

**THE MANAGEMENT OF HEALTH AND SAFETY
PABIAC AUDIT OF A SAMPLE OF UK PAPER MILLS
SUMMARY REPORT
JANUARY - MARCH 2000**

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INTRODUCTION

This is the summary report of the PABIAC mid-Initiative audit into the management of health and safety in UK paper industry, derived from audits in a sample of nine UK paper mills. The audits were carried out by a team from PABIAC against the principles contained in *Successful Health and Safety Management* (HS(G) 65- ISBN 0 7176 0412 X). The recommendations in this report address specific issues relevant to the whole industry, and will be reported to a meeting of industry Chief Executives on 12 April 2000. Individual mills participating in the study have received their own specific reports.

By its very nature the audit process used can only be a snapshot of management arrangements. However PABIAC hopes that the findings from this report provide a reasonably accurate picture of the health and safety management structure within the industry and encourages all mills, WHETHER OR NOT THEY PARTICIPATED IN THE AUDIT PROCESS ITSELF, to consider the recommendations made. During the meeting on 12 April, you will, for example, wish to consider how you and the industry wish to respond to the findings of this report.

PABIAC and the audit team in particular would like to thank all those at the mills for their help, honesty and hospitality during the visits.

Methodology

We used the management model described in *Successful Health and Safety Management* to structure the audits and the presentation of our findings. Appendix 1 illustrates the model used by HS(G) 65.

The audit team did not carry out a full compliance audit, rather it sampled activities in every mill, obtained information from nominated managers about the management systems used and validated the answers given by means of the paperwork provided and physical evaluation on the ground - interviewing staff at all levels where necessary. The issues chosen by the team were:

0Accident Investigation

1Housekeeping

2Transport - particularly the segregation of people and vehicles, and

3Permit to Work.

These four issues were chosen since they were not dependent upon the type or size of mill or product produced and were likely to be common to all mills visited by the team. An "aide memoire" was produced by the team before the visits based on the principles contained in HS(G) 65 (Appendix 2). Questions posed by the audit team were designed to obtain information against every one of the 5 elements within the HS(G) 65 model (i.e. of Policy, Organisation, Planning and Implementation, Performance Monitoring, and Review and Auditing). Not every question in the aide memoire was used for each issue where the information required had been forthcoming by other means. A standard format for each visit was used for the majority of mills - apart from the first mill visited. This was sent to the participating mill prior to each audit (Appendix 3).

The audit team compared the systems found against the baseline of HS(G) 65 and defined its level of confidence in the management system according to a 4 point scale, where:

- | | |
|------------------------------|--|
| <i>Full assurance</i> | There is a sound system of control designed to achieve the system objectives. |
| <i>Substantial assurance</i> | While there are no major weaknesses in the system some action is required to ensure all of the system objectives are fully achieved. |
| <i>Limited assurance</i> | Weaknesses in the system of control are such as to put the system objectives at risk. |
| <i>No assurance</i> | Control is generally very weak, leaving the system open to significant error or abuse. |

As a result of the audit, the team also made a number of recommendations and rated these according to a three point scale of priority, where:

- | | |
|-------------------|---|
| <i>Category A</i> | Recommendations arising from serious control weaknesses which subject the mill to a significant risk of loss or exposure. |
| <i>Category B</i> | Recommendations arising from weaknesses which subject individual systems or managers or Departments to significant risk of loss or exposure. |
| <i>Category C</i> | Recommendations arising from weaknesses which, although not critical to a system, Manager or Department, are of sufficient importance to require remedial action by management. |

For the purposes of this summary report we have not sought to categorise the recommendations made, and believe that most recommendations are equally applicable across the industry.

The findings are summarised both in the Executive Summary (below) and against each of the five principles from HS(G) 65.

