

2014 SMART LEARNING SEMINAR
OCTOBER 2 - 3, 2014

ENGINEERING SOLARIUM, UNIVERSITY OF ALBERTA

OPERATIONAL BENCHMARKING & STANDARDS

2014 SMART LEARNING SEMINAR

Agreed at last SMART meeting (Nov 2013) - Tentative schedule

Keynote: David Hutchens – “Outlearning the Wolves“ and “Lemming Dilemma”

‘Change to manage ...manage to change’ – agree to approach?

- i. Interpreting, Adopting and Applying Standards for Operations – Andrew Scott
the voyage from solo current practice via benchmark to global acceptance
local operational standards with/without consideration – success by chance?
- ii. **Changing Legislation vs. Practice - compliance for a safer workplace – Muneer Naseer**
tires, whole body vibration ... Mike Lipsett / Tim Joseph to lead x 3 speakers
fatigue, collision ... - 3 choices by SMART members
- iii. Changing environments, scale – impact on standards – SMART volunteer?
roads, faces, emissions, water ... - 2 operational experiences – SMART members
change in scale – change in standard – 2 OEM presentations
front-line driven changes – 2 TSUG case studies – Steve Thornton ID?
- iv. **Open forum discussion session – Tim² to lead?**

Deadline to fix agenda, confirm speakers, start marketing for seminar:

Friday June 13, 2014 – confirm: tim.joseph@ualberta.ca

SUGGESTED CHANGE TO PT 36, AB - TIRES

Tires on mine vehicles should be monitored each shift to ensure the appropriate inflation pressure as recommended by the manufacturer or determined as (i) the inflation pressure required for a 7% tire diametral strain or (ii) the ratio of the GVW to the total tire footprint area.

Tires on mine vehicles should be monitored each shift to ensure excessive temperatures are controlled as recommended by the manufacturer or set as (i) a maximum of 90°C or (ii) the temperature commensurate with operating a tire for no more than 28 km haul distance within the space of 1 hour.

When working on a tire or rim mounted on a vehicle, the tire and any tires immediately adjacent (rear dual tires) should be deflated to 15 psi, sufficient only to hold the tire-rim arrangement for installation purposes.

No heat, friction or other such heat generation maintenance activity may be performed on a rim when mounted on a tire, regardless of inflation pressure as a rapid deflation and injury to the maintainer may ensue.

SUGGESTED CHANGE TO PT 36, AB - WBV

Operators of any mining vehicle including but not restricted to haulers, excavators and dozers should be protected through periodic monitoring of whole body vibration. Monitoring must illustrate conformity to the Health Guidance Caution Zones reflected in ISO 2631-1 and/or BS 6841 and specifically

- i. Exposure shall not exceed a weighted acceleration of 0.4 m/s^2 within the space of a single 12 hour shift or
- ii. Exposure shall not exceed a weighted acceleration of 0.5 m/s^2 within the space of a single 8 hour shift
- iii. At no time shall a single shift exposure, regardless of duration, show a weighted acceleration in the Health Guidance Caution danger zone indicated by ISO2631-1.

Measurement of WBV must be performed in 3 mutually orthogonal directions relative to the seated position of the operator. Tools for measurement of WBV must permit collection of data over a minimum of a single shift length and commensurate with the requirements to determine a weighted acceleration as indicated by ISO 2631-1.

Measurement tools must be shown to reliably record data relative to the operator seat and floor of the vehicle; or be approved as an acceptable method of data acquisition by the Director, Mines.