

Harpur Hill, Buxton  
Derbyshire, SK17 9JN  
T: +44 (0)1298 218000  
F: +44 (0)1298 218590  
W: [www.hsl.gov.uk](http://www.hsl.gov.uk)



**A Review of Consistency of References to Risk  
Management Frameworks in HSE Guidance**

**HSL/2007/13**

Project Leader: **Rachel Cummings**

Author(s): **Nicola Healey & Daniel Greaves**

Science Group: **Human Factors Group**

## **ACKNOWLEDGEMENTS**

The authors would like to thank HSL colleague Ms Janet Nash. The assistance provided is greatly appreciated.

# CONTENTS

<b>1</b>	<b>INTRODUCTION</b> .....	<b>4</b>
1.1	Background .....	4
1.2	Aims and Objectives .....	4
<b>2</b>	<b>METHOD</b> .....	<b>6</b>
2.1	Sources of Information.....	6
2.2	Relevant Guidance .....	6
2.3	Search Strategy.....	6
2.4	Assessment of Consistency.....	7
2.5	Inter-rater Reliability.....	7
<b>3</b>	<b>RESULTS</b> .....	<b>9</b>
3.1	Sample Breakdown .....	10
3.2	Consistency of Inclusion and Organisation of Information.....	10
3.3	Consistency of Terminology .....	10
<b>4</b>	<b>CONCLUSIONS</b> .....	<b>12</b>
4.1	Summary of Findings.....	12
4.2	Limitations .....	13
<b>5</b>	<b>APPENDICES</b> .....	<b>14</b>
	Appendix A - Summary of POPMAR Model .....	14
	Appendix B - Guidance: Supplementary Information.....	16
<b>6</b>	<b>REFERENCES</b> .....	<b>46</b>

## EXECUTIVE SUMMARY

There is acknowledgement within the Health and Safety Executive (HSE) that there are competing views regarding effective health and safety management models. The current HSE approach to health and safety management, captured in the publication HSG 65 ‘Successful Health and Safety Management’, is eighteen years old, and the extent that it fulfils all of the developing requirements of HSE’s remit is subject to debate.

The HSE Board mandated Operational Policy and Support Division (OPSD) to “review and refresh the principles of good health and safety management”.

The Board’s paper further went on to recommend:

“A comprehensive review of current good practice in the management of health and safety to define our standards and develop the evidence – base supporting our work in this area”.

### Objectives

The Health and Safety Laboratory (HSL) have been commissioned by the HSE to review a limited sample of HSE guidance literature referencing a ‘Risk Management Framework’. This review focuses on assessing and quantifying the consistency of the sample of guidance literature. The risk management framework outlined in HSG 65 ‘Successful Health and Safety Management’ is used as a baseline for comparison. HSG 65 is used due to the inclusion of comprehensive information regarding risk management frameworks. HSG 65 is not assumed to be a model framework.

### Main Findings

- There was limited consistency of the inclusion and organisation of information across the sample of HSE guidance.
- There was variable consistency of terminology used to describe Risk Management Frameworks across the sample of publications.
- The sample of guidance literature generally contained little to no information regarding the benefits of ‘monitoring performance’, and ‘auditing and review’.
- The sample of guidance literature generally contained limited reference to the importance of ‘policy’ in relation to successful health and safety management. There was a tendency for information regarding ‘policy’ to be referred to towards the end of the guidance.
- Throughout the sample of guidance, the ‘organising’ and ‘planning’ aspects of the POPMAR model were most frequently referred to.

# 1 INTRODUCTION

## 1.1 BACKGROUND

The Health and Safety Commission's (HSC's) "Strategy for workplace health and safety in Great Britain to 2010 and beyond" notes that:

*"We will find ways to demonstrate the moral, business and economic cases for health and safety. ... We are committed to achieving higher levels of recognition and respect for health and safety as an integral part of a modern, competitive business and public sector and as a contribution to social justice and inclusion."* (p.6).

With this in mind the Health and Safety Executive's (HSE's) Board paper B-05-045 proposed a programme of five, interlinked work streams to 'renew and refresh' HSE's approach to health and safety management. The paper said:

*"The philosophy underlying our approach should be to improve duty holders' ability to 'manage' their activities with particular reference to health and safety rather than to address a special function of 'health and safety management'. We consider this is essential both for success by the duty holder (in making health and safety an integral part of line management activity) and in working with other regulators (to achieve a consistent approach to assessing duty holder performance)." As described in 'Improving duty holder management of health and safety, Project Initiation Document' (Mullins, P 2006).*

## 1.2 AIMS AND OBJECTIVES

As part of the first work stream of the proposed programme of five, the Health and Safety Laboratory (HSL) has been commissioned by the HSE to scope a limited range of HSE guidance that refers to a Risk Management Framework<sup>1</sup>, investigating the extent that there is consistency in the guidance.

Guidance referring to a Risk Management Framework is intended to contribute to the effective control and sustained reduction by duty holders in incidents that have the potential to result in acute deleterious effects to employees and other exposed persons.

In the current review, consistency was considered in terms of:

- The inclusion of information;
- The organisation of information (order and priority);
- The terminology used,

Regarding the management arrangements or steps the publications describe. This is referenced to the following model of Risk Management:

- Knowing what the risks are, and what in general should be done about them
- Planning, prioritising and implementing risk controls

---

<sup>1</sup>In this context, the definition of risk management framework refers to the extent to which publications go beyond the practical assessment and control of risk to describe a set of management arrangements intended to help ensure compliance, which might include inspections, training, policies etc.

- Ensuring that risk controls are effective and sustained
- Reviewing and learning

This approach is exemplified by the POPMAR model illustrated in HSE Guidance HSG 65 ‘Successful Health and Safety Management’ (see [Appendix A](#) for further information).

Therefore the risk management framework outlined in HSG 65 is used as a baseline for comparison, in the current review. HSG 65 is used due to the inclusion of comprehensive information regarding risk management frameworks, and is not assumed to be a model framework.

More specifically, the objectives of the exercise were:

- (i) To review a varied sample of twenty pieces of guidance referencing a ‘Risk Management Framework’;
- (ii) To assess and quantify the consistency of this sample of guidance with reference to the framework outlined in HSEs ‘Successful Health and Safety Management’;

With the specific aim of:

- (iii) Providing insight into the current level of consistency of risk management frameworks in HSE guidance literature;

The findings of this project will be used in conjunction with the results from the other work streams to enable delivery of the HSC/E strategy and targets through improving duty holders’ ability to ‘manage’ their activities with reference to consistent health and safety guidance.

## **2 METHOD**

A sample of 20 pieces of HSE guidance that referred to Risk Management frameworks was used to assess consistency of the information presented in HSE guidance communications. The actual sample consisted of 22 pieces of guidance due to the inclusion of (additional) guidance considered of interest.

Consistency was considered in terms of:

- The information included,
- The organisation of the information (order and priority)
- The terminology used.

### **2.1 SOURCES OF INFORMATION**

HSE direct is a web-based electronic database of health and safety legislation and guidance (including all HSE guidance), developed by the Health and Safety Executive (HSE) in partnership with LexisNexis. The resource is updated regularly and includes the most recent pieces of guidance.

HSE Direct and the HSE website were used in conjunction with the HSL Information Centre, which was able to supply the project team with hard copies of the guidance being reviewed.

### **2.2 RELEVANT GUIDANCE**

In the context of this project 'relevant' guidance was considered to be HSE guidance referring to a framework for Risk Management. The guidance provided information on managing a specific risk either within the workplace or associated with a specific (work-related) environment.

### **2.3 SEARCH STRATEGY**

The search strategy for relevant guidance was a three-stage process. The initial stage involved an opportunity sample approach to HSE guidance collection due to the resource and time constraints of the project.

Although an opportunity sample approach was utilised, efforts were made to include guidance from:

- HSE Guidance Booklets (HS (G) Series);
- HSE Regulations Booklets (HS(R) Series);
- HSE Chemical Safety Guidance Notes (CS Series);
- HSE Environmental Hygiene Guidance Notes (EH Series);
- HSE General Series Guidance Notes (GS Series);
- HSE Plant and Machinery Guidance Notes (PM Series);

- Other HSE Published Guidance and Documents (including guidance from recent HSE campaigns).

In addition a range of old, current and new guidance was included in the review. At this stage all HSE guidance was considered of potential relevance.

An initial assessment of the potential relevance was carried out for each piece of HSE guidance the project team identified. This basic assessment was based on the title, contents page and introduction to the guidance. The information in these sections of the guidance was used to assess the relevance of the guidance.

Guidance not referring to a framework for risk management, or providing information on managing a risk within a specific (work-related) environment was excluded from further review.

## 2.4 ASSESSMENT OF CONSISTENCY

Guidance assessed as relevant according to the above criteria were then reviewed in more detail.

Scores from 1-5, (with the exception of ‘consistency of terminology’ which was scored from 1-3) were allocated to the guidance according to consistency of the following areas:

- Management arrangements or steps described;
- Order or priority given to the steps;
- Terminology used to describe the steps;

The scoring of these areas was made with reference to HSE’s HSG 65 ‘Successful Health and Safety Management’, and were allocated according to the tables below:

Consistency of Risk Management Framework References	
1	No
2	Little Detail (e.g. alludes or refers to)
3	Fair detail
4	Examples or illustrations
5	Yes (e.g. explains or indicates 'how')

Consistency of Terminology	
1	Low consistency of terminology
2	Medium consistency of terminology
3	High consistency of terminology

This process was repeated until the agreed number of relevant pieces of guidance had been reviewed.

## 2.5 INTER-RATER RELIABILITY

Efforts were made to ensure consistency of scoring between the project team. The scores for 18 of the 22 guidance publications were verified by a second rater to ensure inter-rater reliability in the ascribed scorings. The two scores for each aspect of the POPMAR model (Policy, Organising, Planning, Measuring Performance and Auditing and Review) and Terminology

were shared between the project team. There was a high level of agreement, with no discrepancy found in the judgements made by the two researchers.

### 3 RESULTS

29 pieces of guidance were initially identified and assessed. 7 of those pieces of guidance were found not to be suitable for inclusion in this review, on grounds of relevance. Table one shows the summary breakdown of the sample of 22 relevant pieces of guidance. Scores for Policy, Organising, Planning, Measuring Performance and Auditing and Review are from 1 to 5, based on the inclusion and organisation of information, in relation to the POPMAR model illustrated in HSE’s *Successful Health and Safety Management*. The ‘Terminology’ score is from 1 to 3, based on the consistency of terminology in relation to that used in the POPMAR model. More detailed information for each piece of the guidance are presented in the appendices B.1 to B.22.

