

# Who do you think you are?

**HUMAN RESOURCES** What makes a dangerous goods professional? And how can they persuade their employers of their value? These questions are troubling an industry keen to bring in new blood. COSTHA's ongoing initiative attempts to provide a roadmap for future work

Recognising the value provided by dangerous goods/hazardous materials compliance personnel is a problem that is threatening safety. Companies responsible for shipping or carrying dangerous goods need to have such people, but they are often overlooked and their contribution to a company's safety and financial performance is hard to gauge. Partly as a result of that, it is difficult to make an attractive career path for young people coming into the industry.

This problem was highlighted back in 2007 when the Netherlands put a paper before the UN Sub-committee of experts on the transport of dangerous goods, saying "it is getting more and more difficult to find new persons who are interested in spending many years in becoming an expert". The US agreed with this and, shortly after, the Pipeline and Hazardous Materials Safety Administration (PHMSA) signed a partnership agreement with the Council on Safe Transportation of Hazardous Articles (COSTHA), giving the Council the tasks of identifying reasons behind the decline in the number of industry experts and developing measures to attract suitable candidates to embark on a career within dangerous goods.

COSTHA soon came up with a brochure, *Blueprint for Success*, outlining the problem and areas of work on which attention should be focused. This was brought to the UN Sub-committee's attention and the UK has since engaged EU agencies, adding the initiative to the European Commission's Logistic Action Plan.

## Practical activities

But what, in practical terms, can be done to enhance the image and career prospects of dangerous goods professionals? One problem that was acknowledged early on was that the better these individuals perform, the more unnecessary they appear – if they are successful in reducing the number of incidents, there appears no reason to allocate more resources.

A major step forward was taken this year with the completion of a pilot study to lead the most critical components of the project. COSTHA brought in a human resources consultant, Dr Barbara McIntosh from the School of Business Administration at the University of Vermont, to help benchmark positions in terms of salary, title, responsibilities and placement within an organisation. The goal was to provide sample job descriptions so that existing dangerous goods



The hazmat professional has to have a range of skills

professionals could demonstrate to their managers the extent of their roles and responsibilities, in the hope that this would impact positively on their recognition within the organisation.

The pilot study covered 74 COSTHA members who responded to an email questionnaire, of whom 51 per cent worked in the manufacturing sector and the rest in services. One third of respondents had masters degrees, although many had no university qualification; other credentials included Certified Hazardous Materials Manager (CHMM) – 15 per cent of those surveyed – and Dangerous Goods Safety Advisor (DGSA) (12 per cent). The average length of employment in compliance management was 10.7 years.

The survey also confirmed informal indications about where these personnel sit in an organisation. The main locations were in the logistics department (19 per cent), regulatory affairs (16 per cent), environment, health and safety management (15 per cent) and transport management (14 per cent). Job titles varied, depending on the home department, but it was clear that these individuals were all involved in the same range of tasks with regard to dangerous goods compliance and compliance training. A search of the US Department of Labor revealed 217 job titles fitting the role of 'hazmat manager', or 229 when the description was changed to

'hazmat transportation manager'.

Some were also involved in the management of safety, security and environmental health and safety issues. These functions may be regulated in the US by the Environmental Protection Agency (EPA) and any overlap of functions can add to external confusion about roles and responsibilities.

Respondents reported a range of salaries, depending on the size of the organisation, length of service, number of employees supervised, and so on, but most (55 per cent) reported making more than \$90,000 a year.

## Acknowledging skills

COSTHA presented the results of Dr McIntosh's survey to the UN Sub-committee at its meeting earlier this month. Dr McIntosh's report, under the title: *Protectors in the Shadows – the Unrecognised/Undervalued Hazardous Materials/Dangerous Goods Professional*, begins by noting that personnel involved in any function gradually increase their knowledge, skill and abilities but that there is often little, if any, formal recognition of this change. This seems particularly true of the dangerous goods sector, where compliance personnel are often working quietly behind the scenes and only come to the attention of their colleagues when something goes wrong or if a consignment has to be held up.

Dr McIntosh said that formal recognition of an evolving occupation requires:

- recording responsibilities formally in job descriptions;
- credentialing in new areas of expertise;
- progression in an organisation's structure;
- recognition of an increased contribution to the organisation by means of an appropriate salary review; and
- retention of tacit knowledge required for successful job performance by future incumbents.

"The role of the hazmat transportation manager is a classic example of an evolving occupation," the report says. Not only does the individual's knowledge increase with time, but also the regulatory environment changes in response to new technologies and better understanding of the characteristics of regulated dangerous goods and their potential impact on health and the environment. Dangerous goods professionals also have to respond to any changes within an organisation, such as the arrival of new products or a move into new territories where different regulations may apply.

