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MAG Audit Overview

Several years ago, wood products manufacturing companies used the BCFSC BASE audit to acquire their SAFE Companies Certification. But the BASE audit was not meeting the expected results for the sawmill industry. To remedy this, the Manufacturing Advisory Group (MAG) and the BCFSC worked together to develop an audit program with an audit tool specifically built with an emphasis on risks related to sawmill workers to help improve safety performance.

The MAG-SAFE Audit was launched in 2019 to help effectively and efficiently measure sawmill safety performance and aligned with WorkSafeBC's high-risk strategy.

The MAG-SAFE audit is performed every three years with an external auditor observing and assessing safe work procedures and interviewing workers. A step-by-step guide of the audit process has been loaded to the MAG-SAFE Audit page on the BCFSC website. This overview provides details on how the audit is performed, what elements are reviewed, how the interviews are conducted and what are the main focus areas for high-risk assessment.

Review the MAG-SAFE Audit Overview to get a better understanding of what to expect for your MAG-SAFE Audit. If you have any further questions, contact the BCFSC Manufacturing Safety Department at 1-877-741-1060.

New Dedicated BCFSC MAG Administrator Gets Her Feet Wet

Tammy Carruthers, Manufacturing Safety's Administrative Assistant, has been with the BCFSC since 2019. Her knowledge and commitment to this organization has been invaluable. In her new role working with Bill Laturnus, Manufacturing Safety Senior Advisor, she took the opportunity to travel with Bill to the quarterly Manufacturing Advisory Group meeting hosted by the Tolko Lavington Sawmill in Lavington BC just outside of Vernon.

Tammy shared her experience:

In June 2022, I moved into my new role as Manufacturing Safety Administrator. In this new role, I provide support to our Manufacturing Safety Advisory groups including the Manufacturing Advisory Group (MAG), Wood Pellets Association of Canada Safety Committee (WPAC) and Manufacturing Technical Working Group (MTWG). I also assist with providing Manufacturing Safety resources to industry such as our weekly Manufacturing Safety Crew Talks and Safety Alerts which we send to our email subscribers and share

on the BCFSC social media channels. These resources have been well received and provide a quick resource for engaging in safety talks in the workplace. We also encourage industry to share their incidents with us. We remove out the specific company information and repurpose it for a safety share that benefits everyone. At the end of the day, our goal is to have zero incidents where workers always go home safely.

This past September, the MAG committee held their quarterly inperson meeting at Tolko Lavington Mill. I was invited to attend and took the opportunity to see a sawmill in action and finally meet the people I have been engaging with over the past three years in person.

We were warmly received and given a comprehensive safety presentation on how Tolko ties its divisional safety plans to WorkSafeBC's high-risk strategy. After the presentation, we toured their facility. This was my first experience touring a sawmill and after seeing the process firsthand and



Pedestrian Crossing Bridge

smelling the freshly milled wood, I was captivated by the multitude and variety of operations it takes to manufacture wood products. Observing the safety measures in practice including lockouts and using the pedestrian bridge that was built to help prevent mobile equipment and pedestrian incidents was inspiring. I was so happy to see safety in action and hard at work to keep workers and visitors like me safe. I am proud to be part of what

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MAG is accomplishing for industry and this tour reaffirmed to me that the work MAG is doing is being adopted all over BC and companies are making safety a top priority by helping mitigate risks for sawmill workers.

To me, Tammy is MUCH more than the Administrative Assistant for MAG

& WPAC. Not only is she a fast learner and a committed support person, but she readily takes on additional tasks and reacts quickly to the needs of the Manufacturing Safety groups. Tammy is the epitome of the Manufacturing Safety motto where we aim to 'work at the speed of business, not at

the speed of the bureaucracy". Bill Laturnus, BCFSC Manufacturing Safety Senior Advisor

Stay informed on and subscribe to our Safety Alerts and weekly Crew Talks.

Or to share an incident or submit a company safety moment with us.