**Table 1. Results of Guidance Review.**

NO.	GUIDANCE	TITLE	RELEVANT?	POLICY	ORGANISING	PLANNING	MEASURING PERFORMANCE	AUDITING/REVIEW	TERMINOLOGY	FURTHER INFORMATION
1.	HSG 256	Managing Shift Work	Maybe	2	2	3	3	2	1	<a href="#">Appendix B.1</a>
2.	* new* HSG 252	A Recipe for Safety	Yes	4, 5	3	4, 5	2	2	2	<a href="#">Appendix B.2</a>
3.	HSG 240	Managing Health and Safety at Recreational Dive Sites	No	2	1	1	1	1	1	<a href="#">Appendix B.3</a>
4.	HSG 137	Health Risk Management	Yes	1	1	3, 4	3	2, 4	1	<a href="#">Appendix B.4</a>
5.	CS 24	The Interpretation and Use of Flashpoint Information	No	1	1	1	1	1	0	
6.	CS 23	Disposal of Explosive Waste	No	2	1	2	1	1	0	
7.	CS 3	Storage and Use of sodium chlorate and other similar strong oxidants	No	1	1	1	1	1	0	
8.	*new* HSG 249	Managing Sickness Absence and Return to Work	Maybe	5	4,5	4,5	1	3	0	<a href="#">Appendix B.5</a>
9.	HSR 25	Memorandum of Guidance on the Electricity at Work Regulations 1989	No	3	2	1	1	1	0	
10.	EH 38	Ozone: Health Hazards and Precautionary Measures	Yes	1	2	2	2	1	1	<a href="#">Appendix B.6</a>
11.	EH 44	Dust: General Principles of Protection	Maybe	1 or 2	2	2	2 or 3	1	0	
12.	*new* HSG 254	Developing Process Safety Indicators	Maybe	3, 4	4, 5	3, 4	3	5	2	<a href="#">Appendix B.7</a>
13.	INDG 259	An Introduction to Health and Safety	Maybe	2, 4	2	2,4	2	2	2	<a href="#">Appendix B.8</a>
14.	HSG217	Involving Employees in Health and Safety: How to achieve effective workforce involvement	Yes	4,5	4,5	4,5	4,5	3	3	<a href="#">Appendix B.9</a>
15.	Misc 217	Making the Stress Management Standards Work: How to apply the standards in your workplace	Yes	1	3	3, 4	2	4, 5	2	<a href="#">Appendix B.10</a>
16.	INDG 343	Directors' Responsibilities for Health and Safety	Yes	3	3	2	2	3	3	
17.	HSG 246	Safety in the Storage and Handling of Steel and other metal stock.	Yes	5	3	5	3	3	2	<a href="#">Appendix B.11</a>
18.	HSG 224	Managing Health and Safety in Construction	Yes	1	3	2	1	1	1	<a href="#">Appendix B.12</a>
19.	HSG 234	Caring for Cleaners	Maybe	1	2	3,4	2	2	1	<a href="#">Appendix B.13</a>
20.	HSG 251	Fumigation	No	1	1	2	2	1	0	
21.	HSG 229	Work-Related Violence Case Studies: Managing the risk in smaller businesses	Maybe	2	2	2	2	2	1	<a href="#">Appendix B.14</a>
22.	INDG 69	Violence at work: A guide for employers	Yes	2	2	3,4	2	2	2	<a href="#">Appendix B.15</a>
23.	HSG 166	Formula for Health and Safety	Maybe	3	3	3	3	2	2	<a href="#">Appendix B.16</a>
24.	HSG 253	The Safe Isolation of Plant Equipment	Yes	2	5	5	3	3	2	<a href="#">Appendix B.17</a>
25.	Industrial Advisory Committee	Managing for Safety at nuclear Installations	Yes	5	5	5	5	5	3	<a href="#">Appendix B.18</a>
26.	INDG 382	Driving at Work: Managing Work-related Road Safety	Yes	3, 4	3	3	2, 4	2	2	<a href="#">Appendix B.19</a>
27.	HSG 179	Managing Health and Safety in Swimming Pools	Yes	4, 5	5	5	5	5	3	<a href="#">Appendix B.20</a>
28.	HSG 154	Managing Crowds Safely	Yes	3	3	5	5	5	2	<a href="#">Appendix B.21</a>
29.	(Industry Advisory Committee Publications)	Working Safely with Research Animals	Yes	1	2	2	1	1	1	<a href="#">Appendix B.22</a>

The ‘relevant?’ column classifies the guidance according to relevance for inclusion (under the definition specified i.e. reference to a risk management framework). References to further information in the Appendix for guidance classed as ‘not’ relevant are included in a small number of cases, where the information was deemed to be of interest in the context of this review.

Scoring Key for Summary table:

Consistency of Risk Management Framework References		Consistency of Terminology	
1	No	1	Low consistency of terminology
2	Little Detail (e.g. alludes or refers to)	2	Medium consistency of terminology
3	Fair detail	3	High consistency of terminology
4	Examples or illustrations		
5	Yes (e.g. explains or indicates 'how')		

### **3.1 SAMPLE BREAKDOWN**

The sample consisted of:

- HSE Guidance Booklets (HS (G) Series), (n = 16);
- HSE Regulations Booklets (HS(R) Series), (n = 1);
- HSE Chemical Safety Guidance Notes (CS Series), (n = 3);
- HSE Environmental Hygiene Guidance Notes (EH Series), (n = 2);
- HSE General Series Guidance Notes (GS Series), (n = 0);
- HSE Plant and Machinery Guidance Notes (PM Series), (n = 0);
- Other HSE Published Guidance and Documents (including guidance from recent HSE campaigns), (n = 7).

### **3.2 CONSISTENCY OF INCLUSION AND ORGANISATION OF INFORMATION**

The results of the review show limited consistency of the inclusion and organisation of information across the sample of HSE guidance.

12 of the 22 pieces of guidance gave very limited or no mention to 'Policy', whilst 10 pieces of guidance provided more detailed information regarding the benefits of 'policy', with 5 of those publications utilising case studies to illustrate. Guidance tended to score lower on 'Policy' due to inconsistency of the order and priority of 'Policy' information in the guidance.

9 of the 22 pieces of guidance gave very limited or no mention to 'Organising', whilst 13 pieces of guidance provided more detailed information regarding the benefits of 'Organising', with 3 of those publications utilising case studies to illustrate.

6 of the 22 pieces of guidance gave very limited or no mention to 'Planning', whilst 16 pieces of guidance provided more detailed information regarding the benefits of 'Planning', with 9 of those publications utilising case studies to illustrate. Therefore 'Organising' and 'Planning' were the most frequently included aspects of the POPMAR model.

12 of the 22 pieces of guidance gave very limited or no mention to 'Measuring Performance', whilst 10 pieces of guidance provided more detailed information regarding the benefits of 'Measuring Performance', with only 2 of those publications utilising case studies to illustrate.

13 of the 22 pieces of guidance gave very limited or no mention to 'Auditing and Review', whilst 9 pieces of guidance provided more detailed information regarding the benefits of 'Auditing and Review', with 2 of those publications utilising case studies to illustrate. Therefore 'Measuring Performance' and 'Auditing and Review' were the least frequently included aspects of the POPMAR model.

### **3.3 CONSISTENCY OF TERMINOLOGY**

The results also show variable consistency of terminology used across the sample of publications. 8 of the 22 pieces of guidance scored 'low' on consistency of terminology, and

were awarded a score of '1'. 10 publications scored medium ('2' points), and 4 publications scored high for consistency of terminology ('3' points).

## 4 CONCLUSIONS

### 4.1 SUMMARY OF FINDINGS

#### 4.1.1 Consistency with the POPMAR model

- There was limited consistency of information across the current sample of HSE guidance, regarding the inclusion, organisation and terminology used to describe Risk Management Frameworks.
- The sample guidance generally contained little to no information regarding the benefits of ‘monitoring performance’, and ‘auditing and review’. However, in cases where this information was included it tended to consist of a higher level of detail and involve the use of case studies to illustrate the benefits.
- The sample guidance generally contained limited reference to the importance of ‘policy’ in relation to successful health and safety management. There was also a tendency for the information regarding ‘policy’ to be referred to towards the end of the guidance, with a general implication that a policy should develop following consideration of the information generated from other ‘steps’ of the POPMAR model (i.e. monitoring performance).
- Throughout the sample guidance, the ‘organising’ and ‘planning’ aspects of the POPMAR model were most frequently referred to.
- A greater number of publications (n = 10) scored medium when considered in terms of consistency of terminology, followed by low (n = 8) and high (n = 4).

#### 4.1.2 Consistency with other Risk Management models

- Although there was variable consistency of information, organisation and terminology between the guidance reviewed (in relation to the POPMAR model), the guidance in this limited sample also tended to frequently refer to a combination of the following key frameworks:
  - Health Risk Management (HSG) 137, 2003, HSE Books;
  - Five Steps to Risk Assessment (INDG) 163, 2006, HSE Books;
  - Successful health and safety management, (HSG) 65, 2003, HSE Books.

#### 4.1.3 General Observations

- HSE guidance publications were generally *inconsistent* in relation to the POPMAR model. In cases where there was some level of consistency with the POPMAR model identified, it was common for some elements of the risk management framework to be referred to comprehensively, whilst information relating to other elements was limited.
  - e.g. ‘Managing Sickness Absence and Return to work’ (HSG 249) scored consistently on Policy (5), Organising (5) and Planning (5), but scored lower on Measuring performance (1) and monitoring and review (3), with reference to HSG 65 ‘Successful health and safety management’.

- There was a tendency for the specificity of the guidance to be related to the level at which the guidance was intended. General guidance, (applying to a risk in a generic context e.g. ‘Driving at Work’) was more likely to refer to the POPMAR model of successful health and safety management (or an equivalent framework), and provide information relating to the underlying management structures for application to a specific work environment. The pieces of guidance that focused on more specific risks (i.e. ‘Ozone: Health Hazards and Precautionary Measures’) tended to include more detailed, risk-specific information, which may have minimised the requirement for inclusion of information relating to the general risk management framework.
- Less detailed guidance tended to be more likely to score lower on consistency of terminology (in relation to the POPMAR model illustrated in HSG 65).
- A number of HSE guidance publications were identified which, although not strictly relevant to the current review (i.e. reference to risk management frameworks), were reviewed and included in the results table due to their inclusion of high levels of information consistent with the POPMAR model.

## **4.2 LIMITATIONS**

Throughout this review, there were a number of limitations:

- Due to time and budgetary constraints, the sample used for the current review was limited in number. The opportunity sampling method employed allowed the work to be completed within the allocated timeframe, but therefore restricts the generalisability of the review findings. The information contained in this report is necessarily selective. The extent generalisations can be made regarding the current levels of consistency to risk management frameworks across all HSE guidance should be treated with caution.
- The guidance reviewed covered a breadth of industries and risks. The volume of information and level of detail was therefore varied according to the risk the framework was aiming to minimise or manage. In order to maintain consistency of the review of guidance (in relation to HSG 65), the guidance was considered in the context for which it was written.
- Although efforts were made to include guidance from each of the main HSE series of guidance, the nature of the range of guidance meant that relevant guidance tended to belong to the HS(G) series.

## 5 APPENDICES

### APPENDIX A - SUMMARY OF POPMAR MODEL

Key elements of the POPMAR model, as exemplified in HSG 65, 'Effective Health and Safety Management'.

#### **Policy**

Effective health and safety policies set a clear direction for the organisation to follow.

Contribute to all aspects of business performance as part of a demonstrable commitment to continuous improvement.

Responsibilities to people and the environment are met in ways that fulfil the spirit and letter of the law.

Stakeholders, expectations in the activity (whether they are shareholders, employees, or their representatives, customers, or society at large) are satisfied.

There are cost effective approaches to preserving and developing physical and human resources, which reduce financial losses and liabilities.

#### **Organising**

An effective management structure and arrangements are in place for delivering the policy

All staff are motivated and empowered to work safely and to protect their long-term health, not simply to avoid accidents. The arrangements are:

Underpinned by effective staff involvement and participation, and

Sustained by effective communication and the promotion of competence, which allows all employers and their representatives to make a responsible and informed contribution to the health and safety effort.

There is a shared common understanding of the organisation's vision, values and beliefs.

