# Representation and consultation on health and safety in chemicals

## An exploration of limits to the preferred model

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### Abstract

**Purpose** – The purpose of this paper is to examine the effectiveness of worker representation and consultation on occupational health and safety in the UK in a context in which, following the 1977 Safety Representatives and Safety Committees (SRSC) Regulations 1977, recognised trade unions have the right to appoint health and safety representatives who have rights to representation and consultation and to access the training and facilities needed to support these activities.

**Design/methodology/approach** – The chemical industry is the chosen site for this enquiry, because, it offers some of the most propitious conditions in which to examine the operation of what has been the preferred model in UK health and safety regulation, namely those in which there are recognised trade unions and where there are likely to be systems and structures of industrial relations in place combined with arrangements for OHS management. Five establishments are examined.

**Findings** – The research suggests joint arrangements make for better safety outcomes and that there is a relation between management consultation on general issues and those of health and safety. Overall, though, management capacity and commitment pose considerable constraints to employee representation on health and safety. The SRSC regulations apply in all five cases but worker representation operated below the level to be expected from the regulations.

**Practical implications** – A stronger legislative steer on worker consultation and representation in respect of workplace health and safety is required.

**Originality/value** – Demonstrates that, even in an apparently propitious environment, legal requirements are not being implemented, and that management commitment and support are vital.

**Keywords** Health and safety, Trade unions, Industrial relations, United Kingdom

**Paper type** Research paper

### Introduction

The Safety Representatives and Committees (SRSC) Regulations 1977 came into force in Britain in October 1978. They made provision for recognised trade unions to appoint health and safety representatives and gave such representatives rights to representation and consultation on health and safety as well as rights to access to training and facilities to support them in undertaking these tasks. Subsequent regulations extended representation and consultation to workplaces in which trade unions were absent or not recognised in the off-shore oil industry in 1989 and more generally in 1996 (Health and Safety (Consultation with Employees) Regulations 1996). However, the SRSC Regulations have long been regarded as providing the most extensive regulatory support for worker representation on health and safety. They are also seen to apply in situations in which the preconditions for the success of workers' representation and consultation are most likely to be found, namely those where recognised trade unions exist and where systems and structures for industrial relations

Employee Relations
Vol. 28 No. 3, 2006
pp. 230-254

0142-5455
DOI 10.1108/01425450610661225

are combined with arrangements for occupational health and safety management (OHS) management.

It was with this in mind that we carried out a study of five establishments in the chemicals industry. The study was originally undertaken as part of a larger research project on the effectiveness of health and safety representatives that was funded by the Health and Safety Executive (Walters *et al.*, 2005). The chemicals sector was chosen because it was considered a relatively stable sector of the economy; because it was anticipated that a high awareness of, and commitment to, health and safety management would be found in the sector; and because it was believed that there would be well developed arrangements for representation along the lines laid down in the SRSC Regulations. In short, the logic of this paper is to examine the adequacy of SRSC Regulations and what might be called the preferred model of health and safety regulation in a best-case scenario – and to consider the implications of this examination.

In what follows we consider the role of worker representation and consultation in improving health and safety performance in the five case studies and explore the supports and constraints to the arrangements made to implement the SRSC Regulations in each of them. This is followed with a discussion of our findings in the context of the existing literature on "what works" in representation and consultation in health and safety and a consideration of what can be learned from the case studies that might help to inform future regulatory developments in the area.

## The chemicals industry

In their study of health and safety arrangements in the chemicals industry during the 1980s, Dawson *et al.* (1988) described an industry in which there were relatively stable patterns of employment with a largely permanent, well qualified full-time workforces, well developed management structures, and a significant presence of large firms. There have been developments in the decade and a half since Dawson *et al.*'s study in which there has been a tendency to shift operations towards specialty chemicals (intermediates and consumer products) and away from bulk production (Pearce and Tombs, 1998, pp. 159-60) a tendency which has partly contributed to a decline in the number employed in the sector in the UK since the 1980s. Nevertheless, the features of the industry noted by Dawson *et al.* have largely remained in place. Furthermore, the industry continues to be essentially one in which trade union organisation is still relatively well established and unions continue to play a significant role in joint arrangements, including those for health and safety.

In 2000/2001 the chemical industry had about 230,000 overwhelmingly permanent employees (two thirds of them men). As a result, it provided around 6 per cent of employment for the manufacturing sector as a whole.

The industry employs comparatively large numbers of non-manual, skilled and professionally trained workers. Employees in the industry are therefore better qualified than those in other sectors of manufacturing. In 2002, 30 per cent possessed a degree or equivalent. In addition, while employees in the sector have a similar age structure to manufacturing as a whole and are similar with respect to their length of service, they have higher earnings than in manufacturing as a whole. In 2000, average earnings in chemicals were just under £11 an hour compared to about £8.70 for manufacturing and the UK overall (LFS, 2000). Meanwhile, in 2002, union density in

chemicals (23 per cent) was only slightly lower than that for manufacturing as a whole (26 per cent), having experienced, as shown in Table I, a similar pattern of decline over the previous ten years.

The industry is responsible for a range of highly hazardous operations as well as the production and use of a wide range of dangerous substances. Both pose serious risks to its workers, the public and the environment and it is for these reasons that parts of the industry are subject to special regulatory measures and a relatively high level of inspection and control. Currently, such requirements are found most prominently in the Control of Major Accidents and Hazards (COMAH) Regulations. In addition there is need to manage risks associated with particular features of every day work in the sector such as the greater likelihood of exposure to dangerous substances and therefore the provisions of the Control of Substances Hazardous to Health (COSHH) Regulations are particularly relevant. At the same time, the more generic approaches to regulating health and safety management, such as found in the requirements of the Management of Health and Safety at Work (MHSW) Regulations, also apply. All these regulatory measures have in common a mandatory approach to systematic health and safety management.

Such regulatory pressure, combined with the comparatively high level of scrutiny from regulatory inspectorates, the presence of high-profile businesses and the potential for adverse economic consequences resulting from health and safety and environmental failures, increase the likelihood that there will be well developed arrangements for health and safety management. Indeed, in their study Dawson *et al.* developed their ideas about the arrangements necessary for effective self-regulation around experiences in the sector and used them as the model with which to compare arrangements elsewhere.

## Methodology

Five establishments were chosen in which we were able to gain good access to management, personnel and documentation. We especially selected establishments in which there were thought to be reasonably good records of injuries in order that we could use them as one measure of health and safety performance.