Control System Isolating Device (magnetic lock) on a perimeter gate is at the top of the hierarchy of controls.



Well-designed pedestrian crossing point.



An Inherently Safer Design (ISD - minimization) that removed the hazard of workers walking in front of the package outfeed forklift zone.



MAG members on the Tolko Lavington Sawmill tour.

Cross-Country Safety Share

The cross-country safety share, led by the Manufacturing Advisory Group (MAG), brings together manufacturing safety leaders from all over Canada including members of the Manufacturing Technical Working Group (MTWG) and Wood Pellets Safety Advisory Group (WPAC) to share their industry best practices. The participants collaborate and

communicate valuable safety procedures with each other and discuss new ideas and operational practices they can adopt to help reduce the risk of injuries to sawmill workers across the country.

On October 13th, 2022, Tom Welton, Director of Health and Safety Services and Education Programs at Workplace Safety North and Chris Fowler, Safety Coordinator with Canoe Forest Products (a Gorman Group Company) shared their insights on Lock Out and Tag Out Procedures during a recorded video presentation.

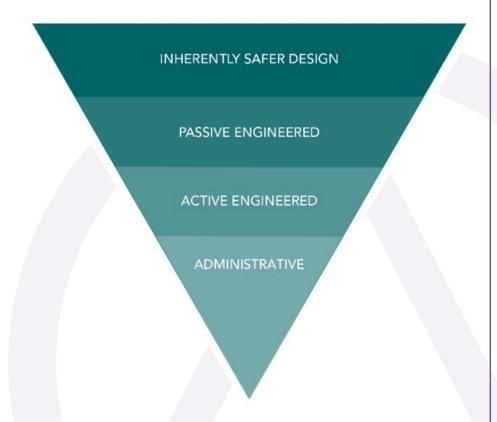
New 15-minute Online Safety Huddles for Pellet Producers

Join the Wood Pellet Association of Canada on Nov. 16, 2022 at 11:30am for a 15-minute Online Safety Huddle. This Safety Huddle focusses on how to effectively integrate inherently safer design (ISD) at wood pellet plants.

ISD focusses on elimination of hazards and treatment of hazards at the source. It is based on four principles – minimization, substitution, moderation and simplification.

This presentation, led by Kayleigh Rayner Brown, MASc., P.Eng., a process safety specialist and Director of Obex Risk Ltd, will include a short rundown of the latest research on ISD and practical examples of ISD application. Funding for this research was provided by WorkSafeBC's Innovation at work grant program.

If you are a pellet plant manager, operator or safety leader, register for this Safety Huddle by emailing fahimeh@pellet.org.



ISD treats hazards at the source rather than only through add-on equipment and procedures. The National Fire Protection Association (NFPA) 652 Standard on the Fundamentals of Combustible Dust (2019) states that ISD options should be considered during the design or evaluation of processes involving combustible dust. Photo Courtesy of Obex Risk Ltd.

Manufacturing Safety

Five Steps to Enhance Safety of Direct-heated Belt Dryers

From Canadian Biomass Magazine - By Fahimeh Yazdan Panah Director of Research and Technical Development for Wood Pellet Association of Canada

As belt dryers have become more common, the pellet industry has experienced several safety incidents over the past few years. In response, the Wood Pellet Association of Canada has developed a Fact Sheet for the safer operation of direct-heated belt dryers.

Direct-heated belt dryers used in wood pellet plants present the risk of fire and deflagration that could arise from a range of conditions, including ignition sources entering the dryer through air intake, fibre infeed, or propagating from interconnected equipment.

The one-page fact sheet is based on the Belt Dryer Safety Symposium's working group's final report on belt dryer safety which reviewed the current practices and discussed controls and procedures for safer operations of direct-heated belt dryers. The working group also reviewed the positive aspects in safety, operations, and efficiency of indirect-heated system.

