

**EXPLANATORY MEMORANDUM TO  
THE MERCHANT SHIPPING AND FISHING VESSELS (HEALTH AND SAFETY AT WORK)  
(CHEMICAL AGENTS) REGULATIONS 2010**

**2010 No. 330**

1. This explanatory memorandum has been prepared by the Maritime and Coastguard Agency and is laid before Parliament by Command of Her Majesty.

**2. Purpose of the Instrument**

2.1 The Regulations do what is necessary to complete implementation of Council Directive 98/24/EC of 7 April 1998 (as supplemented by Directives 2000/39/EC and 2006/15/EC) on the introduction of measures to protect workers from risks related to exposure to chemical agents at work, by extending to the maritime sector the duty on employers to reduce the risk to their employees' health resulting from exposure to chemical agents at work. Regulations introduced by the Health and Safety Executive have already implemented the Directive for land based workers.

2.2 These regulations make a number of references to Annexes to the Directive as amended from time to time. Currently those Annexes are in

(a) Directive 91/322/EEC which is published in the Official Journal of the European Union at O.J. L 177, 05/07/1991 pages 22-24.

(b) Directive 2000/39/EC which is published in the Official Journal of the European Union at O.J. L 142, 16/06/2000 pages 47-50

(c) Directive 2006/15/EC which is published in the Official Journal of the European Union at O.J. L 38, 07/02/2006 pages 36-39

These can be accessed via the Eur-lex website at [eur-lex.europa.eu](http://eur-lex.europa.eu)."

**3. Matters of special interest to the Joint Committee on Statutory Instruments**

3.1 None.

**4. Legislative Context**

4.1 Council Directive 89/391/EEC (the "Framework Directive") introduced general measures to encourage improvements in the safety and health of workers at work and was implemented by the Merchant Shipping and Fishing Vessels (Health and Safety at Work) Regulations 1997 (SI 1997/2962) (the "General Duties" Regulations).

4.2 Council Directive 98/24/EC of 7 April 1998 (the fourteenth individual Directive within the meaning of Article 16(1) of the Framework Directive), as supplemented by Directives 2000/39/EC and 2006/15/EC, introduced minimum safety and health requirements for the protection of workers from the risks related to exposure to chemical agents at work.

4.3 The requirements of Directive 98/24/EC (as supplemented), build on the general safety and health provisions contained in the Framework Directive, are to be implemented for workers in the maritime sector by means of the Merchant Shipping and Fishing Vessel (Health and Safety at Work) (Chemical Agents) Regulations 2010. Regulations introduced by the Health and Safety Executive (The Control of Substances Hazardous to Health Regulations 2002 (as amended) have already implemented the Directive for land based workers and these new

Merchant Shipping and Fishing Vessel Regulations, which follow the requirements of the Directive, complete the United Kingdom's implementation of this Directive.

## **5. Territorial Extent and Application**

5.1 This instrument applies to all United Kingdom ships whether in the United Kingdom or anywhere else in the world, to all seafarers on such vessels irrespective of nationality, ethnic origin, religion, gender etc. They also apply to non-UK ships when in UK waters.

## **6. European Convention on Human Rights**

6.1 As the instrument is subject to negative resolution procedure and does not amend primary legislation, no statement is required.

## **7. Policy background**

- ***What is being done and why***

7.1 The Merchant Shipping and Fishing Vessel (Health and Safety at Work) (Chemical Agents) Regulations 2010 complete the UK implementation of Council Directive 98/24/EC, as supplemented by Directives 2000/39/EC and 2006/15/EC, concerning the introduction of minimum safety and health requirements for the protection of workers from the risks related to exposure to chemical agents at work. A Transposition Note is at Annex 1. As mentioned above, corresponding Regulations have been produced for land based workers. It is therefore necessary to make these Regulations to ensure application of the Directive to workers in the Merchant Shipping and Fishing Sectors to avoid disparity of regulatory coverage between land based workers and those working on ships. This is especially the case at the water margin, i.e. in dock and port areas, where land based workers (e.g. stevedores and other dock workers) could be working on board a ship alongside members of the crew.

7.2 The policy objective of Directive 98/24/EC, as amended, is to protect the health of workers from the risks arising from long-term exposure to hazardous chemical agents at work. Whilst some provisions of the Directive could apply to all vessels, other provisions may only be relevant to vessels carrying hazardous cargoes. It is for this reason that the Directive and the implementing Regulations require employers to identify which of their employees may be at risk, and from which chemical agents, to assess the degree of risk and to introduce measures to eliminate or, where that is not possible, minimise the risk. They therefore fully reflect the Directive requirements.

- ***Consolidation***

7.3 No legislation, other than a general requirement to safeguard health and safety contained in the General Duties Regulations and regulations relating to the carriage of hazardous cargoes, which remain in force, previously existed to protect workers in the maritime sector from the risks to their health and safety arising from exposure to chemical agents at work. There is therefore no scope for consolidation of existing legislation.

## **8. Consultation outcome**

8.1 In order to gauge the potential effect on the merchant, yachting, coded vessel and fishing sectors notification of the consultation was sent to some 380 individuals, companies and organisations inviting their comments on the proposed Regulations, associated guidance etc. necessary to implement Directive 98/24/EC (as supplemented by Directives 2000/39/EC and 2006/15/EC). Copies of the documentation were also placed on the MCA website but no facility exists to establish how many times they were viewed.

8.2 Only 10 responses were received of which only 5 related to the draft Regulations. The remainder either offered comments on matters other than the draft Regulations (e.g. the level of guidance contained in the draft Marine Guidance Note); offered no comments; or supported what was proposed. The most significant of the comments on the draft Regulations were:-

- ***an assertion that the extent of the Regulations was excessive as they covered issues that were unlikely to arise in the shipping industry.***

Whilst it is true that the Regulations do potentially cover issues that are unlikely to arise on ships, it is nonetheless necessary to cover every provision of the Directive in order to give full effect to the Chemical Agents Directive as there would otherwise be a potential for infraction proceedings as a result of the failure to fully implement the Directive for all sectors. Should any provision of the Regulations not be relevant to a ship e.g. use of a biological agent in a work process, it will not be necessary for employers to take any action in respect of that provision. It should also be noted that the Regulations go no further than is necessary to implement the Directive. i.e. there is no “gold-plating” of the Directive’s requirements.

- ***a request that the detail of the regulations be re-examined so as not to increase the potential for further criminalisation of a Master. The penalties in respect of offences committed under the Regulations were considered to be grossly disproportionate.-***

Having reviewed the Regulations, it was considered that other than in a couple of instances, the penalties were in line with those in other sets of Regulations which had previously been introduced to give effect to other EC health and safety Directives. Those where this was not the case have been adjusted accordingly. It should however be noted that prosecution for non-compliance with the Regulations is a last resort where either lesser measures, such as an improvement/prohibition notice or detention of the vessel, have failed to achieve the desired improvement or where conditions are clearly so hazardous as to justify prosecution.

8.3 All the comments made on the draft Regulations, including those referred to in paragraph 8.2 above, have been covered as far as is possible in the Merchant Shipping and Fishing Vessel (Health and Safety at Work) (Chemical Agents) Regulations 2010.

## **9. Guidance**

9.1. In line with usual practice a Marine Guidance Note, produced by the Maritime and Coastguard Agency, will be issued to industry and will provide guidance on the requirements of the Merchant Shipping and Fishing Vessel (Health and Safety at Work) (Chemical Agents) Regulations 2010. Further guidance will be included in the “Code of Safe Working Practices for Merchant Seamen published by The Stationery Office.

## **10. Impact**

10.1 The impact on business is likely to be low as the existing Merchant Shipping and Fishing Vessels (Health and Safety at Work) Regulations 1997 already require risk assessments to be undertaken, and appropriate measures to be taken to alleviate any risks identified. The Merchant Shipping and Fishing Vessel (Health and Safety at Work) (Chemical Agents) Regulations 2010 build on the requirements of those earlier Regulations by introducing provisions specifically relating to Chemical Agents. There might however be some effect on

vessels such as chemical tankers or those carrying packaged hazardous cargoes. Even then legislation regarding the carrying of chemical cargoes may already have reduced the risks.

- 10.2 The impact on charities or voluntary bodies is also likely to be low as they are unlikely to operate chemical tankers or vessels carrying hazardous cargoes and, in addition, the Regulation apply to employed workers not unpaid volunteers..
- 10.3 Organisations or vessels undertaking search and rescue, or public service, operations, where exposure to chemical agents might occur during a mission, are however covered by a limited derogation in respect of any provisions of the Regulations where compliance is not possible. Such derogation is however limited to the time where compliance is not possible.
- 10.4 The impact on the public sector is considered to be minimal as reviewing the application of the provisions of the Regulations on ships will be carried out as part of MCA's normal survey regime.
- 10.5 An Impact Assessment is attached to this memorandum.

## **11. Regulating small business**

- 11.1 The legislation applies to small business.
- 11.2 There is little scope for minimising the impact of the requirements on firms employing up to 20 people, as EC Health and Safety Directives are required to be applied to all workers irrespective of the size of the company employing them. It is however policy when implementing an EC Directive to go no further than is necessary to implement the provisions of that Directive i.e. there is no "gold-plating" of the Directive requirements. In addition it is not envisaged that the Regulations will have any significant effect on small businesses as they are considered unlikely to operate the types of vessel most likely to be affected.