A positive health and safety culture is fostered by the visible and active leadership of senior managers.

#### **Planning**

There is a planned and systematic approach to implementing the health and safety policy through an effective health and safety management system.

The aim is to minimise risks.

Risk assessment methods are used to decide priorities and to set objectives for eliminating hazards and reducing risks.

Wherever possible, risks are eliminated through selection and design of facilities, equipment and processes.

If risks cannot be eliminated, they are minimised by the use of physical controls or, as a last resort, through systems of work and personal protective equipment.

Performance standards are established and used for measuring achievement.

Specific actions to promote a positive health and safety culture are identified.

### **Measuring performance**

Performance is measured against agreed standards to reveal when and where improvement is needed.

Active self-monitoring reveals how effectively the health and safety management system is functioning.

This looks at both hardware (premises, plant and substances) and software (people, procedures and systems) including individual behaviour and performance.

If controls fail, reactive monitoring discovers why by investigating accidents, ill health or incidents which could cause harm or loss. The objectives of active and reactive monitoring are:

To determine the immediate cause of sub-standard performance, and

To identify the underlying causes and the implications for the design and operation of the health and safety management system.

Longer-term objectives are also monitored.

### **Auditing and reviewing performance**

The organisation learns from all the relevant experience and applies the lessons.

There is a systematic review of performance based on data from monitoring and from independent audits of the whole health and safety management system.

These form the basis of self-regulation and of complying to sections 2 and 6 of the Health and safety at work act 1974 (HSW Act) and other relevant statutory provisions.

There is a strong commitment to continuous improvement involving the constant development of policies, systems and techniques of risk control.

Performance is addressed by:

Internal references to key performance indicators, and

External comparison with the performance of business competitors and best practice irrespective of employment sector.

Performance is also often recorded in annual reports.

## **APPENDIX B - GUIDANCE: SUPPLEMENTARY INFORMATION**

### **B.1 Managing Shift Work**

**Guidance: HSG 256**

**Title: Managing Shift Work**

#### Document Summary

Explains employers' legal duties to assess risks associated with shift work. Aims to improve understanding of shift work, and impact on Health and Safety. Guidance aimed at employers, safety representatives, trade union officials and other stakeholders.

The guidance begins by explaining the background to the guidance; explaining employers responsibilities under the law, and information on what shift work is. The guidance then moves on to provide information on how to assess and manage the risks associated with shift work. Employers are encouraged to consider the risks of shift work (i.e. the undesirable effects of shift work) as well as the costs and benefits of effective management.

The guidance advises on how to establish systems to manage the risks of shift work, through seeking management commitment to control the risks associated with shift work, identifying who is responsible for shift work arrangements, and involving safety representatives and workers.

The guidance then explains how to carry out an assessment of the risks associated with shift work (in a specific workplace), considering the risks that workers may be exposed to and who may be harmed by shift work. The guidance encourages employers to consult with workers and the safety representatives.

The guidance then advises on the actions required in order to reduce the risks: following assessment of the severity of the risks, and identification of where improvements need to be made.

A table provides information on how the shift work schedule and workplace environment could be improved. The information covers aspects such as shift timing, and duration and temperature/ supervision, and provide comments and advice on the potential impact of that particular shift work pattern.

The guidance then discusses how to apply good practice examples, however this is not a detailed discussion and the guidance states 'these guidelines are general though, and cover a wide range of factors that may or may not be relevant to your particular sector'.

Finally the guidance mentions the importance of checking and reviewing the shift-work arrangements regularly, suggesting that a system for enabling early reporting of problems associated with shift work should be implemented. Monitoring of any alterations to shift work schedules and work conditions, as well as periodic review of shift work arrangement effectiveness is also encouraged.

Further information is provided in the appendices, covering 'Legal requirements', 'Strategies and practical advice shift workers can use to improve their health and well-being', 'Assessment tools and techniques', 'Further sources of information and help' and 'References and further reading'.

### Consistency of Order

- Generally discusses assessing the risks, establishing systems to manage the risks and regularly reviewing shift work arrangements.
- The guidance does not refer to ‘policy’.

### Consistency of Terminology

Essentially, terminology was *not* consistent with HSG 65, although this was difficult to quantify due to the inconsistent nature (and variable detail) of the ‘Managing Shift Work’ guidance in relation to the POPMAR model.

## **B.2 A Recipe for Safety**

**Guidance: HSG 252**

**Title: A Recipe for Safety**

### Document Summary

The aim of this guidance is to increase awareness of accident or ill health in the food and drink industries. The guidance is targeted at management and safety representatives in firms of any size, and advises on managing safety risks, provides good practice examples and information on how to develop a positive safety culture. Overall the focus is on using information, preventing the causes and reviewing progress.

The introduction to the guidance consists of a list of priority health and safety topics for the food and drink manufacturing industries, and information on how to utilise the guide (e.g. using the information about ill health and concentrating on preventing the main causes of injuries and ill health).

The guidance touches on ‘why positive action is needed’ explaining how the well-being of food and drink industry employees is critical to business health, and explains that effective management of occupational safety and health is ‘good for business’. An extract of a ‘major food company’ policy is also included and discussed, whilst explaining the ‘added value’ of an effective policy.

The guidance then goes on to consider the cost of accidents and how effective health and safety management is cost-effective and can actually save an organisation money.

The guidance includes an action plan for management, detailing what can be done to review and improve the safety of the organisation. (This includes ensuring that the organisations policy is adequate as well as advising a review of the written policy, its organisation and arrangements).

Information relating to the injury rates for industry, to ‘assist setting quantitative objectives for improvement’ is provided, along with information on how to calculate a company’s incidence rates.

The guidance then covers the priority ‘Safety’ topics for the food and drink manufacturing industry, providing information on how to manage the hazards safely. Case studies are used to illustrate the hazards discussed.

The guidance discusses the priority ‘Occupational Health’ topics, following a similar approach as the ‘Health’ information (mentioned above) and providing information on how to manage the

occupational health priorities, including a detailed breakdown of the key steps to developing an occupational health policy.

The guidance concludes with information relating to what HSE is doing, and provides further information for 'Getting help and advice'. Throughout the guidance there is a general emphasis on the cost/saving of good Safety.

#### Consistency of Order

- Discusses aspects of 'policy' i.e. ensuring plans are consistent with business objectives.
- Guidance focuses on the identification of hazards, what can be done, and case studies, but not measuring performance or review.

#### Consistency of Terminology

The terminology used is not always consistent, although there is more consistency in areas where more detail is provided. (i.e. although the general principles of a risk assessment are referred to, there does not seem to be much usage of the actual term 'risk assessment').

### **B.3 Managing Health and Safety at Recreational Dive Sites**

#### **Guidance: HSG 240**

##### **Title: Managing Health and Safety at Recreational Dive Sites**

#### Document Summary

Aimed at site owners and operators, this guidance describes the main risks at managed dive sites and some of the steps that can safeguard the health and safety of employees, divers and other visitors to the site (whilst acknowledging a certain level of risk inherent to the activity).

Primarily focuses on inland sites used for recreational diving, but principles apply to sites where access is controlled to sheltered inshore water (private beaches, harbours, dive centres etc).

The introduction to the guidance defines the site the guidance applies to and how the guidance should be used. This is followed by a section entitled 'Controlling access to the site' which includes information on the control of vehicles, the control of divers, shared dive sites and pertinent information for divers.

Information is provided on water hazards and features, including access and egress, training platforms, underwater hazards, and water quality. The guidance discusses the requirement for first aid, rescue and emergency arrangements for both employees and members of the public. Incident reporting is touched on briefly, and the reader is referred to the legal requirements, detailed in the appendix of the guidance.

The guidance briefly mentions the health and safety considerations relevant to the specific site facilities and Cylinder charging and commercial diving operations is also touched on.

Additional information is provided in the appendices on 'Relevant legislation', 'Contacts', and 'References and further reading'.

### Consistency of Order

- Possibly attributable to the precise nature of the hazards covered by this guidance, the POPMAR model is not visibly followed.
- No information on policy, measuring performance or auditing/ review.

### Consistency of Terminology

Little if any consistency of the terminology used.

## **B.4 Health Risk Management**

**Guidance: HSG 137**

**Title: Health Risk Management**

### Document Summary

Aimed at small to medium sized employers, helping them to recognise how to manage work-related health risks successfully, and the associated benefits.

The guidance begins with an introduction to the booklet, detailing who the guidance was aimed at and how it was intended to help. The guidance also includes a brief summary of the main hazards to health, and the employers' legal duties.

The guidance is then organised into four stages; 'Finding out if you have a problem', 'Deciding what to do', 'Taking action' and 'Checking what you have done'. Further information is also provided on where to go for further help, and includes further reading references and details of HSE regional offices. A tick box checklist, summarising the main points to be considered from the chapter, follows each section. The information relates closely to the HSE leaflet *Five Steps to Risk Assessment*.

Stages one and two cover the main elements of risk assessment, the methodology and benefits of identifying health hazards present in the workplace, who may be at risk, and how big the risk is.

Stage three discusses appropriate interventions or 'improvements'. Stage four discusses the need to 'check the result' of actions taken. Amongst other examples of practical checks are: ensuring that 'any set target for reducing health risks has been reached', equipment is working, and 'records of sickness absence and work-related ill health show a reduced number of cases'.

The guidance also reminds the reader that any changes to the work process or materials in the workplace would require checks to establish 'whether these changes have reduced or increased risks to health'.

Finally the guidance reinforces the idea that 'health risk management should be seen as a rolling programme of improvement', and that although all the answers may not be known at the outset, the guidance should be used to identify priorities set, helping to decide how to do this.

Throughout the guidance short case studies are used to demonstrate specific points.

### Consistency of Order

- Guidance follows the general POPMAR model.

- Although some consideration is given to review, this area is not covered in that much detail.
- No reference is made to ‘policy’.

#### Consistency of Terminology

Essentially, the terminology used in this guidance is not consistent with that used in HSG 65.

### **B.5 Managing Sickness Absence and Return to Work**

#### **Guidance: HSG 249**

##### **Title: Managing Sickness Absence and Return to Work**

#### Document Summary

A ‘best practice resource’ offering employers and managers advice on simple, practical and proactive steps to help employees following injury, ill health or the onset of disability, to return to work.

‘By following these we can reduce sickness absence, improve the competitiveness and productivity of our businesses and protect the well-being of employees’.

The guidance begins with a brief overview of the ‘steps to manage sickness absence and return to work’. The information is displayed in a table format, and leads into the general introduction to the guidance.

The guidance then outlines the employers’ role in managing sickness absence, including legal responsibilities. Information is provided on how to manage ‘return to work’, considering when employees are likely to need help and what is involved. Advice is provided on recording sickness absence, and how absence data can be used to manage return to work, and the employers’ data protection responsibilities.

The guidance advises on the importance and benefits of keeping in contact with the employee throughout the absence, providing advice on the appropriate frequency and tone of the contact. Guidance is also provided on how to handle instances where the employee refuses contact, or becomes distressed.

The guidance discusses issues and considerations for planning and undertaking workplace adjustments, including how to identify adjustments required, advising that one of the ‘key steps in planning adjustments (is) in discussion with your employee, forming a view of their needs and capability’. The notion of ‘reasonable adjustments’ is discussed, and some examples are provided.

The guidance discusses the benefit to making use of professional advice/ treatment, and other sources of information.