### What the job entails

Dr McIntosh recommends that the issues outlined above are taken into consideration by dangerous goods professionals if they are looking to raise their profile within the organisation. In the case of a hazmat transportation manager, for instance, it is advisable to detail job elements in general terms, since the roles undertaken may fall under various functional areas within the organisation – legal, compliance, logistics, and so on. The relevant duties and responsibilities may be regarded differently, depending on the industry covered, the complexity of the particular organisation's activities, and the volume and scope of activity. For many professionals, responsibilities related to hazardous materials may well demand a small proportion of their working time and this too needs to be taken into account.

For those in a senior dangerous goods role, fully qualified in all aspects of domestic and/or international hazardous transport administration, the responsibilities involved many include any or all of the following:

- conducting regulatory monitoring and compliance reviews;
- providing guidance relative to the various elements of the transport chain;
- coordinating policies and procedures;
- overseeing or coordinating information/safety/regulations reviews and analysis;
- developing guidelines and commenting on proposed rulemakings;
- providing regulatory input for maintenance of company databases;
- assisting buyers, suppliers and logistics service

suppliers in providing the safe transport of company products with minimal injuries and enforcement actions; and

- administering internal training programmes relevant to hazardous materials.

This list of responsibilities indicates that such personnel will have to display a range of skills and aptitudes not necessarily associated with the compliance role. They will have to, for instance, develop and maintain contacts with relevant co-workers within the organisation, with logistics service providers and with relevant regulatory and enforcement agencies. They will have to be problem solvers, project managers, and often be on call 24 hours a day. Senior management will need to be comfortable with their handling commercially or legally sensitive information.

Dr McIntosh suggests that, for senior dangerous goods personnel, the necessary qualifications would include an associates or higher degree in a science, engineering, business, bio-safety or related field, experience of working with dangerous goods, a working knowledge of the relevant dangerous goods regulations, at least five years' experience in dangerous goods compliance and a current dangerous goods training certificate. They should also be able to interpret and apply the transport regulations to the organisation's facilities and operations and be able to coordinate projects across multiple divisions within the organisation.

### Woman/man for the job

The different roles played by the dangerous goods compliance manager (or equivalent) in different companies makes it hard to compare exactly what it is they do. Nevertheless, Dr McIntosh feels that it would be very useful to be able to identify commonalities so that a template of job dimensions can be developed, giving more uniformity across the industry. Any programme to enhance the position of the dangerous goods professional should give them key language to use in their job description, as identified above. A common job title would also help, and if this can be established then the Department of Labor could include it in their database as the preferred occupational title for those engaged exclusively in this work.

Credentialling also serves several useful purposes:

- (a) it formalises the knowledge that is required to perform the job successfully;
- (b) it provides a mechanism by which to recognise those who have achieved a certain level of expertise;
- (c) it provides the organisation with a formal mechanism through which to recognise and reward achievement;
- (d) it offers a way to track industry clusters of expertise; and

(e) over time, a credentialling system can be developed to recognise multiple levels of achievement.

Dr McIntosh recommends that the dangerous goods industry finds a way to work with related organisations to formalise a set of credentials based on testing and continuing education.

Having provided a system of recognising dangerous goods expertise, the career path open to those entering the profession will become more apparent. This will help attract younger people who would be keen to ensure that the profession on which they are embarking offers a clearly defined upward path and would also help organisations that are looking to establish positions or replace existing personnel at a particular level.

The development of benchmarks by which to measure career progression is a task for further study, but at least the COSTHA-sponsored report has set out the parameters against which dangerous goods professionals must measure themselves, and be measured by their employer. There will undoubtedly be a role for COSTHA and other similar bodies to play in terms of recognising excellence all the way along the professional chain and such external recognition may be used to provide evidence that an individual is worthy of a merit pay increase or bonus.

The final piece in the jigsaw is the retention of knowledge and expertise within an organisation. "Individual organisational product or service nuances cannot be left to trial and error by future hires," the report says. "With the potential retirement of a large number of 'baby boomers' in the next 10 to 20 years, associations and regulators must take a more active role in preventing a 'brain drain' and building knowledge transfer into their missions."

Dr McIntosh recommends the development of mentoring and support programmes, again through professional associations but also within organisations. Industry should also support the provision of on-line materials to help the more inexperienced practitioners. Those exiting the industry are urged to record their job knowledge before they leave.

The COSTHA initiative is ongoing; it will not be an easy task to fulfil all the recommendations in this report, which has also identified areas for further work. However, the results so far indicate exactly where industry needs to apply itself. And, whatever may have been said recently in the US about the relationship between regulators and the regulated community, it is certainly in the interests of governments to ensure that industry can equip itself with the expertise and knowledge necessary not only merely to apply the regulations but also to ensure that the safety record in the dangerous goods transport business is as good as it can possibly be.