

Meeting Date:	24 th April 2008	FOI Status:	Fully open
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Trim reference:			
An update on the health and safety performance of the waste and recycling industry			

Purpose of this paper

1. To provide the HSE Board with an update on the health and safety performance of the waste /recycling industry as requested at the Health and Safety Commission meeting on 15th January 2008. The HSE Board are asked to note the progress made in reducing injury rates in this sector, note the need to maintain effort in this area and advise on whether they wish work to continue on a waste and recycling programme to inform development of the new HSE strategy.

Background

2. Waste and recycling continues to be a growing industry in the UK and is rapidly developing in terms of technologies and processes. It currently employs over 170,000 people and affects the working and private lives of every citizen. The waste/recycling policies of local authorities and central government have stimulated much public and media interest and attempts have been made to involve HSE in these public debates. It is thought this will continue.
3. Legal requirements from European Directives are increasing the pressure on the waste management industry to develop new processes, reduce landfill and recover an ever widening stream of waste materials. The need to segregate wastes to enable re-use, recycling or recovery has the potential to increase the contact that workers have with waste materials.
4. In 2004 the Manufacturing Sector commissioned research to identify the level of accidents associated with the waste and recycling sector (BOMEL 2004)¹. This identified that in 2001/2 the industry had an accident rate at least 4 times greater than the national average and a fatal accident rate over 10 times the average. Using this evidence a 3 year programme of work was drawn up to arrest and then reduce the growing accident rate (HSC paper 2006/50). HSE developed a strategy based on communication, research, stakeholder engagement and enforcement. This appears to have worked. Since 2003/4 employment within the industry has grown by approximately 12% (to end 2005/6), and the accident rate of the industry has fallen by 14% at the end 2005/6 (BOMEL 2008)². Evidence from individual companies which have accepted the challenge, also points to significant improvements in health and safety performance since 2006.

¹ Mapping Health and Safety Standards in the UK Waste Industry, BOMEL 2004

² Mapping Health and Safety Standards in the UK Waste Industry, BOMEL 2008 (to be published May 2008)

5. The strategy has used a mix of interventions, with communications and enforcement playing important roles. Research has been key to provide a sound evidence base. Direct engagement with a range of stakeholders has been vital, resulting in several stakeholders taking an active lead to address the performance of the industry. Additionally, industry stakeholders have been engaged in the Waste Industry Safety and Health forum (WISH). Facilitated by HSE, WISH has been active in generating and promoting good practice guidance. To encourage the industry to strive for continually improving health and safety performance, HSE has proposed that WISH is reconstituted to act as a Delivery Body, setting targets for the industry, and then encouraging member bodies to deliver improvements through their membership.

Argument

6. As the technology in the industry develops and changes, the workforce grows and the knowledge of ill health in the industry increases it is evident that HSE needs to continue its efforts to bring about sustainable and marked improvement in the health and safety performance of the industry. The future plans will again be based on a mix of interventions of stakeholder engagement, direct engagement via inspection, communications and research. We will aim to segment the audience to improve communications and targeting. Currently the future interventions being considered are:

- Targeting of clients within the industry via a series of regional briefings of Heads of Service from Local Authorities to cover their role as specifiers of systems and control of contractors.
- FOD inspection of household and trade waste/ recycling activities, concentrating on “hot spots” such as metal recycling facilities.
- Use of communications to maintain industry awareness, identify the need to improve and provide the tools to bring about change.
- Scoping ill health performance and raising industry awareness of the causes, cost and prevention of occupational ill health.
- Establishing WISH as the agenda setting body for the industry, to which each stakeholder contributes via its own action plan.
- Maintaining a watch over the technological and legislative changes within the industry to ensure that health and safety is properly built in from the start;
- Continuing to work with other Government agencies and regulators such as the EA, Defra, and the Devolved Administrations.

Consultation

7. Within HSE for this update. Further consultation will be needed across HSE and with LAs as the detail of the future programme of work is developed.

Presentation

8. No immediate issues.

Costs and Benefits

9. As the detailed programme of work for the next three years is developed, an impact assessment will be used as part of the analysis to identify the costs of the programme and its expected benefits. The Economic Advisers Unit have agreed to provide support and advice for this process.

Financial/Resource Implications for HSE

10. The project to date has incurred research costs, communication costs and staff costs. These have been estimated as :-

- Research costs: £283K
- Communication costs: £12k, plus staff costs in preparing articles, presentations and guidance.
- Staff costs: __ Manufacturing sector (approx £250K). Field Operations (approx £430K up to 2006). Data on operational costs not retrievable after this date.
- Work is under way to develop costed proposals for a continuation of the interventions.

Other Implications

13. Success of the strategy is closely linked to the continuation of productive partnership working with stakeholders representing the public, private and community sectors. These will include The Local Government Association, The Environmental Services Association, Trade Unions and other representative bodies.

Action / Next Steps

14. If the Board are content the Manufacturing Sector will draw up a detailed and costed programme of work for future years.

Paper Clearance

15. This paper was produced by Paul Harvey, James Barrett and Elizabeth Gibby and was cleared by Geoffrey Podger on 9th April 2008.

