
Nationalist Specialist Contractors Council  
Paint Research Association  
Society of Dyers and Colourists  
Quarry Products Association  
Solvents Industry Association  
Surface Engineering Association  
UK Cast Stone Association  
UK Petroleum Industry Association  
Water Companies Association  
Water Services Association of England and Wales

### **Representatives of Workers**

Amalgamated Union of Engineering Workers (Foundry Section)  
Association of Occupational Health Nurse Practitioners  
British Institute of Occupational Hygienists  
Chartered Institute of Environmental Health  
Chief and Assistant Chief Fire Officers' Association  
Fire Brigades Union  
GMB  
Manufacturing, Science and Finance  
National Association of Fire Officers  
NUMAST  
Prospect  
RMT  
Royal College of Nursing  
Scottish Trades Union Congress  
Trades Union Congress  
Transport and General Workers Union  
Union of Construction, Allied Trades and Technicians

### **Other organisations**

Aggregate Industries UK

ALPS Electric (UK) Ltd  
Alvin J Wooley Associates  
Architectural Building Products Ltd  
B&Q plc  
British Airports Authority Plc  
Baxi Heating Ltd  
Bison Holdings Ltd  
Blue Circle Industries plc  
Breton Precast (Scotland) Ltd  
Briggs Environmental Services  
British Adhesives and Sealants Association  
British Health and Safety Society  
British Institute of Occupational Hygiene  
British Nuclear Fuels Plc  
British Safety Council  
British Transport Police  
Buxton Lime Industries Ltd  
Cancer Research UK  
Castings Development Centre  
Castings Technology International  
Castle Cement  
Cement Admixtures Association  
Centre for Cement and Concrete  
Chartered Institute of Environmental Health  
Chartered Institute of Water & Environmental Management  
Chemical and Industrial Consultants Association  
Chemical Hazards Communication Society  
Concrete Bridge Development Group  
Concrete Centre  
Concrete Society  
CONSTRUCT  
Corus Group PLC  
Council of Independent Inspecting Authorities  
Croner Publications  
Cyclacel Ltd  
Derwent Cast Stone  
Doctrine and Bond  
Du Pont (UK) Plc  
Electricity Association  
Engineering Construction Industry Association  
EnviroDerm Services  
Environmental Services Association  
Euro-Environmental Ltd  
F Ball & Co  
Friends of the Earth  
Genesis Environmental Ltd  
Greenpeace  
Gwent Safety Consultancy  
Haddonstone Ltd  
Hanson Building Materials Europe

Hawker Batteries  
Hillsdown Holdings  
ICI Chemicals and Polymers Ltd  
ICI Chlor Chemicals  
ICI Halochemicals  
Industrial Health Control  
Industrial Liaison Services  
Innogy Ltd  
Institute of Cancer Research  
Institute of Concrete Technology  
Institute of Mining and Metallurgy  
Institute of Occupational Medicine  
Institute of Trading Standards Administration  
Institute of Wastes Management  
Institution of Chemical Engineers  
Institution of Metallurgists  
Institution of Occupational Safety and Health  
Lafarge Cement UK  
Lafarge Roofing Ltd  
Lancashire Cast Stone Ltd  
Laybond plc  
Lignacite Ltd  
Lincon Batteries  
London Underground Ltd  
Marley Building Materials  
Marshalls  
Meadowstone (Derbyshire) Ltd  
Millenium Chemicals  
Monitor Environmental Consultants  
National House-Building Council  
National Power Plc  
National Society for Clean Air & Environmental Protection  
Orbit Metallurgical Ltd  
Owen Williams Consultants  
Petrochem Carless Ltd  
Pfizer Ltd  
Portland Cement Association  
QinetiQ Ltd  
Rhodia Chirex Ltd  
Rolls Royce Plc  
Royal Doulton Crystal  
Royal Environmental Health Institute of Scotland  
Royal Society for the Prevention of Accidents  
Royal Society of Chemistry  
Rugby Ltd  
Sandwell Metropolitan Borough Council  
Sankey Safety Consultants  
Scottish Power  
Seeboard Plc  
Sericol Ltd

Society of Occupational Medicine  
S P Shutler Associates Ltd  
Supac Electrical Company Ltd  
Traditional Housing Bureau  
Transco  
Trent Concrete Ltd  
University of Birmingham  
University of Glasgow  
University of Warwick  
Water Research Council Plc  
Water UK  
Water Services Association of England and Wales  
Woodside (Precast) Concrete Ltd  
Yellowpatter Ltd

**Individuals**

Mr D J Bourton  
Dr L Bowcock  
Dr D H Lohmann  
Mr A K Watson  
Mr J Westmoreland

Reply form and questions for consideration

Health and Safety Commission

Further proposals for Control of Substances Hazardous to Health  
(Amendment) Regulations 2004

**PLEASE TYPE OR WRITE IN BLOCK CAPITALS**

Name of organisation or individual .....

Address .....

.....

.....

Post Code .....

Name of contact .....

Telephone .....

E-mail .....

**Questions for consideration:**

Please circle the appropriate answers and fill in the blanks, adding comments where necessary

Question 1 (paragraphs 4-12)	
<b>Do you agree the proposed additions to Schedule 2 to COSHH and Schedule 5 to CHIP that will give effect to the supply and use restriction on cement and cement preparations?</b>	
YES	NO
<i>Comments</i>	

**Further proposals for Control of Substances Hazardous to Health  
(Amendment) Regulations 2004**

**Questions for consideration:**

Please circle the appropriate answers and fill in the blanks, adding comments where necessary

Question 2 (paragraph 14)	
<b>Do you have any comments in relation to costs and benefits of the restriction on cement and cement preparations?</b>	
YES	NO
<i>Comments</i>	

Question 3 (paragraphs 16-22)	
<b>Do you agree the proposed amendment to regulation 3(3) of COSHH and CLAW that will give effect to the enforcement demarcation between ship and shore work agreed by HSE and MCA?</b>	
YES	NO
<i>Comments</i>	

**Further proposals for Control of Substances Hazardous to Health  
(Amendment) Regulations 2004**

**Questions for consideration:**

Please circle the appropriate answers and fill in the blanks, adding comments where necessary

Question 4 (paragraph 24)

**Do you have any comments in relation to costs and benefits of the amendment to regulation 3(3) of COSHH and CLAW?**

YES

NO

*Comments*

Question 5 (paragraphs 26-29)

**Do you agree the proposed revision of the wording of regulation 9(1) of COSHH and regulation 8(1) of CLAW and the related changes to the COSHH and CLAW ACOPs?**

YES

NO

*Comments*

**Health and Safety Commission**

**Further proposals for Control of Substances Hazardous to Health  
(Amendment) Regulations 2004**

**Questions for consideration:**

**Any other comments?**

Michael J Ryan  
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# CONSULTATIVE DOCUMENT

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The full text of this and other Consultative Documents can be viewed  
and downloaded from the Health and Safety Executive web site on the internet:

**[www.hse.gov.uk/condocs/](http://www.hse.gov.uk/condocs/)**

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Consultative Documents are available from:

HSE Books, PO Box 1999  
Sudbury, Suffolk CO10 2WA  
Tel: 01787 881165  
Fax: 01787 313995