The guidance then explains the benefits of ‘agreeing and reviewing a return to work plan’, including who should put the plan together, what aspects should be covered in the plan, and how to implement the plan. This leads on to a section which discusses the co-ordination of a return to work.

The guidance then discusses policy, explaining that it is beneficial to consider, in advance, ‘how you would manage the situation’ and ‘what reasonable adjustments you could make’. The

guidance also suggests involving the workforce, any trade union, and other employee representatives in this process.

Advice on the content of a written policy is provided in Appendix 4 to the guidance, whilst information is provided on how to encourage and support an effective policy. It is advised that employee involvement and visible management support is key.

Additional information is also provided in the appendices, referring to 'Relevant Legislation', 'GP advice on returning to work', 'Employers liability insurance', 'Suggestes content of a return to work policy', 'organisations that can provide further advice', 'Useful publications', and 'References'.

#### Consistency of Order

- Provides a general overview (steps to managing sickness absence) although there is little (if any) reference to measuring performance.

#### Consistency of Terminology

In parts, the terminology used was fairly consistent with HSG 65, although this was difficult to quantify due to the inconsistent nature (and variable detail) of the 'Managing Sickness Absence and Return to Work' guidance in relation to the POPMAR model.

## **B.6 Ozone: Health Hazards and Precautionary Measures**

### **Guidance: EH 38**

#### **Title: Ozone: Health Hazards and Precautionary Measures**

#### Document Summary

An Environmental Hygiene guidance note aimed at employers and managers of people exposed to ozone in the course of their work. Draws attention to potential ill health following exposure to ozone and indicates potential sources of exposure at work. The guidance also provides advice on precautions to prevent or control exposure as required by COSHH, stating 'This guidance should be read in conjunction with the Approved Code of Practice, *Control of Substances Hazardous to Health* (the COSHH general ACOP)'.

The booklet states 'this guidance on establishing effective risk management measures for controlling exposure to ozone, focuses on the control of exposure to levels at which any health effects, if they did occur, would not be significant (see paragraph 25)'.

The guidance begins with the introduction, which explains who the guidance is aimed at. Information is provided on the occurrence and properties of Ozone and its effects on health, and Ozone in the workplace, explaining that the production of Ozone can occur both industrially and incidentally, as well as the effects of ultraviolet radiation, and high voltage electrical equipment (on Ozone production).

The booklet provides advice on complying with the COSHH regulations, covering control of exposure to the occupational exposure standard (OES), assessment (e.g. of the work-related risks to employees), and low and high-risk work activities.

The guidance considers ‘prevention and control of exposure’; including prevention of exposure, control measures, engineering control and respiratory protective equipment. The guidance then goes on to discuss maintenance, examination and testing of control measures, and monitoring exposure, including the use of detector tubes, direct reading instruments, and indirect methods. The guidance states that regulation 9 requires employers who provide control measures to meet requirements to maintain effective states (i.e. efficient working order and good repair). The guidance then goes on to explain what should be done in order to comply with regulation 9.

Health surveillance is then considered (stating ‘in general, routine health surveillance is unlikely to be necessary’) and first aid, before briefly discussing information, instruction and training, stating that ‘to comply with Regulation 12 of COSHH, employers should give all their employees who may be exposed to ozone at work sufficient information, instruction and training to understand the risks to their health caused by exposure to ozone and the precautions which should be taken to avoid or minimise exposure’. An example is also provided of a situation where information provision would be appropriate.

The booklet then goes on to cover emergency procedures and safety representatives, stating ‘where trade union safety representatives are appointed under the Safety Representatives and Safety Committees Regulations 1977, they should be consulted by the employer. Such consultations allow the safety representatives to assist employers to develop control measures’. References and sources for further information are then provided in the appendix.

#### Consistency of Order

- Generally, despite inferences to aspects of the POPMAR model, there was little consistency between this piece of guidance and HSG 65.
- Although there was no reference to ‘policy’ the guidance briefly mentioned aspects of ‘organising’ such as information provision and training.
- Although ‘measuring performance’ is not explicitly discussed, the guidance states that regulation 9 requires employers who provide control measures to meet requirements to maintain effective states (i.e. efficient working order and good repair).

#### Consistency of Terminology

In parts, the terminology used was fairly consistent with HSG 65, although this was difficult to quantify due to the inconsistent nature (and variable detail) of the ‘Ozone: health hazards and precautionary measures’ guidance in relation to the POPMAR model.

### **B.7 Developing Process Safety Indicators**

#### **Guidance: HSG 254**

**Title: Developing Process Safety Indicators: A step-by-step guide for the chemical and major hazard industries.**

#### Document Summary

Following publication of the *BP Grangemouth Major incident investigation report* HSE and industry have worked closely to ‘develop the means by which companies can develop key performance indicators for major hazards and ensure process safety performance is monitored and reported against these parameters’.

This guide was produced by HSE and the Chemical Industries Association (CIA), based on information and ideas from industry. The six-stage process outlined was aimed at helping companies through the main steps towards implementing process safety performance indicators. 'it is vital that chemical companies know that systems designed to control risks operate as intended.... It is important that we continue to share understanding of best practice in this developing area. Reviewing performance will increasingly feature in our inspection programme'.

Aimed at senior managers and safety professionals within organisations that wish to develop performance indicators, the guidance stated that it is 'presumed that companies using this guide already have appropriate safety management systems in place; the emphasis of this guide is therefore to check whether the controls in place are effective and operating as intended'.

The booklet is organised into three distinct sections; part one 'introduction', part two 'six steps to performance measurement', and part three a 'worked example'.

The introduction covers the structure and content of the guidance, and sets the context for the information ('measuring performance – early warning before catastrophic failure'), and includes a section entitled 'what's different about this guide'. The booklet also includes diagrams that explain how performance indicators fit within traditional health and safety monitoring activities.

The main body of the report, 'part two' outlines the six steps to implementing a process safety measurement system. The six step process begins with establishing 'the organisational arrangements to implement the indicators', which the guidance suggests may be achieved through appointing a steward or champion (including preparing a business case, identifying the business benefits, learning from others and sharing good practice), setting up an implementation team, and involving senior management.

Step 2 involves deciding 'on the scope of the measurement system', and considering what could go wrong. The booklet suggests achieving this by identifying what could go wrong (incident scenarios), the immediate causes of hazard scenarios and review of performance and non-conformances. The guidance also advises tailoring the indicators to suit the business, focusing on the quality rather than quantity of indicators, and deciding what level of the organisation it is most appropriate to set indicators at (e.g. at a plant or installation level).

Step 3 aims to identify 'the risk control systems in place to prevent a major accident'. It is advised that an outcome should be identified for each control, and lagging indicators set. The guidance advises defining the risk control systems in place, the outcomes and an appropriate lagging indicator alongside a commitment to follow up deviations from the outcome.

Step 4 involves identifying the 'critical elements of each control system (i.e. those actions or processes which must function correctly to deliver the outcomes) and set leading indicators'. The guidance advises identifying the important elements of the risk control system, setting leading indicators and tolerances and following up deviations from tolerances.

Step 5 aims to establish the data collection and reporting system, through ensuring information regarding the appropriate unit of measurement is available or can be established, and deciding on an appropriate format for presentation.

Step 6 involves reviewing performance of the process management system, the scope of the indicators and the tolerances defined in earlier steps.

The guidance then provides a worked example to demonstrate steps 2, 3, and 4. References and further information are also included in the booklet.

### Consistency of Order

- This guidance differs from other pieces of guidance reviewed as it is written under the presumption that companies using this guide ‘already have appropriate safety management systems in place; the emphasis of this guide is therefore to check whether the controls in place are effective’.
- Despite inferences to aspects of the POPMAR model, there was little consistency between this piece of guidance and HSG 65.
- Due to the nature of this guidance, the information tends to focus almost exclusively on the ‘measuring performance’, and ‘auditing and review’.

### Consistency of Terminology

Essentially, terminology was fairly consistent with HSG 65, although this was difficult to quantify due to the inconsistent nature (and variable detail) of the ‘Developing process safety indicators’ guidance in relation to the POPMAR model.

## **B.8 An Introduction to Health and Safety**

### **Guidance: INDG 259**

#### **Title: An Introduction to Health and Safety**

#### Document Summary

Booklet aimed at small business, providing a summary of a range of health and safety topics/ ‘key common risk areas’, with advice on where to locate further information.

The introduction to the guidance contains a brief overview of the booklet, followed by ‘ten questions and answers for everyone’ and information on how to use the booklet.

The first section, dedicated to ‘Managing Health and Safety’, is only one page long but mentions all of the main areas covered by HSG 65 in varying detail, although none of these areas are covered in great depth.

The guidance states ‘Risk assessment should be a practical exercise, aimed at getting the right controls in place’, and touches on risk assessments and sensible control measures, making sure risks stay controlled and health and safety policy.

The guidance informs the reader that employers with ‘five or more employees should have a written health and safety policy’, stating that health and safety policy should set out how health and safety is managed by defining ‘who does what; and when and how they do it’. The guidance also mentions the employer’s duty to ‘involve their employees or their employees’ safety representatives on health and safety matter’ and to provide ‘free health and safety training or protective equipment for employees’.

The guidance includes an example of a policy as well as a guide on how to assess health and safety risks in the appendices (see below).

The booklet also touches on slips, trips and falls, asbestos, hazardous substances, falls from a height, musculoskeletal disorders, display screen equipment, noise, vibration, electricity, work equipment and machinery, maintenance and building work, workplace transport, pressure systems, fire and explosion, radiation, stress, first aid and accident reporting.

The final sections of the report relates to 'health and Safety policy statement', providing comprehensive information and a useful template to be utilised by organisations. This is followed by a step-by-step guide to carrying out risk assessments, again including a risk assessment template.

#### Consistency of Order

- This leaflet includes a brief overview of managing health and safety. It touches on all of the main aspects of the POPMAR model, however the organisation of the information is not consistent with that in HSG 65. (This may be a result of the limited information provided).

#### Consistency of Terminology

Although this booklet has a limited relevant content, the information is presented clearly, and the terminology used seems to be (very) consistent with that used in HSG 65 (where the volume of information is taken into account).

### **B.9 Involving Employees in Health and Safety**

#### **Guidance: HSG 217**

#### **Title: Involving Employees in Health & Safety**

#### Document Summary

The guidance is based on case studies from a cross-section of firms in the chemical industry and states that the partnership between employers and employees is key to preventing accidents and ill health at work.

The guidance is split into two parts. Part one describes the benefits of workforce involvement and how to plan an initiative to achieve it. Part 2 refers to examples of workplace involvement in the context of the management model described in HSE's Successful Health and Safety management (HSG 65 Second Edition).

Part one explains how to achieve workplace involvement in greater detail, the rationale behind involving the workforce to develop a positive health and safety culture and reducing accidents. Information was also included on ill health and the associated costs, responding to customer demands and complying with legal requirements. Finally the section finished with an overview of the process for achieving effective workplace involvement. The guidance uses the model for successful health and safety management (HSG65).

There are then several sections that make up this guidance:

Setting the policy for workplace involvement advises the user to ensure that the health and safety policy statement specifies everybody has a positive role to play, with a clear commitment from senior management to actively involve the workforce (including contractors) as part of developing a beneficial health and safety culture. The guidance also advises that the workforce should be involved in formulating the policy.