## **12. Monitoring & review**

- 12.1 The Maritime and Coastguard Agency will evaluate how the regulations have changed working practices. This will be assisted by any relevant data collected as a result of the implementation by the UK of the ILO Maritime Labour Convention 2006 which will require the Maritime and Coastguard Agency to be notified of any occupational seafarer injuries/diseases.
- 12.2 All health and safety Directives are also subject to a regular review by the EC to which MCA will contribute as appropriate. The next EC review for the Chemical Agents Directive is due in 2013. In addition it is proposed to monitor compliance to see if any problems arise which need to be resolved by amending the regulations, or associated guidance, to make matters clearer to those organisations/persons covered by the Directive's provisions.

## **13. Contact**

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can answer any queries regarding these proposals.

## Summary: Intervention & Options

<b>Department /Agency:</b> <b>Maritime &amp; Coastguard Agency</b>	<b>Title:</b> <b>Impact Assessment of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010</b>	
<b>Stage:</b> Implementation	<b>Version:</b> Final	<b>Date:</b> January 2010
<b>Related Publications:</b> Final versions of Statutory Instrument and Marine Guidance Note are attached.		

**Available to view or download at:**

<http://www.mcga.gov.uk/c4mca/mcga07-home/shipsandcargoes/mcga-shipsregsandguidance.htm>

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**What is the problem under consideration? Why is government intervention necessary?**

Workers exposed to hazardous chemical agents at work can suffer adverse effects to their health and safety, ranging from minor to very serious or even fatal, as a result. There is a risk that some ship operators might not take adequate precautions to mitigate the risks for workers exposed to chemical agents at work. To address these risks, Directive 98/24/EC of the European Parliament and the Council dated 7 April 1998 (as supplemented by Directives 2000/39/EC and 2006/15/EC) introduced minimum health and safety measures intended to protect workers from risks related to exposure to chemical agents at work. The UK is obliged to fully implement these Directives. This is the purpose of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010. Failure to implement these Directives could result in infraction proceedings being taken by the EC and could mean that some workers continue to be exposed to these risks. Also under the Francovich principle, the UK Government could be liable to pay compensation to all those affected by the failure to implement Directive 2000/54/EC.

**What are the policy objectives and the intended effects?**

The Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010 give effect to Directive 98/24/EC (as supplemented) in respect of the maritime, fishing and small vessel sectors in order to complete the UK's implementation of them. The intended effects of these Regulations are to reduce the risk of workers on ships, fishing vessels and small vessels suffering illness or even death as a result of exposure to chemical agents whilst at work.

**What policy options have been considered? Please justify any preferred option.**

- (1) Do nothing
- (2) Extend the land-based Health & Safety Regulations to the maritime and fishing sectors; or
- (2) Introduce a single set of Regulations to implement only Directive 98/24/EC (as supplemented)

Option (1) would leave the UK in breach of its EU commitments and is thus not considered to be appropriate. Option (2) is not considered viable as the Regulations covering exposure to chemical agents at work on land address different issues to those raised by such exposure on ships, and the land Regulations also cease to apply outside the UK. Option (3) is therefore considered to be the most appropriate way to proceed and is justified in the Evidence Base.

**When will the policy be reviewed to establish the actual costs and benefits and the achievement of the desired effects? The policy and the effect of the Regulations will be reviewed in 2013 as part of the EC Directive reporting cycle.**

**Ministerial Sign-off** For final stage Impact Assessments:

***I have read the Impact Assessment and I am satisfied that (a) it represents a fair and reasonable view of the expected costs, benefits and impact of the policy, and (b) the benefits justify the costs.***

Signed by the responsible Minister:

Paul Clark .....Date: 11th February 2010

## Summary: Analysis & Evidence

<b>Policy Option: 3</b>	<b>Description: Introduce new Merchant Shipping Regulations to implement EC Directive 98/24/EC as amended by Directives 2000/39/EC and 2006/15/EC</b>
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<b>COSTS</b>	<b>ANNUAL COSTS</b>		Description and scale of <b>key monetised costs</b> by 'main affected groups' The MCA does not have access to any evidence to enable it to monetise the costs of these Regulations. In addition, no such evidence was provided by consultees.
	<b>One-off</b> (Transition)	<b>Yrs</b>	
	£		
	<b>Average Annual Cost</b> (excluding one-off)		
	£	<b>Total Cost (PV)</b> £	
Other <b>key non-monetised costs</b> by 'main affected groups' Some operators could incur costs for the training of seafarers and supply of specialised safety equipment. However, such costs may not arise on all vessels as safeguards may already be in place or exposure to chemical agents may not occur. This view is supported by the consultation responses, none of which indicate that any costs will arise.			

<b>BENEFITS</b>	<b>ANNUAL BENEFITS</b>		Description and scale of <b>key monetised benefits</b> by 'main affected groups' The MCA does not have access to any evidence to enable it to monetise the benefits of these Regulations. Initial informal consultation suggested that the potential benefits of these Regulations were likely to be minimal at best. In addition, none of the consultation responses considered that benefits would arise. This could be because chemical agents are either not present on UK ships, or because risks have already been considered and appropriate protective / remedial measures put in place.
	<b>One-off</b>	<b>Yrs</b>	
	£		
	<b>Average Annual Benefit</b> (excluding one-off)		
	£	<b>Total Benefit (PV)</b> £	
Other <b>key non-monetised benefits</b> by 'main affected groups' 1.) There could be a reduction in the risk of workers being exposed to chemical agents. Should any reduction in exposure to chemical agents arise due to these Regulations, there could be a reduction in the overall costs to society of exposure to chemical agents in terms of lost output and human and medical costs. 2.) Implementation will ensure that the UK has met its EU commitments.			

**Key Assumptions/Sensitivities/Risks** 1.) It is assumed that work related to exposure to chemical agents is unlikely to occur on most ships and fishing vessels, except for vessels carrying dangerous cargoes. In addition, it is assumed that industry is already aware of the risks and the need for appropriate safety precautions to be taken. 2.) Non-implementation could result in infraction proceedings, and could also render the Government liable to pay compensation to all those affected under the Francovich principle. 3.) The limited nature of the evidence base means that the costs and benefits of these Regulations are uncertain and cannot be monetised.

Price Base Year -	Time Period Years -	<b>Net Benefit Range</b> (NPV) £	<b>NET BENEFIT</b> (NPV Best estimate) £
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What is the geographic coverage of the policy/option?			UK ships worldwide	
On what date will the policy be implemented?			To be advised	
Which organisation(s) will enforce the policy?			MCA	
What is the total annual cost of enforcement for these organisations?			£ 0 - Enforcement will be carried out as part of survey regime.	
Does enforcement comply with Hampton principles?			Yes	
Will implementation go beyond minimum EU requirements?			No	
What is the value of the proposed offsetting measure per year?			£ N/A	
What is the value of changes in greenhouse gas emissions?			£ N/A	
Will the proposal have a significant impact on competition?			No	
Annual cost (£-£) per organisation (excluding one-off)	Micro	Small	Medium	Large
Are any of these organisations exempt?	No	No	N/A	N/A

<b>Impact on Admin Burdens Baseline</b> (2005 Prices)		(Increase - Decrease)
Increase of    £ 0	Decrease of    £ 0	<b>Net Impact</b> £ 0

Key:      Annual costs and benefits: Constant Prices      (Net) Present Value

## **1. PURPOSE OF IMPACT ASSESSMENT**

The purpose of this final stage Impact Assessment is to consider the costs and benefits of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010, which implement Directive 98/24/EC (as supplemented by Directives 2000/39/EC and 2006/15/EC) in relation to owners / operators of UK Merchant Ships, Yachts, Fishing Vessels, Hovercraft, Pilot Vessels, Inland Waterway Vessels and other vessels with employed workers on them as well as to the employers of such workers.

These Regulations apply to seafarers of any nationality when employed on a UK registered vessels but do not apply to seafarers, including UK seafarers employed, on non-UK vessels other than to a limited extent when such vessels are in UK waters.

In the preceding paragraph reference to:-

**“UK Merchant Ships, Yachts, Fishing Vessels, Hovercraft, Pilot Vessels, Inland Waterway Vessels and all other vessels with employed workers working on them”** means all such UK registered vessels irrespective of where in the world they are operating, including on inland waters, or the nationality, location or place of business of the ship owner;

**“worker”** means any person employed to work on any UK vessel referred to above, irrespective of that person's nationality or place of domicile; and,

**“employer”** means the employer of any person employed to work on any UK vessel referred to above, irrespective of the nationality, location or place of business of that employer

These Regulations will also apply to non-UK vessels when in UK waters albeit on a “no more favourable treatment” basis intended to ensure that UK vessels are not put at a competitive disadvantage by non-UK vessels failure to meet similar standards to those required for UK vessels.

## **2. SCOPE OF IMPACT ASSESSMENT**

The costs and benefits that are considered in this final stage Impact Assessment relate to the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010 that are published alongside this Impact Assessment.

## **3. THE ISSUES**

Chemical agents come in many different types and the results of exposure to hazardous chemical agents can result in consequences ranging from very minor up to very serious or even fatal, although it should be noted that exposure to hazardous chemical agents is considered unlikely to occur on many vessels. In an endeavour to protect workers whose health and safety may be put at risk by carrying out work involving potential exposure to hazardous chemical agents, the EC produced Directive 98/24/EC supplemented by Directives 2000/39/EC and 2006/15/EC which introduced measures intended to protect workers from risks related to work potentially involving exposure to chemical agents. In this context, chemical agent means any chemical element or compound, on its own or admixed, as it occurs in the natural state or as produced, used or released, including release as waste, by any work activity, whether or not produced intentionally, and whether or not placed on the market.