The research in each case study comprised:

- Documentation provided by the companies and trade unions involved.
- Interviews with a range of personnel in each establishment including senior managers, health and safety managers and advisers, supervisors, safety representatives, shop stewards, and manual and non-manual workers.

| | 1992 | | 1994 | | 1997 | | 2000 | | 2002 | |
|---|---|---|---|---|---|---|---|---|---|---|
| | (*n*) | (%) | (*n*) | (%) | (*n*) | (%) | (*n*) | (%) | (*n*) | (%) |
| Manufacturing | 1,650,192 | 33.2 | 1,491,209 | 32.7 | 1,366,213 | 28.4 | 1,159,284 | 26.6 | 1,056,129 | 25.5 |
| Chemicals | 101,062 | 33.2 | 95,030 | 31.6 | 95,274 | 29.2 | 72,859 | 25.6 | 72,533 | 23.4 |
| UK | 7,608,601 | 32.1 | 7,172,812 | 30.0 | 7,052,980 | 27.3 | 7,111,237 | 27.1 | 7,035,082 | 26.5 |

**Source:** LFS, Autumn Quarters 1992-2002. 1

**Table I.**
Union membership: 1992-2002

- A questionnaire based survey of employees in each establishment. Overall 1477 employees were surveyed, with response rates varying between 40 and 80 per cent.

Details on case study size, ownership and main activity can be seen in Table II. There were two large establishments, one medium sized and two small establishments undertaking a range of activities involved in the manufacture and supply of chemical products and especially the manufacture of specialty products, toiletries and cosmetics. One of the two large establishments manufactured pharmaceuticals. All the establishments were part of larger companies that had more than one UK site and their ownership ranged from being part of either UK or foreign based multinational firms to being locally owned and managed.

Details on the case study organisations workforces can be seen in Table III. Fairly typical of the sector, they were predominantly white and composed of a wide range of age groups of full-time male workers on permanent contracts. In addition, in case study 2 in particular, which housed the company's R&D facility, there was a workforce that was largely composed of specialist technical staff.

Generally, therefore, the case studies had the kind of well-established workforce, employed on a relatively long-term basis, which might be anticipated for the sector.

## Arrangements for representation

As Table IV shows, trade unions were recognised in all the establishments, mostly with union densities that were clearly above average. In all sites except one, there were formal structures for collective bargaining and consultation, including the representation of workers through shop stewards and joint consultative committees in which local bargaining took place.

In theory, since trade unions were recognised in each establishment, all the case studies would have been expected to have arrangements relating to the appointment of safety representatives and establishment of joint health and safety committees which accorded with the provisions of the SRSC regulations. In practice however, as the following descriptions indicate, these arrangements varied considerably.

The least developed system for workers' representation was found in the small establishment covered in case study 1. Here, there was a shop steward and a safety representative belonging to one of the two unions recognised by the company. Despite the SRSC Regulations applying in the establishment, there were, nevertheless, no formal structures or procedures for the consultation of these representatives on health and safety. Indeed, they were excluded from any form of consultation and denied their legal entitlement to carry out functions such as participating in risk assessments, conducting workplace inspections, meeting members or attending trade union training courses.

In case study 2, there were two shop stewards in place, one for the process workers and one for the laboratory and office workers. A trade union health and safety representative had been appointed for the process workers, but at the commencement of the investigation he had been absent through ill-health for a considerable time. During the course of the fieldwork it transpired he would not be returning to work. There had been no replacement for him appointed by the time the fieldwork was completed. There was no health and safety representative appointed for the laboratory

| | Plant | | | | |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| Size (no. employees/site) | 116 | 47 | 723 | 344 | 268 |
| Ownership/ structure | One of two sites in UK. Owned by foreign-based multinational | One of 12 sites in UK. Owned by foreign-based multinational | One of ten sites in UK and Ireland. UK-based multinational | One of two sites in UK, independently owned | One of two sites in UK, independently owned. One closed during project |
| Main activity | Manufacture and packaging of liquid toiletries | R&D and specialist chemical production | Manufacture of pharmaceuticals | Formulation and manufacture of toiletries and cosmetics | Research, development and production of speciality chemicals |

**Table II.**
Size, ownership and main activity of the chemicals case studies

**Table III.** Features of the workforce and work organisation in the chemicals case studies

| | Case study | | | | |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| Male | 47 | 77 | 78 | 58 | 81 |
| Ethnic minority | 0 | 0 | 1 | 2 | 5 |
| *Age* | | | | | |
| 16-24 | 19.5 | 13.6 | 7.5 | 16.7 | 2.2 |
| 25-34 | 29.3 | 45.5 | 28.9 | 24.2 | 23.1 |
| 35-44 | 14.6 | 18.2 | 36.9 | 20.9 | 27.5 |
| 45-64 | 36.6 | 22.7 | 26.5 | 37.9 | 47.3 |
| 65+ | 0 | 0 | 0.3 | 0.3 | 0 |
| Full-time | 87 | 100 | 95.0 | 95 | 91 |
| Permanent | 94 | 100 | 83.0 | 97 | 99 |
| Manual | 75 | 14 | 31.0 | 56 | 31 |
| *Length of service* | | | | | |
| 1 year or less | 32 | 5 | 13 | 28 | 7 |
| 2-5 years | 46 | 23 | 27 | 30 | 18 |
| 6-10 years | 8 | 27 | 4 | 20 | 13 |
| >10 years | 14 | 46 | 56 | 21 | 63 |
| *Employer* | | | | | |
| Main employer | 100 | 100 | 87 | 99 | 100 |
| Contractor | 0 | 0 | 6 | 0.6 | 0 |
| Agency | 0 | 0 | 6 | 0 | 0 |
| Shift work | Production workers work day and twilight shift | Production workers work 3 × 8 hour rotating shifts × 5 days (no weekend working) | Production workers work 4 shifts, 6 a.m.-6 p.m., 2 days on, 2 days off | Production workers work 3 shifts, early, late and nights | Production workers on annualised hours, working 12 hour shifts, 6 a.m.-6 p.m. × 2 shifts, 6 p.m.-6 a.m. × 2 shifts then 4 days off. 5 × 17 day breaks p.a. |

**Note:** Figures are percentages

**Table IV.**
Trade union representation in the case studies

| | Plant | | | | |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| Recognised trade unions | USDAW and AMICUS | TGWU and AMICUS | TGWU and AMICUS | TGWU | GMB and AMICUS |
| Percentage membership | 40 per cent union membership (manual) | 86 per cent union membership (all workers) | 70 per cent union membership (manual) | 29 per cent union membership (manual) | 75 per cent union membership (manual) |
| Health and safety reps. | Present | Present (but on long-term sick-leave) | Present | Present | Present |

and office workers. The two shop stewards took little active role in health and safety on a regular basis, although in interviews they said they had made representations to management over serious issues.

