



THE 3RD ANNUAL
PWABC & BCMSA

VIRTUAL

10.05.2021

10.06.2021

JOINT ANNUAL CONFERENCE

20
21

Partner Sponsors:

WORKSAFE BC

AMHSA
Alberta Municipal Health and Safety Association

EMCO
WATERWORKS
CUPE
CANADIAN UNION OF
PUBLIC EMPLOYEES
BRITISH COLUMBIA

OCTOBER 5 & 6 | VIRTUAL

The third annual joint conference is presented by the British Columbia Municipal Safety Association and the Public Works Association of British.

The benefits include more presentations in key topic areas including public works, safety and leadership; a large virtual tradeshow¹ and more opportunities to network with municipal leaders and industry professionals from across Western Canada.

Combining the key strengths and areas of expertise of each of our associations elevates the quality and value of your conference experience.

CLASSIFICATION FOR WORKSHOP STREAMS

The classifications of Leadership, Public Works, and Safety offer an indication of the focus of a presentation for a delegate's consideration

L Leadership

PW Public Works

S Safety

ABOUT US



The British Columbia Municipal Safety Association (BCMSA) is an independent, non-profit organization committed to improving worker health and safety in all industries throughout the province.

The Public Works Association of British Columbia represents individuals working for municipalities, utility companies and engineering consulting firms, in every community throughout BC and Yukon.

REGISTER NOW:



REGISTER

Tuesday October 5, 2021

7:30-8:00

Welcome

8:00-9:00

Opening Keynote :

Redefine Possible: Lessons for Tackling Mountains in the Corporate World

9:00-9:30

BREAK / TRADESHOW

9:30-10:30

S
Contractor Safety Management - Tips and Concepts to help assist you in achieving your CSM goals

S
Systems Ergonomics - Beyond the physical domain

L
Fake it Till Ya Make it!!... But NOT in Safety!!

PW
Okanagan Lake and UV Treatment Project

PW
Adaptive Mixing and Better Biological Nutrient Removal

10:30-10:45

BREAK / TRADESHOW

10:45-11:45

S
Ask Us Anything: A Live Panel Discussion with Local Government Safety Leaders

S
Serious Investigations: A Legal Lens

L
Reducing WCB Premiums - The Financial Impact of Disability Management

PW
History of PLC (Programmable Logic Controller) and What are SCADA and DCS systems

PW
Utilizing Remote Monitoring & Machine Learning Tools to Assist Collection System Operations

11:45-12:45

LUNCH / TRADESHOW

12:45-13:45

S
The Art of Bridging the Generation Gap in Workplace OHS Culture

S
Risk Tolerance - 10 Influencing Factors of Risk Acceptance

L
Keeping British Columbians Safe - A New Operator Certification from the EOCP

PW
Municipal & Public Works Responsibilities - Inspection Requirements, & the Importance of Keeping Records

PW
Challenge the Process

13:45-14:45

S
Digitizing Data to Keep Municipal Employees Safer

S
Approaching Others and Intervention - Speaking Up for Safety

L
Psychologically Healthy & Safe Return-to-Work (RTW) Best Practices

PW
Retrofitting Older Green Stormwater Facilities to Improve Maintenance Efficiencies and Meet Current Standards

PW
Engineered Hot Taps - Everything You Didn't Think Could Be Tapped

14:45-15:00

BREAK / TRADESHOW

15:00-16:00

S
Injury Reduction Campaigns How and Why

S
Managing Fatigue Related Risk in the Workplace

L
Prevention of Workplace Violence

PW
Planning and Execution of Confined Space Entries Requiring Alternate Isolation Procedures

PW
Diversity and Inclusion Begins With You

Wednesday October 6, 2021

8:00-9:00

Opening Keynote :

How to Regain Focus, Recharge Your Life, and Really Get Sh!t Done

9:00-9:30

BREAK / TRADESHOW

9:30-10:30

S

Damage Prevention Update from FortisBC

S

Dealing with the Aftermath of a Fatal Workplace Incident

L

Master the Comeback

PW

Sustainability on Steroid

PW

Your Greatest Risk - the Challenge. Everyone who Drives a Vehicle or Operates Equipment

10:30-10:45

BREAK / TRADESHOW

10:45-11:45

S

Certificate of Recognition (COR) Program

S

Hazardous Recyclables and Hazardous Waste in Municipalities Do's and Don'ts

L

Increasing Employee Engagement and Participation in Workplace Safety

PW

Relying on the Policy Defence and the Importance of Having Comprehensive and Updated Policies

PW

COVID Panel/Think Tank

11:45-12:45

LUNCH / TRADESHOW

12:45-13:45

S

Toxic Process Gases - Owning the Risks

S

"Sensing" your body and brain in the workplace: Benefits and challenges

L

The Invisible Disability: Managing Substance Use and Recovery in Safety-Sensitive Workplaces

PW

Hot Topics in Public Works Panel/Think Tank

PW

Applying AI in Public Works

13:45-14:45

S

Prosecution and Penalties: The Legal Risks of an Ineffective Safety System

S

The Present and Future of Workplace Safety Predictive Analytics

L

Resiliency In Response To Abnormal Times

PW

Pressure Sewer Systems Providing a Sustainable Solution for Sewer Renewal

PW

Managing Driving-Related Stress

14:45-15:00

BREAK / TRADESHOW

15:00-16:00

S

BCMSA Past Award Winners Panel - Strategies for an Effective Safety Management System

S

Precursor Analysis

L

Help Shape BC's New Emergency Response Guidelines for Water Suppliers

PW

Pelmewash Parkway - Lake Country, BC

PW

Pavement Gone to Pot? Pothole Prevention and Patching Practices

ALL SESSIONS, EVENTS, TIMES, DESCRIPTIONS AND LOCATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.