The Health and Safety Executive (HSE) and the Health and Safety Executive for Northern Ireland (HSE (NI)) have already implemented this Directive by means of their respective Control of Substances Hazardous to Health Regulations. The Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010 are intended to give effect to the Directives in respect of the maritime and fishing sectors in order to complete the UK's implementation of these Directives.

**(i) Evidence on Risks Arising From Exposure to Chemical Agents At Work**

It has not been possible to find Health and Safety Executive statistics for land based workers on the incidences of diseases and injuries arising directly from exposure to hazardous Chemical Agents. This is because such agents are not covered separately by their regulations. In any event, such statistics would not necessarily be representative of the position on ships as land based workers may work in locations, such as chemical plants and refineries, where exposure is a greater possibility than on a ship at sea.

There are no statistics relating specifically to injuries and diseases to seafarers as a result of exposure to hazardous Chemical Agents at work. This is because there is currently no requirement for any occupational diseases to be notified to the Maritime and Coastguard Agency (MCA), although such a requirement will be introduced as part of the implementation by the UK of the ILO Maritime Labour Convention 2006. However, the MAIB's record of reports of escapes of harmful substances shows a strong downward trend in the number of reported incidents over the period 1994 to 2007 (Table 1).

**Table 1: Number of reported escapes of harmful substances, UK commercial shipping**

1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
24	26	20	15	27	15	4	11	-	-	4	2	1	2

Source: MAIB

Analysis of the most recent UK injury statistics shows that escapes of harmful substances have not led to seafarer fatalities and there is nothing to suggest that any such escapes necessarily had any significant non-fatal injury effect on seafarers on the vessels concerned. Indeed, as an example, the 2 incidents reported in 2007 appear to have no adverse effect on workers. The circumstances of the incidents were as follows:-

- (a) A strong smell of chemicals in the area of a ro-ro tractor tanker that was in the process of being lashed in the dangerous goods stowage on a UK ro-ro ferry. The vessel returned to port and was tied up by a mooring gang using breathing apparatus sets as a precaution. The leaking tank unit was eventually discharged ashore under the supervision of the foreign emergency services including the port safety officer. The emergency services used a foam blanket to cover the tank. None of the involved crew reported any lasting effects.
- (b) The bridge fire detection system on a vessel undergoing sea trials following a refit, identified smoke in the main motor room. On investigation, no fire or smoke was found. However, there was a slight haze and the smell of paint in the space. It was also found that there had been two fault alarms on the Bridge Halon Monitoring Panel which had activated Nos 5 to 10 halon bottles discharging them into the motor room. There is no record of any effect on the crew.



## **(ii) Regulatory Background**

The Control of Substances Hazardous to Health Regulations 2002 (as amended) and the Control of Substances Hazardous to Health Regulations (Northern Ireland) 2003 (as amended) introduced by the Health and Safety Executive and the Health and Safety Executive for Northern Ireland respectively implement the Chemical Agents Directive for land based workers and apply to all work involving potential exposure to chemical agents carried out in the United Kingdom **except** where such work is carried out on board a ship as part of the normal shipboard activities of the ship's crew, and is carried out under the direction of the master; and is not liable to expose persons at work other than the master and crew to a risk to their safety. In effect, this means that the HSE and HSE (NI) Regulations will apply to all work carried out in a port or dock in the UK, unless it is only carried out by the master and crew and cannot adversely affect anyone else. Where work is carried out in a port outside the UK, land based workers will most likely be subject to their own national legislation whilst the master and crew will be subject to the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010.

The Merchant Shipping and Fishing Vessels (Health and Safety at Work) Regulations 1997 (the "General Duties" Regulations), which implemented the EC "Framework" Health and Safety Directive are considered to already cover chemical agents, albeit in a generalised way, as they require employers to ensure the health and safety of workers by complying with certain general duties set out in those regulations. These duties include the following:-

- (a) the avoidance of risks;
- (b) the evaluation of unavoidable risks and the taking of action to reduce them;
- (c) adoption of work patterns and procedures which take account of the capacity of the individual;
- (d) adaptation of procedures to take account of new technology and other changes in working practices, equipment, the working environment and any other factors which may affect health and safety;
- (e) adoption of a coherent approach to management of the vessel or undertaking, taking account of health and safety at every level of the organisation;
- (f) giving collective protective measures priority over individual protective measures; and
- (g) the provision of appropriate and relevant information and instruction for workers.

Without prejudice to the generality of the duties set out in (a) to (g) above, the matters to which those duties extend includes in particular:-

- (i) provision and maintenance of plant, machinery and equipment and systems of work that are, so far as is reasonably practicable, safe and without risk to health;
- (ii) arrangements for ensuring, so far as is reasonably practicable, safety and absence of risk to health in connection with the use, handling, stowage and transport of articles and substances;
- (iii) such arrangements as are appropriate, having regard to the nature of, and the substances used in, the activities and size of the operation, for the effective planning, organisation, control, monitoring and review of preventive and protective measures;

(iv) provision of such information, instruction, training and supervision as is necessary to ensure the health and safety of workers and that of other persons aboard ship who may be affected by their acts or omissions;

(v) maintenance of all places of work in the ship in a condition that is, so far as is reasonably practicable, safe and without risk to health;

(vi) arrangements to ensure, so far as is reasonably practicable, that no person has access to any area of the ship to which it is necessary to restrict access on grounds of health and safety unless the individual concerned has received adequate and appropriate health and safety instruction;

(vii) provision and maintenance of an environment for persons aboard ship that is, so far as is reasonably practicable, safe and without risk to health;

(viii) collaboration with any other persons upon whom a duty is placed by the Regulations to protect, so far as is reasonably practicable, the health and safety of all authorised persons aboard the ship or engaged in loading or unloading activities in relation to that ship.

Directive 98/24/EC, supplemented by Directives 2000/39/EC and 2006/15/EC, builds on those requirements by introducing specific requirements relating to the health and safety of workers likely to be exposed to hazardous chemical agents at work. It is necessary for the provisions of those Directives to be implemented by means of Regulations in order to meet the UK's obligations to give effect to them.

#### **4. OPTIONS FOR IMPLEMENTATION**

There are only two possible options to give effect to Directive 98/24/EC, supplemented by Directives 2000/39/EC and 2006/15/EC, for the Maritime sector. These options are to extend the application of HSE's land-based regulations to the maritime sector (Option 2) or to introduce new Merchant Shipping Regulations to give effect to the Directive (Option 3). These options and the reasons for accepting or rejecting a particular option are set out below.

##### **(i) Option 1 – Do Nothing**

This option is the counterfactual for the purposes of this impact assessment. However, it would leave the UK in breach of its EU commitments. Given that the provisions of EC Directives must be given the force of law in Member States, this is thus not considered to be appropriate. Failure to implement this Directive could not only result in infraction proceedings being taken by the EC, but could potentially leave the UK Government, under the Francovich principle, liable to pay compensation to all those affected by the failure to implement Directive 98/24/EC, supplemented by Directives 2000/39/EC and 2006/15/EC. This option has therefore not been considered further in this Impact Assessment.

##### **(ii) Option 2 – Extend the application of HSE's land-based regulations to the maritime sector**

There are several problems with adopting this option as follows:-

- (a) There are separate Regulations covering Great Britain (produced by HSE) and Northern Ireland (produced by HSE(NI)) which cover workers on land. They also apply to certain offshore installations within UK waters. However, the HSE/HSE(NI) Regulations do not apply outside the UK. Even if they did, it would be questionable which Regulations would apply to a particular incident which occurred outside the UK.

- (b) The HSE/HSE(NI) Regulations are intended to cover work involving potential exposure to chemical agents carried out at premises on land or offshore installation. They may also contain more detailed provisions carried forward from earlier HSE/HSE(NI) Regulations or introduced by HSE/HSE(NI) which amount to “gold plating” of the Directive. As a result, the HSE/HSE(NI) Regulations may not be entirely compatible with the differing requirements of ship operation and could also put UK shipping at a commercial disadvantage compared to its competitors.
- (c) HSE/HSE(NI) Inspectors are not familiar with the operation of ships or their crews.
- (d) The policy of implementing EC Directives for the maritime and fishing sectors by means of regulations specific to merchant shipping and fishing vessels is a well established and widely used practice with which industry is both familiar and in agreement.

For these reasons, it is not considered appropriate to adopt this course of action.

### **(iii) Option 3 – Introduce a single set of regulations to implement only these Directives**

This is the preferred option for the following reasons:-

- (a) Merchant Shipping Regulations are applicable to UK ships wherever they may be in the world. They are also applicable to non UK ships when in UK waters.
- (b) Merchant Shipping Regulations are specifically drafted with ships in mind and whilst they can contain provisions brought forward from earlier Regulations, on the basis of no lowering of existing standards, they do not otherwise seek to “gold plate” Directive requirements.
- (c) The policy of implementing EC Directives for the maritime and fishing sectors by means of regulations specific to merchant shipping and fishing vessels is a well established and widely used practice with which industry is both familiar and in agreement.

## **5. IMPLEMENTATION AND DELIVERY PLAN**

The 380 individuals, companies and organisations in the maritime, yachting, coded vessel and fishing sectors whom form the backbone of the consultation list for Regulations implementing EC Health and Safety Directives were approached for information on the likely costs of implementation of these Regulations and any potential benefits resulting there from these Regulations. This includes the main organisations representing owners, unions, fishermen and yachtsmen. Their views were that any costs were likely to be minimal at worst and that any benefits were also likely to be minimal. This probably results from the General Duties Regulations already requiring employers to carry out general risk assessments and to take appropriate measures to remove, or reduce as far as possible, any risks identified as a result. This would include the consideration of any risks that might arise from the carrying out of any work that might potentially result in exposure to chemical agents.

