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## **HEALTH AND SAFETY COMMISSION**

**Consultation on the proposals for the control of inhalable dust in coal mines**

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### **Issue**

1. This paper asks the Commission to approve the issue of a Consultative Document (CD) on the proposed Inhalable Dust package (subsequently referred to as "the proposed package"). The proposed package consists of draft regulations [The Coal Mines (Control of inhalable Dust) Regulations 200x] and the corresponding ACoP and guidance.
2. The proposed package has been agreed by the Deep Mined Coal Industry Advisory Committee (DMCIAC). This paper has therefore been submitted 'below the line'.

### **Timing**

3. Routine

### **Recommendation**

4. The Commission is invited to approve the issue of the attached CD (Attachment 1) on the proposed package for formal public consultation over a three-month period. The proposed list of consultees is at attachment 3.

### **Background**

5. The Coal Mines (Respirable Dust) Regulations 1975 which were amended in 1978 and further amended to include provisions for small mines by the Mines (Control of Substances Hazardous to Health) Regulations in 1996 need to be revised due to an increase in the incidence of pneumoconiosis.
6. The Commission agreed in July 2001 that priority should be given to a programme on inhalable coal mine dust as part of the mining law review plan (HSC/01/124).

7. The European Chemical Agents Directive (CAD) must be implemented in respect of the health effects of coal mine dust. The proposed package translates the health aspects of CAD into domestic legislation for coal mine dust. This was another driver for change as the main features of CAD require:
  - a risk assessment of the hazardous chemical agent, in this case inhalable coal mine dust;
  - adoption of the principle of a hierarchy of controls in order to prevent, or where this is not possible, control exposure to inhalable coal mine dust; and
  - health surveillance for all employees at risk of significant exposure.
8. At the time when RDR was introduced 10.2 % of miners developed pneumoconiosis during their working lives and 0.9% had the most serious and disabling form of the disease, Progressive Massive Fibrosis (PMF). The measures introduced by RDR were successful in reducing the prevalence of pneumoconiosis and by the mid 90's PMF seemed to have been eliminated, and the rate of simple pneumoconiosis amongst working miners was just 0.2%. However, this trend has not continued. The prevalence of pneumoconiosis among the miners X-rayed from 1998-2001 was 0.6%, including 10 with higher category pneumoconiosis and 2 with PMF.
9. Investigations by HM Inspectors of Mines into the circumstances of the recent pneumoconiosis cases suggest that the mines were generally complying with RDR limits but the individuals concerned had a history of working extended hours and so would have had particularly high exposures. In most cases, at least one four-yearly medical examination had been missed. There were (and are) a disproportionate number of contractors' employees among working miners being diagnosed with pneumoconiosis.
10. These investigations have exposed a number of weaknesses in RDR:
  - the system of fixed point monitoring has generally been effective in detecting excessive dust levels on the face but not those occurring during development work;
  - the present exposure limits do not take into account the amount of time people spend exposed to dust;
  - the duties on health surveillance are only placed on mine owners rather than all employers with employees working below ground;
  - while mine owners have made medical examinations available there have been no arrangements for actively identifying and following-up those who do not attend.

## **Argument**

11. The package strengthens the existing law in several ways. For example by:
  - establishing a goal-setting framework requiring the manager to assess the risks to workers, identify dust sources and take steps to reduce workers dust exposure to as low as is reasonably practicable through engineering and organisational controls;
  - extending health surveillance measures to all workers with significant exposure to inhalable dust whether contractors' employees or employees of mine owners;
  - requiring personal sampling wherever practicable with sampling arrangements focused on those at greatest risk of exposure above the exposure limits, not just on those working at the face;

- introducing time-weighting of exposure limits to take account of the importance to health of adequate breaks between spells of exposure to dust, as well as the length of individual shifts;
- requiring more rapid remedial action in the event of an adverse sample result than was the case under RDR;
- introducing an exposure limit for the quartz component of respirable coal mine dust that will apply throughout the mine.

12. It is not desirable to apply the COSHH Regulations to inhalable coal mine dust as they do not provide everything that is required by the industry, nor maintain the existing RDR standards. It is therefore necessary to develop a separate package based on COSHH principles, but also incorporating some specific RDR principles.

13. Consultees will be asked for their views on amongst other things:

- whether the proposed exposure limits for respirable coal mine dust and quartz (respirable crystalline silica) are achievable;
- the calculations used in time weighting the exposure limits;
- the general approach to health surveillance;
- the proposed approach to actions following an adverse sample result.

### **Consultation**

14. The proposed package has been made in consultation with a working group from the DMCIAC and received their unanimous support. The National Union of Mineworkers (NUM) has also been consulted and supports the package.

### **Presentation**

15. The proposals are broadly accepted by both sides of the industry as a necessary strengthening of the regulatory framework.

### **Costs and Benefits**

16. The benefits to society of introducing the proposed package are significantly greater than the costs to society. Full details can be found in the partial Regulatory Impact Assessment at Attachment 2.

17. The annualised costs to society amount to £70,000, of which £1,000 is implementation costs and £69,000 is policy costs.

18. The annualised benefits to society of introducing the proposed package amount to £5.346 million. Of this £79,000 relates to preventing 5 cases of pneumoconiosis, with a further £5.267 million from preventing 27 cases of chronic bronchitis per annum.

### **Financial/Resource Implications for HSE**

19. None.

### **Environmental Implications**

20. None.

### **Other Implications**

21. None.

### **Action**

22. The Commission is invited to approve the recommendation in paragraph 4.