#JAC2021 03



8:00-9:00

Welcome Session KEYNOTE PRESENTATION

Redefine Possible: Lessons for Tackling Mountains in the Corporate World

Spencer West invites audiences to experience the transformation that can occur when we "redefine possible". With his trademark humour and humility, West spins a spellbinding story of the challenges he faced after losing his legs from the pelvis down at age five, and the journey of discovery that ultimately enabled him to summit Mount Kilimanjaro using his hands and wheelchair.

West applies the insights gleaned from a lifetime of overcoming obstacles to help others identify their own roadblocks and push past them. His inspiring message and tangible life lessons motivate audiences to believe they can tackle any goal, whether personal or professional.

Speaker:
Spencer West, International Speaker; Content Creator; Bestselling Author; World Change Warrior/Activist

9:30-10:30

L Fake it Till Ya Make it!... But NOT in Safety!!

We all "fake it till we make it" at some point in our careers but in safety critical positions, we simply cannot do this! The consequences are too high for failure! As gatekeepers of the safety program, supervisors and safety professionals need to ensure the competence of the people they allow access to higher risk tasks. Far too often we default to trusting the word of people we barely know (or sometimes do not know) based on their perceived confidence and/or verbal assurance that they have conducted the safety critical position you are trying to staff. We need to seek definitive proof that people can execute their work safely.

In this session we begin with a humorous story to set the context for an interactive and engaging presentation/workshop where we will attempt to harvest the collective intelligence of all those in attendance through group work and open discussions. We will collectively explore options for creating a workplace that ensures the competence of their workforce, but also creates an open and honest work atmosphere where people feel comfortable sharing their skills or lack of skills before they take on a safety critical position or task. Learnings from contemporary literature related to the presentation/workshop topic will be interspersed into the group work and open discussions to provide discussion points to attendees.

Speaker(s):
Allan Moore, CRSP Occupational Health and Safety Group Lead, Wood PLC
Paul Charnoun Director of HSE, Clifton
Cam Mitchell, Kasa Safety Consulting

PW Adaptive Mixing and Better Biological Nutrient Removal

With the increased need for biological nutrient removal (BNR) at wastewater treatment facilities, the needed for slow mixing has increased. In addition to needing mixers, operators are discovering that treatment results can be optimized by controlling the timing and speed at which they mix. The introduction of adaptive mixers has made this control not only possible but also programmable.

This presentation will review the processes involved with biological nitrogen and phosphorus removal in wastewater. The role and needed for mixers will be reviewed with regard to each processes. The concept of adaptive mixing will then be introduced along with suggestions on what parameters to monitor within the treatment processes to make mixer speed automation possible. Parameters include monitoring and adjusting mixer speed based on tank levels, flows, DO levels, TSS concentrations and phosphorus release.

Finally, the results from a study at Milwaukee Metropolitan Sewerage District will be presented. In this study, various mixer run times were evaluated to determine the optimal run/rest sequence for phosphorus removal. By studying the phosphorus release in the anoxic zone, it was determined that by not mixing 11.5 hours and running the mixers only 0.5 hrs per day in the anoxic basins, phosphorus removal was increased.

Attendees of this presentation will walk away with a better understanding BNR and the role that mixing plays in its effectiveness. In addition they will learn different ways to monitor BNR processes and will have suggestion on control options that they can attempt at their own facilities.

SUMMARY:
This presentation will give attendees a better understanding of BNR and the role that mixing plays in its effectiveness. In addition they will learn different ways to monitor BNR processes and will have suggestion on control options that they can attempt at their own facilities.

Speaker(s):
Alden Meade, Mechanical Engineer Xylem

S Systems Ergonomics - Beyond the Physical Domain

Ergonomics is considered as a solution for preventing and minimizing MSIs at workplace. For the same reason, Ergonomics has always been seen from a physical domain perspective of postural changes and/or more recently from an equipment design perspective. Ergonomics in actual uses a systems approach where various contributing factors including environment, psychosocial, physical, processes and job design are looked at to identify best possible solutions. For the same, this session will provide on systems ergonomics and how organizations/individuals can successfully reduce MSIs by utilizing various risk mitigation factors.

Speaker(s):
Manu Nellutla, Executive Director Actsafe Safety Association

S Contractor Safety Management - Tips and Concepts to help Assist you in Achieving your CSM Goals

In this session we will provide you with some ideas, concepts and information to assist you in ensuring that your system for contractor safety management is optimized prior to commencing your project and for the duration of your project.

Speaker(s):
Stephen Ty, Owner - SLT Safe-Tye Solutions

PW Okanagan Lake & UV Treatment Project

The presentation will be co-presented by Kiel Wilkie with the District of Lake Country and Stephen Horsman of WSP. The presentation includes the background and history of the Districts Okanagan Lake pump station, the operational challenges that led to the project initiation, design challenges, and project construction. The Okanagan Lake Pump Station was originally constructed by Hiram Walker to use in their whiskey distillery process. In 2004, the facility was taken over by the District of lake Country to use for their drinking water supply network. WSP worked with the District to upgrade the existing facilities in response to increasing water demands, meet health drinking water guidelines, and upgrade the aging electrical infrastructure. The scope of work involved the construction of a new UV disinfection facility, installation of a new 750 HP vertical turbine pump, replacement of the existing on-site hypochlorite generation system and upgrades to the existing 850mm steel transmission main. Key take aways from this presentation include:

DESIGN PHASE: Early and frequent operator engagement = safe and happy end user. Keep it simple!