In addition, vessels carrying hazardous substances are already covered by the IMDG, IBC and IGC codes which are defined as follows:-

'IMDG Code' means the International Maritime Dangerous Goods Code, as it is in force at the time of adoption of this Directive;

'IBC Code' means the IMO International Code for construction and equipment of ships carrying dangerous chemicals in bulk, as it is in force at the time of adoption of this Directive; and

'IGC Code' means the IMO International Code for the construction and equipment of ships carrying liquefied gases in bulk, as it is in force at the time of adoption of this Directive.

Notwithstanding that consultees considered that costs and benefits are likely to be minimal, it is the intention to allow the normal 12 week period between the making of the Regulations and their coming into force in order to allow time for small and medium sized businesses to adapt to the changes should they not have been aware of them previously.

## **6. INTERVENTION**

It is a requirement that EC Directives be implemented by means of legislation in all Member States. HSE/HSE(NI) have already done so for land-based workers in the UK. The Merchant Shipping and Fishing Vessel (Health and Safety at Work) (Chemical Agents) Regulations 2010 complete implementation for the UK by extending the provisions of Directive 98/24/EC (as supplemented by Directives 2000/39/EC and 2006/15/EC) to all seafarers on UK registered ships, fishing vessels, yachts and other craft both sea going and on inland waters on which there are employed workers. Failure to introduce these Regulations could leave the UK open to infraction proceedings by the EC, and leave UK ships and other vessels open to enforcement action for non compliance in other EC ports. Non-implementation could also render the Government liable to pay compensation to all those affected under the Francovich principle.

## **7. COSTS AND BENEFITS**

### **(i) Sectors and Groups affected**

The Merchant Shipping and Fishing Vessel (Health and Safety at Work) (Chemical Agents) Regulations 2010 will apply to all UK ships and other vessels on which workers are employed irrespective of whether they are Merchant Ships, Yachts, Fishing Vessels, Pilot Vessels, Inland Waterway Vessels or any other type of vessel. The main groups affected by these Regulations will be the owners and operators of UK ships, as well the employers of the workers working on those ships and the workers themselves. Given the international nature of shipping, and the potential for ships to join the UK register from other registers, not all of these owners, operators or employers, or indeed the workers themselves will necessarily be based in the United Kingdom. In addition, UK based operators / employers could employ non-UK workers and non-UK UK based operators / employers could employ UK workers. Due to the uncertainty surrounding the costs and benefits of these Regulations, this Impact Assessment cannot seek to differentiate between the costs and benefits for UK and non-UK based owners, operators, employers or workers. It therefore looks at the costs and benefits in a more generalised way applicable to all UK ships and vessels.

### **(ii) Costs resulting from the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010**

Given the requirements of the General Duties Regulations, and its requirement that employers undertake general risk assessments to identify risks to workers and then take appropriate measures to eliminate or reduce as far as possible and risks so identified, the MCA consider that the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010 will only have a very limited effect on the UK maritime sector. This view is supported by the outcome of the consultation exercise and is likely to have occurred because the maritime sector has already have been considering, albeit perhaps in a more generalised

way, the risks arising from exposure to chemical agents and the measures required to alleviate them.

## **Requirements of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010**

Introduction of these Regulations could require the following actions to be undertaken:-

### **Familiarisation with the new regulations**

Introduction of these Regulations could potentially require an employer, or other person acting on their behalf, to familiarise themselves with the requirements of the Regulations and to analyse their effect either on a specific ship or on the company / organisation as a whole. However, the Regulations will not involve every vessel / company as the vast majority of vessels are considered unlikely to have on board any of the chemical agents listed in the Directives to which workers could potentially be exposed.

The number of vessels where crews carry out, or potentially carry out, work involving exposure to hazardous chemical agents, which falls within these Regulations, and where familiarisation with these Regulations will consequently be required, is not known. The vessels likely to be most significantly affected are chemical tankers and those carrying packaged hazardous cargoes. As already indicated earlier, such vessels are however likely to be subject to the "IMDG Code"; the "IBC Code"; or the "IGC Code". Additionally where vessels operate on inland waters, they will be subject to the "European Agreement concerning the International Carriage of Dangerous Goods by Inland Waters". These have existed for many years and govern the carriage of dangerous cargoes by water. Given the existence of the Codes and Agreement, and having regard also to the existing requirements of the General Duties Regulations and the consultation responses which did not suggest familiarisation would be a problem, the Maritime and Coastguard Agency (MCA) does not consider that the new Regulations will require any significant familiarisation for the majority of UK ships.

### **Training**

It is possible that some training could be required in certain circumstances where work involving potential exposure to chemical agents could be undertaken on individual vessels. It has, however, not been possible to assess what level of training will be required, and if so at what cost, to meet the requirements of the Regulations as no information was forthcoming from the around 380 organisations covered by the MCA's formal consultation. Of the responses that were received, only one suggested that some training might be required, but this was not quantified in monetary terms. None of the other consultees indicated that any costs would be incurred as a result of these Regulations. This suggests that any costs which might potentially arise are likely to be minimal at worst for UK ships.

### **Costs of using alternative chemical agents**

The Directive and the new Regulations require that where risks from exposure to chemical agents are identified they should be alleviated by the use of alternative agents which are either non hazardous or are less hazardous. Given that the potential avenues of exposure on ships are likely to be limited to exposure to hazardous chemical agents carried as cargo, this is not considered to be a viable option.

### **Provision of Specialised Safety Equipment**

Whilst there may be some limited instances where specialised safety equipment is required to be provided, such provision is already covered by the requirements of the General Duties

Regulations and the Merchant Shipping and Fishing Vessels (Personal Protective Equipment) Regulations 1999. The MCA therefore consider that any costs relating to the provision of specialised safety equipment will be minimal.

### **(iii) Benefits resulting from the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010**

No information is available on the number of deaths, injuries or diseases that currently arise due to exposure to hazardous chemical agents whilst at work on UK ships. However, the MCA believes that the risk of developing illnesses or diseases directly related to exposure to chemical agents at work is negligible as compliance with the requirements of the General Duties Regulations is considered likely to already have removed any risks that may existed previously. In these circumstances, it is considered that extension of Directive 98/24/EC (as supplemented by Directives 2000/39/EC and 2006/15/EC) will have a negligible beneficial impact.

Obviously, it cannot be assumed in the absence of any data that deaths, injuries or diseases would never arise due to exposure to such agents. However, it is difficult to quantify whether there will be any potential benefits from the new Regulations given the significant uncertainties and limited evidence that is available. In an attempt to resolve this issue, consultees were asked to comment on whether they envisaged any benefits arising from the introduction of the Regulations. Of the 11 responses received, 5 either offered no comments or agreed with what was proposed. The remaining six, whilst offering comments on various aspects of the proposal, did not however offer any comments on potential benefits that might accrue. In the circumstances, it can only be assumed that significant benefits are unlikely to arise.

In the light of the foregoing comments, and in particular the lack of any evidence showing that benefits are likely to arise from the Regulations, the MCA believes that the underlying risk of developing diseases related to exposure to hazardous chemical agents at work on UK ships is currently small and that the extension of the land-based directive to working at sea will therefore have negligible beneficial impact on this risk on UK ships. However, **any** reduction that should result is to be welcomed.

It should be noted, however, that the consultees approached for comments are in the main already familiar with UK merchant shipping legislation and its requirements in so far as it affects them. As indicated earlier, there might be ships joining the UK register from outside the EU whose operators are not familiar with the health and safety requirements applicable to UK ships, including those relating to chemical agents. There is therefore the potential for the new Regulations and the related guidance to assist in preventing exposure to hazardous chemical agents and thus the development of diseases caused by hazardous chemical agents on such vessels. However, this is a very uncertain and cannot be proved conclusively.

Should any reduction in exposure to chemical agents result from the Regulations, there could be a reduction in overall costs to society of exposure to chemical agents. In particular, it is possible that the human costs of exposure to chemical agents and the loss of output due to exposure to chemical agents could be reduced. It is also possible that medical costs of exposure to chemical agents could be reduced in seafarers' countries of domicile. However, it should be noted that a large number of workers on UK ships are nationals of other EEA countries or are from outside the EEA, and any medical treatment / social security payments for those workers may well be provided outside the UK under relevant local provisions.

In addition to the potential benefits to seafarers, the owners and operators of UK vessels serving ports in other EC States could potentially benefit from the introduction of the Regulations in so far as they will be less likely to face sanctions for non compliance with the requirements of the Directive. Introduction of the Regulations would also remove the risk to the Government of infraction proceedings for failing to implement the Directive as well as the risk

that the Government could, under the Francovich principle, be liable to pay compensation to all those affected by the failure to implement the Directive.

## **8. SIMPLIFICATION**

Introduction of the new Regulations offers no scope for simplification of earlier requirements as there are currently no regulations in place, other than the General Duties Regulations, which could be said to deal with the protection of workers from the risks resulting from exposure to chemical agents at work. Even then the General Duties Regulations only establish minimum general health and safety requirements and these new Regulations actually build on the General Duties Regulations rather than superseding them. No simplification is therefore considered feasible.

