ABSTRACT

Safety is a concern of every heavy industry. The members of the International Association of Dredging Companies (IADC) have long recognised this and as individual companies have implemented rules and regulations to reduce accidents and incidents. Complying with ISO standards and other international and national legislation has been the norm, but in recent years safety awareness has heightened. New programmes and systems of ensuring safety and health of employees have been adopted with positive results. To extend this effort, the Board of the IADC decided to establish a Safety Committee. The IADC Safety Committee has recently developed a Charter outlining the committee’s goals, which includes inter-company exchanges of knowledge and experiences and developing shared safety measures on specific safety subjects. The ultimate aim is to spur the industry’s safety record towards continued improvements and zero accidents. The five authors are all members of the new committee.

INTRODUCTION

Awareness of the risks when dredging has long been present. Like other major heavy industries, managing such risks are at the forefront of safety policies. National and international agreements and legislation stipulate safety guidelines and requirements. They issue certificates such as the ISO to monitor that safety measures are implemented properly. Compliance with these international and national standards has long been recognised as a crucial component in realising a successful project.

On the other hand, implementing legislation into clear, consistent safety programmes in a hands-on, daily routine has not always been obvious. Experience has demonstrated that effective safety systems require a great deal of thought, planning and effort. The investments of time and money in achieving high-levels of safety, reducing accidents and injuries, is significant as well as imperative.

Simply stated: A dredging operation is only as safe as its weakest link. To reduce accidents, all employees must realise that safety is everybody’s business, every day.

GROWTH OF SAFETY AWARENESS

Attention to safety and investments in safe working procedures benefit all stakeholders. Acknowledging this led the Board of the International Association of Dredging Companies (IADC), in its role as the umbrella organisation for the international private dredging contractors, to institute an annual award amongst its membership in 2007. The goal was to increase safety awareness by honouring a member company, individual project or employees who had shown outstanding achievement in the area of safety.

In the early days of dredging, safety was not always the foremost issue for project managers or employees. Personal protective equipment (PPE) such as hard hats, safety boots and life jackets were available but not consistently used. The use of this equipment was not consistently enforced by employees or management. As the dredging industry became more involved with the oil and gas industry, however, the dredgers were required to comply with the very high standards of the offshore industry. Following a period of working within these standards dredging companies recognised fully the benefits of a safe work environment. The results: the importance and benefit of safe working is now paramount in the policies and practices of the dredging industry.
The industry developed its demands along the lines of engineering, systems and behaviour. First they had a look at dredging equipment and organisational systems. How can the design and use of the equipment contribute to safer working methods and less incidents?

Then safety systems were developed and put into place. People were encouraged to learn from their experiences, positive and negative. Risk and hazard identification and management grew to be normal practice. Reporting and monitoring systems were developed and feedback from these systems was discussed amongst employees in a structured way. Information from these monitoring systems was analysed. This gave rise to specific measures which resulted in a further decrease of ‘lost time injuries’ (LTIs).

Over time it became apparent that this effort was a good beginning but that much more could and should be done.

The next step in the safety efforts at the dredging companies was a behavioural approach. Safety had to become embedded in the genes of the employees. Programmes like NINA (No Injuries, No Accidents) of Boskalis and CHILD (Colleagues, Help Injuries to Leave DEME) and Van Oord’s Work Safe have contributed to motivation and a safer working environment as shown in Figure 1.

TODAY’S SAFETY MANAGEMENT

Nowadays safety is a primary motivator for the IADC dredging companies. From top management to crew members, everybody understands that they are responsible for a safe environment. When an unsafe situations arises, employees are required to report it, irrespective of their position and the level of the employee. No matter how big or small the job, each and every employee – on board vessels or in the office – has the right to expect that their well-being is foremost in the minds of their employers and their colleagues.

The industry has now achieved a position in which the safety policies of the major international dredging contractors are judged as equal to those requested by the client (Figure 2). But safety is a constant vigil and the formation of the IADC Safety Committee and Charter is the next big step in the ongoing efforts to maintain and improve industry safety.

IADC HEALTH & SAFETY CHARTER

To further support the members’ efforts regarding safety, the IADC is now focussing its efforts on establishing a more substantive, permanent programme. In November a year ago, the Safety Committee was formed, with recruits from amongst the member companies. This year as a first concrete step, the committee announced a “Health & Safety Charter” that reads as follows:

The IADC is aware of the risk of the activities in the dredging industry and recognises the will of its members to safeguard their employees and involved parties. The IADC therefore has established a safety committee that enables sharing of best practices amongst its members and active communication thereof.

By maintaining a high level of health and safety IADC members commit themselves to:

• Create a safe and healthy working environment for their employees;
• Comply with all applicable safety and occupational health laws, regulation standards, codes of practice in all countries in which they operate;

Figure 1. Development of the LTI (Lost time incidents) index for IADC members. From 2009-2013.

Figure 2. Personal protective equipment (PPE) is mandatory for all personnel.
• Keep risks to personnel, equipment and the environment at a level as low as reasonably practicable;
• Stimulate a culture of safety awareness and continuous improvement.

The above mentioned commitments aim to reduce the number of accidents and incidents to zero.

On behalf of all IADC members, Split, Croatia 19-9-2014.”

New initiatives, based on the concepts in the Charter, are being developed, concepts which define “best practices” in safety and will incorporate many of the features presently found in the safety programmes of the member companies (Figures 3 and 4).

Additionally, the committee will meet quarterly and discuss specific issues such as mooring/unmooring, Explosives, Asbestos, Crew transfer and Bogg down equipment. General incidents will be discussed with the aim of defining specific best practice ideas. This exchange of information and learning from each other’s experiences will raise create new opportunities to continue to improve the safety of all personnel and vessels. (Figure 5).

CONCLUSIONS

The Safety Committee comprises individuals responsible for SHE-Q within the major dredging contractors. It will aim to prepare information for regular publication of “best practices” in Terra et Aqua Journal and on the website of the IADC. As dredging companies frequently work in joint ventures, a harmonisation of specific safety instructions is an important goal and will contribute to a safer working environment. Through these efforts, the committee wants to emphasise to all stakeholders that safety is a top priority and can contribute to effective and efficient execution of maritime infrastructure projects.

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