PROCUREMENT PHASE: RFP process provided flexibility to negotiate final scope to meet project budget with preferred Contractor

CONSTRUCTION PHASE: Collaborative approach established early with Contractor-Engineer-Owner. Construction change orders < \$70,000 on \$5.67M Contract (i.e. < 2% Contract Value)

Speaker(s):
Stephen Horsman, Manager of Water WSP Canada Inc
Kiel Wilkie, Utilities Manager, District of Lake Country

12:45-13:45

L Keeping British Columbians Safe - A New Operator Certification from the EOCP

Legionnaires' disease afflicts and kills more people in the United States than any other reportable waterborne disease upwards of 70,000 estimated cases annually. The number of cases in Canada are equally troubling. Between 3% and 35% of infections lead to death. Reported cases of Legionnaires' disease have increased in the last ten years. Legionella are associated with the built environment - cooling towers, decorative water features, and non-potable water treatment systems. The bacteria can proliferate in unsatisfactorily maintained plumbing and building mechanical systems and are transmitted through inhalation of contaminated water that has been aerosolised. The Environmental Operators Certification Program (EOCP) worked alongside the City of Vancouver and the BC Ministry of Health to create a new operator certification for Building Water Systems (BWS) that will help ensure these systems are properly operated, reducing the number of Legionella outbreaks in BC.

Speaker(s):
Kolpana Solanki, President and CEO, Environmental Operators Certification Program
Chris Radzimski, City of Vancouver

PW Municipal & Public Works Responsibilities - Inspection Requirements & the Importance of Keeping Records

Responsibilities: What are they? How do we prove we are continually meeting them? Will discuss effective Risk management strategies including:

1. Municipal - Codes, Standards & Regulations
2. Municipal related Liability issues (Sources for Inspection)
3. Inspections - Needs - Recreational locations, Facilities, Safety
4. Inspections - Needs - Public works, Assets, etc.

5. How to use Checklists to improve record keeping
Alan will touch on the requirements for policy & procedural development in regards to good risk management practices when it comes to developing a system that will not only minimize injuries but minimize exposures to local government.

Speaker(s):
Alan Kavanagh, Director of Loss Control and Risk Management at Norata Solutions inc.

PW Challenge the Process

Have you ever proposed a change to a process to make it better and more efficient, but you were told... "If it isn't broken, then don't fix it." "Why change, we have done it that way for 20 years." "It's tradition." Well, "Challenge the Process" is about challenging something with the purpose of making it better by: asking questions and searching for opportunities; continually reviewing processes; innovating, experimenting and taking risk; and learning from mistakes. Many of these ideas and principles come The Leadership Challenge by J. Kouze and B. Posner. By attending this session, participants will be better able to:

1. understand the importance of asking questions and searching for opportunities.
2. implement strategies for improving processes.
3. influence change for the purpose of making things better.

Speaker(s):
Ella Twigg Sr. Project Engineer CONSOR Engineers

S The Art of Bridging the Generation Gap in Workplace OHS Culture

Safety culture is built by the the shared beliefs, experiences, attitudes and passions of a group of the people in an organization. People in different age cohorts can hold disparate views and as a result safety management strategies that work for one generation may not be effective for others. Together we will use our collective knowledge in collaborative dialogue to enable us to see which approaches and techniques best convey the message of workplace safety to the various age cohorts. This World Cafe style discussion will be a live interactive workshop, cameras and mics on!

Speaker(s):
World Cafe Discussion

S Risk Tolerance - 10 Influencing Factors of Risk Acceptance

Why do workers take risks? What is it about us humans that compels us to take risk? Our speaker, Dave Fennell, has explored this topic and has identified the 10 influencing factors that impact our decisions on how much risk is acceptable. He will show us how to recognize each of these factors in the work place (and off the job) and will provide practical guidance and strategies on what we can do to reduce risk to acceptable levels. Simple tools and approaches will be provided that can be used with existing safety systems in any organization. Participants will take away practical approaches for reducing risks in their organizations.

Speaker(s):
Dave Fennell, Dave Fennell Safety Inc



98%

BC Public Sector

WHO ATTENDS?



DON'T MISS OUT!

#JAC2021 will provide you with direct access to real-life local government case studies and success stories, as well as direct access to a virtual community of hundreds of health and safety and public works professionals.

Information sharing, question-and-answer sessions and networking are a vital part of the conference experience and will be made available through the virtual conference platform.

The solutions you can find at the conference can save your organization hundreds or even thousands of dollars in consulting fees. Stay current with information and emergent trends, technologies, and best practices. All this, virtually and conveniently from wherever you are. You also have the opportunity to learn about exciting products and new services from the virtual tradeshow.

