

DIVEX HSE ALERT



HSE Alert No. HSE001-2006

Hyfex Fire Extinguisher Refill Kits
Part No's SE4816 and SE4817

Divex Ltd.

Enterprise Drive
Westhill, Aberdeen
AB32 6TQ, United Kingdom

Telephone +44 (0)1224 740145
Facsimile +44 (0)1224 740172
e-mail info@divex.co.uk

DATE	05/05/06	COUNTRY:	EGYPT	LOCATION:	DECOMPRESSION CHAMBER
-------------	----------	-----------------	-------	------------------	-----------------------

DESCRIPTION

An installed Hyfex Hyperbaric Fire Extinguisher has recently catastrophically ruptured inside a decompression chamber. Fortunately no personnel were injured as a result of the incident and only minor damage occurred to the interior of the decompression chamber. The photographs below indicate the potential severity of the failure:



INVESTIGATION FINDINGS

Investigation has revealed that the interior wall of the fire extinguisher was badly corroded, in places the wall thickness was only approximately **2mm thick**. Typically wall thickness should be approximately **4.2mm and 6.3mm thick based on the type of cylinder**.

The users' contract for maintenance had recently been awarded to a local service company in the country of operation and the maintenance and servicing process was not carried out as per Divex requirements. It was obvious that the Servicing Company did not fully understand what was required of them.

The contents of the ruptured extinguisher seem to indicate that the wrong type of foaming agent has been used and that it has had a significant influence on the high levels of corrosion. Initial appearances are that a "protein based" foam agent such as "bull's blood" with a high level of iron content may have been used. This is difficult to quantify at present.

LESSONS LEARNED

- Servicing and tests were not carried out as per Divex requirements;
- Divex refill packs were not used in performing refill process;
- The sub-contractors were not fully aware of technical requirements and did not hold the necessary factory / manufacturers training and qualifications;
- Had divers been inside the chamber at the time there would have been a high potential for people to be injured.

CORRECTIVE ACTION

- Divex have performed an incident investigation, including discussions with the Diving Company involved;
- Informed IMCA of our intention to issue an HSE Alert to the industry;

RECOMMENDATIONS

- Clients (users) need to refill Hyfex Extinguishers with Divex AFFF Refill Packs (SE4816 (3Ltr) and SE4817 (7.5 Ltr));
- Users must ensure their sub-contractors are fully aware of technical requirements and hold the necessary factory / manufacturers training.
- Issue Divex HSE Alert to all trade associations (e.g. IMCA, ADC (UK) and ADC (USA));
- Issue Divex HSE Alert to all known purchasers of Divex Hyfex Extinguishers;
- Distribute Divex HSE Alert to all Divex locations.

NAME: Kevin Smith

JOB TITLE: General Manager - QHSE

DATE: 05/07/06

for and on behalf of Divex Ltd.