8th Annual CCPS Canadian Regional Meeting

Meeting Hosted by Keyera Thursday September 7, 2023, at 08:30-16:30

14:15	Break	
14:45	CSA Z767 – Process Safety Management Update	Kristi Soderman
	(Second Edition)	(Cenovus)
15:15	Metrics – What are Using, What Works?	Glen Worobets
	Panel/Group Discussion	(Keyera)
		Jyoti Patel
		(Resolute RMS)
		Robert Colver
		(AON)
16:00	Open Sharing	Anil Gokhale
		(CCPS)
16:30	Closing Comments	Fred Henselwood
		(NOVA Chemicals)

CSA Z767 – Second Edition

• Kristi Soderman – Director Process & Technical Safety, Cenovus

CAN/CSA Z767 second edition update

CCPS regional meeting 7 Sept 2023 Kristi Soderman, P.Eng. Vice-chair CSA Z767 technical committee Process safety management national standard Canada lacks a federal regulatory approach to Process Safety

Process Safety professionals using CSChE PSM standard worked within CSA governance to produce CSA Z767:17

Standards are developed through a consensus process approved by the Standards Council of Canada

Inclusive participation, diverse interests, and transparency

Living document as strong as committee volunteers

Use of Z767 first edition

Aligned with large producers

Included in regulations

- BC Energy Regulator
- Government of Ontario
- Quebec RBQ approvals
- Environment Canada

Used by educators and authors

Figure 1 Process Safety Diamond

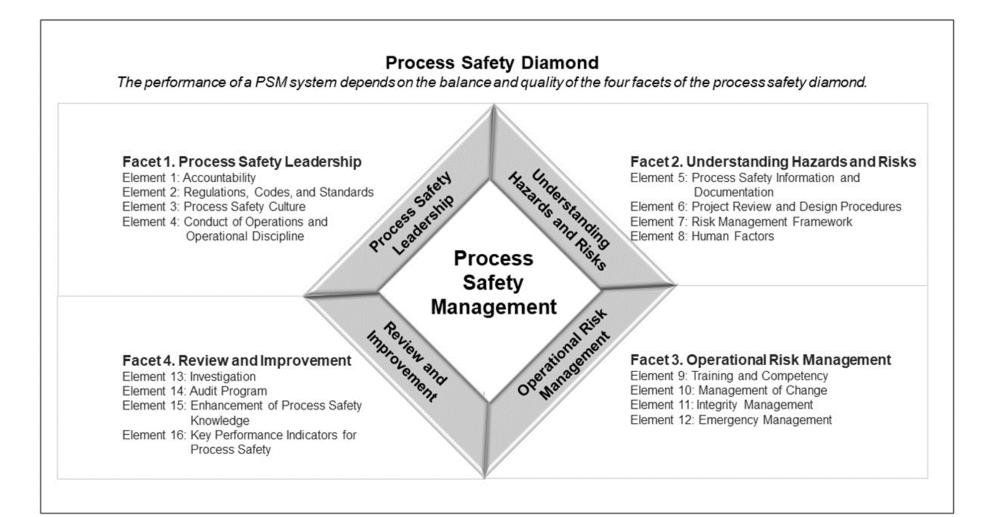
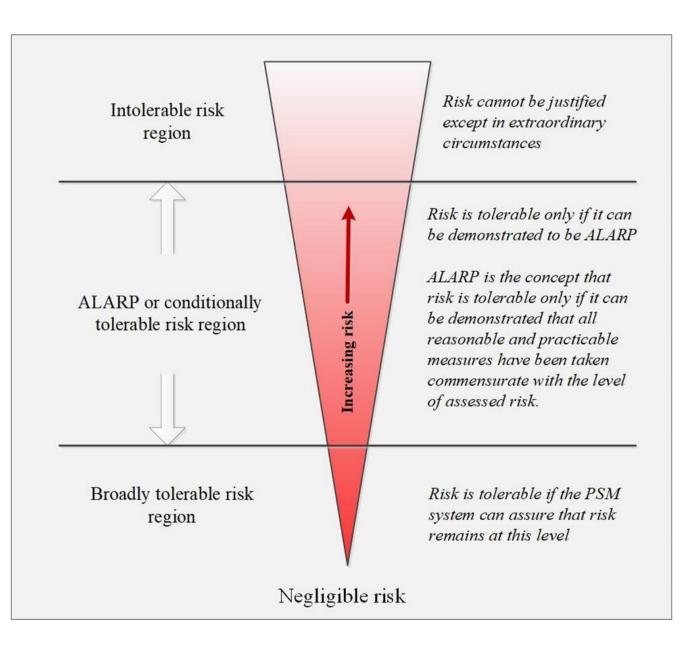