EXECUTIVE SUMMARY

The level of confidence found for each of the five elements from HS(G) 65 were:

Policy	Organisation	Planning and Implementation	Measuring performance	Review and Auditing
Substantial (Full - Limited)	Substantial (Full - Limited)	Limited (Substantial - Limited)	Limited (Substantial - No)	No (Limited - No)

(NB. The range found is shown in brackets)

Recommendations

1. **We recommend that mills set priorities based on risk assessment and produce clear policies and standards to be achieved**
2. **We recommend that Mill Action Plans become a living document - by a process of review and revision - “closing the loop” on key priorities and moving on to set further targets**
3. **We recommend that employees and safety committees are fully involved in formulating, progressing and reviewing Action Plans and Policies - that these plans are communicated effectively and that employees are kept fully up to date with progress**
4. **We recommend that individual managers have both clear technical and personal standards and objectives to work towards. This should apply to everyone in the line management chain - from CEO to team leader .**
5. **We recommend that the industry make special efforts to train all managers in the risk assessment process, to share best practice and to ensure risk assessment is seen as a process that challenges the status quo.**
6. **We recommend that mills investigate further the use of performance appraisal in relation to health and safety - particularly for managers and supervisors - “praise where praise is due”.**
7. **We recommend that all mills avoid “shopping list committees” - Safety Committees should be structured and have ownership of policies and Plans. They should be capable of driving the monitoring and review process**
8. **We recommend that managers consider safety representatives as much a part of their resources as a voice of their staff - using the competencies**

available to them to promote policies and practices and to monitor performance within an effective review process

9. We recommend that mills ensure consistency of controls across all their operations - that managers in all areas work to similar standards and where necessary a Group or Divisional policy is used to achieve common approaches
10. We recommend that mills provide support and training to managers to enhance their communication skills, and promote two-way communication
11. We recommend that mills examine ways to use all available tools to communicate with their staff - including IT as appropriate
12. We recommend that mills identify clear standards of competence (skills and knowledge) for jobs - matching safety training to the job carried out and monitoring the implementation and effectiveness of that training
13. We recommend that mills increase everyone's understanding of the principles underlying a hierarchy of control. Where necessary challenging the results of older risk assessments that have resulted in a use of the lower end of the control hierarchy - "the hierarchy reflects the fact that eliminating and controlling risk by using physical engineering controls and safeguards is more reliable than relying solely on people"
14. We recommend mills concentrate on "closing the loop" on their highest safety priorities - completing them and setting up systems to monitor and review them
15. We re-emphasise the need for everyone to see risk assessment as an integral part of a management process to challenge the way you do things - involving task analysis, risk assessment and risk control.
16. We recommend that "Making Paper Safely" is used as a benchmark within the risk assessment process to challenge existing practices and the conclusions from older risk assessments
17. We recommend that all mills consider active performance monitoring - as well as reactive monitoring - as an integral part of their management process. This will involve actively testing compliance with existing systems of work and ensuring staff are working as expected at all times - rather than reacting to problems as they occur - " it takes 4 hours on days but 2 on nights"
18. We recommend that those mills without clear standards and performance monitoring systems examine urgently systems in use elsewhere in the industry and introduce them as required - "what gets measured gets done"

19. We recommend that mills concentrate on learning from accidents and near-misses rather than just counting them
20. We recommend that the Federation examines best audit practices around the industry and elsewhere to help mills develop their auditing skills and techniques
21. We recommend that the industry considers introducing a scheme of independent auditing based on the principles of *“Successful Health and Safety Management”* - HS(G) 65

Overall the audit team has detected an improvement in the commitment given to health and safety and is convinced there is a clear foundation to build upon. However, the team were disappointed by the lack of a structured, businesslike approach to the control of risk.

POLICY

Key issue

To examine your Health and Safety policy to establish your overall approach to the management of health and safety, and in particular to look whether your policy is accurately reflected in how the mills implement your objectives.

Findings from site audit

Strengths:

- i) All mills have an overall, high level safety policy
- ii) All mills have communicated their policy to their employees
- iii) All mills have an Action Plan
- iv) Responsibilities are set out in policies and Action Plans

Weaknesses:

- i) Not every area examined by the audit team had a documented policy or standard
- ii) Not all mills have communicated their Action Plans to their employees
- iii) Safety Committees do not generally have ownership of mill policies or Plans
- iv) Many mills were attempting to be too optimistic with their Action Plans - Too many priorities were incomplete or targets had slipped.