In case study 3, in contrast, arrangements for worker representation on health and safety were well developed. Trade unions had appointed over 30 health and safety representatives at the establishment. Workers not covered by trade union representatives (these included temporary contract workers and some of the office workers) were represented by four representatives of employee safety in accordance with the Health and Safety (Consultation with Employees) Regulations 1996. There was a joint safety committee structure with a Factory Health and Safety Committee (FHSC) chaired by the site director and eight departmental health and safety committees. Six senior health and safety representatives had a place on the FHSC, alongside senior managers, and senior specialist health and safety staff. This committee functioned as a venue for consultation, and for monitoring and reviewing establishment wide health and safety issues, policies and strategies. It held quarterly meetings.

Departmental Committees existed for various sites and activities within the establishment, including manufacturing, steroids, new products, quality, business support, site engineering and contracting. Safety representatives from the relevant department attended these committees, as well as team managers and safety advisors. They were chaired by senior managers, generally met monthly, and functioned as venues for consultation on issues that were of direct relevance to the department and dealt with health and safety problems that had not been resolved through normal procedures.

Facility time was provided for health and safety representatives to undertake their functions, receive training and to attend committee meetings. Representatives confirmed that generally there was not a problem with obtaining release and cover was usually supplied where necessary. Where attendance at the FHSC required representatives who were not working on site at the relevant time to be present, they were paid overtime to attend the committee.

In case study 4, the other relatively large establishment, there was one trade union recognised for collective bargaining. It had appointed eight health and safety representatives. Six of them represented workers in manufacturing, engineering, and the stores and two represented supervisors. Two more safety representatives were thought to be needed to complete the coverage. Safety representatives were also shop stewards and could meet in that capacity when they had a problem to resolve and before meetings of the establishment's Joint Consultative Committee (JCC), if they needed to. They did not meet together regularly before the safety committee meeting, but sometimes met afterwards. There was a factory health and safety committee, which met every six weeks. The eight trade union safety representatives were members, along with a senior first-aider, and a representative from Human Resources (who took minutes). The group health and safety manager also attended and the works director was chair. There were no representatives for the office staff, but an understanding with the trade unions that they would take up issues on behalf of non-members.

In case study 5, a medium to large sized establishment, ten trade union representatives served both as health safety representatives and shop stewards. There

was a system of joint health and safety committees. The Factory Health and Safety Committee met quarterly and comprised all ten trade union safety representatives and eight management representatives. Because arrangements were not made for safety representatives from all five shifts to attend the factory safety committee meetings, in practice only the representatives for the shift actually working at the time attended. There was an operations consultative safety group. Three process safety representatives and one engineering safety representative were members, together with senior managers. There were also three or four area groups, which met eight times a year. Each group consisted of the area manager, plant manager, plant engineer and safety representatives or workers from that line. Other safety committees also existed for research and development and the quality control sections.

## Health and safety outcomes

### *Reported injuries*

Data received from the management of the five establishments is summarised in Table V. For four of the case studies, data were available covering a number of years. In case study 1, however, data were available for only one year (itself testimony to a lack of organisation before 2001). Annual injury rates have been calculated and compared with those for the sector as a whole as calculated by the HSE in its annual reports. The small size of some of the establishments, the limited number of case studies and the low number of incidents reported mean that, though, that few inferences can be reliably drawn from the data. This is particularly so given that in some establishments there had been years in which quite major departures from annual averages took place, such as, for example, in 1999/2000 in case study 3 and in 2002/2003 in case study 4, and that, although the official record in case study 2 reported five years of nil injuries requiring three or more days off work, several people interviewed expressed doubts about the reliability of the establishment's reporting systems.

Nevertheless, comparisons with the rates for the industry as a whole suggest:

- case studies 2, 3, and 5 currently performed better than the sector as a whole in terms of injury rates;
- case study 5 had demonstrated continued relative improvement; and
- case studies 1 and case study 4 currently performed worse than the average for the sector.

These findings are consistent with the measures of workers' experience of the work environment that follow.

It is also worth noting that, as far as it was possible to determine from the information available, the types of injury reported and the nature of the accidents that had caused them seemed broadly comparable with that for the sector as a whole. That is, sprains and strains were amongst the most common injuries, a fractured arm was the only reported major injury for which information was available. Records suggested that these types of injury had been mainly caused by handling accidents and slips, trips and falls. Injuries resulting from exposure to harmful chemicals were also common.

| Plant | Size (no. workers) | No of accidents (> 3 days) | Annual injury rate per 100,000 (> 3 days) | Year | HSE Sector injury rate per 100,000 (> 3 days) | Comparison with sector: + higher than sector: − lower than sector |
|---|---|---|---|---|---|---|
| 1 | 116 | 3 | 2,586 | 2001/2002 | 740.3 | + |
| 2 | 47 | | | 1997/1998 | 822.0 | − |
| | | | | 1998/1999 | 695.1 | − |
| | | | | 1999/2000 | 780.4 | − |
| | | | | 2000/2001 | 777.3 | − |
| | | | | 2001/2002 | 740.3 | − |
| 3 | 723 | 4 | 553 | 1997/1998 | 822.0 | − |
| | 812 | 3 | 370 | 1998/1999 | 695.1 | − |
| | 906 | 9 | 993 | 1999/2000 | 780.4 | + |
| | 885 | 0 | 0 | 2000/2001 | 777.3 | − |
| | 784 | 1 | 128 | 2001/2002 | 740.3 | − |
| 4 | 344 | 3 | 344 | 1999/2000 | 780.4 | − |
| | 387 | 2 | 517 | 2000/2001 | 777.3 | − |
| | 398 | 3 | 754 | 2001/2002 | 740.3 | + |
| | 451 | 10 | 2,217 | 2002/2003 | 656.4 | + |
| 5 | | 7 | 2,500.0 | 1996/1997 | 895.2 | + |
| | | 6 | 2142.9 | 1997/1998 | 822.0 | + |
| | | 7 | 2,500.0 | 1998/1999 | 695.1 | + |
| | | 5[a] | 1,785.7 | 1999/2000 | 780.4 | + |
| | | 4[a] | 1,428.6 | 2000/2001 | 777.3 | + |
| | | 3 | 1,071.4 | 2001/2002 | 740.3 | + |
| | 268 | 1 | 357.1 | 2002/2003 | 656.4 | − |

