

Health and Safety Executive Board		HSE/12/50	
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The GB mining industry: Revision of health and safety legislation.

Purpose

1 To update the Board on proposals for consolidating mining-specific safety legislation and seek views on the options for doing this.

Background

2 The underground mining sector has contracted dramatically since the 1950s. In the last 30 years coal-mining has gone from around 200 major deep coal mines to around seven. The major hazards in underground mining, however, are largely the same as they ever were, although the technologies involved have changed. A separate paper provides more detailed information on the current industry and HSE's regulatory approach.

3 Arising from the unique nature of the underground mining environment and the related hazards, there is a long history of specific mining H&S legislation which has grown over time mainly in response to incidents and other concerns. The earliest extant law dates from the 1950s, the latest 2007. There are 49 specific legal instruments supported by ten ACoPs and a range of industry/HSE guidance. The Extractive Industries Directive 92/104/EEC (EID) came into force in 1992 and lays down minimum standards for underground and surface extractive industries. Most of the Directive's provisions for underground mining were already covered by pre-existing law, with a new set of miscellaneous mining regulations introduced to fill the gaps. The attached annex provides a full list of mining law.

4 The Lofstedt report recommended that this suite of legislation should be consolidated, taking into account findings from ongoing investigations into fatal accidents in 2011 in South Wales and Yorkshire. Lofstedt looked at the current legislation as it applied to the present day mining industry. In deciding the scope of our response, we were mindful that novel ways of exploiting coal resources such as underground coal gasification are emerging. However, our analysis suggests that the risks from these activities, though significant, are very different in nature from traditional mining. We have therefore confined this legislative review to regulating traditional underground mining activities.

Argument

5 The existing legislation applies variously in scope and detail to different types of mines and comprises two Acts and 47 SIs. Reviews from the late 1980s to mid-1990s were driven partly by the general entreaty under the HSW Act to update and modernise the pre-Act legislation but also by the need to prepare for privatisation and to implement Directive 92/104/EEC. The HSC curtailed proposals for further comprehensive review, considering that size of the sector (then around 15,000 employees and reducing) and the coverage afforded by existing law did not warrant further HSE resource. However, new regulations to improve control of inhalable coal and crystalline silica dusts were introduced in 2007.

6 Whilst the current regulations are familiar and well understood by industry and HSE, some can be an obstacle to industry operating more flexibly using modern technology. For example, HSE has to issue exemptions to allow the use of certain types of explosives in some mines with potentially flammable atmospheres. This example also illustrates that, in practice, much of the industry operates in effect on a type of permissioning basis – either by following very tightly prescribed legal requirements or by seeking the approval, consent or direction of the regulator where variations to it are needed. This has tended to engender a culture - certainly in some quarters - where competence in assessment and management of risks is insufficiently developed.

7 Lofstedt provides renewed impetus to critically review the legislation. Our detailed initial analysis suggests that we should adopt a mixed approach; scrap that which is clearly redundant because technology and working practices have moved on; retain that which is still valuable in a much reduced and simpler package; and improve in some areas to help address the dependency culture mentioned earlier. Examples of the latter include giving more emphasis to the existing requirement for operators to assess and control major risks - and demonstrate that they are continuing to do so. This should, in our view, steer operators to focus on major hazards and contribute to better risk control. Furthermore, we can recast many of the legal duties so that they reinforce corporate responsibility and foster the right safety culture. Currently, many duties are placed on individuals such as mine managers. However this can create a culture where individual dutyholders have responsibility without power – which rests with the mine owners/employers/operators.

8 HSE will engage with the sector to develop a fit-for-purpose legal framework modelled on the above with supporting codes/guidance where needed. A challenge is to develop a regulatory framework that achieves these changes and provides a regime that is effective for the range of sizes of businesses that the underground mining sector now encompasses ie from larger companies employing over 2,000 in total, to micro-businesses employing single figures. In developing a new regime, we aim to identify and utilise experience of similar initiatives that may be in train elsewhere in the worldwide mining community. For example, we understand that Australia is to consult over the summer months on a new national regulatory framework for underground mines in the larger mining states.