HSE/08/16_Appendix 1: Update on the waste/ recycling sector

This appendix:

- Provides a synopsis of industry performance;
- Updates the employment numbers of the industry;
- Updates the accident rate of the industry;
- Reports on work undertaken by HSE;
- Reports on work undertaken by others in the industry;
- Identifies priorities for the industry.

1. Where the industry has come from

The Manufacturing Sector of HSE commissioned the report “Mapping health and safety standards in the UK waste industry” (Bomel 2004). This report identified a very high accident rate for the industry, the size of the industry and the potential for the industry to grow.

Size of the industry: the waste/ recycling industry is considered to encompass the range of activities that include collection, transfer, treatment and disposal of waste and recyclates. This includes household collection, commercial collection, transfer stations, sorting, landfill, composting, incineration, treatment, street cleansing and a range of other subsidiary processes. In 2003/4 there were 158,174 workers in these industries, in 2005/6 this was 177,967 (an increase of 12%).

Accident performance: The accident rate identified for the industry was between 4 and 5 times the average for UK industries and 2.6 times greater than that of the average for manufacturing industries. The accident rate peaked at 2724 RIDDORS/ 100,000 workers in 2003/4 and had reduced by 14% to 2341 RIDDORS/ 100,000 workers in 2005/6 (BOMEL 2008).

HSE Year	Fatals	Major	Over 3 day	Total	Incidence rate
1996/07	13	593	3765	4371	
1997/08	13	594	3660	4267	
1998/09	17	584	3505	4106	
1999/00	11	610	3515	4136	
2000/01	11	577	3403	3991	
2001/02	17	591	3385	3993	2237
2002/03	13	628	3555	4196	2659
2003/04	6	585	3335	3926	2724
2004/05	9	646	3117	3772	2566
2005/06	13	628	3242	3883	2341

**Table 1: RIDDORs 1996/7 – 2005/6 (employees and self employed)
From Bomel 2008**

	2005/6	2006/7	2007/8
Workers	13	13	10
MoP	6	4	3
Total	19	17	13

Table 2: RIDDOR Fatal accidents (employees, self employed and members of the public), from Manufacturing Sector data.

2. What HSE and others have done since 2004

HSE actions since 2004

The Bomel 2004 report provided the Manufacturing Sector with the evidence to draw up a strategy, delivered via a 3 year programme of work. This programme:

- Used evidence to target actions
- Pursued industry specific themes
- Involved and supported stakeholders in the delivery of actions
- Was balanced in its method of delivery (using communications, stakeholder initiatives, inspection/ enforcement and research)

The 3 year programme of work has been largely completed. Highlights of this included:

➤ **3 year FOD inspection programme**

In 2005/6 and 2006/7 FOD inspectors carried out over 300 planned inspections of local authorities as clients in household waste collection operations. Over the 2 years of the inspection initiative the same question set was used allowing comparison and early indication of whether progress had been made. After 12 months there was improvement in each of the 38 questions asked.

2007/8 FOD inspectors have been asked to look at 2 areas which claim the majority of fatalities in the industry; reversing refuse collection vehicles and use of mechanical shovels with pedestrian waste picking operatives.

2008/9 FOD inspectors have been alerted to the need to inspect metal recycling (scrap yards) and metal reprocessing premises as this sector has a disproportionately high number of fatal accidents.

Overall FOD inspections and enforcement activity in this sector has been as follows:

	Service Order Inspections	Prohibition Notices	Improvement Notices	Informations laid
2005/6 – 7/8	829	271	838	81

➤ **FOILE interventions with national companies**

FOD and the Manufacturing Sector have organised nationally co-ordinated inspections (FOILE) in 4 of the national waste management companies.

➤ **Waste Industry Safety and Health (WISH) Forum**

WISH is made up of representatives from the majority of stakeholders in the industry and has been active in the generation of standards and good practice guidance. Over the last 3 years the Forum has helped to increase the suite of industry specific guidance from nothing to over 20 titles.

Building on from the successful period of standards/ good practice generation by WISH, the HSE has proposed that the body is reconstituted to act as a Delivery Body, setting targets for the industry and encouraging member bodies to deliver improvements through their membership.

➤ **Stakeholder engagement**

Development of networks and links within various stakeholders in the industry, including trade union, employer, professional bodies and Local Authority representatives plus voluntary and government bodies with a specific interest in waste and recycling such as the Third Sector, Defra, the Environment Agency and devolved administrations.

The Manufacturing Sector has been working to stimulate stakeholder led initiatives and the leadership of these bodies as champions for effective management of risks (see below).

➤ **Media and communications activity**

In 2004 there was virtually no coverage of health and safety within this industry in the relevant the trade press. Nowadays the titles cover health and safety issues in virtually every edition. Additionally, the Manufacturing Sector staff deliver about 30 presentations every year to the industry.