The section on organising involves key requirements that must be addressed such as modifying existing management arrangements and changes in roles should be defined and training given to people to fulfil their new functions. It also states that effective communication should be

established or strengthened. The guidance also refers to control, co-operation, communication and competency

In relation to planning and implementation timing is explained as a crucial part of the extension of workplace involvement into the mainstream of health and safety management. The planning stage is broken down into several areas such as first steps, piloting, organisational change and keeping up the momentum.

Under the section measuring performance the guidance talks about how the workforce should be involved in collecting evidence about what the management wants to achieve i.e. monitoring performance against planned milestones using indicators from the planning stage. These stages are broken down into Checking that the management is being supportive, whether the organisational arrangements are changing as required, monitoring problems and collecting data and ideas for improvement that can be fed back into the system i.e. continuous improvement. Other stages include, recording any benefits which were not planned and to measure other areas as well as health and safety.

In terms of auditing and reviewing performance the main aims outlined in the guidance include analysis of what works and what doesn't, checking if the goals still fit the business needs, to identify ways of improving quality, continuous involvement of the workforce and adjusting the programme taking into account the conclusions of the review process

Part 2 of the document has examples of involving the workforce in managing health and safety in the chemical industry in close relation to the key elements of health and safety HSG 65

In addition there is a section in the appendices called "simple assessment tool for reviewing workforce involvement", references and further reading

#### Consistency of Order

- High consistency of order inasmuch that the sections are in exactly the same order as HSG65
- Refers to the key elements of successful health and safety management in the same format set out in HSG65
- Refers to the POPMAR model

#### Consistency of Terminology

The terminology was consistent with HSG65 in nearly every aspect.

The consistency of the terminology was relevant in terms of how the key elements work in relation to each other (e.g. feedback).

## **B.10 Making the Stress Management Standards Work**

### **Guidance: Misc 217**

#### **Title: Making the Stress Management Standards Work: How to apply the standards in your workplace**

##### Document Summary

HSE/International Stress Management Association/ Acas Booklet advising on the application of the stress management standards in the workplace

Uses a 'risk assessment approach' based on HSEs 'Five steps to risk assessment'. The guidance is based on a collective, proactive approach, 'which research has shown has the most positive effect on worker health'.

The guidance begins with a section on 'what is stress and why do we need to tackle it?' briefly touching on the legal duty of UK employers to ensure employees are not harmed by work-related stress.

The guidance then explains what the management standards approach is, describing the risk assessment approach. The risk assessment is based on the HSE publication 'Five steps to risk assessment', which the booklet makes reference to.

The guidance then goes through the five steps, starting with 'identify the hazards' and detailing the six key areas or 'risk factors' which HSE-commissioned research has identified as being major causes of work-related stress.

The second step 'decide who might be harmed and how' explains how to identify which factors are a problem in the organisation or department. A number of suggestions are provided, from using sickness absence records to staff attitude surveys, and involving staff through focus groups.

The third step 'evaluate the risk' explains how the information identified in step two can be utilised to determine the organisational performance in relation to each of the risk factors described in step one. The booklet also informs that HSE has produced 'management standards for each risk factor' (including targets for organisations to aim for), to help with the process of evaluating the risk.

The fourth step 'record the findings' mentions the benefits of working with staff to decide on improvement targets and actions (dependant on the information collected in steps two and three). The guidance also provides a list of 'actions that have so far been popular' e.g. increased communication channels.

The fifth step 'monitor and review' suggests 'looking for improvements', 'communicating the success throughout the business', 'listening to staff and tackling strategies that are not working' and 'repeating the audit'. The guidance also provides information on 'individual differences', reminding the reader that the risk assessment approach is appropriate for taking a collective approach, although individual problems may still exist.

The following section provides a helpful list of individuals and organisations 'typical experiences' when trying to successfully implement the management standards. These experiences cover aspects such as 'senior management commitment', 'understanding of stress

and the issues involved’, ‘communication with staff’, ‘initial benchmarking’ and ‘effective communication’.

The guidance ends with a brief summary ‘programmes are particularly successful where attention is given to small changes. Managers need to understand that good stress management is not about a survey but is an ongoing process of continuous improvement. They do not have to devote an unrealistic amount of time to the project and small changes really do make a big difference’. A small introduction to each of the organisations that contributed to the booklet is also included.

#### Consistency of Order

- Although a number of the main aspects of the POPMAR model are covered in the booklet, the order is consistent with that of the HSE publication ‘five steps to Risk Assessment’ as opposed to HSG 65.
- The requirement for a policy is not explicitly mentioned or discussed.
- However, this is one of the few pieces of guidance to mention the need to repeat the auditing/ review process.

#### Consistency of Terminology

In parts, terminology was fairly consistent with HSG 65, although this was difficult to quantify due to the inconsistent nature (and variable detail) of the ‘Making the Stress Management Standards Work: How to apply the standards in your workplace’ guidance in relation to the POPMAR model.

### **B.11 Safety in the Storage and Handling of Steel and Other Metal Stock**

#### **Guidance: HSG 246**

#### **Title: Safety in the Storage and Handling of Steel and Other Metal Stock**

#### Document Summary

The guidance sets out a blueprint for health and safety standards that need to be met in order for accidents (occurring during the storage and handling of steel) to be prevented. The information states that applying this guidance will help ‘manage the risks better and create a safer working environment for everyone’.

Aimed at employers, managers, supervisors, employees, safety representatives and safety advisors, the booklet provides practical guidance and reference to help identify the main health and safety hazards and properly assess the risks, identify the likely causes of accidents and ill-health, understand the basic principles of good health and safety management, including how to prepare the safety policy, recognise the most common stock storage and handling systems and the advantages and disadvantages of each type, understand how to meet the requirements for provision of information, instruction, training and supervision to employees, and meet obligations in health and safety law. The guidance also includes ‘illustrations of safe and unsafe practice to help you understand good risk management more clearly’.

The first section of the booklet, entitled ‘Managing Health and Safety’ begins with advising that an organisation should appoint ‘someone with enough knowledge of stock storage and handling processes and the law to enable them to carry out a proper risk assessment’. It emphasises that

employees should be involved in the assessment process, as well as the subsequent risk management, stating that ‘assessment is fundamental to an effective safety management system’.

The booklet then takes the reader through the risk assessment process, identifying the five steps, and providing detailed information (specific to steel and other metal stock handling) for each step. For example, the guidance provides a list of injuries, organised by type and the common causes of those injuries, a list of job roles that typically involve a risk of injury. The booklet also references guidance produced by the National Association of Steel Stockholders (NASS) on recording the findings of risk assessments.

The guidance then explains that once the risks have been identified (i.e. the risk assessment) the next important step is to identify how to control the risks.

The guidance then runs through preparing a safety policy, including what should go into a safety policy (statement of intent, organisation; managing implementation, and arrangements for meeting the objectives). The guidance provides a detailed breakdown of each area, and states ‘proper authorisation and endorsement of the policy by the most senior management is essential; it must be reviewed periodically and revised as often as appropriate’.

The booklet also covers involving employees through including employees in the development process of the guidance, using the policy as part of the induction training programme and making it part of the health and safety training sessions.

The booklet then covers ‘checking the policy is being implemented’, which suggests monitoring the workplace as an ‘excellent way of managing the risk on an ongoing basis’, and suggests regular workplace inspections, analysis and investigation of workplace accidents and ill health, routine spot checks, and periodic auditing of performance.

The guidance goes on to cover storage, including planning stock storage arrangements, making sure storage systems are safe, other factors that can increase the risks from storage systems and choosing a safe storage system.

The guidance discusses storage systems, covering which systems are best suited to different types of stock, type and stability of stock, long narrow and broad stock, coils, stacking, sheet and plate, and rules for racking and stacking.

Handling, including ensuring safe loading and delivery of stock, keeping loading areas safe and checking stock processing/ handling systems are safe is covered. Also lifting operations, inspection and maintenance of equipment and systems, manual handling, sharp edges, and personal protective equipment.

The final section of the main body of guidance provides advice on information, instruction, training and supervision. The information covers the principles of basic information and instruction that should be provided, how to plan/ organise safety training for employees, how to identify who requires training, what training should be given, where to get help to provide training, and how to ensure employees are adequately supervised.

Appendices to the publication provide examples of a typical racking inspection report and an employers training record for a flatbed driver. A glossary and list of references, including further reading and training material is also included in the booklet.

### Consistency of Order

- Order fairly consistent with the POPMAR model.
- A lot of emphasis on policy, although this followed on from the risk assessment.

### Consistency of Terminology

Terminology was fairly consistent with that used in the POPMAR model.

## **B.12 Managing Health and Safety in Construction**

### **Guidance: HSG 224**

#### **Title: Managing Health and Safety in Construction.**

### Document Summary

This publication contains the Approved Code of Practice (ACoP) and duties set out in the Construction (Design and Management) (CDM) Regulations 1994, and therefore advises on how to comply with the law. The guidance also states ‘Health and safety inspectors seek to secure compliance with the law and may refer to this guidance as illustrating good practice’.

The guidance advises on how to determine whether CDM applies to work being carried out, how to interpret CDM and the work circumstances requiring HSE notification under CDM.

The guidance dedicates chapters to the client, designer, planning supervisor, principal contractor, and other contractors, detailing who they are, what they do, their responsibilities and how the ACoP affects them. Short case studies are used to illustrate the outcomes of certain actions/ how some issues should be dealt with.

The guidance goes on to discuss how to assess the competence and resources of CDM duty holders, and the effects of good information and training on health and safety. This chapter includes information on ‘Regulation 17 and the Management Regulations’, stating what information employers should provide and who this should be provided to (e.g. risks, precautions and emergency procedures).

The guidance then discusses the importance of ‘Involving the workforce’ and worker representatives, before relating this to the specific requirements of CDM.

The guidance then discusses the requirement of regulation 15 for a ‘health and safety plan to be prepared and maintained until the end of the construction phase’. The guidance refers to both a ‘pre-tender’ plan and a ‘construction stage’ plan, explaining the different requirements of each, and providing an example for the pre-tender plan. A more detailed example of the plan is provided in the appendices to the guidance.

Finally the guidance advises on a health and safety file: what should be included, why and how this information could be utilised.

Further information is provided in the appendices, covering ‘the Construction (Design and Management) Regulations 1994’, ‘Extracts from the Management of Health and Safety at Work Regulations 1999’, ‘Contents of the Health and Safety Plan’, ‘Contents of the Health and Safety File’, ‘Form 10’ (notification of project), ‘Glossary’, and a ‘Summary of CDM Duties’. Further information, and References for further reading are also provided.

### Consistency of Order

- No information on 'Policy'.

### Consistency of Terminology

Terminology was essentially *not* consistent with HSG 65, although this was difficult to quantify due to the inconsistent nature (and low levels of detail) of the guidance in comparison with HSG 65.

## **B.13 Caring For Cleaners**

### **Guidance: HSG 234**

#### **Title: Caring For Cleaners**

### Document Summary

Guidance and case studies on preventing musculoskeletal disorders.

The guidance is organised into four sections and begins with an introduction to the information, who the booklet is aimed at, definitions and explanations of musculoskeletal disorders, why cleaners are at risk, symptoms to be aware of, and how to tackle potential problems.

The second section is dedicated to 'managing the risks' and begins by describing the 'first steps in preventing risk' (a risk assessment) stating 'before anyone can start to control the risk in their work, they need to know what they are, how serious they are, and who is exposed to them'. Although the guidance describes what a risk assessment is, only basic information relates to what is involved in a risk assessment, whilst appendix one contains a checklist to 'help with the assessment'. The guidance highlights that the risk assessment should be undertaken, drawing on 'the knowledge and experience of adequately trained staff'.

