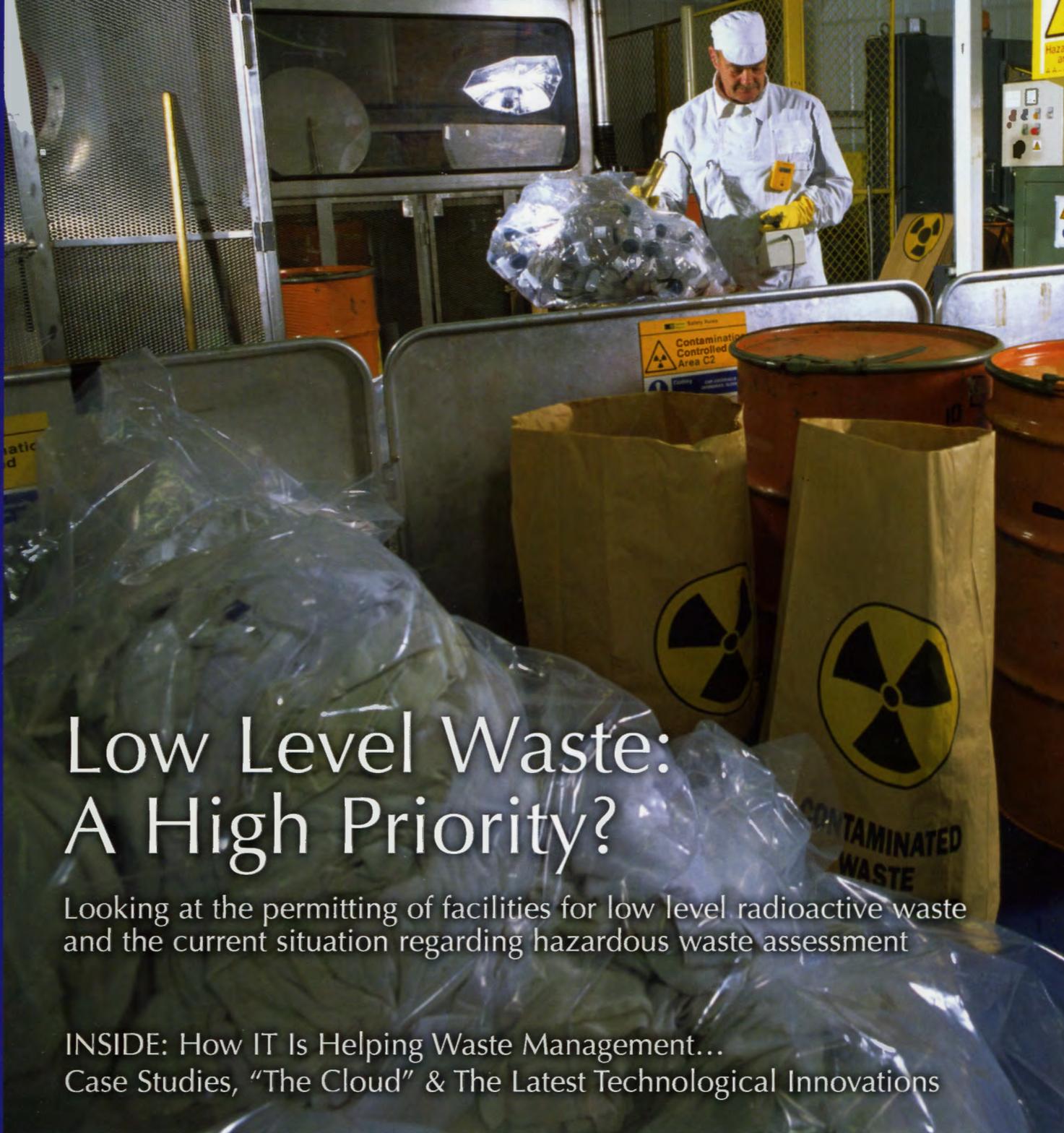




CIWM

THE JOURNAL FOR WASTE & RESOURCE MANAGEMENT PROFESSIONALS



Low Level Waste: A High Priority?

Looking at the permitting of facilities for low level radioactive waste and the current situation regarding hazardous waste assessment

INSIDE: How IT Is Helping Waste Management...
Case Studies, "The Cloud" & The Latest Technological Innovations

Nine Deaths Is Nine Too Many

Ian Blenkarn, Toni Gladding and Tracy Moffatt look at the industry's latest health and safety performance on behalf of the CIWM Health & Safety Special Interest Group

There can be no doubt that the waste and recycling industries must work hard to sustain and improve safety standards. The Health & Safety Executive (HSE) recently reported an increase to nine fatalities in 2010/11 and nobody can disagree that this is nine deaths too many. Every death or serious, possibly life changing, injury is a tragedy that stains the reputation of this sector. However, since the HSE released the latest mortality statistics (see box copy), several commentators have remarked on the "deteriorating safety standard of the waste industries" and "an alarming rise in deaths". But are these statements correct?