**Note:** [a]Major injury

**Table V.**
Reported injuries in the five case studies

*Self-reported injuries*

Respondents were asked if they had experienced injury or ill health during the previous 12 months. In the case of both reported and unreported injuries, the pattern was similar to that recorded by management. That is, there was a higher percentage of such events in the two poorly performing establishments represented by case studies 1 and 4, with respondents in case study 5 also experiencing quite a lot of injuries and ill-health. (Table VI).

*Workers' views on their health and safety*

A substantial proportion of workers in all the case studies believed their work to be bad for their health (Table VII).

Looking at these three sources of data it is notable that the analysis of the respondents' views about the health effects of their work and the risks posed by their work organisation and environment demonstrated a similar pattern to that shown by the data on reported injuries. Thus, while the small number of events represented by the injury data does not by itself allow inferences to be made about the state of health and safety in the establishments, if all the information obtained from our various approaches to examining health and safety outcomes is combined it shows a range of hazards that are fairly similar across the establishments and also fairly typical for the sector generally and indicates that the risks they represent for workers varied from case study to case study, with the establishments represented by case studies 2, 3 and 5 being able to manage these risks better than cases 1 and 4.

Against this background, it is to the issue of the management of health and safety that we now turn. There is widespread agreement that effective health and safety practice requires the participation of workers and their representatives. Bearing this in mind, we examine the systematicity of arrangements for health and safety in the five case studies and the role played in these by worker representation and consultation.

**Table VI.**
Injuries and ill-health experienced by respondents in the previous 12 months

| Case study | 1 ($n = 55$) | 2 ($n = 23$) | 3 ($n = 396$) | 4 ($n = 358$) | 5 ($n = 101$) |
|---|---|---|---|---|---|
| Work-related injury/ill health in last 12 months and reported it | 23 | 0 | 6 | 17 | 10 |
| Work-related injury/ill health in last 12 months, not reported | 8 | 0 | 2 | 8 | 5 |

**Note:** Figures are percentages

**Table VII.**
Do you think work is bad for your health?

| Case study | 1 ($n = 55$) | 2 ($n = 23$) | 3 ($n = 396$) | 4 ($n = 358$) | 5 ($n = 101$) |
|---|---|---|---|---|---|
| Do you think work is bad for your health? Percentage who say Yes | 58 | 44 | 38 | 60 | 67 |

## Management, consultation and health and safety outcomes in the case studies

An extremely varied picture was found. Case studies 3 and 5 evidenced senior management commitment to health and safety, as shown by a number of indicators, including the identification of the senior-most person with overall responsibility for health and safety; its regular appearance on the agendas of board level meetings; the presence of safety policies, in which responsibilities of named senior managers were identified; and the appointment of competent persons to provide OHS advice. Additionally, procedural indicators included those for risk assessment and control; accident and incident reporting; and the inspection and auditing of health and safety arrangements.

Case studies 1 and 4 evidenced much less adequate arrangements and practices on these matters. Case study 2 was somewhat anomalous, with relatively poor arrangements for managing health and safety systematically that were the consequence of a major reduction in the parent company's presence on the site (now only partly occupied by the establishment) and of changes in the ownership of the remainder of the site which had resulted in several OHS functions, such as specialist occupational health and safety services, now being organised by the new occupants of the main site.

Workers were asked how effective they thought that managers were at managing health and safety conditions (Table VIII). Responses to this question leave little doubt that workers rated case study 3 the most effective and case studies 1 and 4 the least so. The findings here, therefore, paralleled the health and safety performance of the case studies. Case study 1 also consistently scored poorly and case study 3 consistently scored best on a range of similar measures (a full account is provided in Walters *et al.* 2005).

Respondents were asked a series of further questions about specific management arrangements on health and safety, including whether management:

- produced a written health and safety policy;
- conducted risk assessments;
- kept written records of risk assessments; and
- had procedures for monitoring workers' health.

Management in all the establishments claimed to do all four of these things**.** But when workers were asked about them there was a broadly similar pattern of response to these questions to that reported above. That is, the large majority of respondents from

| Case study | 1 ($n = 55$) | 2 ($n = 23$) | 3 ($n = 396$) | 4 ($n = 358$) | 5 ($n = 101$) |
|---|---|---|---|---|---|
| Very effective | 4 | 13 | 26 | 8 | 20 |
| Reasonably effective | 58 | 78 | 66 | 72 | 70 |
| Not effective | 31 | 9 | 5 | 16 | 9 |
| Don't know | 6 | 0 | 3 | 5 | 1 |

**Note:** Figures are percentages

**Table VIII.**
Workers' assessment of how effective the employer is at managing health and safety conditions

case studies 2, 3 and 5 consistently indicated knowledge of the existence of such management arrangements, with the highest proportion of workers demonstrating such awareness being found in case study 3. This contrasted with sometimes substantial levels of ignorance about the existence of such arrangements in case studies 1 and 4 (Table IX).

Similarly, when asked how frequently managers asked them for their views on health and safety at work, three-quarters or more of respondents in case studies 2, 3 and 5 felt they were at least sometimes asked for their views, whereas over half the respondents in case study 1 claimed that they were hardly ever or never asked for their views and so did a third of those in case study 4 (Table X).

Moreover, there was a correlation between employees' perceptions of *general* arrangements for management and those for health and safety management as can be seen from Figure 1 (the "out of line" position is occupied by case study 2 and is a function of the views of the highly autonomous specialist technical staff that constituted the majority its respondents).

The combining together of the quantitative results from the analysis of the questionnaire with information obtained from interviews with managers, representatives and workers further confirmed a broadly consistent pattern across the five case studies in relation to arrangements for direct and representative consultation on health and safety. In what follows we draw out some features of the cases, beginning with the best (case study 3) and worst (case study 1) and then those in between.