10:45-11:45

L Serious Investigations: A Legal Lens

The occurrence of a serious workplace injury or fatality is the worst moment in any safety professional's career. Such events occur without warning but require the safety professional to respond promptly and in a well thought-out manner in emotionally charged circumstances. This presentation will highlight key legal and strategic considerations when responding to serious workplace incidents, including: satisfying your statutory obligations under the BC Workers Compensation Act; carrying out the employer's investigation; responding to investigations by police, WorkSafeBC and other agencies; retaining experts/advisors; supporting persons impacted by the incident; and responding to inquiries from the press and other third parties.

Speaker(s):

Andrew C. Wood, Partner, Harris and Company LLP

S Ask Us Anything: A Live Panel Discussion with Local Government Safety Leaders

Join this live panelled ask us anything style discussion with Local Government Safety Leaders discussing emergent issues and sharing experience and knowledge in the local government industry.

Speaker(s):

Safety Leaders from BC Local Government

VISIT THE TRADE SHOW

Many local and national suppliers will be displaying their products and services for you. This is an excellent opportunity to ensure you are current with the most recent developments and solutions for your workplace.

S Reducing WCB Premiums – The Financial Impact of Disability Management

You are likely paying more than necessary to WorkSafeBC – your organization's premium rate is directly related to your own injury prevention and management measures. While many employers meet the minimum health & safety criteria, they don't realize to what extent their efforts can reduce claim costs and, consequently, their premiums. Implementing or improving your injury management strategy can have a significant impact on your bottom line, contributing to the success of your organization.

Speaker(s):

Martin Paquette, Vice President, TeksMed Services Inc.

PW Utilizing Remote Monitoring & Machine Learning Tools to Assist Collection System Operations

Learn how advances in easy to deploy, remote monitoring technology is enabling utilities across BC to have a window into their collection systems and make data-driven decisions. This presentation will cover how remote monitoring can assist wastewater operators with three key challenges they face:

- High-frequency cleaning due to fats/oils/grease (FOG) build-up & root intrusion
- Inflow & infiltration detection/tracking
- H2S levels

Speaker(s):

Matt Stoltz, Owner/President, Flow Systems

PW History of PLC (Programmable Logic Controller) and What are SCADA and DCS Systems.

In today's world, automation and remote connectivity systems are used in all industries and also in our personal life. This session is to demystify the PLC, DCS and SCADA systems used in the water and wastewater industry and to provide a better understanding of their roles and how they can improve systems efficiency. This session will also help to understand the technical language used in the automation industry. And finally, to assist water and wastewater operators identifying the type of systems they used on a daily basis and what type of equipment should be adequate for future needs.

Speaker(s):

Luc-Rejean Lepine, Senior Market Development Manager – Monitoring & Control – Xylem Canada LP

TRADE SHOW HOURS

TUESDAY
OCTOBER 5

9:00 am - 4:00 pm

WEDNESDAY
OCTOBER 6

9:00 am - 4:00 pm

13:45-14:45

PW Engineered Hot Taps - Everything You Didn't Think Could Be Tapped

Did you know you can: - Complete a hot tap using a butterfly, plug valve or no valves at all? - Hot tap reinforced concrete walls, manholes, pipe caps, blind flanges, RCP pipe, PCCP pipe, fiberglass pipe and many more? - Completed tangential hot taps or hot taps at on a 45-degree angle on certain types of pipes? Please join us for this extremely informative seminar showing case studies and the engineered fittings for some the unique hot taps that we have completed in the last 40 years. You will find yourself wishing you knew this technology existed in the past and glad you now know about it for the future.

Speaker(s):
Elia Twigg Sr. Project Engineer, CONSOR Engineers

PW Retrofitting Older Green Stormwater Facilities to Improve Maintenance Efficiencies and Meet Current Standards

The City of Eugene Oregon has a robust stormwater management program with the goals of flood control, water quality improvement and habitat enhancement. Green stormwater treatment facilities, standards and requirement have evolved over the last decade. Eugene has many older green facilities that are challenging to maintain and do not meet current stormwater standards. The city has begun evaluating older facilities and is implementing capital improvement projects to improvement maintenance efficiency and water quality benefits. This presentation will discuss how public stormwater facilities can be re-invented to improvement water quality, reduce maintenance costs and extend the overall life of treatment facilities.

Speaker(s):
Doug Singer Principal Civil Engineer, City of Eugene Oregon

L Psychologically Healthy & Safe Return-to-Work (RTW) Best Practices

The World Health Organization (WHO) identifies mental health issues as the leading cause of worldwide disability, with anxiety and depression being the most prevalent psychological health diagnoses. Psychological health issues can disrupt an individual's ability to function effectively, both personally and professionally; furthermore, when issues become chronic or untreated, work environment adjustments may be required. Evidence-informed accommodation, return-to-work, and stay-at-work plans can mitigate impacts, benefiting both the affected individual, as well as the workplace.

In this session, attendees will understand employee vs. employer roles and responsibilities in managing workplace mental health issues; will gain familiarity with approaching formal and informal mental health accommodations; will understand how to best support and communicate with workers when off work; and will be familiar with best practices in implementing supportive, timely, and sustainable return-to-work and stay-at-work plans in a collaborative and psychologically safe manner.

