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CLIENT-CONTRACTOR PARTICIPATION CAN IMPROVE SAFETY PERFORMANCE

ABSTRACT

Safety in dredging relates to safety and health of personnel, safety of the ships and quality of the environment. In the past, dredging contractors often had inadequate safety management systems, which led each client to insist that its own safety management systems be used by a contractor to ensure compliance. Nowadays, however, the leading dredging companies have mature safety management systems and they have earned the trust of their clients. Clients prescribing systems is no longer necessary and in fact may prove to be counterproductive. When the contractors can implement their own systems it enhances their strengths, values, knowledge and safety culture and leads to better results. Rather than switching temporarily from one client's system to another, using a single reliable system within a dredging company helps the safety management to improve. This article aims to share views and ideas on how contractors and clients can jointly improve the safety performance on projects.

INTRODUCTION

The leading international dredging companies have come a long way regarding their safety

performance. The number and seriousness of incidents have significantly been reduced over the last decade and contractors have shown adequate responses when an accident does happen to ensure prevention in the future. The will to learn from what has gone wrong in the past is strong. Still serious incidents do occur and keeping performance improvement growing requires constant vigilance.

In the past, contractors often had inadequate safety management systems, which consequently lead clients to prescribe their own safety management systems to contractors to ensure compliance. Nowadays, however, as the leading dredging companies have mature safety management systems, prescribing different systems is no longer necessary and may prove to be counterproductive. Given the present advanced state of contractor's safety systems, clients would be advised to assess the safety management system of their contractor and, if at all possible, accept it and not advocate their own systems. In this way the client and contractor can jointly concentrate on what is most essential to improving on-the-job safety performance:

Above: Training exercises for safety are an integral part of safety awareness and preparedness, in which all crew are expected to participate.

The safety culture of the contractor. When the client actively participates in the contractor's safety culture, the contractor's staff will be empowered to act and change.

THE CONTRACTOR'S SAFETY CULTURE

As an example of the advances the dredging community has made in safety compliance, Van Oord's safety management system includes (but is not limited to) specific policies on several subjects: An overall integrated management system, tools such as a Safety Observation Cards and Work Safe Rules – which define the basic principles regarding activities that historically result in the most incidents, and Use of Safety Performance indicators. Policies have been developed in line with the company's vision and mission on Safety, on Environment and CO₂ emissions, and goals have been set to improve results within a given timeframe.

VOMS

Van Oord has a very comprehensive management system (VOMS) which describes its business processes. It has integrated Quality Assurance, Health & Safety as well as Environmental Management. The company aims to ensure compliance with numerous norms and standards, such as ISO 9001, ISO 14001, OHSAS 18001, ISM, ISPS and MLC, for which the company has been certified by the

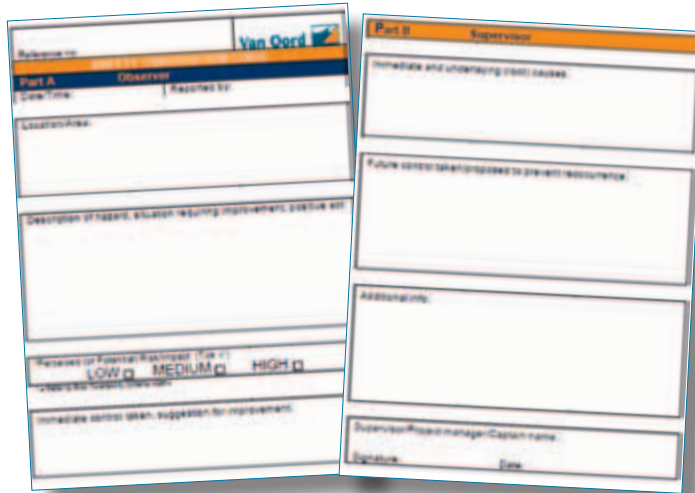


Figure 1. Examples of the Safety Observation Cards, which are a proactive tool for personnel to address safety concerns.

recognised certifying authority. Amongst the positive reinforcement tools developed is a Safety Observation Card. This card invites personnel to be proactive in addressing safety issues. It is a simple tool which is easily used, and supervisors are mandated to address each card individually and ensure that feedback about any necessary actions is given within a reasonable amount of time. The card stresses the positive aspects of safety by empowering all personnel to act before a situation escalates or an incident occurs (Figure 1).