## **9. POST IMPLEMENTATION REVIEW**

The MCA will evaluate how the Regulations have changed working practices. This will be assisted by any relevant data collected as a result of the implementation by the UK of the ILO Maritime Labour Convention 2006, which requires notification to the Maritime and Coastguard Agency of seafarer injuries and diseases. The limited number and generally low injury severity of chemical agent incidents in recent years suggests that post implementation review will require at least five years of data to provide a meaningful evidence base and even then it is likely to be difficult to attribute any change to the introduction of the new regulations.

All health and safety Directives are, however, subject to a regular review by the EC to which MCA will contribute as appropriate. The next EC review for the Chemical Agents Directive is due in 2013. In addition, it is proposed to monitor compliance to see if any problems arise which need to be resolved by amending the regulations, or associated guidance, to make matters clearer to those organisations and persons covered by the Directive's provisions.

## **10. SMALL FIRMS IMPACT TEST**

The MCA envisage that the impact of the Regulations on vessel operators will be commensurate with their size; with smaller firms less affected than larger companies. This is because companies operating smaller vessels are less likely to be involved with the carriage of chemical agents, although the Regulations might have some minor application where chemical cleaners, etc, are used on board.

The MCA ensured that consultees included small, medium and large businesses – a number of consultees including the British Chamber of Shipping, RYA and BMF have small business members and a number of the specific consultees would themselves be classified as small or medium enterprises. However of the 11 responses received, 5 either offered no comments or agreed with what was proposed. The remaining six, whilst offering comments on various aspects of the proposal, did not however offer any comments on any potential impact on small businesses. In the circumstances, it can only be assumed that the Regulations will not place a disproportionate burden on small firms.

## **11. COMPETITION ASSESSMENT**

As the Regulations implement an EC Health and Safety Directive and do not go beyond these instruments, coupled with the existing requirements of the General Duties Regulations, the MCA do not consider that these Regulations will have a significant impact on competition.

However, failure to implement Directive 98/24/EC (as supplemented by Directives 2000/39/EC and 2006/15/EC) could affect competition as it could result in UK flagged vessels failing to

meet EC requirements and consequently result in them facing sanctions in ports in other EC Countries up to and including detention for non-compliance.

## **12. HEALTH IMPACT**

The Regulations implement an EC Directive intended to safeguard the health of workers from the risks associated with exposure to chemical agents at work. Any impact on health will therefore be beneficial.

## **13. RACE EQUALITY**

The Regulations are applicable to all seafarers on UK ships irrespective of their race, nationality or ethnic origin

## **14. DISABILITY EQUALITY**

The Regulations are applicable to all seafarers on UK ships. They do not however contain any provisions relating to disability equality as the fitness or otherwise of a seafarer to work on a ship is covered by separate regulations

## **15. GENDER EQUALITY**

The Regulations are applicable to all seafarers on UK ships irrespective of their gender.

## **16. HUMAN RIGHTS**

The Regulations do not raise any human rights issues.

## **17. ENFORCEMENT, SANCTIONS AND MONITORING**

Enforcement will be carried out by the Maritime and Coastguard Agency as part of its existing enforcement activities. The Regulations provide for sanctions for non-compliance. These include provisions for a fine not exceeding the statutory maximum (currently £5,000) on summary conviction in some cases. In the case of a conviction in the Crown Court, the Regulations do not impose any limit on the amount of the fine and there is also the possibility of imprisonment for up to two years. These penalties are in line with those for other health and safety offences and are considered to be proportionate to the nature of the offences. Provisions also exist whereby a ship may be detained in UK waters where a surveyor of ships suspects that an offence has been committed.



## Specific Impact Tests: Checklist

<b>Type of testing undertaken</b>	<b><i>Results in Evidence Base?</i></b>	<b><i>Results annexed?</i></b>
Competition Assessment	Yes	No
Small Firms Impact Test	Yes	No
Legal Aid	No	No
Sustainable Development	No	No
Carbon Assessment	No	No
Other Environment	No	No
Health Impact Assessment	Yes	No
Race Equality	Yes	No
Disability Equality	Yes	No
Gender Equality	Yes	No
Human Rights	Yes	No
Rural Proofing	No	No

## **Annexes**

Copies of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010 and the related Marine Guidance Note are attached.

## **TRANSPOSITION NOTE**

Relating to the implementation for the maritime sector of Council Directive 98/24/EC of 7 April 1998 (the fourteenth individual Directive within the meaning of Article 16(1) of the Framework Directive), as supplemented by Directives 2000/39/EC and 2006/15/EC, on the introduction of measures to protect workers from the risks related to exposure to chemical agents at work

The Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010 implement Council Directive 98/24/EC, as supplemented, for the maritime sector, which includes all commercial sea-going and inland waterway merchant and fishing vessels of whatever size. The regulations also apply to commercial and private pleasure vessels on which workers are employed.

Implementation of Council Directive 98/24/EC, as amended, in respect of workers employed in land based industries is the responsibility of the Health and Safety Executive.

The responsibility for implementation of Council Directive 98/24/EC, as amended, for the maritime sector rests with the Secretary of State through the introduction of new Regulations.

Maritime and Coastguard Agency  
Department for Transport  
January 2010

**TABLE RELATING TO IMPLEMENTATION OF ARTICLES OF DIRECTIVE 98/24/EC,  
AS AMENDED BY DIRECTIVES 2000/39/EC AND 2006/15/EC**

<b>CHAPTER I GENERAL PROVISIONS</b>		
<b>Article 1 Objective and scope</b>		
<b>Article or Paragraph of Directive</b>	<b>Purpose of Article or Paragraph in Directive</b>	<b>Implementation in the UK by</b>
Article 1(1)	States purpose of the Directive	Transposition not required
Article 1(2)	The requirements of this Directive apply where hazardous chemical agents are present or may be present at the workplace, without prejudice to the provisions for chemical agents to which measures for radiation protection apply pursuant to Directives adopted under the Treaty establishing the European Atomic Energy Community.	Transposed by Regulations 4(1) and 5(2)(a) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010.
Article 1(3)	For carcinogens at work the provisions of this Directive shall apply without prejudice to more stringent and/or specific provisions contained in Council Directive 90/394/EEC of 28 June 1990 on the protection of workers from the risks related to exposure to carcinogens (sixth individual Directive within the meaning of Article 16(1) of Directive 89/391/EEC) (1).	Transposed by Regulation 5(2)(b) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010
Article 1(4)	The provisions of Directive 89/391/EEC shall apply fully to the whole field referred to in this Article, without prejudice to more stringent and/or specific provisions contained in this Directive.	Transposed by Regulation 5(1) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010. The General Duties Regulations referred to in that regulation implement Directive 89/391/EEC
Article 1(5)	As far as the transport of hazardous chemical agents is concerned, the provisions of this Directive shall apply without prejudice to more stringent and/or specific provisions contained in Directive 94/55/EC, in Directive 96/49/EC, in the provisions of the IMDG Code, IBC Code and IGC Code as defined in Article 2 of Directive 93/75/EEC (4), in the provisions of the	References to Directives 94/55/EC and 96/49/EC are not transposed as they relate to transport of dangerous goods by road and rail respectively and are not therefore applicable to the maritime or fishing sectors.  The remaining provisions are transposed by Regulation 5(2)(c) of the Merchant Shipping and Fishing Vessels (Health and Safety at

	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterway and of the Regulation for the Carriage of Dangerous Substances on the Rhine as incorporated in Community law and in the technical instructions for the safe transport of dangerous goods issued, at the date of entry into force of this Directive, by the International Civil Aviation Organisation.	Work) (Chemical Agents) Regulations 2010 except for the reference to the International Civil Aviation Organisation which is also not relevant to the maritime and fishing sectors.
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**Article 2  
Definitions**

Article 2	<p>For the purpose of this Directive, the terms used shall have the following meanings:</p> <p>(a) 'Chemical agent' means any chemical element or compound, on its own or admixed, as it occurs in the natural state or as produced, used or released, including release as waste, by any work activity, whether or not produced intentionally and whether or not placed on the market;</p> <p>(b) 'Hazardous chemical agent' means:</p> <p>(i) any chemical agent which meets the criteria for classification as a dangerous substance according to the criteria in Annex VI to Directive 67/548/EEC, whether or not that substance is classified under that Directive, other than those substances which only meet the criteria for classification as dangerous for the environment;</p> <p>(ii) any chemical agent which meets the criteria for classification as a dangerous preparation within the meaning of Directive 88/379/EEC, whether or not that preparation is classified under that Directive, other than those preparations which only meet the criteria for classification as dangerous for the environment;</p>	<p>Transposed in Regulation 2(1) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010</p> <p>Transposed in Regulation 2(1) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010</p> <p>Transposed in Regulation 2(1) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010</p>
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	<p>(iii) any chemical agent which, whilst not meeting the criteria for classification as dangerous in accordance with (i) and (ii), may, because of its physicochemical, chemical or toxicological properties and the way it is used or is present in the workplace, present a risk to the safety and health of workers, including any chemical agent assigned an occupational exposure limit value under Article 3.</p> <p>(c) 'Activity involving chemical agents' means any work in which chemical agents are used, or are intended to be used, in any process, including production, handling, storage, transport or disposal and treatment, or which result from such work;</p> <p>(d) 'Occupational exposure limit value' means, unless otherwise specified, the limit of the time-weighted average of the concentration of a chemical agent in the air within the breathing zone of a worker in relation to a specified reference period;</p> <p>(e) 'Biological limit value' means the limit of the concentration in the appropriate biological medium of the relevant agent, its metabolite, or an indicator of effect;</p> <p>(f) 'Health surveillance' means the assessment of an individual worker to determine the state of health of that individual, as related to exposure to specific chemical agents at work;</p> <p>(g) 'Hazard' means the intrinsic property of a chemical agent with the potential to cause harm;</p> <p>(h) 'Risk' means the likelihood that the potential for harm will be attained under the conditions of use and/or exposure.</p>	<p>Transposed in Regulation 2(1) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010</p> <p>Covered by definition of "chemical agent" in Regulation 2(1) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010. In addition the Regulations apply in any situation where hazardous chemical agents are present on a ship</p> <p>Transposed in Regulation 2(1) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010</p> <p>Transposed in Regulation 2(3) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010</p> <p>Transposed in Regulation 2(1) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010</p> <p>Transposed in Regulation 2(3) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010</p> <p>Transposed in Regulation 2(3) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010</p>
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**Article 3**  
**Occupational exposure limit values and biological limit values**