This section also covers who should do what (including employers of cleaners, contractors, clients, cleaning supervisors, safety representatives, cleaners, designers, manufacturers and suppliers and trainers). Although the detail is limited the guidance states that employers of cleaners should

- 'Recognise and clearly show sustained commitment to the importance of health and safety at work', 'ensure that systems are in place to enable staff to work safely and to comply with the law (e.g. appoint a person to assist in health and safety management, provide adequate training)',
- 'Ensure accident reporting systems are in place',
- 'Put absence and ill health monitoring systems into operation',
- 'Carry out regular risk assessments and re-assess when changes are introduced at the workplace in consultation with staff' and
- 'Consult safety representatives about risk assessments and training available'.

The guidance also states that 'training, however effective, cannot overcome the inherent risks in machine or equipment design or in the system of work', and provides a number of issues to be included in a training programme.

The remaining sections of the guidance provide case studies, demonstrating the effects of changes to equipment, training, workplace and work organisation and also occupational health management.

Finally the guidance provides useful tips (i.e. solutions and causes to problems commonly experienced by cleaners) regarding workplace change, cleaning agents/ materials, work organisation changes and protective clothing. The appendices include the checklists (mentioned above but also including equipment, maintenance, and postural checklists), and a cleaners' health questionnaire.

References for further information, useful websites along with contact details for trade associations and training organisations are also provided.

#### Consistency of Order

- Although the main aspects of the POPMAR model are touched on in basic detail, the information is not arranged in a consistent order with that of POPMAR.
- The guidance does not refer to 'policy'.

#### Consistency of Terminology

Essentially, terminology was *not* consistent with HSG 65, although this was difficult to quantify due to the inconsistent nature (and variable detail) of the 'Caring for Cleaners' guidance in relation to the POPMAR model.

### **B.14 Work-related Violence Case studies**

#### **Guidance: HSG 229**

**Title: Work-related Violence Case Studies: Managing the risk in smaller businesses.**

#### Document Summary

Guidance refers to a recent study that identified people working in smaller businesses as more likely to be threatened or assaulted at work. Although the booklet consists mainly of case studies, these are used with the intention of demonstrating how 'some businesses have reduced the risk of violence'. Aimed at owners and managers of small to medium sized businesses, the guidance states that although the situations may vary, the information (responses and solutions) will be relevant to business in different sectors.

The guidance begins with an introduction to the guidance, explaining the background (see above) as well as the aims of the booklet. Brief information is also included, referring to the legal requirements, other relevant HSE Guidance and the organisation of the case studies.

The next section, entitled 'Managing Work-Related Violence' contains information on the effects of work-related violence (i.e. consequences for employees and the business), and explains the business benefits of good management stating 'if a business successfully manages the risk of violence, it will usually manage other risks equally well'. The guidance touches on effective measures being 'cost-effective solutions'.

The guidance then sets out the principles for the 'Four- Stage Management Approach', stating that the 'process of managing the risk of violence is the same as for any other health and safety

risk'. The guidance describes the key aspects of successful management as 'to identify the risks and decide what measures can be taken to prevent or control those risks'.

Stage one is 'finding out if you have a problem', and the guidance states that 'the best way is to discuss this with your staff'. Stage two is 'deciding what action to take' which the guidance explains could be one of a series of options. The guidance advises actions should be considered in three areas: training and information for staff, the work environment and the design of the job.

Stage three is 'take action' and suggests making any changes required and to 'check that employees are following your agreed policy'. Stage four is 'check that what you have done is working' and advises that regular checks should help ensure that arrangements are working. The guidance is aimed at smaller businesses, and advises that although the 'review' need not be formal, employees should be involved in the process.

Finally there is a small section on 'helping employees after an incident', which leads into the case studies. For each of the case studies the guidance provides 'Key Risk' information bullet pointing the main hazards faced by the organisation along with examples of incidents. The guidance then provides 'Reducing the Risk' information bullet pointing interventions that the organisation has found successful at minimising the risks of work-related violence. This information is organised under the headings of 'training and information', 'work environment' and 'job design'. Further options are also suggested. This information and format is repeated for each of the 10 case studies, which are arranged according to industry sector (retail, health and welfare, security and enforcement and leisure service/providers).

Further information is also provided on general and sector guidance, the four stage management approach, research and 'other information'.

#### Consistency of Order

Although only a small section of the booklet refers to managing the risk, the information summarises the main principles of the POPMAR model. However the information was organised inconsistently with the POPMAR model.

The guidance refers to the Health Risk Management 4 step model.

#### Consistency of Terminology

Essentially, terminology was *not* consistent with HSG 65.

### **B.15 Violence at Work: A Guide for Employers**

#### **Guidance: INDG 69**

#### **Title: Violence at Work: A Guide for Employers**

#### Document Summary

Booklet giving practical advice on how to identify if violence is a problem, and how to tackle it. Aimed at employers, but information may also be of interest to employees and safety representatives.

The guidance begins by defining what violence is, and states the job roles at higher risk of experiencing violence at work. Legal requirements are also detailed.

The following section, entitled 'Effective Management of Violence' describes a 'straightforward four stage management process' (this process is based on that described in 'Health Risk Management' HSG 137).

The guidance begins by outlining the four stages; 'finding out if you have a problem', 'deciding what action to take', 'take action', and 'check what you have done', and reminds the reader of the importance of considering the four stages not as a one-off set of actions, but as a continual process. (The guidance also states that stages 1 and 2 are completed by carrying out the risk assessment).

The guidance then goes through each of the four stages in more detail, beginning with 'Stage one, finding out if you have a problem' which provides information on involving employees, as the employer may be unaware of the extent or frequency of employees violent experiences. This section also explains the benefits and includes advice on keeping detailed records, including classifying incidents (according to the time, place and nature of incident). Potential uses of this information are then discussed (i.e. identification/ prediction of incident patterns). Brief case studies are used to illustrate the effects of this stage of the process.

'Stage two, deciding what action to take' provides information on deciding who might be harmed and how, how to evaluate the risk (including consideration of level of training/ information provided, the environment and the design of the job). Examples are provided for each of the areas for consideration, in addition to a list of preventative measures and a case study illustration. Information is also provided on recording findings, and reviewing and revising the assessment.

'Stage three, take action' briefly mentions the policy for dealing with violence, and explains that employee awareness will aide employee co-operation and reporting of future incidents.

'Stage four, check what you have done' advises checking 'on a regular basis how well your arrangements are working, consulting employees or their representative committees to do this'. The booklet recommends keeping records of incidents and examining them regularly as a source for information regarding progress made and changes in problems, and recommends repeating stages one and two where measures have not effectively controlled violent incidents.

Finally the guidance provides information regarding the victim, covering debriefing, time off work, legal help and the effects on other employees. Further information is recommended, and contact addresses for victim support are provided, along with a list for further information sources.

#### Consistency of Order

- Policy is discussed after the information on Risk Assessments.
- Employee involvement is touched on infrequently throughout the Guidance.
- Overall there is little consistency in the organisation of information with HSG 65.
- The guidance includes detailed reference to HSE's Health Risk Management guidance.

#### Consistency of Terminology

Essentially, terminology was fairly consistent with HSG 65, although this is not simple to quantify due to the inconsistent nature (and variable detail) of the 'Violence at work: A guide for employers' guidance in relation to the POPMAR model.

## **B.16 Formula for Health and Safety**

**Guidance: HSG 166**

**Title: Formula for Health & Safety**

### Document Summary

This guidance is aimed at small and medium sized firms in the chemical industry.

In the first part of the guidance under managing health and safety it talks about setting your policy in terms of who has the health and safety responsibilities, how hazards are identified and risk assessed and how these risks are controlled.

In relation to organising it relates to organisation of staff, specifically checking that all employees have the skills to carry out work safely which will also help to identify any extra training, identifying people with particular health and safety duties, making arrangements for assistance in health and safety requirements, discussing health and safety issues with staff and telling them the risks involved.

Planning what you need to do includes guidance on identifying hazards, assessing risks and deciding on controls, putting the controls in place, setting out what should be done in a dangerous situation and providing health surveillance.

Measuring your performance refers to the measures that can be used such as:

Before things go wrong – Checking actual workplace standards against those set. I.e. are chemicals properly stored and improvements identified in the risk assessment being put into practice

After things go wrong – To investigate accidents and near misses fully to find out what happened

The guidance talks about reviewing and where improvements can be made and tied into internal audits that compliment measuring activities by looking to see if policy, organisation and systems are actually achieving the right results.

Risk assessment and hazard and risk are outlined as well as an action plan, prioritising as well as relevant reference to the Health and Safety at Work Act 1974 and Successful health and safety management HSG65.

The guidance then goes on to look at the main chemical industry hazards such as fires, explosions; work related ill health, equipment and the workplace and electricity.

Further information in the guidance looks at the typical processes and industry specific activities pertinent to the chemical industry giving guidance on the actions required including storing hazardous substances, production, maintenance and modification to plant and processes and the finished product.

The final section of the guidance covers preparation for emergency situations and planning on how to deal with them in order to minimise the effects on employees and others.

### Consistency of Order

- This guidance has good consistency of order as it discusses all the key elements of HSG65

### Consistency of Terminology

Essentially, terminology was fairly consistent with HSG65, although this was difficult to quantify due to the inconsistent nature (and variable detail) of the safe isolation of plant and equipment guidance in relation to the POPMAR model.

## **B.17 The Safe Isolation of Plant & Equipment**

### **Guidance: HSG 253**

#### **Title: The Safe Isolation of Plant & Equipment**

#### Document Summary

This revised guidance reflects HSE's increased appreciation of the importance of human factors in safe isolations. This publication provides guidance on the general principles of safe process isolations. It describes how to isolate plant and equipment safely, and how to reduce the risk of releasing hazardous substances during intrusive activities such as maintenance and sampling operations.

This guidance is primarily intended for senior operational managers who are responsible for their companies' isolation systems, and for the health and safety professionals who advise them. It is of interest to employees representatives and to anyone who monitors, audits and reviews isolation systems.

The guidance also refers to scope, audience, legal considerations and an overview of isolation hazards. Further to this there is a section on management of isolations, its basic principles, design, human factors, roles and responsibilities, training and competence including a more in-depth explanation of monitoring, auditing and reviewing with a sub-section about setting performance indicators for isolation activities.

The guidance then talks about safe systems of work for isolation activities, key stages of process isolation, hazard identification, risk assessment and selection of isolation scheme, risk assessment measures and risk reduction measures and a flowchart for selection of an ALARP isolation method.

Other subjects within the guidance point towards planning a preparation of equipment, installation of isolation, testing and monitoring isolation and reinstatement of the plant, Isolation situations requiring specific considerations.

The appendices of the guidance covers the legal requirements, non process isolation hazards, valve types and issues, isolation methods, an example of a selection tool to establish the baseline standard for final isolation, pipeline isolation requirements, draining & venting and Isolation for instrument work

Most of the information in Appendix 3 is relates to a Checklist for monitoring and reviewing, specifically a Checklist for company review of adequacy of SMS for Isolations. The guidance refers to a set a policy and standards for isolation activities, to reduce risk to ALARP.

a) Policy: States the objectives of the isolation system and a commitment to continuous improvement, e.g. to reduce the risk of release of a hazardous substance to ALARP.

