



## DUST SAFETY SCIENCE

Dust Safety Science, Episode 230:  
Part 1 | Building a Culture of Safety with  
Bill Laturus: Lessons for Companies

In this episode of the Dust Safety Science podcast, Bill Laturus, BCFSC's Senior Safety Advisor, Manufacturing Safety, talks about building a culture of safety. Episode 230 is Part 1 of a two-part series that includes a discussion about how companies and end-users at the operations level can define a culture of safety by "having workers who are

actively involved in doing the right thing at the right time, without needing explicit instructions."

Dust Safety Science, Episode 230:  
Part 2 | Building a Culture of Safety  
with Bill Laturus: Lessons for Industry  
Associations

The second episode in the two-part series focusses on Lessons for Industry Associations. In this discussion, Bill explores the significance of safety culture within associations and industry

support groups and the evolution of safety culture in British Columbia. He also provides insights on initiating the process of cultivating safety culture within a company or industry and examines the collaborative approach required to effectively engage with regulators and other stakeholders.

To listen to more Dust Safety Science podcast episodes or to subscribe to the weekly Combustible Dust E-Newsletter, visit the Dust Safety Science website. 🎧

## WorkSafeBC – Proposed Amendments to OHS Regulation Part 6, Substance Specific Requirements | Combustible Dusts

The proposed amendments to the OHS Regulation Part 6, Substance Specific Requirements relating to Combustible Dusts will include the requirement for a 'qualified person' to be consulted in many parts of the new regulation activities.

The BC Forest Products Manufacturing industry including the Manufacturing Advisory Group (MAG) and Wood Pellets Association of Canada provided valuable feedback to the proposed Combustible Dust Regulations during the public consultation period which

ended June 22, 2023. The regulation review and revisions for Combustible Dust was a significant undertaking by WorkSafeBC. After many years of review and revisions, the final regulation went from one (1) sentence in OHSR 5.81 to 33 sections in OHSRs 6.133 to 6.167.

Forest Products Manufacturing operations are encouraged to become familiar with the proposed regulations and start making plans to address any gaps they may identify. BCFSC will continue to update and provide

industry with additional resources to assist operations with the proposed regulations. [Review the consultation document on the proposed OHS amendments by visiting the WorkSafeBC website.](#)

For questions about the new OHS Regulations for Combustible Dust, contact Bill Laturus, BCFSC Senior Safety Advisor, Manufacturing Safety at [Blaturus@bcforestsafe.org](mailto:Blaturus@bcforestsafe.org) or call 778-268-0653. 📞

# Steven Mueller Takes on a New Role with WorkSafeBC

BCFSC would like to congratulate Steven Mueller on his new position as Manager, Prevention Field Services (Prince George region) with WorkSafeBC.

Steve is a Canadian Registered Safety Professional (CRSP®) and worked at the BCFSC from 2006 until 2010 in various leadership roles. Early in the BCFSCs history, Steve was interim Director of SAFE Companies and was instrumental in the initial development of the SAFE Companies audit tools and audit process. He then took on the role of Director, Forest Worker Development and oversaw the development and management of many pivotal forest safety courses including:

- Individual Owner Operator
- Small Employer
- BASE Internal/External Auditor
- Basic Incident Investigation
- Forest Supervisor
- Falling Supervisor
- Basic Chainsaw Operator
- New Faller Training

When Steve left BCFSC in 2010 to start his own audit company, he continued working with BCFSC as a contracted training course instructor. His passion for safety training and his advocacy and knowledge made him a popular instructor who generated a lot of positive feedback.

In 2015, Steve started working for Pinnacle Renewable Energy and was part of their bold solution for safety culture change. Steve witnessed first-hand the beneficial results of developing a collaborative working relationship between WorkSafeBC and industry. As a result of this partnership, Pinnacle saw a dramatic improvement in safety performance, crew morale, and operations productivity. Pinnacle leadership and frontline operations staff fully embraced “owning safety” as a core value and the foundation for an industry-leading and award-winning safety culture.