WORK SAFE RULES

The incidents from the company’s recent history have been thoroughly assessed and staff have identified several activities where incidents occur more often than in other activities, the so-called “higher risk” activities. Focussing especially on those areas resulted in the development of Work Safe Rules, which specify the most important “do’s and don’ts” for those activities. A poster campaign as well as a DVD with specific short movies per Work Safe Rule emphasises each of these rules and the safety department stresses the importance

of addressing those within Toolbox talks and prestart meetings and such (Figure 2).

In total the company has developed more than 50 Safe Work Practices (SWPs), which are more detailed instructions on numerous subjects, varying from UXO (Unexploded Ordnance) to Food Safety in catering. These SWPs were recognised by the IADC Safety Award in 2011. They continue to be expanded on a number of subjects which are covered by comprehensive, detailed, clear and unambiguous instructions for all to follow.

SAFETY PERFORMANCE INDICATORS

Safety appears to be one of the few activities which are quantitatively measured via actual unsafe parameters – which means “unsafety” is actually being measured. This is because traditionally safety is measured with Lagging Indicators, incident frequency and other accident statistics.

Van Oord is moving towards a more positive and predictable way to measure safety, by Leading Indicators – such as the number of

safety observations and the time span within which actions are taken to address an incident. Such Leading Indicators allow management to act and change things proactively rather than reactively (Figure 3).

SAFETY IS A CULTURE

When talking about safety, issues such as trust and blame, care and commitment are raised. These are subjects in addition to the statistics, the procedures and the checklists that are necessary to adequately address safety performance and attitudes within an organisation. Focussing solely on standards, safety equipment and management systems does not provide the whole picture (Figure 4). Safety must be part of a company’s culture.

What one observes historically within the company with respect to incident frequency conforms with what science has reported: Originally as technology improves, the frequency of incidents is greatly reduced. Initially contractors start to actively implement safety management systems. But gradually after a while the rapid improvement flat-lines somewhat. To continue to see improvement in safety performance demands developing “a safety culture”.

CLIENT PARTICIPATION

The client’s participation in the contractor’s efforts is very much welcomed. As a team, contractor and client can address issues, including cultural issues, which can lead to very valuable improvements. Outsider’s eyes can see blind spots, and often contractors are so much part of their own safety culture that they may overlook opportunities for improvement. If a client is actively engaged in safety and addresses safety attitudes, this will empower the contractor’s personnel to speak up, be proactive and raise issues. So, within Van Oord a client’s active participation is certainly welcome. However, clients should also assess against their own requirements, with the focus on what they aim to achieve – rather than which means or methods they are going to use. In this way they can make a contribution and yet accept the contractor’s safety management systems, without prescribing their own (new) rules and procedures.

This will have several positive effects:
 - It will avoid “changing the rules” all the time,



Figure 2. Two examples of Work Safe Rules posters.