Recommendation
1. We recommend that mills set priorities based on risk assessment and produce clear policies and standards to be achieved
2. We recommend that Mill Action Plans become a living document - by a process of review and revision - “closing the loop” on key priorities and moving on to set further targets
3. We recommend that employees and safety committees are fully involved in formulating, progressing and reviewing Action Plans and Policies - that these plans are communicated effectively and that employees are kept fully up to date with progress

ORGANISING

Key Issue

To examine the structures put in place at the mills to implement and develop your policy. In particular, to look at the allocation of responsibilities and how people are managed and motivated to work safely.

We looked for evidence of the way the mills organised themselves in relation to four activities:

Control: *i.e. the allocation of defined responsibilities and the means by which unit directors, hold their line managers to account. We were looking to see whether everyone is clear about what they are expected to achieve.*

Findings of the audit

Strengths:

- i) Most mills have some safe operating procedures set out in writing - but see below
- ii) Most senior managers recognise their responsibilities
- iii) Some managers have their health and safety responsibilities outlined in their job descriptions

Weaknesses:

- i) Personal objectives often lacked clarity and did not set clear standards
- ii) Safety controls and responsibilities have not been driven down to all levels of shift manager and supervisors - who lack recognition of their responsibilities
- iii) The role and responsibilities of individuals needing to be involved in task analysis, risk assessment, and identification of control measures were poorly understood in many mills - leading to obvious risks being uncontrolled or controlled via a system of work alone - risk assessment was not recognised as a challenge process
- iv) Health and safety performance appraisal was lacking in almost all mills - attempts were made, but none were completely effective

Recommendations	
4.	We recommend that individual managers have both clear technical and personal standards and objectives to work towards. This should apply to everyone in the line management chain - from CEO to team leader .
5.	We recommend that the industry make special efforts to train all managers in the risk assessment process, to share best practice and to ensure risk assessment is seen as a process that challenges the status quo.
6.	We recommend that mills investigate further the use of performance appraisal in relation to health and safety - particularly for managers and supervisors - “praise where praise is due”.

Co-operation: *i.e. the arrangements you have to secure everyone's trust and participation, for example through representation on health and safety committees, holding team briefings and involvement in developing procedures.*

Findings of site audit

Strengths:

- i) Safety committees exist in all mills - in the best mills these were strategic committees, owning the safety policy and Action Plan - in others a “shopping list mentality” still reigned and the committees were unstructured.
- ii) There is a clear willingness to address health and safety problems and solve them amongst most of those interviewed by the audit team
- iii) Safety representatives are generally committed and believed in health and safety

Weaknesses:

- i) Safety representatives are an under-used management resource
- ii) In some mills employees did not believe what senior managers said regarding their commitment to safety vs. production. This commitment had clearly not reached all levels, for example, the audit team asked why a felt could be changed in 2 hours on a night shift, but it took 4 hours during the day when senior managers were present

Recommendations

7. **We recommend that all mills avoid “shopping list committees” - Safety Committees should be structured and have ownership of policies and Plans. They should be capable of driving the monitoring and review process**
8. **We recommend that managers consider safety representatives as much a part of their resources as a voice of their staff - using the competencies available to them to promote policies and practices and to monitor performance within an effective review process**
9. **We recommend that mills ensure consistency of controls across all their operations - that managers in all areas work to similar standards and where necessary a Group or Divisional policy is used to achieve common approaches**

Communication: *i.e., the sharing information on health and safety issues both within the company and externally with contractors and others;*

Findings of site audit

Strengths:

- i) Most mills use committees, meetings and notice boards to transmit information
- ii) Some mills are beginning to use IT to communicate safety, setting standards, reporting problems and monitoring performance

Weaknesses:

- i) Very few mills have an effective feedback system to communicate with those reporting defects, or communicate day to day safety problems - i.e. that communication is a two-way process
- ii) Very few mills had a structured approach to communication or saw communication as a key safety management competence

Recommendations

- 10. We recommend that mills provide support and training to managers to enhance their communication skills, and promote two-way communication**
- 11. We recommend that mills examine ways to use all available tools to communicate with their staff - including IT as appropriate**

Competence: *i.e., the ability of individuals and groups to carry out tasks to acceptable standards.*

Findings of site audits

Strengths:

- i) The audit team found a number of very competent managers and safety advisers
- ii) The audit team noted a high level of competence amongst safety representatives
- iii) There was a high degree of commitment to train for safety - but see below