Steve is now the Manager, Prevention Field Services at WorkSafeBC and continues to make a difference through collaborative relationships between WorkSafeBC and industry. 🌱

## WPAC Interactive Online Operator Safety Training

Plant Operators supervise the operation of an industrial plant and play a key role in ensuring the safety of plant workers. Plant operations like pellet manufacturing plants, production plants, processing plants, power plants, gas plants, oil fields, smelters, mines, mills, refineries and other industrial facilities including those that handle combustible dust such as wood pellets, chemical products and food and beverage processing all fall under the umbrella of Plant Operations.

Part of a Plant Operator's duties are to:

- Know the risks in their operations and how to control them.
- Understand how human factors can affect safety.
- Have awareness of current legislation and regulations and standards.

- Understand what constitutes an upset condition.
- Understand how to incorporate process safety management.
- Understand and identify combustible dust and combustible gas hazards in the operation.

A well-trained Plant Operator can make all the difference to the success of an organization. The Wood Pellet Association of Canada is now offering FREE Operator Safety Training resources to help train Plant Operators in safe operation strategies.

The training was designed to ensure the safe operation of pellet manufacturing facilities. The content was developed with senior plant operators and subject matter experts from BC and Nova Scotia, focussing

on combustible dust, human factors, hazard analysis, process safety management, upset conditions and plant operation. The collaboration resulted in a state-of-the art online learning platform that includes videos, industry resources and built-in knowledge assessments for plant operators and supervisors and was developed with support from the BC Forest Safety Council and WPAC with funding provided by WorkSafeBC.

Although the platform was designed for pellet plants, these free training modules are available to the broader wood products sector and other industries that handle combustible dust, such as chemical products and food and beverage processing.

To start your FREE online training, visit [www.wpaclearning.com](http://www.wpaclearning.com) and get started right away.

### Additional Resources:

[Online Learning Platform](#)

[Factsheet](#) 🌱

# WorkSafeBC Site Visit Builds on Long-History of Collaboration

By: Gordon Murray, Executive Director, Wood Pellet Association of Canada

The Wood Pellet Association of Canada (WPAC) and Drax Group, a WPAC member, recently toured Todd McDonald, WorkSafeBC's new Head of Prevention Services around Drax's pellet plant in Williams Lake.

WorkSafeBC is committed to fostering the improvement of occupational health and safety in workplaces and communities. One way they do this, is by partnering with employers and workers in BC. Todd's recent visit on July 25th is a great example of this commitment and was an excellent opportunity for the pellet sector to highlight our commitment to safety, continuous improvement and strong partnerships.

Todd took on the role of Head of Prevention Services in December 2022. He has been a member of WorkSafeBC's executive team for many years, most recently as Chief Planning Officer. This was Todd's first visit to a pellet plant which was led by Plant Manager, Ian Tencarre. Ian escorted Todd and his colleagues Steve Mueller, Manager, Prevention Field Services and Mike Tasker, Occupational Safety Officer around the plant showing them some of the major achievements the pellet sector has implemented in safety improvement initiatives.

WPAC and its members have a long history of working together to make the industry safer. This collaboration has led to identifying and exploring new ways to improve safety and implementing those learnings along the way. WorkSafeBC has provided funding, input and guidance

over the years to WPAC, the safety committee and to the individual plants resulting in positive changes to WPAC's safety culture — something Mike said he has observed over the past nine years.

I was impressed by Todd's interest in ensuring an optimum balance between experienced and new workers, and that new workers would be adequately trained and mentored. The tour was also an opportunity for Drax to demonstrate their commitment to implementing process safety and to ensuring a highly trained stable and experienced team.

During the tour, we reflected on some of our major achievements such as critical control management implementation, inherently safer design research project and the great work of our belt dryer safety working group. We also brought Todd and his team up-to-speed on our current initiatives such as the operator training program including the e-learning platform, process safety management implementation and combustible gas bowtie report and roll-out.