Figure 2 and Annex C Risk Management Framework

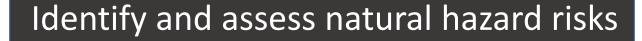
Figure 3 ALARP Principle





Annex D Climate Risk Vulnerability Assessment

NEW





Understand exposure and vulnerability





Evaluate your management systems and programs



Survey and identify areas of difficulty



Volunteer to support or serve on technical committee



Provide feedback to current committee members

Voting committee members

Chair: Adrian Pierorazio, Jenson Hughes Vice Chairs: Kristi Soderman, Cenovus and Rich Piette, Suncor

User Interest Roberto Bianchin, Glencore; Jonas Duarte, Chemtura; Fred Henselwood, Nova Chemicals; Parnian Jadidian, Enbridge Gas Distribution; Richard Piette, Suncor; Francois Roche, Air Liquide ; Kristi Soderman, Cenovus; Adnan Mahmood, Plains Midstream Canada; Hocine Ait Mohamed, Rio Tinto **Producer Interest**; Colin Hendrick, Independent Consultant; Jean-Paul Lacoursiere, JP Lacoursiere Inc.; Marcello Oliverio, Olitech; Terry Koehler, Hatch **Regulatory Authority** Suzanne Mathews, BC Oil & Gas Commission; Hua Deng, Alberta Energy Regulator; Peter Jones, Worksafe NB; Sedote Ghislain Hounkpe, Commission des normes, de l'équité, de la santé et de la sécurité du travail; Jorge Larez, TSSA Ontario; Sujoy Dey, Ontario Ministry of Labour; Keith Landra, Canada Energy Regulator **General Interest** Graeme Norval, University of Toronto; Ron Willey, North Eastern University ; Srikanth Mangalam, PRISM Institute; Morley Brownstein, retired; Rob D'Amico, Hamilton Professional Firefighters Association; Vinay Sharma, Unifor

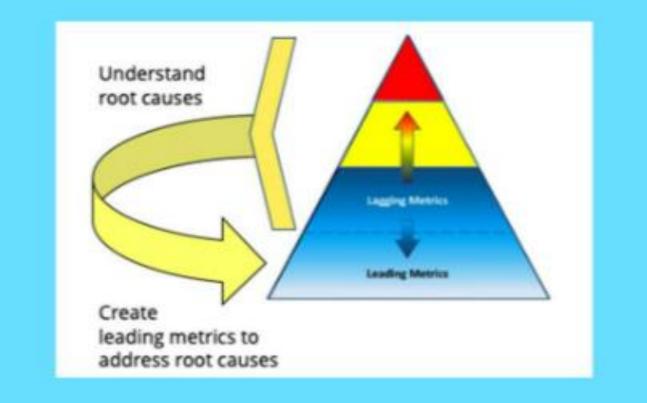
Thank you!

Process Safety Metrics - Discussion

- Glen Worobets Process Safety Manager, Keyera
- Jyoti Patel Principal Consultant, RRMS
- Robert Colver Risk Engineer, AON
- For this discussion we would like to hear from the audience, in addition to our speakers

CCPS Monograph:

Effectively Using Metrics to Improve Process Safety Performance



https://www.aiche.org/sites/default/files/html/ccps/3295426/V1/310-Metrics.html

Lots of Concepts to Explore

- API RP 754, CCPS Guidance
- Leading/Lagging
- Reactive/Proactive
- Near Misses/Weak Signals
- Targets, Normalizations, Measuring Change
- Alignment with Occupational Safety Metrics
- Linkages to Compensation Systems
- Getting to the Right Data
- Driving the Right Behaviours

What is the Future of Process Safety Metrics?

- Big Data
- Machine Learning
- AI

Open Sharing

• Anil Gokhale – Chief Operating Officer, CCPS

Thank You

- Please let me know of any feedback on the session
 - If you are interested in hosting next year
 - Thoughts as to future topics
 - Etcetera