Case study 3, in parallel with its generally well-developed health and safety management arrangements, had quite comprehensive structures for worker representation and joint consultation. Health and safety representatives covered virtually all of the permanent workers within the establishment. They were well trained, generally able to obtain the time and facilities they required to function and

**Table IX.**
Workers' knowledge of specific employer provision

| | Percentage claiming to know such provision exists in each case study | | | | |
|---|---|---|---|---|---|
| Case study | 1 | 2 | 3 | 4 | 5 |
| Written health and safety policy | 73 | 91 | 92 | 83 | 95 |
| Risk assessment | 63 | 96 | 97 | 69 | 98 |
| Written record of risk assessments | 59 | 91 | 90 | 69 | 96 |
| Procedures for reporting work-related accidents and ill health | 71 | 96 | 97 | 89 | 98 |
| Procedures for monitoring workers' health | 26 | 91 | 83 | 42 | 99 |

**Table X.**
Frequency with which workers report that they or others were consulted by managers for their views on health and safety

| Case study | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| Frequently | 11 | 22 | 26 | 24 | 34 |
| Sometimes | 39 | 70 | 51 | 42 | 40 |
| Hardly ever | 24 | 9 | 15 | 17 | 9 |
| Never | 26 | 0 | 8 | 17 | 18 |

**Note:** Figures are percentages

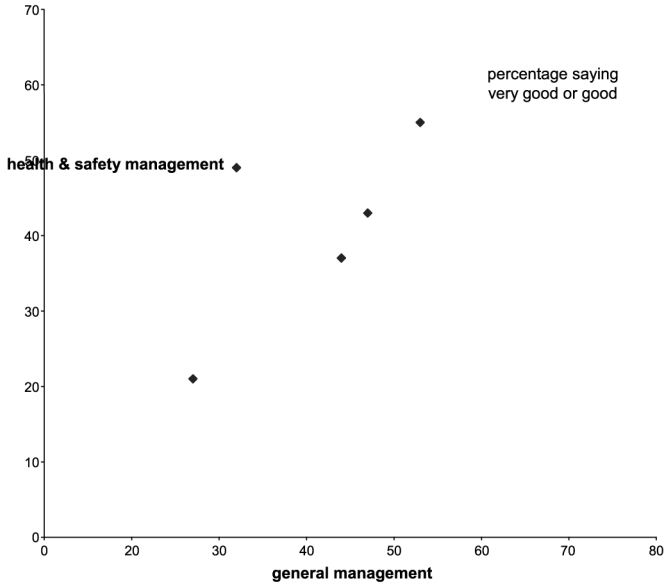


**Figure 1.**
Employee evaluation of health and safety management and general management

were broadly satisfied with their situation. The workers they represented also seemed satisfied with the representation they received as was also evident from the results of the questionnaire (Table XI).

Case study 1, by contrast, although it had a requirement that health and safety should feature regularly at board level within the organisation, had a poorly developed health and safety management system. Senior managers at the establishment regarded health and safety management as being about "following procedures". They had little understanding of the issues involved, having received little in the way of training on health and safety and relied almost entirely on the health and safety manager – who had been appointed following an HSE enforcement action – to take responsibility for organising health and safety at the establishment. The fact that the health and safety manager was based at a different site some distance away and made only fortnightly visits to the establishment did not help. Although there was trade union representation at the company and a health and safety representative had been appointed, the management culture at the establishment did nothing to encourage or support worker representation or consultation on health and safety matters. The safety committee for the establishment was not constituted or operated according to the guidance that

| Case study | Percentage rating "effective" or "reasonably effective" 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| Effectiveness of your health and safety representative at representing your interests | 50 | 85 | 86 | 62 | 85 |
| Effectiveness of your health and safety committee at representing your interests | 48 | 87 | 85 | 65 | 85 |

**Table XI.**
Workers' assessment of effectiveness of health and safety representatives and committees

accompanies the SRSC Regulations and its very existence appeared to be unknown to a substantial proportion of the workers who responded to the questionnaire. Trade union representatives reported:

> Our views are ignored by the health and safety manager and by management generally.
>
> There is little communication or involvement with management.
>
> There is no consultation.
>
> Management don't consult over health and safety issues.

There was also little in the way of training on health and safety for workers and little evidence of meaningful direct consultation at the establishment, or even of the provision of information on health and safety matters. One worker commented:

> I think the company health and safety manager could spend a bit more time at this site, and speak to the workers on a one-to-one basis. After all, they are the people in the know!

Interviewees and respondents frequently identified a simplistic and behaviourist approach on the part of the management to dealing with health and safety.

As seen previously, this establishment had the greatest proportion of workers who were dissatisfied with their working conditions and who found work to be bad for their health, both generally and in several specific ways. A greater proportion also identified hazards to which they were exposed in the physical and organisational environment at their workplace. It also performed least well in terms of reported injuries with a level considerably in excess of what might be expected from the sector average. All of this suggests an association between poor management arrangements for health and safety, including in respect of the poor provision made for representation and consultation, and the poor health and safety outcomes.

The remaining three case studies (2, 4 and 5) occupied somewhat less extreme positions in the spectrum of health and safety arrangements and health and safety conditions/performance between 1 and 3.

Case study 4 performed less well than average in terms of health and safety outcomes and although on most indicators of management arrangements and perceptions of work and health it did not fare as badly as case study 1, respondents consistently rated it poorly. From the interviews with representatives, workers and managers it was clear that while health and safety appeared to feature at board level and arrangements for health and safety management were in place, they relied heavily on the role of the health and safety manager. They were, as a consequence, said to be somewhat "patchy" in their application and not entirely integrated into the general systems for managing work at the establishment. One respondent commented:

> Health and safety issues have arisen without any positive action being taken. The culture has altered to become one of blame rather than addressing the problems that we encounter … Health and safety could be greatly improved by a little more explanation and a little more action on the part of the management.

Formal arrangements for representation and consultation were in place although insufficient health and safety representatives were appointed to provide complete coverage for all workers. Consultation between managers and health and safety representatives took place but was limited. Respondents made it clear that there was

also limited communication on health and safety between management and workers more generally. There was a joint health and safety committee at the establishment and it appeared to be constituted in accordance with the guidance accompanying the SRSC Regulations. However, it functioned as a forum for a discussion of a wide range of issues including many every day ones. Many of these were the sort of issues that – according to the guidance on the role of joint health and safety committees, as well as research on determinants of their effectiveness – would have been better dealt with through other procedures, leaving the committee to play a more strategic role.