We value our relationship with WorkSafeBC and their support of our safety initiatives. While we keep them up to date via meetings and communications, there's no replacement for boots-on-the-ground opportunities at the plants to meet the people and see safety in action. A huge thanks to Liezl van Wyk, VP Northern Operations at Drax and her team for their support and participation. 🙌



WPAC and Drax recently had the pleasure of touring Todd McDonald, WorkSafeBC's new Head of Prevention Services and his team around Drax's Williams Lake pellet plant.

Left to right: Ian Tencarre, Plant Manager, Drax; Jason Stockall, HSE Director Northern Operations Drax; Todd McDonald, Head of Prevention, WorkSafeBC; Fahimeh Yazdan Panah, Director of Research and Technical Development, WPAC; Gordon Murray, Executive Director, WPAC; Mike Tasker, Occupational Safety Officer, WorkSafeBC; Steve Mueller, Manager, Prevention Field Services, WorkSafeBC; Liezl van Wyk, VP Northern Operations, Drax; David Brideau, Mobile Equipment Manager, Drax. Missing from photo: Tony Kim, GM Northern Operations, Drax, who took the photo.





# Join WPAC in Ottawa for their Annual AGM & Conference

The Wood Pellet Association of Canada Conference and AGM is Canada's largest gathering of the Canadian wood pellet industry.

Each year, the event attracts hundreds of wood pellet, biomass and bioenergy professionals from across the country, as well as the U.S., Europe and Asia, to discuss the issues that are having an impact on the industry here in Canada.

Join the Wood Pellet Association of Canada (WPAC) at their annual AGM and conference in Ottawa from September 19 - 20, 2023. This year's conference will highlight how biomass has moved from niche to mainstream: from Canada to Europe, to Asia, India and beyond. They'll examine trends and technology and review the latest safety procedures and resources. Experts will share the limitless opportunities for wood pellets through innovation and policy change and will explore the next generation of biofuels.

## Who should attend?

Anyone involved, or interested in, the Canadian wood pellet industry, including current biomass industry executives, educators, researchers, government officials, logistics personnel and equipment manufacturers.

The WPAC Conference and AGM is your opportunity to learn about the most important issues from industry experts around the globe. For more information and to register, [visit the WPAC Conference website](#).

---

## Taking Safety to New Levels: The Next 25 Years

**Register for this full-day pre-conference safety workshop** on September 18<sup>th</sup> at the National Arts Centre in Ottawa to discuss and explore ways to ensure that safety is keeping up with the pace of industry. The workshop will spotlight the enhanced adoption of process safety management (PSM), with a focus on two critical drivers: inherently safer design (ISD) and safety culture.

In this session, participants will identify key issues, trends and opportunities to strengthen safety across the wood pellet sector. Your insight will provide an important foundation for the sector's safety initiatives both short-term and for years to come.

The session will be facilitated by Dr. Paul Amyotte, P.Eng., Distinguished Research Professor and Professor of Chemical Engineering at Dalhousie University and supported by safety experts and leaders across the Canadian pellet sector. Participants will receive a certificate of completion for continuing education.

*Registration fee:* \$150 + tax and service charge 🇨🇦

# New Report: Managing the Risk of Combustible Gas in Drum Dryers

By: Gordon Murray, WPAC and Bill Laturus, BCFSC

The Wood Pellet Association of Canada (WPAC) and the BC Forest Safety Council (BCFSC) have released a new report that summarizes the key actions plant operators can take to manage the risk of combustible gas in drum dryers.