Speaker(s):
Dr. Joti Samra, CEO & Founder of MyWorkplaceHealth

"Where Innovation and Collaboration Meet"

1
Unique Event



2
Keynote Plenaries

600+
Delegates, exhibitors,
speakers & guests

15:00-16:00

PW Diversity and Inclusion Begins With You

Diversity awareness is essential for the continued growth and vitality of an organization. Those organizations who intend to remain relevant today and long into the future recognize the strategic importance of diversity and inclusion both as a workforce and as a membership organization. There is no right way or one size-fits all method for diversity and inclusion. Kimberly Strong, who served as Chair of the National American Public Works Association's Diversity and Inclusion Committee from 2019-2021 will share her insights on what the Diversity Committee accomplished during her chairmanship in the area of Diversity and Inclusion, and provide you a few tips on how you can advance diversity and inclusion with your members and volunteers to ensure that your organization continues to thrive.

Speaker(s):
Kimberly Strong, Public Information Specialist, City of Chattanooga

PW Planning and Execution of Confined Space Entries Requiring Alternate Isolation Procedures

This presentation will cover examples which require Alternate Isolation Procedures to be prepared to meet Part 9 of the Occupational Health and Safety Regulation (OSR). The complexity involving adjacent piping in confined spaces presents a challenge for entry inside many typical municipal confined spaces (e.g., sewers). The options for isolation are sometimes not practical, and therefore implementing alternate isolation procedures requires careful planning, consideration and communication with WorkSafeBC. Takeaways from this presentation will cover: case examples relevant to municipality confined spaces; requirements to include when submitting a request to WorkSafeBC for alternate isolation procedures (to meet Section 9.22 in the OSR); and planning to potentially avoid having to submit alternate isolation procedures.

Speaker(s):
Peter Bergholz, Senior Occupational Hygienist and Project Manager, Wood Canada Ltd

S Injury Reduction Campaigns How and Why

The BC Municipal Safety Association and the Alberta Municipal Safety Association have partnered together to invest in resources to tackle common risks between our provinces. Learn more about these common initiatives such as Mental Health, MSI Reduction, Line or Fire and Winter Ready.

Speaker(s):
BC Municipal Safety Association
Alberta Municipal Safety Association

S Managing Fatigue Related Risk in the Workplace

Human fatigue can increase the likelihood of errors and incidents. Often, attempts to manage fatigue risk focus on an individual's level of sleepiness and/or sleep hygiene. With this approach, countermeasures such as restricted hours of work or mandatory break schedules may be used. While some of these measures can be helpful, they may not be as effective in reducing fatigue-related risks associated with performing work.

You are invited to join Heather Kahle, Human Factors Specialist in the Risk Analysis Unit at WorkSafeBC for a riveting education session on a novel risk assessment process that is sure to leave you wide awake. This session introduces a risk-based approach on managing workplace fatigue, which uses best practices to guide employers on developing sustainable methods to reduce fatigue-related risks.

Speaker(s):
Heather Kahle, Ergonomist, WorkSafeBC

L A Practical Workshop to Help Employers Manage the Risk of Violence in Today's Workplaces

Fortunately, violent incidents in the workplaces are not daily events, workers often find themselves in situations that have the potential to escalate into violence. This risk has been heightened during the current pandemic.

Whether your employees are faced with an inebriated customer who is misbehaving, are required to deal with guests pushing back against new COVID-19 related regulations, or experience an attempted robbery while working alone, training them on how to handle difficult encounters will help influence how these incidents unfold.

This virtual session features Phil Eastwood, a leading expert in workplace violence related training.

Employers everywhere are committed to providing a safe, healthy and supportive working environment for all employees - this session offers employers practical advice on how to translate that commitment into ACTION.

Speaker(s):
Phil Eastwood, FIORE Group Training



8:00-9:00

**Welcome Session
KEYNOTE PRESENTATION**

**The Success-Energy
Equation: How to Regain
Focus, Recharge Your
Life, and Really Get Sh!t
Done**

Speaker:
Michelle Cederberg
Change, Health and
Productivity Expert; Author

*In an age of disengagement, distraction and fatigue further exacerbated by the on-going pandemic, how we work and live has been tested. We're busy, stretched and stressed, and as we navigate the constant change and uncertainty, it can feel difficult to stay positive, and do our best work. By using the wisdom of science and your own innate common sense, you can combat what Health and Productivity Expert Michelle Cederberg calls 21st-and-a-quarter-century stress, and tap into a well of energy that will reduce overwhelm and stress in every area of your life. In this engaging session, Cederberg shares research from her new book *The Success-Energy Equation* that will help you regain focus, recharge your life, and really get sh!t done, with confidence and optimism on your side.*

In this high-energy keynote you will:

- Get clear on your own definition of success; what really matters to you in work and life, and what drives you to do what you do? How has COVID changed that?
- Look at typical barriers that get in the way of success, and how you can effectively navigate them.
- Discover four science-backed variables that contribute to higher levels of goal success and overall well-being and how to make them work for you.
- Embrace a simple but powerful habit you must do daily to ensure on-going success with everything you do that's important to you.

Full of hilarious stories, anecdotes and innovative strategies, you'll leave this session with a renewed sense that it's possible to break free from stress and drive your own success, through the pandemic and beyond. That's Success-Energy, and it's a formula worth calculating.

This session is based on Michelle's new book of the same title that debuted as a bestseller October 27th, 2020.

9:30-10:30

L Master the Comeback

Some of us struggled to pivot and excel during this pandemic, and now we are struggling to move forward both personally and professionally. The intent of this program is to provide skills, and tools for managers and individuals to move forward and succeed during any crisis. The effects of the pandemic on our mental and physical health spill over into our organizations and affect not only the manager but their employees and families. This program will equip you to develop the skills and tools to "Master a Comeback" now and for the future.