Case studies 2 and 5 were better than average current performers as measured by our indicators

Case study 5 had clearly defined senior management responsibilities for health and safety and reasonably well developed arrangements in place for undertaking them. The incidence of reported injuries had improved in recent years. Interviewees were aware of this improvement and attributed it at least in part to a new management culture instigated by a new managing director and the safety, health and environment manager he had appointed. Its present health and safety management arrangements were largely a result of these changes. It also had quite well developed structures for representation and consultation including quite good coverage by health and safety representatives and a structure of joint health and safety committees in place. The overall impression from the interviews and responses to the questionnaires was that case study 5 was in the process of improving its health and safety arrangements. However, in this process the legacy of the older experience was still in evidence. For example, health and safety representatives complained that they did not receive sufficient facility time to be able to consult adequately with workers or amongst themselves:

> Trade union health and safety reps are not given time to do the health and safety duties that they should be doing, as they are working on plants due to workload. The company has come a long way with their health and safety policies and it would be a shame if they slipped back because of this.

This was something that was attributed to the layout and complexity of the site and systems of work as well as to recent staffing reductions, making it difficult for the representatives to leave their place of work, rather than their managers deliberately denying them the opportunity to do so. They also (and perhaps for the same reasons) did not participate in either risk assessment or formal health and safety inspections. Responses to the questionnaire on working conditions and health were also indicative of a workforce in which there were still serious concerns about the effects of work on health. They suggested a prevalence of health conditions perceived to be associated with work as well as significant concerns about hazards of the physical and organisational work environment.

Case study 2 had, as already noted, a better than average health and safety performance, with commitment to OHS stated at board level. In other respects, however, this small establishment was somewhat anomalous in that experiences here were less supportive of the existence of the relationships between formal health and safety arrangements, representation and consultation, and perceptions of work, health, hazards and performance demonstrated in all the other case studies. Generally, arrangements for representation and consultation were poorly developed and not consistent with the requirements of the SRSC Regulations. This had been exacerbated

by the long-term absence of the person appointed as a safety representative and had resulted in a major limitation on consultation with the minority of process workers at the establishment. One trade union representative commented:

> It's not working without a named safety rep.

Training on health and safety was also limited, as was competent advice for management on health and safety. But respondents' satisfaction with their working conditions, and the relationship between their work and their health generally were quite high, as was satisfaction with provision of information and consultation between management and workers on health and safety matters. Assessment of management arrangements for health and safety more generally was complicated by recent changes that had taken place in the ownership of the site. The establishment had previously occupied the entire site but now shared it with a larger organisation. One consequence of this was uncertainty on the part of many interviewees about who was responsible for a number of health and safety matters relating to the site as a whole and the extent to which the remit of structures such as the health and safety committee remained site-wide or were restricted to the establishment. Nevertheless, there had been no reportable injuries recorded at the establishment for the past several years and respondents were relatively content with local arrangements for both health and safety management and consultation.

In many ways, however, the good performance and comparative satisfaction with the arrangements for information and consultation was not surprising, given this establishment's size, and its particular workforce composition in which there was a high representation of technical, administrative and managerial staff. The education and skills as well as labour market position of this majority may have facilitated their ability to engage informally in direct participation in health and safety more meaningfully than would have been possible in a larger establishment or amongst less qualified staff, as has been shown to be the case in previous studies of direct participation (Gustavsen and Hunnius, 1981).

## Discussion: the limits to the "preferred" model

### *The meaning of consultation and representation*

Before considering the implications of our findings for the regulation of representation and consultation it is important to be clear about what is meant by these terms. Starting with their legal interpretation, it is apparent that there are several different models of worker representation as well as direct consultation that are possible under present UK legislative provisions. Where there are recognised trade unions, the "preferred model" in an employment law context is that framed by the SRSC Regulations 1977 in which consultation is with the representatives that these unions have appointed. Where there are no such unions recognised, employers are required to make arrangements to consult, either directly with workers or through representatives that the workers have elected.

The general principle in current British law, then, is that in most cases there is a preference for consultation with representatives of a recognised trade union, appointed in accordance with its own procedures. Where there is no recognised trade union the procedures for worker consultation are those laid down under the provisions of the Health and Safety (Consultation with Employees) Regulations 1996; provisions which

provide for consultation to be carried out either via representatives of employee safety or with employees directly.

Trades unions were recognised in all of the case studies in our analysis and therefore the "preferred model" of representation and consultation under the SRSC regulations should have applied in each of them. So what quality of consultation on health and safety might be anticipated in these case studies? The legal position is a helpful starting point. In addition to the provisions of the HSW Act, the SRSC Regulations indicate that every employer should consult safety representatives in good time with regard to:

- the introduction of any measure at the workplace which may substantially affect the health and safety of the employees represented by the safety representative concerned;
- arrangements for appointing or, as the case may be, nominating competent persons to advise on health and safety matters;
- any health and safety information required to be provided to employees;
- planning and organising health and safety training required for employees; and
- the health and safety consequences of the planning and introduction of new technologies into the workplace.

Consultation in good time therefore refers to situations in which workers and or their representatives are:

(1) informed by their employers/managers about health and safety matters in sufficient time;

(2) the information provided is adequate; and

(3) this process allows workers and or their representatives an opportunity to digest understand and respond to information.

There is a further implication that employers should listen to what workers and their representatives themselves have to say on health and safety issues and to respond (even though health and safety representatives do not have the power to insist on this in practice).

Given the above, in each of the case studies we should have found representation and consultation on the implementation and operation of a range of health and safety management arrangements that took the form of two-way communication, conducted in good time and which was associated with an implication of consequential action. This was not the case in the majority of situations we found in our case studies.

*Preconditions for effectiveness*

In the years since the HSW Act 1974 and more especially since the adoption of the EU Framework Directive 89/391, there has emerged a fairly consistent theoretical approach to how the systematic management of health and safety should operate. The participation of workers and their representatives in the process is widely regarded as a necessary element in achieving successful outcomes. This is the case not only in regulatory policy, but also in its policy underpinnings and is further evident in a range of health and safety management standards both in the UK and internationally. Where such an approach is

operational, improvements in health and safety performance are anticipated. Our findings lend some support to this thinking in as much as the case study in which the requirements of the regulations had been most completely implemented, (case study 3), had above average health and safety performance, better health and safety awareness and greater employee satisfaction with organisational management generally and with the management of, and consultation on, health and safety specifically.