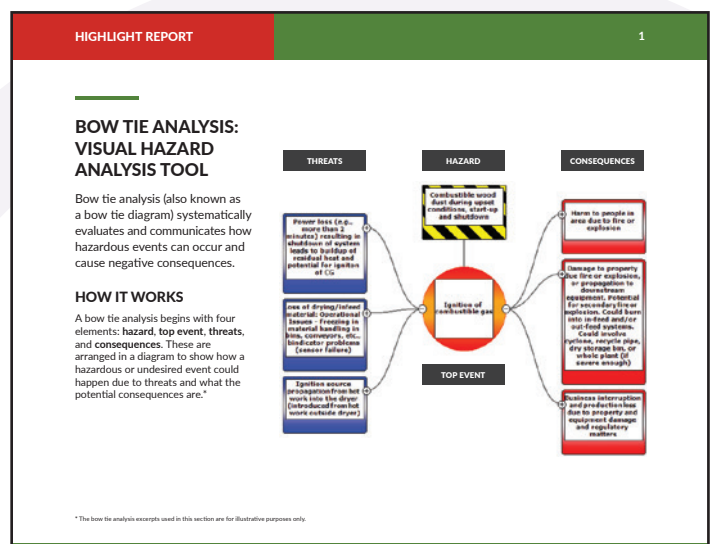
In wood pellet production, there is the potential for the formation and ignition of combustible gas, primarily in dryers and burners. Combustible gas, also known as synthesis gas or syngas, is a mixture of flammable hydrocarbons and volatiles (such as methane), carbon monoxide and hydrogen. Combustible gas is formed when biomass is heated in low-oxygen environments. It can accumulate in enclosed areas, like dryers, ducts, cyclones and piping. Ignition of combustible gas can lead to explosions that cause injuries, facility damage and production downtime.

The report, Combustible Gas Risk Reduction in Wood Pellet Production Drum Dryers, is a result of a bow tie analysis workshop conducted in collaboration with staff at Premium Pellet in Vanderhoof, BC and Kayleigh Rayner Brown, MASc, P.Eng. (Obex Risk Ltd.). Bow tie analysis is a hazard analysis tool that wood pellets and medium-density fibreboard manufacturers have previously used to evaluate combustible dust hazards.


Workshop participants emphasized the critical need for workers to better understand the hazardous scenarios that can arise during upset conditions, start-up, or shutdown, normal operation, and confined space entry activities. It's also important that critical safeguards, including emergency shutdown procedures, operator training, and confined space entry programs are in place and followed.

The report, available to pellet producers across Canada, reinforces the importance of sharing key learnings among the broader sector. It includes important information including:

- The highest-risk operations and activities,
- Conditions that present the risk of combustible gas ignition,
- Measures to ensure the reliability of critical preventative barriers,
- Actions for operations, and
- Bow tie analysis for each hazardous scenario.



Funding for the workshop and the report was provided by the Wood Pellet Association of Canada and the BC Forest Safety Council.

Learn more about combustible gas safety by accessing **WPAC's combustible gas resources** and register for WPAC's new Operator Training program which includes a learning module on combustible dust and gas. Register for this free program at [www.wpaclearning.com](http://www.wpaclearning.com). 



# Kalesnikoff Lumber Mill Hosts a Tour in Nelson BC for the Manufacturing Advisory Group

The Manufacturing Advisory Group's (MAG) quarterly meetings are an excellent opportunity for MAG members to visit sawmill operations to see industry best practices in action. After each meeting, the group tours the host sawmill to get a first-hand look at how sawmill operations are managing and implementing safety in day-to-day operations and to how sawmill workers are utilizing safety in their daily roles.

This past June, MAG members toured the Kalesnikoff family lumber mill and mass timber plant located near Nelson, BC.

Many on the tour saw Kalesnikoff's value-added mass timber plant for the first time and observed innovative production techniques that highlighted elevated safety solutions and well-maintained plant facilities.

*"Meeting in person at different host sawmills MAG members are gaining stronger relationships with one another and sharing safety." David Murray, Head of Corporate Human Resources, Safety, & Environment, Gorman Group*

A big thank you to Kalesnikoff for sharing their on-site safety initiatives with the group and providing a behind-the-scenes look at their new mass timber plant. 🌲



BCFSC Manufacturing Advisory Group 2023