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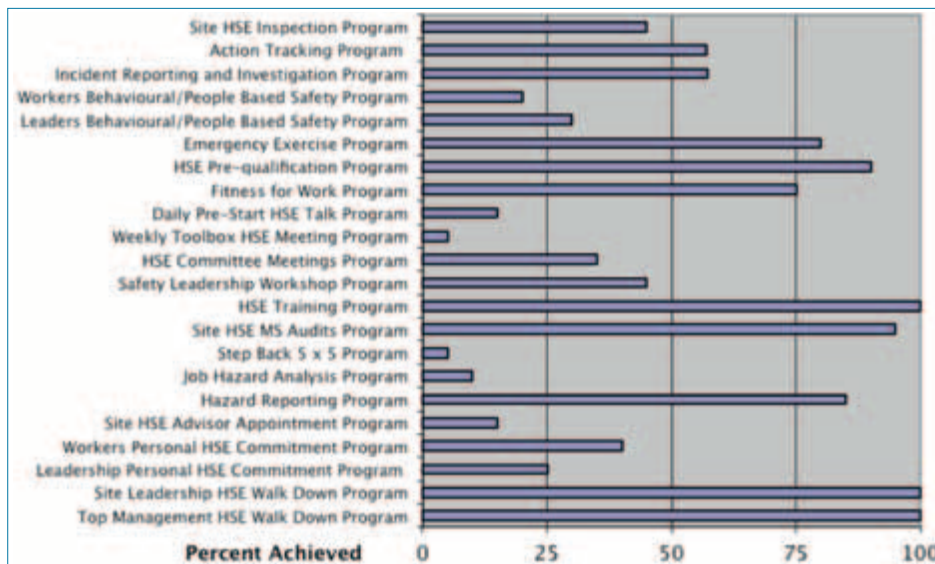


Figure 3. Leading Performance Indicators are a more positive and predictable way of measuring safety.

which basically enables a rule-breaking mentality.

- It will maximise the contractor's own personnel's familiarity and knowledge of all systems and procedures which will result in better performance (and compliance).
- It will avoid administrative pressures: if contractor's forms and templates are used, no repetition of filling in two versions will be required, which counteracts the perception that "safety is just paperwork".



A client's involvement in addressing the contractor's safety culture is appreciated. Clients can contribute by adopting a behavioural-based safety approach, leading by example. They will be able to empower the contractor's personnel by giving priority to safety issues and as a more objective observer they will see things which the contractor may miss. In this way, the best of both worlds can be used.

SAFETY INCENTIVES – ADVANCED PAYMENTS, NOT BONUSES

This approach, allowing the contractor to use its own safety management systems, has led to some very positive experiences with clients. Additionally, a specific experience with a client has taken this idea a bit further. It led Van Oord to suggest a new approach to safety performance in contract administration and management. At the start of the contract the contractor should look at what the client wants to achieve in safety performance and then identify the specific tools and systems, initiatives, trainings and programmes to reach this goal. Together, client and contractor can define (positive) leading Key Performance Indicators (KPIs) and agree on a programme/ "milestone schedule" – Leading Indicators to ensure a positive and predictive approach and to avoid any reluctance to pursue full transparency on incident reporting.

The client can then commit specific parts of the lump-sum of the entire contract towards these milestones. This is NOT an additional amount, but a part which was already agreed to be payable under the contract for executing the entirety of the scope of work. The safety performance would dictate WHEN this part would be paid, not IF it would be paid.

Upon achieving a milestone, a part of the overall lump-sum would be payable. If a milestone were not met, the payment of that portion would move back to the end of the contract. In this way a cash-flow benefit is attached to the "milestones" and the contractor will be incentivised to achieve them.

What might possibly be even more effective is to make a project's progress quantitatively visible. As most dredging company employees are generally quite competitive, they will be driven to achieve these milestones in a timely manner. When confronted with clearly defined quantitative goals and milestones, they would certainly do their utmost to accomplish the tasks.

CONCLUSIONS

Safety awareness amongst the leading international dredging contractors has grown and improved over time. At present, these contractors have mature, sophisticated systems in place. By implementing their own systems, rather than that of various clients, the safety systems gain acceptance and improve the dredging contractor's commitment to a safety culture.

In addition, by working with Financial HSE KPIs and financially rewarding the achievements of the contractor through advanced or early payments (not bonuses) better work procedures are encouraged. This keeps the costs the same for the client, but acts as an incentive to the contractor by improving the cash flow.