9 This work requires considerable policy, technical, legal and economist resource - already significant Mines Inspectorate resource has been provided for assessing which of the existing provisions are likely to be redundant and which likely to justify retention in some form. Next stages involve distilling this into modern

principles and provision that will be carried forward, and action is in hand to ensure ongoing technical capacity without detracting from priority frontline work.

Options for change

10 Given the need to consolidate, alongside the aim of introducing a modernised regime commensurate with the present-day industry, we believe there are two broad realistic options to consider at this stage:

a) Consolidate into a single set of regulations only those current provisions that stakeholders (and HSE) believe are essential and well-established safety controls, whilst ensuring continuing implementation of the Extractive Industries Directive. This could have as its starting point either the existing stock of legislation or the provisions of the EID (the choice of which would affect to some extent the shape of the regulations but not the substantive content).

Pros:

- Regulations would be similar in style and content to existing law, but conflated.
- Retains some existing and familiar duties while also presenting the opportunity to modernise by, for example, placing duties on the owners/operators rather than managers and placing risk assessment at the heart of the law.
- It is likely to be an amenable option to stakeholders.

Cons:

- Highly resource intensive in analysing, extracting and re-packaging the large volume of existing provisions. This presents a real risk to the very tight timetable.
- Retention of specific requirements not contained in the EID would need justification.

b) A more radical approach taking underground mining's major hazard status as the starting point and developing a legal framework, potentially including a modern permissioning element based on a safety case regime, as in other HSE regulated major hazards.

Pros:

- In theory a proportionate approach to take to what is a major hazard industry with potential for catastrophic incidents.

Cons:

- The industry presently tends to a culture of adherence to prescriptive requirements. It is unlikely to be ready to respond to a permissioning regime in this timescale, and such an approach could cause difficulties for the numerous smaller employers in the sector.
- Will likely require significant time to engage with stakeholders to overcome these obstacles. The Lofstedt deadline of October 2014 would be a real challenge to meet.
- There is no permissioning element in the EID.

11 HSE believes that option a) is the right approach to take for this project at this time. Although b) may appear ultimately the most appropriate regulatory regime, it is considered over-ambitious to attempt to deliver this within the next two years, given where we are now both in terms of the existing long-standing prescriptive regime and

the industry's familiarity with it. Option a), as well as delivering a more progressive regime with emphasis on managing risk, can however be viewed as a significant step towards b). This could be taken forward in future if deemed appropriate or in light of changes to the EID that may emerge over time following the forthcoming review. We expect that it would be significantly easier to gain a consensus from stakeholders on option a) though we have yet to engage with them on the detail.

Action

12 The Board is asked to note the two broad options for reviewing the legislation and agree that option a) should be progressed. Timing for the review is challenging – it is unprecedented to consolidate such a large volume of legislation in one step. However, subject to the Board's discussion and preference, we would propose to return to the Board with a draft consultative document around the turn of the year.

Paper clearance

At SMT meeting 6 June

ANNEX

Mining specific health and safety legislation

- 1 The 49 pieces of legislation specific to mining comprise:
 - 20 sets of substantive regulations that pre-date HSWA dealing mainly with fire prevention, transport and welfare below ground;
 - 13 sets of regulations that amend, modify, vary or metricate older legislation;
 - 10 sets of regulations made post-1974. The first in 1978 deals with water inrushes (stemming from the Lofthouse disaster in 1973); eight sets resulting from a legislative review that ran from the mid-80s until the late 90s some of which were legal changes needed to pave the way for privatisation, others to implement parts of the Extractive Industries Directive not covered by pre-existing law. The last to be introduced in 2007 updated requirements relating to inhalable dust in coal mines to reflect changes in working patterns that effectively reduced protection afforded by earlier legislation.
 - 4 sets that apply to specific named mines.
 - 2 Acts of Parliament.
- 2 Directive 92/104/EEC addresses surface and underground mineral-extracting industries and is considered to be transposed by current legislation.
- 3 The Mining Waste Directive (2006/21/EEC) is an environmental directive dealing with management of waste from mines and other extractive industries. Pre-existing health and safety legislation specific to mines and quarries - namely Mines and Quarries (Tips) Act 1969 and Mines and Quarries (Tips) Regulations 1971 - were considered sufficient to implement Article 11 – dealing as this does with management of waste facilities. (The remaining environmental provisions of this Directive have been transposed via UK environmental legislation.)