Speaker(s):
Jeanette Austin

**S Dealing with the Aftermath
of a Fatal Workplace
Incident**

When we think about safety and the workplace, we often focus on prevention and all the reasons it is important. When we attend training and education in safety we are walked through the aspects of a good investigation; techniques, methods, causation development etc. When we are faced with a serious injury or fatality in the workplace, what training do we draw on to understand how to manage the experience of the event, the days, weeks, months after the event. In this session the real life experience of responding to a serious injury/fatality will be shared from the perspective of a large municipality including what was learned and how we responded to impacts outside the immediate incident and causation. This session will be a combination of experience sharing, logistical response, and strategic leadership.

Speaker(s):
Jennifer Irwin, Safety Manager, Engineering Services City of Vancouver

**S Damage Prevention Update
from FortisBC**

Did you know that FortisBC's underground infrastructure receives over 1,000 damages annually? In this presentation, Ian Turnbull, Damage Prevention & Emergency Services Manager will provide an overview of the damage prevention program, its key successes and challenges. While municipalities comprise a small percentage of damagers to FortisBC's underground infrastructure, other parties such as independent contractors who do work for municipalities are yet still to "get the message" about the importance of clicking or calling before they dig and then following the instructions. In this interactive presentation, Ian will speak to recent changes and improvements made to FortisBC's damage prevention program, share case studies and lessons learned so far. Damage prevention is a joint responsibility and we would like to hear your ideas and thoughts.

Speaker(s):
Ian Turnbull, Damage Prevention & Emergency Services Manager

**PW Your Greatest Risk – the
Challenge. Everyone who
Drives a Vehicle or Operates
Equipment**

We all drive for work, home, and play; therefore, it is not surprising that the greatest risk for injury or death occurs in vehicle-related incidents. Ensuring both yourself and your employees are educated and properly trained will decrease this risk. This presentation will challenge participants to assess their own driving behaviours and make them aware of the solutions they have as employers. Challenge yourself to assess the following: 1. Awareness - Inform yourself about the risks associated with driving a vehicle or operating equipment. 2. Attitude and Behaviour - Change your attitude toward driving; it can happen to you. 3. Remove the word "Accident" from your vocabulary. 4. Slow Down - Going 5km over the speed limit can make a big difference to stopping distance and reaction time. 5. ART vs. ACT - Pay attention, be in the moment, wear your seat belt. 6. Lead by example - Positive influence, education and training.

Speaker(s):
Terry Betts, Associate AFSI and Bob Reed

**PW Sustainability on
Steroids**

The presentation will be about the evolution of the new Central Transfer Station project in Anchorage and how it relates to enhanced recycling and diversion from the landfill in Anchorage. All with the intent of ensuring a reliable solid waste management and recycling system for the next 40-years in Anchorage with the overarching goal of extending the life of the Anchorage Regional Landfill.

Speaker(s):
Mark Spafford

#JAC2021 O

10:45-11:45

L Increasing Employee Engagement and Participation in Workplace Safety

A disengaged workforce could lead to unsafe behavior on the job as well as spell trouble for an organization's bottom line. Safety culture is built by the shared beliefs, experiences, attitudes and passions of a group of people in an organization. Together we will use our collective knowledge in collaborative dialogue to enable us to see which approaches and techniques increase employee engagement and participation in workplace safety. This World Cafe style discussion will be a live interactive workshop, cameras and mics on!

Speaker(s):
World Cafe Discussion

S Certificate of Recognition (COR) Program

The Program is a voluntary employer certification program designed to recognize and reward employers who commit to a high standard of occupational health and safety through implementation and maintenance of an effective OHSMS. This presentation will review the background of the program, the uptake and effectiveness in reducing injury/illness for certified employers, and some concepts we are testing to improve the program as a whole.

Speaker(s):
Sandra Kolberg (Sontag), Manager OHS Consultation and Education Services, WorkSafeBC

S Hazardous Recyclables and Hazardous Waste in Municipalities Do's and Don'ts

Municipalities are a unique business. They don't really ship or transport chemicals as the core of their business. Or do they?? When hazardous materials, also known as hazardous products, dangerous goods or hazardous wastes are on a municipal site or property, the municipality is the generator, shipper, consigner or owner by definition. Even if you hire or contract a vendor to take it out of your mind and out of your hands, you still had possession before they did, therefore it is your responsibility. We will discuss the requirements set out by WorksafeBC, Ministry of Environment, and Transport Canada for your municipality to comply.

Speaker(s):
Kevin Swinden, President, Global Hazmat Inc.



THE 4TH ANNUAL PWABC & BCMSA JOINT ANNUAL CONFERENCE VIRTUAL OCTOBER 2022

12:45-13:45

L The Invisible Disability: Managing Substance Use and Recovery in Safety-Sensitive Workplaces

Addiction exists everywhere – in our friend groups, homes and workplaces – but few organizations are properly equipped to confront it. In safety-sensitive workplaces, where addiction exponentially increases the likelihood of a fatal accident, a staggering 20% of workers admit to using substances on the job. However, nearly 66% say that they don't have access to resources. How can we set-up high-risk, safety-sensitive workplaces to better support struggling workers?

This presentation will introduce the concepts of recovery-oriented systems of care and recovery capital. Participants will gain an understanding of the practical skills they can apply to support employees struggling with substance use and their medical needs, develop effective policy frameworks and safely manage communities and workplaces.