Article 3(1)	Requires the Commission to evaluate the relationship between the health effects of hazardous chemical agents and the level of occupational exposure by means of an independent scientific assessment of the latest available scientific data.	Transposition not required as obligation is imposed on Commission
Article 3(2)	<p>On the basis of the evaluation described in paragraph 1, the Commission, after first consulting the Advisory Committee on Safety, Hygiene and Health protection at Work, shall propose European objectives in the form of indicative occupational exposure limit values for the protection of workers from chemical risks, to be set at Community level.</p> <p>These limit values shall be established or revised, taking into account the availability of measurement techniques, in accordance with the procedure laid down in Article 17 of Directive 89/391/EEC. Member States shall keep workers' and employers' organisations informed of indicative occupational exposure limit values set at Community level.</p>	<p>Transposition not required as obligation is imposed on Commission</p> <p>Transposition not required as obligation is imposed on Commission and Member States</p>
Article 3(3)	For any chemical agent for which an indicative occupational exposure limit value is established at Community level, Member States shall establish a national occupational exposure limit value, taking into account the Community limit value, determining its nature in accordance with national legislation and practice.	Transposed by Regulation 2(1) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010 by cross referring to limits set down in Directives 91/322/EC, 2000/39/EC and 2006/15/EC and the workplace exposure limits established for the UK by the Health and Safety Executive and set out in their document EH/40.
Article 3(4)	Binding occupational exposure limit values may be drawn up at Community level and, in addition to the factors considered when establishing indicative occupational exposure limit values, shall reflect feasibility factors while maintaining the aim of ensuring the health of workers at work. Such limit values shall be established in	Transposition not required as obligation is imposed on Commission

	accordance with Article 118a of the Treaty and laid down in Annex I to this Directive.	
Article 3(5)	For any chemical agent for which a binding occupational exposure limit value is established. Member States shall establish a corresponding national binding occupational exposure limit value based on, but not exceeding, the Community limit value.	Transposed in Regulation 2(1) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010 by establishing a maximum occupational exposure limit in line with the binding occupational exposure limit values set out in Annex 1 of the Directive.
Article 3(6)	Binding biological limit values may be drawn up at Community level on the basis of the evaluation described in paragraph 1 and of the availability of measurement techniques, and shall reflect feasibility factors while maintaining the aim of ensuring the health of workers at work. Such limit values shall be established in accordance with the procedure laid down in Article 118a of the Treaty and laid down in Annex II to this Directive, together with other relevant health surveillance information.	Transposition not required as obligation is imposed on Commission
Article 3(7)	For any chemical agent for which a binding biological limit value is established, Member States shall establish a corresponding national binding biological limit value based on, but not exceeding, the Community limit value.	Transposed by Regulation 2(1) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010 and the reference in the definition of “binding biological limit value” to Annex II of the Directive.
Article 3(8)	Where a Member State introduces or revises a national occupational exposure limit value or a national biological limit value for a chemical agent, it shall inform the Commission and other Member States thereof together with the relevant scientific and technical data. The Commission shall undertake the appropriate action.	Transposition not required as obligation is imposed on Member States to notify Commission.
Article 3(9)	On the basis of the reports provided by the Member States under Article 15, the Commission shall carry out an assessment of the way in which Member States have taken account of Community indicative limit values when establishing the corresponding national occupational exposure limit values.	Transposition not required as obligation is imposed on Commission.



Article 3(10)	Standardised methods for the measurement and evaluation of workplace air concentrations in relation to occupational exposure limit values shall be developed in accordance with Article 12(2).	Transposition not required as obligation is imposed on Commission.
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**SECTION II**  
**EMPLOYERS' OBLIGATIONS**  
**Article 4**  
**Determination and assessment of risk of hazardous chemical agents**

Article 4(1)	<p>In carrying out the obligations laid down in Articles 6(3) and 9(1) of Directive 89/391/EEC, the employer shall first determine whether any hazardous chemical agents are present at the workplace. If so, he shall then assess any risk to the safety and health of workers arising from the presence of those chemical agents, taking into consideration the following:</p> <ul style="list-style-type: none"> <li>--- their hazardous properties,</li> <li>--- information on safety and health that shall be provided by the supplier, (e.g. the relevant safety data sheet in accordance with the provisions of Directive 67/548/EEC or Directive 88/379/EEC),</li> <li>--- the level, type and duration of exposure,</li> <li>--- the circumstances of work involving such agents, including their amount,</li> <li>--- any occupational exposure limit values or biological limit values established on the territory of the Member State in question,</li> <li>--- the effect of preventive measures taken or to be taken,</li> <li>--- where available, the conclusions to be drawn from any health surveillance already undertaken.</li> </ul> <p>The employer shall obtain additional information which is needed for the risk assessment from the supplier or from other readily available sources. Where appropriate, this information shall comprise the specific assessment concerning the risk to users established on the basis of Community legislation on chemical agents.</p>	<p>First sentence transposed by Regulation 6(1) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010</p> <p>Second sentence and related provisions transposed by Regulation 6(2) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010</p> <p>Transposed by Regulation 6(3) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010</p>
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Article 4(2)	The employer must be in possession of an assessment of the risk in accordance with Article 9 of Directive 89/391/EEC, and shall identify which measures have been taken in accordance with Articles 5 and 6 of this Directive. The risk assessment shall be documented in a suitable form according to national law and practice, and may include a justification by the employer that the nature and extent of the risks related to chemical agents make a further detailed risk assessment unnecessary. The risk assessment shall be kept up-to-date, particularly if there have been significant changes which could render it out-of-date, or when the results of health surveillance show it to be necessary.	Transposed by Regulation 6(4)(a)-(d) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010
Article 4(3)	Certain activities within the undertaking or establishment, such as maintenance, in respect of which it is foreseeable that there is a potential for significant exposure, or which may result in deleterious effects to safety and health for other reasons, even after all technical measures have been taken, shall be included in the risk assessment.	Transposed by Regulation 6(4)(e) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010
Article 4(4)	In the case of activities involving exposure to several hazardous chemical agents, the risk shall be assessed on the basis of the risk presented by all such chemical agents in combination.	Transposed by Regulation 6(4)(f) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010
Article 4(5)	In the case of a new activity involving hazardous chemical agents, work shall only commence after an assessment of the risk of that activity has been made and any preventive measures identified have been implemented.	Transposed by Regulation 6(5) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010
Article 4(6)	Practical guidelines for the determination and assessment of risk, and for their review and, if necessary, adjustment, shall be developed in accordance with Article 12(2).	Transposition not required as Article 12(2) imposes an obligation on the Commission which does not require transposition into regulations.
<p><b>Article 5</b>  <b>General principles for prevention of risks associated with hazardous chemical agents and application of this Directive in relation to assessment of risks</b></p>		
Article 5(1)	In carrying out his obligation to ensure the health and safety of workers in any activity involving hazardous chemical agents the employer shall take the necessary preventive measures set out in Article 6(1) and (2) of Directive	Transposed by Regulation 7(1) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010

	89/391/EEC and include the measures set out in this Directive.	
Article 5(2)	<p>Risks to the health and safety of workers at work involving hazardous chemical agents shall be eliminated or reduced to a minimum by:</p> <ul style="list-style-type: none"> <li>--- the design and organisation of systems of work at the workplace,</li> <li>--- the provision of suitable equipment for work with chemical agents and maintenance procedures which ensure the health and safety of workers at work,</li> <li>--- reducing to a minimum the number of workers exposed or likely to be exposed,</li> <li>--- reducing to a minimum the duration and intensity of exposure,</li> <li>--- appropriate hygiene measures,</li> <li>--- reducing the quantity of chemical agents present at the workplace to the minimum required for the type of work concerned,</li> <li>--- suitable working procedures including arrangements for the safe handling, storage and transport within the workplace of hazardous chemical agents and waste containing such chemical agents.</li> </ul> <p>Practical guidelines for preventive measures to control risk shall be developed in accordance with Article 12(2).</p>	<p>Transposed by Regulation 7(1) and (2) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010. Reference is however made to “ship” rather than “workplace”</p> <p>Transposition not required as Article 12(2) imposes an obligation on the Commission which does not require transposition into regulations.</p>
Article 5(3)	Where the results of the assessment referred to in Article 4(1) reveal a risk to the safety and health of workers, the specific protection, prevention and monitoring measures laid down in Articles 6, 7 and 10 shall be applied.	Transposed by Regulations 8, 9 and 12 of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010.
Article 5(4)	Where the results of the risk assessment referred to in Article 4(1) show that, because of the quantities of a hazardous chemical agent present in the workplace, there is only a slight risk to the safety and health of workers, and the measures taken in accordance with paragraphs 1 and 2 of this Article are	Transposed by Regulations 8(1), 9(1) and 12(1) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010.