Statutory instruments

	Title
1	Coal and Other Mines (General Duties and Conduct) Order 1956
2	Coal and Other Mines (Ventilation) Order 1956
3	Coal and Other Mines (Safety-Lamps and Lighting) Order 1956
4	Coal and Other Mines (Fire and Rescue) Order 1956
5	Coal Mines (Precautions against Inflammable Dust) Order 1956
6	Coal Mines (Precautions against Inflammable Dust) (Variation) Regulations 1960
7	Coal Mines (Precautions against Inflammable Dust) (Second Amendment) Regulations 1974
8	Coal Mines (Precautions against Inflammable Dust) Amendment Regulations 1977
9	Coal and Other Mines (Locomotives) Order 1956

10	Coal and Other Mines (Sidings) Order 1956
11	Coal and Other Mines (Sanitary Conveniences) Order 1956
12	Coal and Other Mines (Horses) Order 1956 (owned by DEFRA)
13	Miscellaneous Mines (General) Order 1956
14	Coal Mines (Cardrox and Hydrox) Regulations 1956
15	Stratified Ironstone, Shale and Fireclay Mines (Explosives) Regulations 1956
16	Mines (Manner of Search for Smoking Materials) Order 1956
17	Coal Mines (Clearances in Transport Roads) Regulations 1959
18	Miscellaneous Mines (Explosives) Regulations 1959
19	Coal and Other Mines (Shafts, Outlets and Roads) Regulations 1960
20	Coal and Other Mines (Ventilation) (Variation) Regulations 1960
21	Coal Mines (Firedamp Drainage) Regulations 1960
22	The Meadow Bank Mine (Explosives) Special Regulations 1963
23	Mines (Medical Examinations) Regulations 1964
24	Coal and Other Mines (Ventilation) (Variation) Regulations 1966
25	Coal and Other Mines (Shafts, Outlets and Roads) (Amendment) Regulations 1968
26	Disused Mine and Quarry Tips (Prescribed Forms) Regulations 1969
27	Mines and Quarries (Tips) Regulations 1971
28	Mines and Quarries (Tipping Plans) Rules 1971
29	The Boulby Mine (Storage battery Locomotives) Special Regulations 1972
30	Mines and Quarries Acts 1954 to 1971 (Repeals and Modifications) Regulations 1974
31	The Winsford (formerly Meadow Bank) Mine (Explosives) (Amendment) Special Regulations 1974
32	Mines and Quarries Acts 1954 to 1971 (Repeals and Modifications) Regulations 1975
33	Mines and Quarries (Metrication) Regulations 1976
34	Coal and Other Mines (Metrication) Regulations 1978
35	The Daw Mill Mine (Refuge Holes) Regulations 1978
36	Mines (Precautions Against Inrushes) Regulations 1979
37	Coal and Other Mines (Fire and Rescue) (Amendment) Regulations 1980
38	Miscellaneous Mines (Metrication) Regulations 1983
39	Mines (Safety of Exit) Regulations 1988
40	Coal and Other Safety-Lamp Mines (Explosives) Regulations 1993
41	Mines (Shafts and Winding) Regulations 1993
42	Management and Administration of Safety and Health at Mines Regulations 1993
43	Coal Mines (Owner's Operating Rules) Regulations 1993
44	Mines Miscellaneous Health and Safety Provisions Regulations 1995
45	Escape and Rescue from Mines Regulations 1995
46	Mines (Control of Ground Movement) Regulations 1999
47	Coal Mines (Control of Inhalable Dust) Regulations 2007

Acts

	Title
48	Mines and Quarries Act 1954
49	Mines and Quarries (Tips) Act 1969

4 In addition;

Regulation 8 of the Health and Safety (First Aid) Regulations 1981, and ;

Part III of The Electricity at Work Regulations 1989,

apply specifically to mines.