In the guidance it describes set procedures/processes, with worker participation, to achieve secure isolations in normal operating conditions and in other foreseeable conditions.

b) Organising: Refers to control, co-operation, communication and competence:

- Control - roles and responsibilities for isolation system are allocated and performance standards are set
- Co-operation - between all parties involved in isolation work
- Communication – formal and thorough between all parties involved in isolation work
- Competence – Appropriate levels developed and maintained for managers, employees and contractors involved in isolation systems

The guidance also refers to assessing any proposed deviations from company procedures, authorise these at an appropriate level and record/monitor them;

c) Planning and implementing: Refers to risk assessment underpinning the isolation systems and effective procedures enable implementation of control measures.

Reference in the guidance is angled at monitoring and periodically auditing isolations procedures and use that information in the review of companies isolations policy.

d) Measuring & Performance: Refers to active and re-active monitoring of the performance of isolation systems.

In terms of auditing and reviewing performance it states that “for multi-site operations, an element of corporate oversight in standard-setting and assurance (for example, central reporting of objective information on the performance of isolations systems)”.

e) Audit: implies that independent audits verify that the isolation systems implemented and drive any remedial action.

f) Review: Refers to the overall isolation systems being periodically reviewed.

#### Consistency of Order

- The order of the information is consistent with the HSG65 model.

#### Consistency of Terminology

Essentially, terminology was fairly consistent with HSG 65, although this was difficult to quantify due to the inconsistent nature (and variable detail) of the safe isolation of plant and equipment guidance in relation o the POPMAR model.

## **B.18 Managing for Safety at Nuclear Installations**

**Guidance: (Part of Industry Advisory Committee)**

**Title: Managing for Safety at Nuclear Installations**

### Document Summary

This publication, by the Health and Safety Executive's (HSE's) Nuclear Safety Division (NSD), provides a statement of the criteria the Nuclear Installations Inspectorate (NII) uses to judge the adequacy of any proposed or existing system for managing a nuclear installation regarding its affects on safety.

These criteria have been developed from the basic HSE model, described in the publication *Successful health and safety management*, that applies to industry generally, in order to meet the additional needs for managing nuclear safety.

The management of safety systems for nuclear licensed sites is entirely consistent with the basic management steps of the model in *Successful health and safety management* but that special emphasis needs to be given to particular elements within the basic steps.

The general HSE advice for the effective management of safety in industrial situations in described in *Successful health and safety management*. The basic steps in the HSE model form a continuous management process and are:

In relation to policy the guidance states that the important and essential first step involves the licensee establishing a policy for safety that sets out the Board's commitment to meeting its responsibilities, and signalling to those who work in the licensee's organisation the fundamental values and beliefs on which management of the activity is based.

It also states that in order to convey top level commitment, the policy should be expressed in a written statement which sets out the organisation's objectives and the arrangements for providing, implementing and maintaining an adequate management of safety system.

In addition the guidance refers to developing relevant and effective policies for meeting health and safety responsibilities requires appropriate health and safety advice.

In relation to organising the guidance explains that the main purpose of this step is to ensure that the licensee's organisation can readily plan and implement the aims and objectives identified in the policy. In particular, the licensee should be capable of ensuring that the safety provisions, identified through risk assessment, are in place.

In terms of management control the guidance states that effective managerial control is the foundation of a positive health and safety culture and is achieved by:

- (a) securing the commitment of employees to clear health and safety objectives;
- (b) positive leadership by all levels of management;
- (c) setting up of managerial systems; and
- (d) clearly identifying responsibilities.

In terms of Communication – the guidance states that effective communication is an essential prerequisite for ensuring that everyone understands the vision, values and beliefs which underlie

the safety policy, the commitment of senior management, together with how the policy is put into effect.

In terms of co-operation - A united approach to safety requires the co-operation of all parties through a combination of participation, commitment and involvement. Ideally, everyone should work together to make the policy work, so that health and safety becomes everybody's business and does not become a subject for management/worker bargaining.

In terms of Competence the licensee needs to ensure that all those whose work could affect safety are competent to carry out the tasks asked of them.

In terms of Independent advice within the nuclear industry it is particularly important that management actively seeks and is provided with authoritative and independent safety advice on current and proposed operations.

In terms of standards for planning and implementation for the control of risk the guidance states that it has always been particularly important in the nuclear industry. Measurable, achievable and realistic standards need to be identified for the lifetime of the activities on a plant, ie through design, construction, commissioning, operation and decommissioning.

In terms of Safety assessment within the nuclear industry it is expected that all activities which affect safety are underpinned by a safety case. Safety cases justify the design, construction, and commissioning of new plant, the modification to, and experiments on, existing plant and the decommissioning of redundant plant. In addition, the licensees should review the safety of their operations periodically and revalidate their operational safety case.

In terms of Work plans the guidance states that companies that manage safety effectively usually have work plans that include clear safety objectives and targets for all managerial and supervisory staff whose work has an impact on safety.

In terms of Operational control the guidance refers to licensed nuclear installations the safety assessment process is intended to ensure that the nuclear hazard presents acceptable risks by design, identifying operating constraints and the provision of safety mechanisms.

In terms of Emergency planning it is necessary to ensure that through the management of safety system, the licensee is able both to mitigate the safety effects of any abnormal event, incident or emergency (particularly those which might affect people outside the site) and to ensure that action is taken to prevent recurrences. The latter will necessitate the proper identification of reasons for the event.

In terms of measuring performance the guidance in relation to self monitoring within the management system performance is monitored to show that the plans (corporate, divisional, individual) in place are achieving the objectives set. Monitoring performance, together with the review of plans and objectives, are tasks which need to be carried out by line managers, ultimately reporting to the company's Board.

In addition, independent monitoring is considered by the guidance inasmuch that the Health and Safety Resource (HSR) also has a role in monitoring the system independently of line management so that advice can be given if needed or unsafe activities stopped in extreme cases.

In terms of reviewing performance the guidance states that a fundamental principle of management systems is their need to be reviewed on a systematic and periodic basis to ensure they work effectively and to see if changes would improve performance.

An important function of the review process is to provide the Board with evidence that health and safety plans, and the aims, commitment and objectives embodied in the overall policy statement are being achieved in practice. Review therefore operates at all levels of the management system.

The introduction to the guidance refers to non-statutory guidance on the management of health and safety at nuclear installations, referring to certain acts such as the Nuclear installation Act 1965 (NI Act) and the management of Health and Safety at work regulations 1992 and an overview of Management of safety before it goes into detail about policy, organising, planning and implementation, measuring performance and auditing and reviewing performance.

#### Consistency of Order

- The consistency of order is high and relevant to the management framework outlined in the POPMAR model

#### Consistency of Terminology

Terminology was highly consistent with the terminology used in the POPMAR model.

### **B.19 Driving at Work: Managing Work-related Road Safety**

#### **Guidance: INDG 382**

##### **Title: Driving at work: Managing work-related road safety.**

#### Document Summary

The guidance applies to any employer, manager or supervisor with staff who drive or ride a motorcycle or bicycle to work, particularly those with fleet management responsibility. The guidance covers anyone whose role involves driving or riding both occasionally and frequently. The booklet aims to suggest ways of managing the risks to driver's health and safety. The guidance states 'many incidents happen due to inattention and distraction as well as failure to observe the Highway Code. You need to consider what steps you should take to ensure that your employees use the road as safely as possible'.

The booklet begins by providing information regarding the employer's legal responsibilities, making the distinction between the duties (as an employer) under Road Traffic law and under the Health and Safety at Work act. The booklet then goes on to discuss the 'benefits of managing work-related road safety', considering the costs and consequences of accidents to organisations, and (with reference to case studies and research) the business benefits of effective management.

The booklet then describes 'how to manage work-related road safety', stating that this is only effectively managed if integrated into the overall business arrangements for managing health and safety at work. The booklet provides brief information on the written policy, top-level commitment, the need for an integrated organisational structure (that 'allows co-operation across departments with different responsibilities for work related road safety'), adequate systems to allow the management of work related road safety and monitoring performance to ensure the policy is effective (including encouraging employees to report all incidents and collecting information to make informed decisions).

The booklet then goes on to discuss the importance of risk assessments for any work-related activity (including work-related driving). The booklet provides information on carrying out the risk assessment, summarising the five-step approach favoured by HSE.

The guidance then provides information on ‘evaluating the risks’, and considers individually the driver: competency, training, and fitness and health, the vehicle: suitability, condition, safety equipment, safety critical information, and ergonomic considerations, the journey: routes, scheduling time, distance and weather conditions. Brief examples are used to illustrate specific considerations. The booklet also provides references and sources for further information.

#### Consistency of Order

- The risk management section of the guidance begins by referring to the policy, demonstrating its importance.
- Although further aspects of the POPMAR model are referred to, the organisation of the guidance is only partially consistent with HSG 65.
- The guidance includes detailed reference to HSE’s Five Steps to Risk Assessment.

#### Consistency of Terminology

Essentially, terminology was *not* consistent with HSG 65, although this was difficult to quantify due to the inconsistent nature (and variable detail) of the ‘Driving at work: managing work-related road safety’ guidance in relation to the POPMAR model.

## **B.20 Managing Health and Safety in Swimming Pools**

### **Guidance: HSG 179**

#### **Title: Managing Health and Safety in Swimming Pools.**

#### Document Summary

The third edition of ‘Managing health and safety in swimming pools’, revised due to advances in ‘technology, the law, and our general thinking on health and safety’. The guidance is written by HSE in collaboration with Sport England and draws on the experience of ‘representatives from the public and private sector, local authorities and related professional bodies’. The guidance focuses on ‘the need for pool operators to make provisions for health and safety based on risk, taking into account the circumstances that apply to each individual pool’.

The guidance begins with an introduction, covering who the guidance is aimed at, how it should be used, and definitions of the pools to which the guidance applies. Basic information is also provided on Risk assessments, the meaning of ‘reasonably practicable’, subjects *not* covered in the guidance and enforcement of health and safety law.

The next section of the guidance, entitled ‘General management of health and safety’ covers the legal requirements under approximately 15 regulations. The following section entitled ‘The practicalities of managing health and safety’ begins by describing the principles of risk assessment, including definitions of the terms ‘risk’ and ‘hazard’ and includes information on the key steps to carrying out a risk assessment (the HSE publication ‘Five steps to risk assessment’ is also referenced).

The guidance then goes on to explain ‘how to manage health and safety’, beginning with policy ‘as a pool operator you may be employed by a local authority or an organisation which has a corporate health and safety policy; you should ensure that you refer to it when setting your own policy. However the policy which you set will need to take account of local circumstances’. The guidance then leads the reader through the five steps for effective management of health and safety, starting with ‘policy’, explaining what a policy is, and advising a written statement will ‘demonstrate to your staff, and anyone else, that hazards have been identified and risks assessed, eliminated or controlled’.

The second step, ‘organise your staff’ covers staff involvement and commitment as a means of ensuring that the health and safety policy is effective. The provision of training and advisory support is also mentioned, as is staff consultation, information provision, and distribution of the policy.

The third step ‘plan and set standards’ explains the need for setting objectives, identifying hazards, assessing risks and implementing standards. It is stated that ‘standards help to build a positive culture and control risks’, but explains that in certain circumstances a revision of standards may be necessary (i.e. where new hazards are introduced to the workplace).

The fourth step covers ‘measure your performance’, and discusses the benefits of active monitoring of hazards, and what this involves. The guidance advises recording the results of the regular inspections in order to ensure the standards are being implemented.