	sufficient to reduce that risk, the provisions of Articles 6, 7 and 10 shall not apply.	
<b>Article 6</b> <b>Specific protection and prevention measures</b>		
Article 6(1)	The employer shall ensure that the risk from a hazardous chemical agent to the safety and health of workers at work is eliminated or reduced to a minimum.	Transposed by Regulation 8(2) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010
Article 6(2)	<p>In applying paragraph 1, substitution shall by preference be undertaken, whereby the employer shall avoid the use of a hazardous chemical agent by replacing it with a chemical agent or process which, under its condition of use, is not hazardous or less hazardous to workers' safety and health, as the case may be.</p> <p>Where the nature of the activity does not permit risk to be eliminated by substitution, having regard to the activity and risk assessment referred to in Article 4, the employer shall ensure that the risk is reduced to a minimum by application of protection and prevention measures, consistent with the assessment of the risk made pursuant to Article 4. These will include, in order of priority:</p> <p>(a) design of appropriate work processes and engineering controls and use of adequate equipment and materials, so as to avoid or minimise the release of hazardous chemical agents which may present a risk to workers' safety and health at the place of work;</p> <p>(b) application of collective protection measures at the source of the risk, such as adequate ventilation and appropriate organizational measures;</p> <p>(c) where exposure cannot be prevented by other means, application of individual protection measures including personal protective equipment.</p> <p>Practical guidelines for protection and</p>	<p>Transposed by Regulation 8(3) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010</p> <p>Transposed by Regulation 8(4) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010</p> <p>Transposed by Regulation 8(5)(a) to (c) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010</p> <p>Transposition not required as Article 12(2)</p>

	prevention measures to control risk shall be developed in accordance with Article 12(2).	imposes an obligation on the Commission which does not require transposition into regulations.
Article 6(3)	The measures referred to in paragraph 2 of this Article shall be accompanied by health surveillance in accordance with Article 10 if it is appropriate to the nature of the risk.	Transposed by Regulation 8(6) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010
Article 6(4)	Unless the employer clearly demonstrates by other means of evaluation that, in accordance with paragraph 2, adequate prevention and protection have been achieved, the employer shall carry out on a regular basis, and when any change occurs in the conditions which may affect workers' exposure to chemical agents, such measurements of chemical agents which may present a risk to worker's health at the workplace as are necessary, in particular in relation to the occupational exposure limit values.	Transposed by Regulation 8(7) and (8) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010
Article 6(5)	<p>The employer shall take into account the results of the procedures referred to in paragraph 4 of this Article in carrying out the obligations laid down in or resulting as a consequence of Article 4.</p> <p>In any event, where an occupational exposure limit value effectively established on the territory of a Member State has been exceeded, the employer shall immediately take steps, taking into account the nature of that limit, to remedy the situation by carrying out preventive and protective measures.</p>	<p>Transposed by Regulation 6(6) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010</p> <p>Transposed by Regulation 8(9) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010</p>
Article 6(6)	<p>On the basis of the overall assessment of and general principles for the prevention of risks in Articles 4 and 5, the employer shall take technical and/or organisational measures appropriate to the nature of the operation, including storage, handling and segregation of incompatible chemical agents, providing protection of workers against hazards arising from the physico-chemical properties of chemical agents. In particular he shall take measures, in order of priority, to:</p> <p>(a) prevent the presence at the workplace of hazardous concentrations of inflammable substances or hazardous</p>	Transposed by Regulations 8(10) and (11) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010

	<p>quantities of chemically unstable substances or, where the nature of the work does not allow that,</p> <p>(b) avoid the presence of ignition sources which could give rise to fires and explosions, or adverse conditions which could cause chemically unstable substances or mixtures of substances to give rise to harmful physical effects, and</p> <p>(c) mitigate the detrimental effects to the health and safety of workers in the event of fire or explosion due to the ignition of inflammable substances, or harmful physical effects arising from chemically unstable substances or mixtures of substances.</p> <p>Work equipment and protective systems provided by the employer for the protection of workers shall comply with the relevant Community provisions on design, manufacture and supply with respect to health and safety.</p> <p>Technical and/or organisational measures taken by the employer shall take account of and be consistent with the equipment group categorisation in Annex I to Directive 94/9/EC of the European Parliament and of the Council of 23 March 1994 on the approximation of the laws of the Member States concerning equipment and protective systems intended for use in potentially explosive atmospheres.</p> <p>The employer shall take measures to provide sufficient control of plant, equipment and machinery or provision of explosion suppression equipment or explosion pressure relief arrangements.</p>	<p>Transposed by Regulation 12 of the Merchant Shipping and Fishing Vessels (Provision and Use of Work Equipment) Regulations 2006</p> <p>Transposition not required as Article 2(4) of Directive 94/9/EC disappplies the provisions of that Directive to inter alia means of transport for goods or passengers by water.</p> <p>Transposed by Regulation 8(12) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010</p>
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**Article 7  
Arrangements to deal with accidents, incidents and emergencies**

Article 7(1)	Without prejudice to the obligations laid down in Article 8 of Directive 89/391/EEC, the employer shall, in order to protect the safety and health of workers from an accident, incident or emergency related to the presence of hazardous chemical agents at the workplace, establish procedures (action	Transposed by Regulation 9(2) and (3) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010
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	plans) which can be put into effect when any such event occurs, so that appropriate action is taken. These arrangements shall include any relevant safety drills which are to be performed at regular intervals, and the provision of appropriate first aid facilities.	
Article 7(2)	<p>In the case of the occurrence of an event such as is mentioned in paragraph 1, the employer shall immediately take steps to mitigate the effects of the event and to inform the workers concerned thereof.</p> <p>In order to restore the situation to normal:</p> <p>--- the employer shall implement appropriate measures to remedy the situation as soon as possible,</p> <p>--- only those workers who are essential to the carrying out of repairs and other necessary work shall be permitted to work in the affected area.</p>	<p>Transposed by Regulation 9(4)(a) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010</p> <p>Transposed by Regulation 9(4)(b) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010</p>
Article 7(3)	<p>The workers who are permitted to work in the affected area shall be provided with appropriate protective clothing, personal protective equipment, specialised safety equipment and plant which they must use as long as the situation persists; that situation shall not be permanent.</p> <p>Unprotected persons shall not be permitted to remain in the affected area.</p>	<p>Transposed by Regulation 9(5) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010</p> <p>Transposed by Regulation 9(6) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010</p>
Article 7(4)	Without prejudice to Article 8 of Directive 89/391/EEC the employer shall take the measures necessary to provide the warning and other communication systems required to signal an increased risk to safety and health, to enable an appropriate response and to launch remedial actions, assistance, escape and rescue operations immediately if the need arises.	Transposed by Regulation 9(7) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010
Article 7(5)	The employer shall ensure that information on emergency arrangements involving hazardous chemical agents is available. The relevant internal and external accident and emergency	Transposed by Regulation 9(8) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010





	<p>of this Directive. This may vary from oral communication to individual instruction and training supported by information in writing, depending on the nature and degree of the risk revealed by the assessment required by the said Article,</p> <p>--- updated to take account of changing circumstances.</p>	Agents) Regulations 2010
Article 8(2)	Where containers and pipes for hazardous chemical agents used at work are not marked in accordance with the relevant Community legislation on the labelling of chemical agents and on safety signs at the workplace, the employer shall, without prejudice to the derogations provided for in the abovementioned legislation, ensure that the contents of the containers and pipes, together with the nature of those contents and any associated hazards, are clearly identifiable.	Transposed by Regulation 10(4) and (5) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010
Article 8(3)	Member States may take measures necessary to ensure that employers may, preferably from the producer or supplier, obtain on request all information on hazardous chemical agents needed to apply Article 4(1) of this Directive, insofar as Directives 67/548/EEC and 88/379/EEC do not include any obligation to provide information.	Not transposed as is discretionary provision not requiring transposition. Also not possible to apply such requirement to producers and/or suppliers outside the UK and within the UK such data sheets are already required to be provided in accordance with the relevant HSE and HSE (NI) Chemicals (Hazard Information and Packaging for Supply) Regulations.
<p><b>SECTION III</b>  <b>MISCELLANEOUS PROVISIONS</b>  <b>Article 9</b>  <b>Prohibitions</b></p>		
Article 9(1)	To prevent the exposure of workers to health risks from certain chemical agents and/or certain activities involving chemical agents, the production, manufacture or use at work of the chemical agents and the activities set out in Annex III shall be prohibited to the extent specified therein.	Transposed by Regulation 11(1) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010
Article 9(2)	Member States may permit derogations from requirements of paragraph 1 in the following circumstances:	Transposed by Regulation 11(2) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010