Speaker(s):
World Cafe Discussion

S Toxic Process Gases – Owning the Risks

Municipal employers operate a variety of toxic process gas systems such as in water treatment and distribution, wastewater treatment, pools, and ice rinks. Toxic process gases used in these facilities such as chlorine, ammonia, and sulfur dioxide have potentially catastrophic risks to workers and the surrounding community. This presentation will cover some elements relating to hazard, risk, and control to be able to establish ownership of the risk. The presentation will also cover some of WorkSafeBC's efforts to promote risk reduction, including most recently with water treatment and distribution, and wastewater treatment.

Speaker(s):
Andrew McSherry, Occupational Hygiene Officer, WorkSafeBC

S "Sensing" your Body and Brain in the Workplace: Benefits and Challenges

Commercial biosensors and neurosensors have many workplace applications intended to promote safety, productivity, health, and wellness, however employee and employer perceptions surrounding the use of these devices are largely unexplored. We launched a BC-wide online survey of employees and employers from across the workforce to address this research gap. A survey was developed and refined based on key research questions, past literature, and consultation with the research team. The survey was launched in February 2020, suspended due to the COVID-19 pandemic, and relaunched in June 2020. We received 344 survey responses, with the largest responses from construction, healthcare, education, government, and utilities sectors at the time of study closure in March 2021. Respondents were 53% male, 43% female, with the remainder undisclosed. Results showed remarkable convergence in key areas of perceived benefit and concern between employers and employees regarding the motivation to use body sensors in the workplace. Safety, privacy, disclosure of findings of possible medical significance, risks, ownership of the data, data sharing, and transfer of the data from workplace to workplace were among the survey questions where opinions were shared by both employers and employees. There were no differences in opinions about sensors between ages, genders, or workforce sectors. Sensors that yield signals from the brain were not yet in sufficient use in the province to be differentiated from body sensors. We will discuss evidence-based strategies for regulatory bodies and policy-makers to consider when implementing biosensors and other advanced technologies in the workforce that respect the opinions and concerns of employers and employees.

Speaker(s):
Dr. Judy Illes, Professor of Neurology and Canada Research Chair in Neuroethics
Dr. Aline Talhouk, Assistant Professor of Obstetrics and Gynecology, UBC

PW Applying AI in Public Works

The City of Surrey recently successfully piloted AI technologies in the field. This session intends to explore the lessons learned from the City of Surrey's for other Municipalities to apply their own solution.

Speaker(s):
Matt Brown, City of Surrey

PW Hot Topics in Public Works Panel/Think Tank

A facilitated virtual round table discussion of the hot topics impacting the public works sector. Participants will be encouraged to contribute by sharing their experiences, successes and challenges.

Speaker(s):
Greg Wightman, Utilities Manager, City of Kamloops

13:45-14:45

L Resiliency In Response To Abnormal Times

Build resiliency while experiencing normal reactions during this abnormal time in the midst of COVID-19. Develop an understanding of the impact of current stressors on our well-being, how to recognize the signs of stress, and how to react appropriately.

Speaker(s):
Lucette Wesley, CMHA Consultant and Trainer

PW Pressure Sewer Systems Providing a Sustainable Solution for Sewer Renewal

As municipalities and sewer utilities move to renew aging and failing sewer systems, many are putting an emphasis on providing sustainable solutions. They are looking for solutions that optimize economic and social costs and provide environmental benefits. Typical sewer rehabilitation processes and gravity sewer replacement have been the standard "go-to" solutions. These solutions can be cost-prohibitive and disruptive. Additionally, standard sewer renewal approaches do not always achieve the anticipated removal of infiltration and inflow from the failed gravity sewer. This presentation will review the problems of failing gravity sewers and the impact infiltration and inflow can have on the community. An overview of pressure sewers, and the advantages they provide to wastewater utilities struggling to control extraneous flows in their buried infrastructure will be presented.

Speaker(s):
Keith McHale, Applications Engineering Project Manager, Environment One Corporation

PW Managing Driving-Related Stress

Safe driving demands physical and mental alertness, which stress can impair. Stress is an everyday occurrence, but too much of it or negative stress can lead to mental fatigue or other negative consequences. People who drive when overstressed can find their decision-making impaired and experience deteriorating performance, which can have devastating consequences. In this presentation, managers and supervisors will learn about the different types of stress and stressors drivers face -- some of them positive. They will also learn about approaches, practices, and tips to help employees understand and manage negative driving-related stress.

Speaker(s):
Angelina Robinson, Client Relationship Manager, Road Safety at Work
Rick Walters, Road Safety at Work

S The Present and Future of Workplace Safety Predictive Analytics

Workplace Injury rates have been stagnating since 2010 all over Canada. Serious injury and fatality rates are not going down much and, in some cases, they are climbing. We have reached a place where our traditional way of dealing with workplace safety is simply not working anymore. This is significant enough to highlight the need for a new approach in managing and implementing Environment, Health and Safety (EHS) data. We need to rethink the way we collect, store, and analyze our EHS data as it is clear now that the answer to moving the needle on serious injury and fatality reduction requires data. Much of the EHS data that exists, has not been used to its full potential. Most organizations are simply "record-keeping" and are unable to do much with that valuable data - it sits fallow and siloed. Even if a single organization wants to embrace data-driven solutions, it simply does not have enough knowledge to identify underlying hard-to-discover trends or latent problems. However, the collective of organizations, when collaborating on their experience at the industry level, can contribute to an overarching dataset. It is only then that with working together with industry experts, we can contextualize the information coming from this dataset and put action to the analysis.