However our findings also show that arrangements allowing consultation and representation to occur meaningfully were not present across all the case studies and worker representation and consultation were quite severely constrained in delivering their potential beneficial effects in some of them. Whereas union recognition meant that the SRSC Regulations applied in all five case studies, we found that in most of them worker representation operated at a level some way below that which might be anticipated from the provisions contained in the regulations.

It is important to understand the reasons why this is so and to ask whether it is possible that change in the nature, application or enforcement of regulation might alter this situation. Previous research, notably that of Walters (1987), Walters and Gourlay, 1990 and Walters, 1996, in Britain, Biggins *et al.*, 1991, Biggins and Phillips, 1991a, 1991b and Biggins and Holland, 1995, in Australia, (Shannon *et al.*, 1996 and 1997), Havlovic (1991) and Eaton and Nocerino (2000) in Canada, Frick and Walters (1998) in small enterprises in Weil (1991, 1992) in the USA, has elaborated various elements of support for the effectiveness of worker representation and consultation. These include:

- a strong legislative steer;
- effective external inspection and control;
- demonstrated senior management commitment to both OHS and a participative approach and sufficient capacity to adopt and support this type of management;
- competent hazard/risk evaluation and control;
- effective autonomous worker representation at the workplace and external trade union support; and
- consultation and communication between worker representatives and their constituencies.

These supports are likely to occur together and are interdependent. In fact, sections 2.4-2.7 of the HSW Act, under which the SRSC Regulations were made, rested on assumptions about the commitment and capacity of management to undertake self-regulation in a participative way as well as the collective bargaining strength of trade unions to influence them to do so, as was in keeping with thinking on labour law at that time (Wedderburn, 1980). Similarly, Dawson *et al.* (1988) in their study of self-regulation pointed to the importance of management will and capacity in making for the success of self-regulatory strategies. These preconditions and their interrelationship cannot be ignored if we are to appreciate the role of regulation and its influences. Our case studies bear this out.

In some cases, such as 3 and 5, there were clearly representational and consultative practices taking place on health and safety issues that were working to the satisfaction of the health and safety representatives, and the workers they represented. These were the same case studies where there was also strong evidence of a conspicuous commitment to such approaches on the part of senior management. Although trade

union health and safety representatives had been appointed in these workplaces, they would have been unable to function effectively in the absence of management commitment to participation. Without such commitment, factors that promoted the operation of representative participation either did not exist or had a limited operational capacity. Such factors included, for example:

- properly constituted joint health and safety committees at site and departmental level;
- accountability of managers to the joint health and safety committee;
- engagement of health and safety representatives with the health and safety practitioners from the safety health and environment departments;
- dialogue between local area and line managers within the establishment and health and safety representatives;
- the provision of facility time to undertake health and safety representative functions such as joint health and safety inspections, investigations of workers complaints, making representations to managers and so on;
- involvement of health and safety representatives in risk assessment;
- involvement of health and safety representatives in reporting and monitoring on OHS;
- access of health and safety representatives to workers; and
- access to training for health and safety representatives.

In the case studies where management commitment to participatory approaches was poorly developed such as in case study 1 and to some extent in case studies 2 and 4, these kinds of arrangements were either absent or set up in very limited ways. There were two main aspects of such limitations. One concerned the limited development of the consultative structures and processes themselves; the other concerned the inability of health and safety representatives to find time to engage fully with these structures and processes, or to receive training to do so. Both aspects were under the control of management and dependent on its will and capacity to facilitate such participation.

It was a problem for many of the health and safety representatives to leave their workstations to attend to health and safety functions, even where good arrangements to do so existed in theory. Examples of best practice to enable such activity were found occasionally. For example, arrangements to facilitate attendance of health and safety representatives at safety committee meetings by paying them overtime if such attendance was not part of their normal shift pattern, were described in case study 3. However, this was somewhat exceptional and generally, while rights of consultation may have existed in theory, and managers did not normally resist granting time off from normal activities to be involved in it, in practice the organisation of work tended to limit the engagement of representatives. In such cases there were few examples of managers proactively seeking to facilitate the engagement of safety representatives in ways similar to that seen in case study 3.

While there was considerable evidence of the influence of management commitment and capacity in the implementation and operation of the SRSC Regulations in the case studies there was nothing to indicate the influence of intervention by the regulatory agency in such matters. This was despite the fact that most establishments were

covered by the COMAH regulations and subject to greater than average scrutiny by the HSE. It seemed that in all of the establishments inspectors had followed the traditional approach of the HSE towards the implementation and operation of these Regulations. Paragraph 3 of the Approved Code of Practice accompanying the 1977 Regulations states:

> The employer, the recognised trade unions concerned and safety representatives should make full and proper use of the existing agreed industrial relations machinery to reach the degree of agreement necessary to achieve the purpose of the Regulations and to resolve any differences.

Guidance from the HSE to its inspectors issued in 1978 with regard to the application of the Regulations stated that inspectors should not consider enforcement action until they are satisfied that all voluntary means of resolving disagreement have been resolved (Walters and Gourlay, 1990, pp. 124-28). It encouraged them not to become involved in disputes over the application of the Regulations but rather to leave their resolution to industrial relations processes at the workplace. Although currently HSE policy encourages a more pro-active role for its inspectors in their dealings with health and safety representatives, in practice this rarely appears to extend to formal interventions on the application of the Regulations. There was certainly no sign of this in any of the case studies.

Implementation and operation of the regulations were therefore more dependent on the wider relationship between the trade unions and the management within each establishment than any external enforcement pressure. This, coupled with the dependency of arrangements for worker representation and consultation on the systematicity of management arrangements for health and safety and for managing the activities of organisations more generally, suggests that in practice management commitment and capacity is likely to pose considerable constraints. Despite the applicability of the SRSC regulations to the workplaces represented by our case studies, certain requirements were repeatedly under implemented. Even in case study 3, where arrangements were certainly the best developed, they fell short of what is provided for in the regulations in a number of important respects. These included for example, consultation over the appointment of competent persons, training and the introduction of new technologies. In the other case studies, health and safety representatives' experiences of the operation of the legislative requirements were even more limited. They ranged from experiencing difficulties in obtaining information, time and facilities to undertake practically all aspects of their functions as in case study 1, to not taking part in more specific activities such as risk assessment or joint inspections as in other case studies. There were also substantial concerns expressed over the extent to which the views of representatives were acted upon by managers in these case studies.