Finally the fifth step, entitled ‘learn from experience: audit and review’ provides information on the benefits of monitoring and reviewing activities in order to ensure that the ‘policy, organisation and systems’ are achieving the intended results. The guidance also suggests using the information resulting from measuring performance, along with audit information as feedback, improving the approach to health and safety management.

The guidance goes on to explain (in more detail) ‘what should be included in a safety policy statement’, as well as information on ‘pool safety operating procedures’. The guidance explains the requirements to report accidents, and provides examples of reportable incidents. Information is also provided regarding first aid provision and the use of safety signs (examples of which are provided in the appendix).

The guidance then considers the physical environment of the swimming pool, including the pool tank, access to the pool and pool hall, the design of steps and ladders, floors and finishes, walls, ceilings, specialised pool designs, diving platforms and boards, water slides, storage, and all other special features. An extensive table is also included, detailing options for controlling design problems/ hazards identified.

The guidance also covers (in varying detail) supervision arrangements to safeguard pool users, general maintenance – plant and equipment and the pool water treatment system. The appendices provide further, detailed information as well as references and further information sources.

### Consistency of Order

- The guidance covers all of the aspects of the POPMAR model, as detailed in HSG 65, and in a consistent order.

## Consistency of Terminology

Terminology was highly consistent with the terminology used in the POPMAR model, despite the summarised use of the information.

## **B.21 Managing Crowds Safely**

**Guidance: HSG 154**

**Title: Managing Crowds Safely.**

### Document Summary

The guidance aims to provide practical guidance for those organising events, to manage crowd safety in a systematic way. The guidance does not detail a specific way of maintaining or achieving crowd safety, but sets out a general approach. Aimed at organisers or those with overall responsibility for an event the information contained within the guidance is also useful for other (e.g. venue staff and contractors).

The guidance is organised into nine distinct sections, beginning with ‘planning’. This section of the guidance covers the importance of good planning, and involving staff representatives from different facets of the event (e.g. technical staff and merchandising). The guidance states ‘to minimise the risk of overcrowding, you need to consider the activities, movement and dynamics of the crowd at various [arts within the venue’, and explains the benefits of considering the expected turnout, types of visitors, getting to and from the venue, venue suitability, excess arrivals and previous information collected (e.g. experiences of similar venues or events). The guidance also covers getting organised, keeping records (e.g. the health and safety policy, where more than five people are employed) and crowd behaviour.

The next section, entitled ‘assessing risks’ covers the general principles of a risk assessment, ‘look for the hazards’, ‘decide who might be harmed and how’, ‘evaluate the risk and decide whether the existing precautions are adequate or whether more should be done’, ‘record your findings’, and ‘review your assessment and revise it if necessary’. The section then goes through each step in detail, identifying potential crowd and venue specific hazards. The section culminates in a risk assessment checklist.

The guidance then covers ‘putting precautions in place’, providing further details about precautions to address risks to crowds, including the venue (transport, parking, access routes, entrances and exits, inside the venue, viewing areas, seating fences and barriers) and crowd management. The guidance recommends checking the precautions implemented to ensure continued effectiveness, and the importance of ensuring remedial work is carried out.

The guidance then discusses ‘emergency planning and procedures’, defining a crowd safety emergency, and measures to manage emergency situations (including informing the emergency services, communicating with staff, communicating with the public, evacuation, assembly areas and reopening the venue).

The next section of the guidance covers aspects of communication, with both members of the public and staff. A brief case study is used to illustrate the use of communication in an event held in a park, and further examples of methods of communication with the public are presented in a table. The guidance also touches on communication with outside bodies and communication within public venues, presenting communication options and how they can be used.

The guidance then looks at ‘monitoring crowds’ (i.e. crowd behaviour), explaining that effective monitoring can help to avoid overcrowding problems, and ‘aid long-term action to correct problems in venue design or event management’. The booklet provides guidance on where to monitor, stating ‘as part of your risk assessment, identify potential problem areas which will need to be closely monitored’. Examples of such areas are then provided. The guidance provides information on how to monitor crowds (e.g. the use of counting systems) and the potential benefits of ‘staff within the crowd’, as well as listing useful indicators for monitoring crowd behaviour.

The final section of the main booklet, entitled ‘review’, advises the reader to ‘review your activity and consider all aspects of the arrangements you have put in place to manage crowd safety. The review can be in light of a recent event...or a period of operation of a venue..’. Information is provided on the aims of the review, advising ‘involve staff in the review and encourage them to discuss concerns’, ‘identify and cater for any changes to the venue, e.g. staffing structure, type of people attending the venue, temporary changes due to building work’, ‘identify ways of improving the management of crowd safety’, and ‘collect feedback from those involved in the event or operation of the venue’. The guidance then goes on to touch on the timing of the review, who should be involved, what information should be collected (‘the way you collect information should also be periodically reviewed and updated’). It is stated that the information collected in the review will ‘help you to decide if your arrangements for managing crowd safety are adequate’, and the benefits of keeping a record of the review process and findings are touched on briefly.

The guidance also includes an appendix covering the relevant legislation, and provides references for further, related, information.

#### Consistency of Order

- Although there is some consistency of the information with that of the POPMAR model, the information is organised inconsistently with that of HSG 65, with the exception of two distinct sections on ‘monitoring crowds’ and ‘review’.
- One of few pieces of guidance to discuss the audit/ review stage in detail.

#### Consistency of Terminology

Terminology was fairly consistent with the terminology used in the POPMAR model, although this was fairly difficult to determine due to the inconsistency of the organisation of information between this booklet and the POPMAR model.

## **B.22 Working Safely with Research Animals: Management of Infection Risks**

### **Guidance: (Industry advisory Committee Publication)**

#### **Title: Working Safely with Research Animals: Management of Infection Risks**

#### Document Summary

Following amendments to COSHH (the Control of Substances Hazardous to Health Regulations) ‘basic containment measures for animal rooms’ have been translated from guidance into law, and therefore this guidance expands on the updated recommendations.

The guidance focuses on work situations involving experimentally infected animals in the laboratory setting, but also contains useful information for anyone working with animals (e.g.

where there is contact with wild animals during fieldwork). The guidance is primarily aimed at protecting human health and safety, although full account is taken of animal welfare issues.

The guidance begins with an introduction to the use of animals in the study of disease, and drug testing, and introduces the relevant legislation, before stating that the guidance is 'divided into three parts;

- the first part contains background information about the hazards and risks of working with animals;
- the second part sets out appropriate measures to be taken when working at different containment levels and provides guidance on certain operating procedures;
- the third part provides guidance on the decontamination and disposal of waste associated with animals'.

The first section, entitled 'hazards and risks' covers the issues that should be considered before work begins (e.g. is it essential to use animals for the procedure), before going on to explain the nature of potential infection hazards (including both 'deliberately introduced and pre-existing'). The guidance states that the 'identification of all the hazards, including physical and chemical, and identification of the route of exposure, together with an evaluation of the likelihood of exposure occurring' will form part of the overall assessment, which will help determine the appropriate containment and experimental procedures necessary. The guidance also considers selection of animals in detail, including characteristics of animals, behaviour of the micro-organism (in the animal), potential routes for transmission of infection, clothing and personal protective equipment, and handling

The guidance then covers control measures (containment and operating procedures), covering animal containment levels 1-4 in more detail, setting out the legal requirements for handling animals under these classifications. Information is then provided on the decontamination and disposal of waste.

Further information is also provided in the appendix on 'legislation and local rules', 'information, instruction and training', 'emergency procedures', 'genetic modification', and 'containment of invertebrates'. A bibliography is also included.

The information in the appendix entitled 'information, instruction and training' describes the employers responsibility to ensure 'adequate information, instruction and training on all relevant aspects of health and safety at work', as well as the need for employees to gain a 'sound understanding of the principles and practice of infection control'. The guidance provides advice on the information and training that should be provided by the employer (i.e. to include instruction in the nature of the potential hazards and in the practical use of the procedures, techniques and safety equipment that are required to minimise the risk of infection).

#### Consistency of Order

- Due to the specific topic area the guidance was specified for, the information provided was not structured consistently with the POPMAR model.

#### Consistency of Terminology

Little consistency of terminology with that used in the POPMAR model in HSG 65.

## 6 REFERENCES

- A Recipe for Safety (HSG) 252, 2005, HSE Books.
- An Introduction to Health and Safety (INDG) 259, 2006, <http://www.hse.gov.uk/pubns/indg259.pdf>, HSE Books, accessed December 2006.
- Caring for Cleaners (HSG) 234, 2003, HSE Books.
- Developing Process Safety Indicators (HSG) 254, 2006, HSE Books.
- Directors' Responsibilities for Health and Safety (INDG)343, 2002, <http://www.hse.gov.uk/pubns/indg343.pdf>. HSE Books, accessed December 2006.
- Driving at Work: Managing Work-related Road Safety (INDG) 382, 2003, <http://www.hse.gov.uk/pubns/indg382.pdf>. HSE Books, accessed December 2006.
- Disposal of Explosive Waste (CS) 23, 1998, HSE Books.
- Dust: General Principles of Protection (EH) 44, 1997, HSE Books.
- Five Steps to Risk Assessment (INDG) 163, HSE Books.
- Formula for Health and Safety (HSG) 166, 1997, HSE Books.
- Fumigation (HSG) 251, 2005, HSE Books.
- Health Risk Management (HSG) 137, 2003, HSE Books.
- Involving Employees in Health and Safety: How to achieve effective workforce involvement (HSG) 217, 2001, HSE Books.
- Making the Stress Management Standards Work: How to apply the standards in your workplace (Misc) 217, 2005, <http://www.hse.gov.uk/pubns/misc714.pdf>. HSE Books, accessed December 2006.
- Managing Crowds Safely (HSG) 154, 2000 2nd Edition, HSE Books.
- Managing Health and Safety in Construction (HSG) 224, 2004, HSE Books.
- Managing Health and Safety at Recreational Dive Sites (HSG) 240, 2003, HSE Books.
- Managing Health and Safety in Swimming Pools (HSG) 179, 2003, HSE Books.
- Managing for Safety at Nuclear Installations, Industrial Advisory Committee, 1996, HSE Books.
- Managing Shift Work (HSG) 256, 2006, HSE Books.
- Managing Sickness Absence and Return to Work (HSG) 249, 2004, HSE Books.
- Memorandum of Guidance on the Electricity at Work Regulations 1989 (HSR) 25, 2003, HSE Books.

Mullins, P. (2006). Improving duty holder management of health and safety, Project Initiation Document,

Ozone: Health Hazards and Precautionary Measures (EH) 38, 1998, HSE Books.

Safety in the Storage and Handling of Steel and other metal stock. (HSG) 246, 2004, HSE Books.

Storage and Use of sodium chlorate and other similar strong oxidants (CS) 3, 1998, HSE Books.

Strategy for Workplace Health and Safety in Great Britain to 2010 and beyond, Health and Safety Commission, 2004.

Successful Health and Safety Management, (HSG) 65, 2003, HSE Books.

The Interpretation and Use of Flashpoint Information (CS) 24, 1999, HSE Books.

The Safe Isolation of Plant Equipment (HSG) 253, 2006, HSE Books.

Violence at work: A guide for employers (INDG) 69, 1996, <http://www.hse.gov.uk/pubns/indg69.pdf>. HSE Books, accessed December 2006.

Work-Related Violence Case Studies: Managing the risk in smaller businesses (HSG) 229, 2002, HSE Books.

Working Safely with Research Animals (Industry Advisory Committee Publications), 1997, HSE Books.