The rapid advancement in artificial intelligence has resulted in the development of amazing tools that enable us to utilize large EHS datasets much more efficiently. Today, machine learning techniques are actively used to extract features and leading indicators from EHS data and make predictions and corrective action suggestions based on them. In "The Present and Future of Workplace Safety Predictive Analytics" session, we will go through living examples exhibiting what machine learning can do to take our workplace safety game to the next level. We will first go through a short but practical introduction to the theories behind these machine learning tools. We will then go through two of our own AI tools, EHS Incident Description Analyzer (EIDA) and Incident Risk Analyzer (IRA), to showcase how these theories can turn into amazing AI agents in the real world. We will see how EIDA can recognize and comprehend incident descriptions and extract relevant EHS attributes from them and how IRA (named after our founding father's favourite beer!) can use this data to make predictions for the risk of serious injuries and provide suggestions for corrective actions. Join us to discuss what we can do with data today and what the future of workplace safety looks like.

Speaker(s):
Dr. Mohammad Khalkhai, Head of Data Research, EHS Analytics

S Prosecution and Penalties: The Legal Risks of an Ineffective Safety System

..The stakes have never been higher in the arena of occupational health and safety enforcement in British Columbia. Administrative penalties/fines have increased dramatically in recent years and there is a heightened pressure on enforcement agencies to make greater use of prosecutions, which can result in both fines and imprisonment, to motivate compliance with workplace safety obligations. This presentation will review WorkSafeBC's statutory authority to enforce workplace safety through the use of administrative penalties and regulatory offence prosecutions as well as the requirements for occupational health and safety prosecutions under the Criminal Code of Canada.

Speaker(s):
Andrew Wood, Partner, Harris and Company LLP

15:00-16:00

PW Pavement Gone to Pot? Pothole Prevention and Patching Practices

Potholes aggravate drivers, interfere with traffic flow, damage vehicles, cause collisions and are a hazard to cyclists and pedestrians. Though materials, methods and machinery for pothole repairs has not changed much in the last 20 years, there is a growing need for better training of the road crews, supervisors and managers in understanding the causes of pothole formation, the proper repair type and techniques, and the identification of other pavement distresses that will eventually become potholes. More importantly, understanding how to prevent potholes by proper selection and application of various surface treatments, correction of underlying deficiencies and improving roadside drainage is vital to extending the service life of aging and obsolete roadways.

Speaker(s):
Dave Bergner

PW Pelmewash Parkway – Lake Country BC

Pelmewash Parkway, formerly Highway 97, is a 6 km road corridor running along the foreshore of Wood Lake from Lake Country to Oyama. This presentation will overview the engineering design and construction conversion from a provincial highway into a local road and active transportation corridor, as well as discussion about operational and maintenance considerations. The project involved tight space constraints alongside a lake foreshore, as well as coordination with transportation safety, landscape architecture, environmental, geotechnical, and archaeological disciplines. The length of the project, involving many unique site features and constraints, required a keen attention to detail in order to deliver the project on budget with a high level of quality. In order to meet functional and budgetary requirements, several strategies were employed, including micro-surfacing for pavement remediation and low-impact drainage strategies.

Speaker(s):
Nelson Chapman, Project Engineer, WSP

L Help Shape B.C.'s New Emergency Response Guidelines for Water Suppliers

This is a chance to preview the Ministry of Health's draft new guidelines for emergency response and communications plans and contribute your knowledge and experience. Currently, there is no easy-to-follow guidance water suppliers can reference when developing an Emergency Response and Contingency Plan. New guidelines will clearly describe the Ministry's expectations and help water suppliers continue to protect public health in the event of a drinking water emergency. Through roundtable facilitated discussion with the Ministry, share your thoughts on the draft guidelines, and help ensure they reflect the perspectives and interests of B.C.'s diverse water systems and suppliers. Your comments will help inform B.C.'s new Emergency Response and Contingency Plans Guideline and Water User Communication Guideline.

Speaker(s):
Rupert Benson, Health Protection Branch Ministry of Health
Diana Bulley, James Laurence Group
Debbie Cox, James Laurence Group

S Precursor Analysis

Precursor analysis was designed and tested to predict and prevent serious incident and fatality (SIF) events. The method was developed through a 3-year industry-academic collaboration, over \$1M in investment, and experimentally validated across over 100 cases. Precursor analysis has proven to identify the warning signs of SIF events before they occur through a brief but targeted field safety engagements. Intended for high-risk work, precursor analysis focuses on elusive human factors (e.g., work pressures, tendency to improvise, and fatigue) that are often consequences of safety culture. The method requires about 8 minutes to implement and complements industry-standard pre-job meetings, audits, and job hazard analyses.

Speaker(s):
Dr. Sid Bhandari, Associate Director of Research, Construction Safety Research Alliance at the University of Colorado Boulder

S BCMSA Past Award Winners Panel – Strategies for an Effective Safety Management System

Join this panel discussion with previous BCMSA Award Winners. Learn about how you can set up an effective safety management system and achieve a premium discount in a municipal setting whether you support a small or large organization.

Speaker(s):
Previous BCMSA Award Winners

Wednesday

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CONTACT US!

FOR QUESTIONS AND MORE INFORMATION

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