



Health and Safety at Work & Noise Protection

Entsorga-Enteco – the International Trade Fair for Recycling Management and Environmental Technology – has provided information on the latest status of the organisational and technical options for keeping staff in the industry in good health and for preventing accidents.

Safety in the workplace and health protection have long been a high priority in the waste management industry – and not only here. Since 1960, the number of work accidents requiring reporting nationwide across all industries has been reduced by almost two thirds, and for some years now has been constant at just over one million. At 812, the number of fatal accidents in 2007 was lower than ever before.

The foundation of this positive trend is an extensive legal complex of rules. Starting with the laws on industrial safety, occupational safety and working hours as well as the Social Security Code including all associated statutes, private and public sector accident insurance companies as well as government safety organisations have issued

a multitude of their own accident prevention regulations, rules, information, principles and practical aids. Last but not least, in order to provide a better overview of this varied regulation that was barely still comprehensible, in 2008 a coordinated concept for a 'Joint German Industrial Safety Strategy' (GDA) was passed by all relevant industrial protection players. This was also done against the background of a new strategy by the European Community on health and safety at work. For the period from 2007 to 2012, it has taken the reduction of accident frequency by 25% as a specific goal.

Biological Agents

Besides the usual health risks due to weather conditions, it is the risk of accidents in road traffic, for instance du-

ring waste collection, or the risk of injury during the handling of containers or operating filling, compacting and sorting equipment, the risk of infection through viruses, bacteria and moulds that play a specific role in recycling management. In addition, such employees deal with hazardous substances in the form of gases, vapours, aerosols and liquids more frequently than in other industries.

Protective measures for instance for waste treatment facilities are set down in the Technical Rules for Biological Agents. Structural measures have priority here over technical, organisational, hygienic and finally people-related protective rules. According to these rules, disintegrators and automatic sack openers, for example, are to be setup such

that air pollution from the stirring-up of biological agents is kept as low as possible through the installation of an effective exhaust system. For the same reason, screens, metal separators and air separators are to be encapsulated. In addition, manual sorting of salvaged materials is only allowed in closed spaces that can be heated and are equipped with effective ventilation.

Or take an example from composting. Here the decomposition should, as far as possible, take place on an automated basis. If cleaning and maintenance work is required, this is only possible with respiratory protection such as a half mask with a particle filter, for example. Among the personal protective equipment (PPE) that has to be provided by the employer are 'safety shoes for commercial use', 'protective gloves for mechanical risks' as well as work clothes that cover the entire body. In some cases, safety glasses or spray- and dustproof disposable overalls with a hood are also required.

Hearing protection

Hearing protection is not to be forgotten. The so-called Noise and Vibration Industrial Safety Act has been in effect since 2007, which implements two EC directives into national law. Since then, trigger values that are 5 decibels (dB(A)) lower apply to prevention measures in comparison to the old 'Noise' accident prevention regulation. Thus, noise zones are to be identified and marked off starting at a level of 85 dB(A). In addition, those working there are required to wear ear protection as well as have their hearing checked regularly as a precautionary measure. With even higher noise pollution levels, the employer has to establish and implement a noise-reduction programme.

Here, the main goal is to prevent noise emissions starting at their point of origin, or to dramatically reduce them. For waste collection vehicles for instance, this means that aisle vehicles have to comply with current European standards. Cab structures are to have noise-abating loading troughs. Semi- and fully automated filling systems, for

example, have the advantage compared to manual controllers that the loader can move away from the vehicle during the loading process and thus protect his hearing. In addition, modern lift systems work completely without any mechanical end-stop noise when emptying.

On the basis of the ordinance on the reduction of machinery noise (32nd German Federal Emission Control Ordinance), a number of other vehicles and systems in waste management and communal services have to adhere to specific 'sound power levels' according to EC Directive 2000/14/EC, and be labelled accordingly. This includes items such as high-pressure rinsing and suction vehicles, waste compactors, lawnmowers, leaf-blowers, road sweepers, shredders/disintegrators, snow blowers, rollable rubbish containers as well as waste glass receptacles. Furthermore, certain quiet times must be adhered to depending on the area (e.g. residential area, health resort). |

Source: Koelnmesse GmbH



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