Weaknesses:

- i) Very few mills had a minimum level of health and safety understanding for the task to be carried out - "training needs analysis"
- ii) There was an over-reliance on the competence of a few individuals rather than the system, overloading some individual managers but bypassing or ignoring others, particularly at supervisory levels
- iii) There was little evidence that the investment in training was justified in terms of returns - i.e. managers assume a training course has been effective, rather than ensuring the training is used in practice.
- iv) In many mills there was an over-reliance on personal behaviour to assure safety - in other words there is a lack of understanding of the hierarchy of controls - resulting in a reliance on PPE and safe systems of work - from the lower end of the control hierarchy

Recommendations

- 12. We recommend that mills identify clear standards of competence (skills and knowledge) for jobs - matching safety training to the job carried out and monitoring the implementation and effectiveness of that training**
- 13. We recommend that mills increase everyone's understanding of the principles underlying a hierarchy of control. Where necessary challenging the results of older risk assessments that have resulted in a use of the lower end of the control hierarchy - "the hierarchy reflects the fact that eliminating and controlling risk by using physical engineering controls and safeguards is more reliable than relying solely on people"**

PLANNING AND IMPLEMENTING

Key Issues

To determine how you plan to put your policy intentions into effect, looking in particular at how priorities are assessed, how resources are made available, and how standards of performance are set. One of the major sub elements is the hazard identification and risk assessment process.

Having set certain standards through the planning process, it is then necessary to carry them out.

Findings of site audits

Strengths:

- i) Every mill was spending a lot of time and trouble undertaking risk assessments, although some had only recently begun the process and had a great deal of work still to do.
- ii) The team found some excellent examples of systems - such as permits to work that could easily become exemplars for others

Weaknesses:

- i) Although Action Plans exist and targets have been set the team found many examples of slippage against deadlines - mills trying to do too much, too soon or not "closing the loop" on priorities
- ii) Lack of identified standards (see above) means that managers struggle to carry out effective risk assessments
- iii) Risk Control measures taken rely on human factors, competence, SSoW, rather than hardware - this means that when the system fails accidents tend to be more serious:
"Where do people go to work - what do they do when they get there? Is it easy to do the right thing and is it difficult to do the wrong?"
- iv) Mills generally had failed to challenge existing systems and controls when carrying out their risk assessments and hence almost universally suffered from a blindness - "because that's the way we've always done things" - "if the risk assessment confirms you are right you should be suspicious"

Recommendations

- 14. We recommend mills concentrate on “closing the loop” on their highest safety priorities - completing them and setting up systems to monitor and review them**
- 15. We re-emphasise the need for everyone to see risk assessment as an integral part of a management process to challenge the way you do things - involving task analysis, risk assessment and risk control.**
- 16. We recommend that “Making Paper Safely” is used as a benchmark within the risk assessment process to challenge existing practices and the conclusions from older risk assessments**

MEASURING PERFORMANCE

Key Issue

How do you check that your plans and standards are being put into effect? How much active, as well as reactive monitoring do you do?

Findings of site audit

Strengths:

- i) Reactive measurement was common - including accident investigation and defect reporting
- ii) The best mills carried out compliance inspections at various levels

Weaknesses:

- i) Active measurement was very uncommon - assessing action against existing systems of work, positively encouraging safe behaviour
- ii) Because of the lack of documented standards, managers and safety advisers found it difficult to assess performance - "what do you want people to do and how do people measure their performance".
- iii) Very few mills use accident investigations to revisit their risk assessments and to change their control systems - "are we learning from accidents rather than just counting them?"

Recommendations

17. **We recommend that all mills consider active performance monitoring - as well as reactive monitoring - as an integral part of their management process. This will involve actively testing compliance with existing systems of work and ensuring staff are working as expected at all times - rather than reacting to problems as they occur - " it takes 4 hours on days but 2 on nights"**
18. **We recommend that those mills without clear standards and performance monitoring systems examine urgently systems in use elsewhere in the industry and introduce them as required - "what gets measured gets done"**
19. **We recommend that mills concentrate on learning from accidents and near-misses rather than just counting them**

REVIEWING AND AUDITING

Key Issue

As HS(G)65 points out, any organisation needs to know how well it is doing at a broad level, and in particular what progress is being made towards medium and long term objectives. Reviewing is based on information obtained from measuring and auditing activities fed back into the planning process to enable lessons to be learned and improvements to be made where necessary.