The HSE states that the rate of fatal injury has stayed broadly the same, at

seven per 100000 workers over the past five years. There is no room for complacency but adverse reporting and additional criticism at this stage is no more appropriate than lauding industry-wide improvement in worker safety if next year the mortality rate falls to just six deaths. Though statistically just another point on a graph, that 33 percent reduction would still leave six bereaved families heartbroken at the death of a loved one. In reality, the changes are small and, though each one points to an individual tragedy, these small variations cannot be construed as indicators of significant change in overall health and safety performance.

Statistics can be a useful tool, but can also be misleading. Several

trade journalists appear to have misconstrued this small rise in the annual mortality rate as a sign of worsening standards. News reports of the HSE data, showing an increase in *all* workplace deaths of around 16 percent, seem intent on presenting only bad news. With 171 deaths in 2010/11, few reports bother to mention that these data are being compared with the record low of 147 deaths in 2009/10. The overall trend remains downward.

Based on a count of events that are fortunately still rare, these statistics are highly subject to chance variation from year to year and it is necessary to look only at trends over a number of years; any inference about changes in the safety performance based



on single year-to-year comparison is inherently flawed and almost certainly misleading.

Other Sector Statistics

IN THE agriculture sector which, along with construction, is traditionally the most dangerous in which to work, deaths fell from 39 last year to 34 in 2010/11. Others do not fare so well. The construction industry recorded 50 deaths – an increase of 22 percent on last year's total of 41 fatalities and 2.4 deaths per 100 000 workers (see box copy). Though this compares favourably with a five-year fatality rate of 2.8 per 100 000, critics are already implying that the reduction reflects more the shrinkage of that sector in these times of financial constraint than any real improvement. It is clear that the data might be interpreted in many ways and can support just about any interpretation, but not all are valid.

Though headline mortality rates are an obvious parameter they are not a particularly informative measure of health and safety performance in the waste industries. Overall, the injury rate has consistently fallen in recent years. Lost time injury rates may be helpful, though these do not readily indicate the severity or impact of an incident that may range from the relatively trivial to the life-changing injury. The Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR), though recently revised to record fewer trivial injuries, provides an invaluable record of safety standards across all sectors. It includes:

- a death or major injury
- any accident that does not result in major injury but the injured person still has to take three or more days off their normal work to recover
- a work-related disease
- a member of the public being injured as a result of work related activity and taken to hospital for treatment
- a dangerous occurrence, which does not result in a serious injury, but could have done.

However, this is not an all-embracing list and remains subject to sometimes widely variable

Annual Fatalities In The Waste & Recycling Sector

2010/11	9 workers died
2009/10	3 workers died
2008/09	10 workers died
2007/08	6 workers died
2006/07	7 workers died
2005/06	12 workers died

Worker Fatalities By Industry 2010/11

In **construction** there were 50 fatal injuries, with a rate of 2.4 deaths per 100 000 workers. This compares to an average rate of 2.8 for the previous five years.

In **agriculture** there were 34 fatal injuries in 2010/11 with a corresponding rate of eight deaths per 100 000 workers. This compares to a rate of 9.6 when an average of the previous five years is examined.

In **manufacturing** there were 27 fatal injuries, with a rate of 1.1 deaths per 100 000 workers (the same rate as the average for the previous five years).

In the **services sector** there were 47 fatal injuries, with a rate of 0.2 deaths per 100 000 workers (the same rate as the average for the previous five years).

In the **waste and recycling** industry (categorised using SIC divisions 38 and 39) there were nine fatal injuries, with a rate of 8.7 deaths per 100 000 workers. This compares to an average rate of seven for the previous five years.

Source: www.hse.gov.uk/statistics/fatals.htm

interpretation with a tendency to under-reporting in order to maintain an acceptable accident record and avoid the scrutiny of HSE inspectors.

Detailed classification of reported incidents permits review of individual risk behaviours and targeting of specific safety interventions. Though various – sometimes conflicting – metrics can be applied, it appears that the rates of all injuries, including major injuries and over-three-day injuries, have been relatively static or have fallen over both five and 10-year review periods. But how do we compare a traumatic amputation or mesothelioma with a sharps injury, or a road traffic accident with a debilitating back injury or occupational dermatitis?

Getting Better

FIGURES SHOW that the injury rate per 100 000 workers reached 2 614 in 2003/04, slowly declining over subsequent years to around 2 207 per 100 000 in 2007/08, with a total of

4 347 injuries and 196 920 employees.

The waste and recycling sectors continue to endure an accident rate that is far higher than in other sectors, though modest improvement in safety standards is continuing. The number of fatalities remain on a downward trend, but is the industry really safer now than in previous years? There is little deviation from the average over a five-year period and the 2009/10 low results were the anomaly.

But the trend is clear and the waste and recycling industries might reward themselves with a cautious pat on the back for efforts to improve safety standards. However, complacency is misplaced and there must remain a stark warning that injury rates in this sector are still unacceptably high and that nine fatalities are, of course, nine too many. **CIWM**

You can contact the **CIWM Health and Safety SIG** on +44 (0)1604 620426 or visit http://www.ciwm.co.uk/CIWM/InformationCentre/SpecialInterestWorkingGroups/Health_and_Safety/Health_And_Safety.aspx