Therefore, in nearly all the case studies where the SRSC Regulations applied, the activities of health and safety representatives fell short of their potential in many of the areas defined in the legislation. This is an important observation for three reasons. First, because as we have already made clear, the model provided for by these regulations is widely regarded as "the preferred approach" to representative participation, other provisions being acknowledged to provide somewhat lesser rights to representatives of employee safety. Second, the legal model on which the development of these regulations was based adopted a set of assumptions about the capacity of their beneficiaries to ensure their application without the further

intervention of either the law or the regulatory agencies. Third, under the present legal framework, as already pointed out, these regulations only apply in the limited proportion of establishments in which trade unions are recognised. It is assumed that it is in such workplaces that the pre-conditions for their effective operation are most likely to exist. If, as our case studies suggest, even in these workplaces representation operates in practice at some way below the requirements the Regulations lay down, it seems there are important questions to be answered concerning the role of the legislative steer. It is important to know why the Regulations are apparently not fully operational, how widespread this situation is and what, if anything, can, or should, be done to improve their implementation.

A final point that needs to be emphasised is that although the chemicals industry represents relative stability on various measures of production and the employment relationship, it has not been immune to the changes that have occurred in employment and production since the SRSC regulations were introduced. Dealing with the obvious structural changes in the organisation of employment and labour relations may present a challenge for strategies on worker representation and consultation in many sectors. But as we have also seen, it does not automatically follow that in situations in which the structure and organisation of employment has apparently remained relatively stable there will be effective arrangements for representation and consultation in place. Indeed as we have shown, the different circumstances of the establishments represented in our five case studies in the sector produced very different arrangements. Some of these differences had to do with the willingness and capacity of managers to countenance them, but others were related to less obvious aspects of change in the organisation of work. For example it seems likely that reduction in the number of workers employed in the industry since the 1980s has been paralleled by an intensification of the work of the surviving workforce. Health and safety representatives and workers in our case studies that performed less well than average in chemicals frequently complained of a lack of time to undertake the sort of activities such as attending meetings, briefings, training or being able to talk to constituents that are essential for effective consultation. The primary reasons for such complaints were the staffing levels experienced, shift patterns worked, and the location of jobs, all of which contributed to workers and their representatives feeling they were unable to leave their work-stations. It is significant in this respect that in case study 3, which performed best, there were a variety of arrangements in place to overcome these problems. They included greater flexibility in staffing to enable safety representatives to leave their work-stations when necessary and compensation for safety representatives attending health and safety meetings held outside their shift patterns. Overall, these kinds of arrangements helped to raise the profile of health and safety and there is little doubt that they contributed to the perception held by the majority of respondents at the establishment that health and safety was being managed effectively.

Interestingly, despite the rise of economistic thinking in relation to OHS management, there was little evidence of its influence on OHS management practices in terms of any attempts by managers to consider preventive approaches from the perspective of their economic effectiveness. Considerable attention has been paid to the "business case" for health and safety in national pronouncements on the subject in recent years. For example, there has been much publicity associated with the

development of a "ready reckoner" to assist employers calculate the cost of health and safety (Marsden *et al.*, 2003).

However, in none of the case studies did there appear to be any systematic arrangements in place to include the costing of injuries or ill-health, or their prevention, in the observed approaches to health and safety management. Managers were asked about this and whether the costs of injuries were taken into account in their strategies on health and safety. In no case did they do this.

## Conclusions – the way ahead?

Our findings lend some support to the conclusion, widely expressed in previous research in the UK and elsewhere, that joint arrangements involving representation and consultation with employees on health and safety matters lead to better outcomes in terms of health and safety awareness and performance than when health and safety management is left to employers to manage unilaterally (Nichols, 1996; Walters *et al.*, 2005). They also support the idea that there are a number of preconditions that need to be in place if representation and consultation on health and safety is to occur in a meaningful way. Again, this is a conclusion that has been reached in previous research. More significantly for current policy development in this field, however, is the finding that such preconditions were seldom present in anything like their entirety in the case studies we examined. As a result, the relevant legal requirements had not been implemented. Given that our choice of workplaces probably represented the better end of the industry we chose to study, we can assume that the preconditions we have identified will be even less frequently found elsewhere.

Since the election of a Labour Government in 1997 there have been frequent calls for a new, consolidated and improved regulatory basis for worker representation and consultation on health and safety. These demands have concerned *inter alia*:

- rationalising the existing multiple sets of regulations into one comprehensive set of regulations, and ensuring that all workers have access to representation;
- increasing the specific rights of trade union health and safety representatives, including giving them rights to issue quasi-legal notices and for their trade unions to initiate private prosecutions[1];
- making employers' duties to respond to representations more explicit and onerous;
- giving representatives greater capacity to represent employees who are not employed by the same employer as they are, (including employees in small firms); and
- increasing the role of regulatory agencies in seeking compliance with the legal requirements for representation and consultation.

To date no consolidation or strengthening has taken place. Instead the HSC has published a voluntary statement of principle on representation and consultation on health and safety. The chairman of the HSC has also publicly set his face against such legislative action, confirming that the direction preferred by current policy makers on health and safety is away from further regulation and towards emphasising voluntary effort and arguing that health and safety representatives:

> . . . do a good job precisely because they are not inspectors and can improve health and safety informally. Increasing their powers would dramatically change their job[2].

The evidence of our study, combined with that of previous work, suggests that existing legal requirements – on such matters as the provision of training, the making of representations to employers, the receipt of information, engagement in risk assessment, prior consultation over workplace changes that might affect OHS and liaison with inspectors — are all rarely acted upon in practice. In addition these and other requirements are rarely, if ever, the subject of enforcement by the regulatory agencies. If the wider legal basis were to be properly implemented it would considerably improve the present situation. Action to secure such implementation is therefore required.

## Notes

1. See for example, the Report of the Parliamentary Select Committee of Inquiry into the Work of the HSC/HSE, which recommended in July 2004 that health and safety representatives be given powers to initiate private prosecutions and issue enforcement notices.
2. Remarks attributed to Bill Callaghan, the Chairman of the HSC in the Health and Safety Practitioner, September 2004, page 2.

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