HS(G)65 defines auditing as the means for gaining independent information on the various systems in place for managing health and safety and for drawing up remedial plans.

Findings from site audits

Only the best mills had or were developing audit systems but many had safety committees that were well placed to monitor a suitable system once developed

Group policies on auditing were unclear and required further development

Most mills have well developed QA or environmental systems but very few had seen the links between them and safety auditing processes

Recommendations

- 20. We recommend that the Federation examines best audit practices around the industry and elsewhere to help mills develop their auditing skills and techniques**
- 21. We recommend that the industry considers introducing a scheme of independent auditing based on the principles of “*Successful Health and Safety Management*” - HS(G) 65**

Appendix 1

APPENDIX 2 - THE PABIAC AUDIT - QUESTION SET

A. POLICY: Does the Plan give a clear direction for the organisation to follow, supported by commitment at the highest level in the company?

1 What arrangements do you have for the preparation of a Policy statement?	
2 Do you have a current policy (all parts and forms etc)?	
3 What arrangements do you have for the review of Policy in relation to health and safety?	
4 How has the policy been distributed and communicated?	
5 Does health and Safety feature in company annual report and 'mission' statements?	

B. ORGANISATION: Is there an effective management structure and arrangements for delivering the Plan? The 4 C's: Control, Co-operation, Communication and Competence.

<p>6 What arrangements do you have for the allocation of responsibilities for health and safety; for example line management, safety adviser, occupational hygienist, medical staff etc.?</p>	
<p>7 How are health and safety responsibilities included within job descriptions?</p>	
<p>8 What arrangements do you have for setting health and safety objectives for individuals (if any!)?</p>	
<p>9 What arrangements do you have for review staff performance and how does your appraisal systems cover health and safety?</p>	
<p>10 What arrangements are there to consider health and safety within disciplinary or disputes procedures?</p>	
<p>11 What arrangements are there for involving employees in the health and safety effort both at site level and local level?</p>	
<p>12 What arrangements do you have to ensure</p>	

<p>competence of people at all levels including: competence requirements for jobs recruitment arrangements training policy arrangements for training arrangements for supervision</p>	
<p>13 What arrangements do you have for health surveillance and health promotion?</p>	
<p>14 What arrangements do you have to ensure relevant health and safety information is available to the site, communicated within the site and disseminated from the site as necessary?</p>	
<p>15 How do you ensure visible management involvement in the health and safety programme, for example safety tours, investigation of accidents and incidents etc?</p>	
<p>16 What arrangements do you have to control documentation including preparation of safety rules, operating procedures etc?</p>	
<p>17 How do you use of safety posters and newsletters etc?</p>	
<p>18 How do you record details of meetings at which health and safety forms a specific part of the agenda, for example management</p>	

meetings, team briefings, 'tool-box' talks?	
19 Do you have any safety incentive schemes?	

C. PLANNING AND IMPLEMENTATION: Is there a planned and systematic approach to implementing the health and safety policy, and assessing and minimising risks through an effective health and safety management system? Planning describes the process by which the objectives and methods of implementing the health and safety policy are decided. It is concerned with allocating resources (money time and effort) to achieve objectives and decide priorities. It ranges from general topics dealing with the direction of the whole organisation to detailed issues concerned with setting standards and the control of specific risks - it is closely linked to Action Plans

20 Do you have a health and safety Action Plan for the organisation and for individual sites?	
21 What hazard identification and risk assessment procedures/mechanisms do you have?	
22 What arrangements do you have for the selection of contractors?	
23 Does health and safety feature in your procurement processes - including of plant, equipment and materials?.	
24 How do you control of process risks throughout the mill including inception, design, construction, 'steady state' operations, maintenance, and decommissioning?	
25 What arrangements do you have to manage and control of change?	

26 What arrangements do you have for emergencies?	
27 How do you ensure compliance with legal requirements?	
28 How do you carry out and use risk assessments?	

