

From: Wayne Vernon [REDACTED]
Sent: Monday, December 23, 2013 6:54 PM
To: Stuart Pinks
Subject: RE: Canada's Draft Safety Culture Definition and Framework Discussion Paper

Hi Stuart,

Season's greetings to you.

Thanks for sharing this valuable work. Given that a number of companies I regulate are Canadian, it will be very useful for me to be able to refer to publications of this nature when dealing with them in future.

On the assumption that you would prefer feedback from foreign regulatory agencies directly rather than through the public mechanism mentioned in the document, here are some thoughts for your consideration:

In my view, while Reason's model is of some use in presenting risk concepts to a lay audience, as I mentioned at IRF, I don't believe it is the best model currently out there for explaining and analysing organisational incidents, and wouldn't promote it myself. A good explanation for the limitations of the Swiss cheese model and reliability based approaches to safety is put forward in Leveson's book, 'Engineering a Safer World,' particularly in the analysis of the Bhopal incident.

(
http://mitpress.mit.edu/sites/default/files/titles/free_download/9780262016629_Engineering_a_Safer_World.pdf
).

Leveson proposes an alternative model based on system theory. There are a number of reasons that recommend its use in preference to other current approaches, including that the tools it gives rise to can analyse both hardware and organisational issues, (see the attached paper on Chernobyl as an example) and also allows analysis of the causes of the recurring cultural threats mentioned on page 5 of the report. It offers additional insights into what can be done to counter them. I believe a systems based approach also allows a better chance of identifying significant precursor measures of use to regulators. On top of this, if done correctly, the use of system dynamics can allow computer modelling of behaviours over time, which is a powerful tool when designing policy and regulatory frameworks at the highest level. (The 'learning from incidents' paper attached includes examples).

Another example of how systems analysis can offer analytical tools that the Swiss cheese model doesn't include is in the attached analysis of the Westray mining incident. This case study identifies big-picture drivers for risky organisational behaviour, such as low economic activity in an area leading populations to accept work that may be rejected by areas with more job options. The case study also points to the possibility of the use of staff turnover as an important precursor factor to major incident as an example of precursor events that may not be identified if a more mechanistic analysis is carried out.

For all that I believe there is perhaps a more useful theoretical model for preventing major incidents than the Reason model contained in the document, I think that the majority of the document contains good advice:

resilience engineering encompasses much of what I am referring to here, and I think the main issue is the disconnect between the governance of organisations and what goes on in practice, so any effort to get corporate governance addressing the issue of organisational incidents is extremely valuable.

I hope this is of some use.

Regards,
Wayne

From: Stuart Pinks [REDACTED]

Sent: Tuesday, 24 December 2013 5:13 a.m.

To: [REDACTED]

Subject: Canada's Draft Safety Culture Definition and Framework Discussion Paper

For information and comment (if possible)

At the recent IRF Annual Meeting, Canada provided a copy of a proposed safety culture definition and framework that has been released in our country for discussion purposes. A copy of this document can be found at: http://www.cnsopb.ns.ca/sites/default/files/pdfs/safetyculture_draftframework.pdf

I am circulating this to solicit any comments from IRF members that would be useful to us as we move forward with this initiative here in Canada. I will continue to share the outcomes of this project as it develops.

Regards,

Stuart Pinks, P. Eng.
Chief Executive Officer

Canada-Nova Scotia Offshore Petroleum Board
1791 Barrington Street
18th Floor TD Center
Halifax, NS B3J 3K9

Direct [REDACTED]

Cell [REDACTED]

Reception [REDACTED]

Fax [REDACTED]

e-mail: [REDACTED]

website: <http://www.cnsopb.ns.ca>

THIS MESSAGE IS INTENDED ONLY FOR THE ADDRESSEE. IT MAY CONTAIN PRIVILEGED OR CONFIDENTIAL INFORMATION. ANY UNAUTHORIZED DISCLOSURE IS STRICTLY PROHIBITED. IF YOU HAVE RECEIVED THIS MESSAGE IN ERROR, PLEASE NOTIFY US IMMEDIATELY SO THAT WE MAY CORRECT OUR INTERNAL RECORDS. PLEASE THEN DELETE THE ORIGINAL EMAIL. THANK YOU.

newzealand.govt.nz - connecting you to New Zealand central & local government services

Any opinions expressed in this message are not necessarily those of WorkSafe New Zealand. This message and any files transmitted with it are confidential and solely for the use of the intended recipient. If you are not the intended recipient or the person responsible for delivery to the intended recipient, be advised that you have received this message in error and that any use is strictly prohibited. Please contact the sender and delete the message and any attachment from your computer.

