IMCA Safety Flash 04/12

April 2012

These flashes summarise key safety matters and incidents, allowing wider dissemination of lessons learnt from them. The information below has been provided in good faith by members and should be reviewed individually by recipients, who will determine its relevance to their own operations.

The effectiveness of the IMCA safety flash system depends on receiving reports from members in order to pass on information and avoid repeat incidents. Please consider adding the IMCA secretariat (imca@imca-int.com) to your internal distribution list for safety alerts and/or manually submitting information on specific incidents you consider may be relevant. All information will be anonymised or sanitised, as appropriate.

A number of other organisations issue safety flashes and similar documents which may be of interest to IMCA members. Where these are particularly relevant, these may be summarised or highlighted here. Links to known relevant websites are provided at www.imca-int.com/links Additional links should be submitted to webmaster@imca-int.com

1 Lacerated Finger during Rigging Operations

A member has reported an incident in which a crewman involved in rigging operations sustained a laceration to one of his fingers. The incident occurred during offshore operations when two riggers were working on the rigging and transfer of lengths of 16" (40cm) diameter pipe.

The injured person was holding the handle of the pipe hook at the end of the pipe, and as the pipe was lifted, it made a backward swing motion and sandwiched his right little finger between the pipe end and the barge structure, resulting in a deep cut.

Illustration of right hand position holding the pipe hook

An investigation revealed the following:

- Whilst a tag line was provided for safer control of the load, this was not used, and the injured person was holding onto the end of the pipe joint;
- The injured person was an experienced rigger but complacent, and had placed himself in the line of fire.

The following lessons were learnt and incorporated into members' toolbox meetings and safety briefings:

- Always make use of tag lines rather than handling the load itself, particularly for lifts of pipes or other long and unwieldy loads;
- Appropriate and sufficient risk assessment – including 'last minute risk assessment' should be conducted before engaging the hands;
- Avoid placing oneself 'in the line of fire'.

Members may wish to refer to the following IMCA guidance:

- IMCA SEL 019 – *Guidelines for lifting operations*.

Additionally, IMCA publishes a wide range of safety promotional material which is applicable in this instance:

- DVDs:
  - slips, trips and finger nips
  - risk assessment
  - toolbox talks;
- IMCA SPP 09 – *Watch out for pinch points*;
- IMCA SPC 04 – *Lifting operations*;
- IMCA SPC 16 – *Caught between and pinch points: What you should know*.

2 Near Miss during Subsea Cutting Operations

A member has reported an incident during subsea gas flame cutting in which a flashback occurred and one oxygen hose burst in two places. During gas flame cutting with a PVL torch, it was noticed that the oxygen bottle for the gas mixture was approaching depletion. Cutting operations were suspended whilst a new oxygen bottle was prepared. The diver reported closed valves on the torch and the deck crew closed the old oxygen bottle and unscrewed the regulator. The regulator was then screwed to a full bottle and the bottle opened. Cutting operations were about to restart when the diver had difficulty igniting the torch. After several attempts at ignition, the flashback occurred, resulting in the hose bursting around 4metres underwater and also on deck, causing a small fire. The fire was put out by deck crew. There were no injuries.

An investigation revealed the following:

- There had been no flash back arrestors on the regulator side of the oxygen hoses;
- The available operations/user manual did not provide clear instructions;
- The procedures used to change out the oxygen bottle were not correct;
- The torch valve was not closed properly.

The following steps were taken to ensure there was no reoccurrence:

- All gas and oxygen hoses were fitted with flash back arrestors and non-return valves at the regulator side;
- Non- return valves were fitted at the torch side;
- Oxygen and/or gas quads were used instead of single bottles;
- The incorrect procedures and work Instructions were updated and rewritten, and redistributed to personnel;
- The member together with the equipment manufacturer is researching further development of equipment and instructions.

Members may wish to refer to the following IMCA documents in which further information can be found:

- IMCA D 003 – *Guidelines for oxy-arc cutting*;
- IMCA D 014 – *IMCA International Code of Practice for Offshore Diving*.

Please see attached letter from the equipment manufacturer.

PVL International B.V.
Dooleg 1
5541 GH The Netherlands
Telephone: 0031 497 645 521
Telefax: 0031 497 645 621
E-mail: info@pvlint.nl
Web: http://www.pvlint.nl

International BV

Subject: PVL Subsea cutting Date: 15-02-2012

Following the subsea gas flame cuttingincident with the PVL underwater torch cutting system, the company PVL International introducesimprovements on the PVL underwater torch cutting system.

Improvements on the PVL underwater cutting system:

1. Oxygen cylinders are connected to each other (no regular oxygen cylinder change over is required anymore).
2. Two propylene cylinders are connected to reduce the number of change outs.
3. Flash back arrestors c/w non return valves are installed on all oxygen and propylene reducers. (top side).
4. Non return valves at the torch side. (subsea)
5. Work Instructions were updated and rewritten. (Manual 2012)

These improvements are described in the **new Manual 2012**, including safety instructions for the PVL underwater torch cutting system.

The **new Manual 2012** will be introduced as soon as possible. The notification on the website of PVL International will be implemented. There will be the possibility to download the **new Manual 2012**.

Mr. John Penson
Supervisor PVL International BV

3 Cargo Hose Incidents

The Marine Safety Forum (MSF) has published the following Safety Flash regarding a number of cargo hose related incidents. In all cases this was due to a breakdown of communication, procedure and maintenance management of offshore installations/base facilities. The quick and professional actions taken by crews prevented these incidents escalating, as the potential for environmental damage were significant.

The report can be downloaded from www.marinesafetyforum.org/upload-files//safetyalerts/msf-safety-flash-12.10.pdf.

4 Crane and Supply Boat Lifting Incident

The MSF has published the following Safety Flash regarding an incident in which a 14 tonne load (a metal reel) made contact with vessel. The single chain/wire arrangement securing the reel to the transport skid failed and resulted in the skid collapsing due to the inadequate securing arrangement and method. There were no injuries/

The report can be downloaded from www.marinesafetyforum.org/upload-files//safetyalerts/msf-safety-flash-12.11.pdf

5 Near Miss: Cargo Carrying Unit (CCU) Flipped Over during Lifting Operations

The MSF has published the following Safety Flash regarding an incident in which a cargo carrying unit (CCU) was flipped over during lifting operations, narrowly missing a crewman. The immediate cause was that the crane wire ferrule snagged in part of the container.

The report can be downloaded from www.marinesafetyforum.org/upload-files//safetyalerts/msf-safety-flash-12.12.pdf