	<ul style="list-style-type: none"> <li>--- for the sole purpose of scientific research and testing, including analysis,</li> <li>--- for activities intended to eliminate chemical agents that are present in the form of by-products or waste products,</li> <li>--- for the production of the chemical agents referred to in paragraph 1 for use as intermediates, and for such use.</li> </ul> <p>The exposure of workers to chemical agents referred to in paragraph 1 must be prevented, in particular by providing that the production and earliest possible use of such chemical agents as intermediates must take place in a single closed system, from which the aforesaid chemical agents may be removed only to the extent necessary to monitor the process or service the system.</p> <p>Member States may provide for systems of individual authorisations.</p>	<p>Transposed by Regulation 11(2) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010</p> <p>Transposed by Regulation 11(2) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010 provides for individual authorisations</p>
Article 9(3)	<p>When derogations are permitted pursuant to paragraph 2, the competent authority shall request the employer to submit the following information:</p> <ul style="list-style-type: none"> <li>--- the reason for requesting the derogation,</li> <li>--- the quantity of the chemical agent to be used annually,</li> <li>--- the activities and/or reactions or processes involved,</li> <li>--- the number of workers liable to be involved,</li> <li>--- the precautions envisaged to protect the safety and health of workers concerned,</li> <li>--- the technical and organisational measures taken to prevent the exposure of workers.</li> </ul>	<p>Transposed by Regulation 11(4) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010</p>
Article 9(3)	<p>The Council, in accordance with the procedure laid down in Article 118a of the Treaty, may amend the list of</p>	<p>Transposition not required as this imposes an obligation on the Council not Member States.</p>

	prohibitions under paragraph 1 of this Article, to include further chemical agents or activities.	
<b>Article 10 Health surveillance</b>		
Article 10(1)	<p>1. Without prejudice to Article 14 of Directive 89/391/EEC, Member States shall introduce arrangements for carrying out appropriate health surveillance of workers for whom the results of the assessment referred to in Article 4 of this Directive reveal a risk to health. These arrangements, including the requirements specified for health and exposure records and their availability shall be introduced in accordance with national laws and/or practice.</p> <p>Health surveillance, the results of which shall be taken into account in applying preventive measures in the specific workplace, shall be appropriate where:</p> <ul style="list-style-type: none"> <li>--- the exposure of the worker to a hazardous chemical agent is such that an identifiable disease or adverse health effect may be related to the exposure, and</li> <li>--- there is a likelihood that the disease or effect may occur under the particular conditions of the worker's work, and</li> <li>--- the technique of investigation is of low risk to workers.</li> </ul> <p>Furthermore, there shall be valid techniques for detecting indications of the disease or effect.</p> <p>Where a binding biological limit value has been set as indicated in Annex II, health surveillance shall be a compulsory requirement for work with the hazardous chemical agent in question, in accordance with the procedures in that Annex. Workers shall be informed of this requirement before being assigned to the task involving risk of exposure to the hazardous chemical agent indicated.</p>	<p>Transposed by Regulation 12 of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010</p> <p>Transposed by Regulation 12(3) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010</p> <p>Transposed by Regulation 12(4) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010</p> <p>Transposed by Regulation 12(5) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010</p>

Article 10(2)	Member States shall establish arrangements to ensure that for each worker who undergoes health surveillance in accordance with the requirements of paragraph 1, individual health and exposure records are made and kept up-to-date.	Transposed by Regulation 12(7) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010
Article 10(3)	<p>Health and exposure records shall contain a summary of the results of health surveillance carried out and of any monitoring data representative of the exposure of the individual. Biological monitoring and related requirements may form part of health surveillance.</p> <p>Health and exposure records shall be kept in a suitable form so as to permit consultation at a later date, taking into account any confidentiality.</p> <p>Copies of the appropriate records shall be supplied to the competent authority on request. The individual worker shall, at his request, have access to the health and exposure records relating to him personally.</p> <p>Where an undertaking ceases to trade, the health and exposure records shall be made available to the competent authority.</p>	<p>Transposed by Regulation 12(8) and (9) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010</p> <p>Transposed by Regulation 12(10) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010</p> <p>Transposed by Regulations 12(11) and (12) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010</p> <p>Transposed by Regulation 12(13) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010</p>
Article 10(4)	<p>Where, as a result of health surveillance:</p> <ul style="list-style-type: none"> <li>--- a worker is found to have an identifiable disease or adverse health effect which is considered by a doctor or occupational health-care professional to be the result of exposure at work to a hazardous chemical agent, or</li> <li>--- a binding biological limit value is found to have been exceeded,</li> </ul> <p>the worker shall be informed by the doctor or other suitably qualified person of the result which relates to him personally, including information and advice regarding any health surveillance which he should undergo following the end of the exposure, and the employer shall:</p> <ul style="list-style-type: none"> <li>--- review the risk assessment made pursuant to Article 4(1),</li> </ul>	<p>Transposed by Regulation 12(14) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010</p> <p>Transposed by Regulation 12(15) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010</p> <p>Transposed by Regulation 12(16) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010</p>

	<p>--- review the measures provided to eliminate or reduce risks pursuant to Articles 5 and 6,</p> <p>--- take into account the advice of the occupational health-care professional or other suitably qualified person or the competent authority in implementing any measures required to eliminate or reduce risk in accordance with Article 6, including the possibility of assigning the worker to alternative work where there is no risk of further exposure, and</p> <p>--- arrange continued health surveillance and provide for a review of the health status of any other worker who has been similarly exposed. In such cases the competent doctor or occupational health-care professional or the competent authority may propose that exposed persons undergo a medical examination.</p>	Agents) Regulations 2010
<p><b>Article 11</b> <b>Consultation and participation of workers</b></p>		
Article 11	Consultation and participation of workers and/or their representatives shall take place in accordance with Article 11 of Directive 89/391/EEC on the matters covered by this Directive, including the Annexes hereto.	Transposed by Regulation 13 of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010
<p><b>Article 12</b> <b>Adaptation of the Annexes, preparation and adoption of technical guidance</b></p>		
Article 12(1)	States adjustments of a strictly technical nature to the Annexes shall be adopted in accordance with the procedure laid down in Article 17 of Directive 89/391/EEC.	Transposition not required.
Article 12(2)	Refers to the Commission drawing up practical guidelines of a non-binding nature after consulting the Advisory Committee on Safety, Hygiene and Health Protection at Work. Such guidelines to address the topics referred to in Articles 3, 4, 5 and 6, and Annex II, section 1 and to be taken account of as far as possible by	Transposition not required as such guidelines are not binding. In addition such guidelines have still to be produced by the Commission..

	Member States in drawing up their national policies for the protection of the health and safety of workers.	
<b>Article 13</b> <b>Repeal and amendment of earlier Directives</b>		
Article 13(1)	States Directives 80/1107/EEC, 82/605/EEC and 88/364/EEC shall be repealed on the date referred to in Article 14(1).	Transposition not required.
Article 13(2)	States Council Directive 83/477/EEC on the protection of workers from the risks related to exposure to asbestos at work is amended.	Transposition not required as not relevant to Chemical Agents Directive. Refers to Asbestos Directive which will be implemented for the maritime and fishing sectors by means of a separate set of Regulations
Article 13(3)	States Council Directive 86/188/EEC on the protection of workers from the risks related to exposure to noise at work is amended.	Transposition not required as not relevant to Chemical Agents Directive. Refers to Noise at Work Directive which has already been implemented for the maritime and fishing sectors by means of the Merchant Shipping and Fishing Vessels (Control of Noise at Work) Regulations 2007.
Article 13(4)	States any other reference in Directive 83/477/EEC and Directive 86/188/EEC to Directive 80/1107/EEC shall be obsolete from the date of repeal of the said Directive.	Transposition not required as Directive 80/1107/EEC did not apply to sea transport.
Article 13(5)	States Directive 91/322/EEC remains in force.	Transposition not required. Directive 91/322/EEC established limit values for Directive 80/1107/EEC. However 80/1107/EEC did not apply to sea transport.
<b>SECTION IV</b> <b>Final provisions</b>		
Article 14(1)	<p>States date by which Member States are to bring into force the laws, regulations and administrative provisions necessary to comply with this Directive.</p> <p>Also states that Member State's measures shall contain a reference to this Directive or shall be accompanied by such reference on the occasion of their official publication. The methods for making such reference shall be laid</p>	<p>Transposition not required.</p> <p>Directive referred to in Explanatory Note to the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010</p>

	down by Member States.	
Article 14(2)	Requires Member States to communicate to the Commission the texts of the provisions of national law which they have already adopted or which they adopt in the field governed by this Directive.	Transposition not required.
Article 15	Requires Member States to report to the Commission every five years on the practical implementation of this Directive, indicating the views of employers and workers.  The Commission shall inform the European Parliament, the Council and the Economic and Social Committee thereof.	Transposition not required.  Transposition not required.
Article 16	States date Directive enters into force	Transposition not required.
Article 17	States Directive is addressed to the Member States	Transposition not required
<b>ANNEX I</b> LIST OF BINDING OCCUPATIONAL EXPOSURE LIMIT VALUES		Reference to Annex contained in definition of “maximum occupational exposure limit value” in Regulation 2(1) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010 but actual text of Annex is not transposed
<b>ANNEX II</b> BINDING BIOLOGICAL LIMIT VALUES AND HEALTH SURVEILLANCE MEASURES		Transposed in reference to Annex contained in definition of “binding biological limit value” in Regulation 2(1) and in Regulation 12(5) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010 but actual text of Annex is not transposed
<b>ANNEX III</b> PROHIBITIONS		Reference to Annex contained in Regulation 11(2) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010 but actual text of Annex is not transposed
<b>ANNEX TO DIRECTIVE 2000/39/EC</b> INDICATIVE OCCUPATIONAL EXPOSURE LIMIT VALUES		Reference to Annex contained in definition of “national occupational exposure limit value” in Regulation 2(1) of Regulation 16(10) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010 however actual text of Annex is not transposed
<b>ANNEX TO DIRECTIVE 2006/15/EC</b>		Reference to Annex contained in definition

SECOND LIST OF INDICATIVE OCCUPATIONAL EXPOSURE LIMIT VALUES

of “national occupational exposure limit value” in Regulation 2(1) of Regulation 16(10) of the Merchant Shipping and Fishing Vessels (Health and Safety at Work) (Chemical Agents) Regulations 2010 however actual text of Annex is not transposed