



# Individual scalded during heated produced fluid transfer

**SAFETY ALERT**

ISSUE #: 19-2014

### Enform

Enform is the health and safety association for Canada's upstream oil and gas industry. We provide leading health and safety training, programs and services, touching the lives of hundreds of thousands of workers each year. We are dedicated to the continuous improvement of safety with a vision of eliminating work-related incidents or injuries in the upstream oil and gas industry.

### An Industry Product

This document was developed by industry for industry. Working collaboratively, Enform works with the submitting organization representative in developing these documents to improve the industry's hazard awareness. Canada's leading oil and gas industry trade associations support the use of shared information to help companies of all sizes improve performance.

### Disclaimer

This document is intended to be flexible in application and provide guidance to users rather than act as a prescriptive solution. Recognizing that one solution is not appropriate for all users and situations, it presents accepted guidance that generally apply to all situations. While Enform believes that the information contained herein is reliable under the conditions and subject to the limitations set out, Enform does not guarantee its accuracy. The use of this document or any information contained will be at the user's sole risk, regardless of any fault or negligence of Enform and the submitting organization.

### Copyright/Right to Reproduce

Copyright for this document is held by Enform, 2014. All rights reserved. Enform encourages the copying, reproduction and distribution of this document to promote health and safety in the workplace, provided that Enform is acknowledged. However, no part of this publication may be copied, reproduced or distributed for profit or other commercial enterprise, nor may any part be incorporated into any other publication, without written permission of Enform.

For more information on this event, please contact: [safety@enform.ca](mailto:safety@enform.ca)

## Description of Incident:

A pressure truck operator was rigging up to load hot produced water from a field production tank. Standard procedure for this operation is to make use of a portable safety device, consisting of a valve connection that includes a bypass valve. In normal operation, the bypass valve must be rotated into the *OPEN* position to check for pressure across the valve before the camlock fitting arms can be lifted and the fitting disconnected (see Figure 1).

The worker was unable to connect to the tank using the company supplied safety device because the load valve had a male camlock fitting installed. The operator had a changeover fitting (see Figure 2) in his truck and used it in place of the safety device to connect to the load valve. This configuration resulted in 2 sets of camlock arms being required to make the connection. On investigation it was determined the operator failed to properly secure the camlock arms for the large diameter (4") side of the changeover. This resulted in the hose coming off the load valve camlock fitting and spraying the worker with hot produced water. In spite of his injury, the worker was able to secure the tank at the main valve and prevent a large spill of produced water.



**Figure 1**  
Safety Device



**Figure 2**  
Changeover Fitting

By industry, for industry





### What Caused It:

The tank load valve had a fitting pre-installed that prevented the worker from using the safety fitting (which was specifically designed to warn of pressure and attach properly to the tank). The operator followed a non-standard procedure to circumvent this problem. The non-standard procedure introduced additional risk to the operation, culminating in the load hose separating from the tank load valve and hot produced water being sprayed onto the operator.

### Corrective/Preventive Actions Taken By Submitting Company:

- For tanks with no integral safety fittings, portable safety devices must be used when transferring heated dangerous goods and heated produced water with **no exceptions**.
- If the safety fitting cannot be attached for any reason when transferring heated dangerous goods or heated produced water, the fluid transfer must not be done.
- Immediately notify district office/dispatch that you cannot use the portable safety fitting to do a heated dangerous goods or heated produced water fluid transfer.

By industry, for industry

