

## Near-miss: Broken high pressure oxygen fitting

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A member has reported that while recovering an inflated lift bag over the bow bulwarks on one of its vessels, a regulator attached to an oxygen pack was broken off at the bottle nipple on the high pressure side of the regulator.

### What happened?

The king valve was quickly closed and there was no harm to personnel or equipment. Nevertheless, the potential hazard from a high pressure oxygen escape is obvious.

In its investigations, the company noted that the regulator and associated piping and hose had extended beyond the framework of the oxygen pack and into the work area.

### The company has issued the following recommendations as a result of its investigations:

- Ensure fittings used are suitable for the task involved. Where such fittings extend the overall length before the regulator, they add leverage and therefore increase the likelihood of breakage.
- Plumb in such a way that the regulator, its associated fittings, gauges and hose reside within protective framework – ideally that of the bottle rack or quad skid. An appropriately rated brass pipe street elbow should be used after the bottle nipple if necessary, to keep the regulator and fittings within the protective framing.
- Wherever possible, bottle racks and quad skids should be positioned in such a way that regulators are away from work areas and walkways.
- If high pressure bottles must be located in a work area, it must be ensured that job safety analyses associated with the tasks in that area include the potential hazards associated with working around high pressure bottles.

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