➤ **Research**

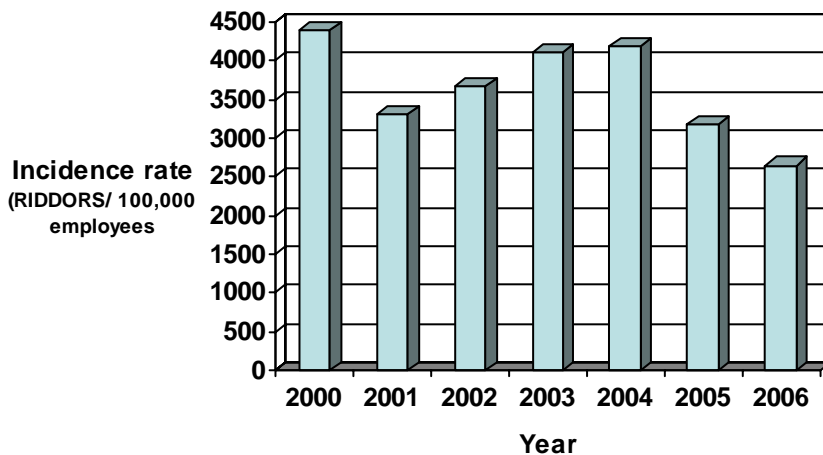
In addition, to the benchmarking research there have been proactive and reactive research projects undertaken. A major project has been joint research funded with the Defra, Welsh Assembly and Scottish Government to produce a tool that can assist local authorities to identify the most appropriate collection, transfer and treatment systems for their environments. Reactive research has concentrated on musculo-skeletal injury risks from various household waste collection systems. In the near future the Manufacturing Sector will be conducting research to scope the type and prevalence of occupational ill health within the industry.

➤ **Development of website**

www.hse.gov.uk/waste are the HSE's web pages for the waste management industry. The site attracts over 4,000 individual visitors every month.

Work undertaken by other organisations

In 2004 the Environmental Services Association (trade body for private sector waste management companies) launched its Accident Reduction Charter with the objective of reducing accidents by 10% per year. The Charter developed over the last 3 years now has the same characteristics of other leading targeted initiatives and has produced a 37% reduction in accident rates in the years 2004 – 2006.



ESA Members: RIDDOR incidence rate 2000- 2006

ESA and other stakeholders in the industry have contributed to the work of the Waste Industry Safety and Health Forum (WISH) in its drafting of good practice guidance and defining standards.

The United Kingdom Accreditation Service (UKAS) approached HSE and EA with a view to exploring the possible development of a joint management standard for the industry which would be specifically designed to appeal to smaller enterprises who may find the existing management standards (OSHAS 18001 and EN14001) daunting. A small feasibility project has been proposed.

3. How has the accident rate of the industry changed since 2004?

A repeat of the original Bomel scoping project was commissioned at the end of 2007. This has measured industry performance using the same methodology as the 2004 report (comparing RIDDOR reportable accidents per 100,000 workers). The report found that since the start of HSE's programme of work with the industry:

2003/4 accident rate:	2724
2005/6 accident rate:	2341 (14% reduction)
Change in employment:	+12.5%

This has met the first objective of the HSE's strategy for the industry; "zero increase in accident rates by 2007/8" has been met early. It is not possible to accurately determine performance for 2006/7 and 2007/8 at this time.

4. Priorities for the industry

- a) The accident rate for the industry peaked in 2003/4 and has dropped since then. The accident rate of 2341 RIDDOR injuries per 100,000 workers (2005/6) remains high and is 2.6 times that of Manufacturing Industries (875 RIDDORS/ 100,000 workers). The accident profile for the industry has not changed significantly since Bomel 2004 was commissioned, which showed that:
 - Approximately one third of accidents are musculo-skeletal injuries and one third are caused by slips, trips and low falls.
 - Over 80% of all accidents occur during collection activities.
 - 32 of the last 49 fatalities (2004/5 – 2007/8) been "struck by vehicle" or "vehicle overturning."

- a) HSE inspections found potential for Local Authorities to improve their role as clients of waste management contracts, regardless of whether the work was contracted to a private contractor or undertaken by an in-house organisation. In particular it was recognised that Local Authorities have great influence over the type of service provided and the health and safety management of that contract. These are generic themes which could be pursued in partnership with other programmes involving local authorities.

- b) The HSE inspections found that there is a genuine enthusiasm to improve the performance of the industry and that tangible issues such as hardware provision had been addressed. Inspectors reported that there is a gap between the intent to operate safe systems of work and actual practice. Development of a positive safety culture at all levels in the industry will help ensure the effective use of safe systems of work. Each of the top 4 national waste management companies has

recognised the need to improve “safety culture” and embarked upon their own programmes of improvement.

- c) The ill health performance of the industry is not known. The Manufacturing Sector is undertaking a scoping study of performance in partnership with the Environmental Services Association.
- d) The industry has adopted the need to improve its health and safety performance with responsibility and energy. It has rapidly developed a range of WISH good practice guidance and standards and is now moving into a phase of implementing that good practice. The role of WISH needs to develop to promote the implementation of good practice guidance.
- e) Technological and legislative changes are rapid as the industry evolves. HSE will need to continue to monitor developments and work with the industry and other government departments to ensure that the legislation is “joined up” and health and safety is considered at all stages of development.