D. MEASURING PERFORMANCE: Is performance measured against agreed standards to reveal when and where improvement is needed? The collection of information about the implementation and effectiveness of plans and standards. This involves a variety of checking or 'monitoring' activities. Is there adequate and sufficient measurement of performance both before and after accidents or incidents?

29 What arrangements do you have for workplace inspections?	
30 What arrangements do you have for the inspection of critical plant items and equipment - e.g. pulpers?	
31 What arrangements do you have for the inspection of critical procedures - e.g. PTW?	
32 How do you inspect behaviour?	
33 What arrangements do you have for accident/incident reporting?	
34 How do you investigate accidents and incidents?	
35 How do you analyse accident investigation data?	

E. AUDIT AND REVIEW: Reviewing describes the activities involving judgements about performance, and decisions about improving performance. Reviewing is based on information from 'measuring' and 'auditing' activities. Is there adequate and sufficient performance review to ensure that lessons learned are effectively put into practice to improve performance throughout the organisation? Auditing is the structured process of collecting independent information on the efficiency, effectiveness and reliability of the total health and safety management system and drawing up plans for corrective action. Is there adequate auditing of the health and safety management system?

36 What arrangements do you have to review of performance?	
37 Do they include the arrangements for health and safety management?	
38 How does information from reviews and audits feedback into the mill Action Plan?	
40 Who does the review and audit, and who is told about the results?	

PABIAC AUDIT

Objective

To audit the “management of safety” at a representative number of mills in order to provide information for the CEO day on 12 April 2000. The outcome of which will help to determine the industry’s actions throughout the remaining twelve months of the PABIAC Initiative.

The Audit Process

Four topic areas will be audited against the principles contained within HSG 65, Successful Health and Safety Management. The topics are:

- 0 Accident Investigation
- 1 Housekeeping (Slips, Trips and Falls)
- 2 Transport & People
- 3 Permit to Work

Generally topics 1. & 2. will be conducted in the Production areas, topic 3. in the Finishing/Warehouse/Logistics area and topic 4. in the Engineering area, although there may be local variations.

A responsible person for each topic, usually the manager, will be nominated by the mill. He/she will be interviewed to learn how the particular topic area is managed in relation to HSG 65. The auditors will then go into the workplace to validate the information provided by the manager.

The Audit Team comprises:

Mike Wilcock, Principal Inspector, HSE; Simon Longbottom, Senior Inspector, HSE; Tim Watts, Senior Training Executive (Operations), Paper Federation; Bud Hudspith, Health Safety and Environment Adviser, GPMU; Bob Clark, Group Safety Adviser, St Regis Paper Co Ltd

The timetable for the audit will be (subject to mill agreement):

- 09h00 Arrive and Audit Team preparations.
- 09h30 Introduction to Mill Team and explanation of audit process.
 - w Suggested Mill Team: MD, Department Managers (as per areas 1 – 4 and HR/Personnel), Safety Adviser and Senior Mill Union Representative.
- 09h45 Meeting with Top Mill Executive & separate meeting with Senior Union Representative (Safety or FOC).

10h00 Audit Team reconvenes

10h30 Accident Investigation & Transport/People

w With nominated manager for 30 minutes, explore and validate in mill thereafter.

12h30 Lunch

13h00 Housekeeping & Permit to Work

w With nominated manager for 30 minutes, explore and validate in mill thereafter.

15h00 Team review

16h00 Feedback to Mill Team

16h30 Audit Team wash-up and subsequent departure

General

For background information the Audit Team will require copies of Mill Safety Policy, Safety Action Plan, Accident Performance.

A member of the Mill Team, probably the Safety Adviser, will need to be the common point of contact throughout the day.

The Audit Team will operate as two smaller teams when gathering information from managers and mill staff, hence two meetings or subjects of investigation can take place at the same time. Someone from the mill will need to chaperon the audit groups as they conduct their work around the mill.

Audit Outcomes

There will be three outcomes from the process. Firstly an outline verbal feedback about the audit findings at the 1600 hours meeting, secondly a written report to each mill with evidence to support the findings and thirdly an amalgamated report, with no mill identities, delivered at the CEO day on 12 April 2000.

PABIAC Audit Team

January 2000