The fact sheet outlines five steps operators and workers can take to enhance safety of direct-heated belt dryers:



Photo courtesy Pinnacle Renewable Energy (Drax)

- 1. Monitor infeed contaminants
- 2. Maintain infeed equipment
- 3. Prevent ignition sources
- 4. Compete housekeeping
- 5. Communicate to your supervisor

View the <u>Safer Operation of Direct-</u> Heated Belt Dryers Fact Sheet. **(4)**

WPAC Conference Overview

Canada's wood pellet industry covered a lot of ground at their first inperson gathering since 2019. Around 200 industry members attended the Wood Pellet Association of Canada (WPAC) conference in Vancouver September 20 - 21 to discuss the state of bioenergy and its future potential.

Speakers from coast to coast were invited to discuss topics on fibre supply security, local economic development, public perceptions, climate change mitigation and plant safety.

Day one of the conference featured industry and government speakers covering myriad topics including:

- · Government Policy Priorities
- Community Involvement
- Social Messaging and Transparency
- Climate Change Challenges



Gord Murray, Executive Director WPAC

The second day focussed on Wood Pellet Industry Safety.

Safer by design

Five speakers took the stage to outline best practices and ongoing projects to enhance the safety of pellet operations across Canada.

WPAC members take part in monthly safety meetings to check in on research developments and lessons learned. Bill Laturnus, a senior safety advisor with the BC Forest Safety Council, said members should consider

themselves lucky to have access to these meetings.

"I really don't think another industry has anything like that," he said. Referring to his work with the pellet industry to implement a safety process called bowtie analysis and critical control management, he said the safety meetings, "set the stage to have the commitment and support from industry before we started the process."

Fike Canada's Jeff Mycroft summarized the findings from WPAC's Belt Dryer Working Group, urging producers who operate or are considering purchasing a belt dryer to read their document to help inform their decisions. The study tackles safety issues and hazards related to direct heated dryers, Mycroft said, but the takeaways are applicable to most dryers used in the wood processing industry.

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Kayleigh Rayner-Brown, principal with Obex Risk, shared her work advancing process safety management (PSM) in pellet plants in partnership with WPAC, Dalhousie University, the BC Forest Safety Council and Dust Safety Science. Her conclusions found that "explicit and effective" integration of PSM in wood pellet plants can help in prevention and mitigation of loss of control incidents.

Mike Tasker, occupational safety officer with WorkSafeBC, outlined the role his organization took on to implement bowtie analysis in the pellet industry with partners like the BC Forest Safety Council. Initial momentum was slow

but, he said, but companies have since made significant capital investments to improve processes and lower risk.

Read the WPAC Conference Highlights by Maria Church in Canadian Biomass Magazine. (4)

Power of Pellets: Innovating Our Way to a Safer Better Product

By Gordon Murray, Executive Director of Wood Pellet Association of Canada (WPAC)

Wood Pellet Association of Canada (WPAC) members never stop working and looking at innovative new ways to make the wood pellet industry safer and stronger. The latest video in the **Power of Pellets Series**, *Innovating Our Way to a Safer Better Product* highlights some of the pioneering safety initiatives that have been released over the past two years that demonstrate this unwavering commitment. The video focuses on four main areas: combustible dust, deflagration isolation, belt dryer safety and off-gassing in transportation.

The video features stories from the people on the ground who are passionate about keeping each other safe so they can all go home to their families at the end of the day in the same condition as they came to work. I am proud of what we are accomplishing every day in safety from the forest to the pellet plants to ground-breaking research.



Dave Herzig, General Manager of Lumber
Operations, Sinclar Group Photo: WPAC

Premium Pellets in Vanderhoof is one of the Sinclar Group of Forest Products plants that manufactures quality wood pellets for both domestic and global markets. As general manager of lumber operations Dave Herzig puts it, it's really about employees engaging in the safety culture. "It's safety by choice, not by chance."

Premium Pellets production supervisor Mike Fantillo witnesses that culture change every day. "Everything that we do, starts and ends with safety so all of our people go home safe at the end of each day; everything that we do focuses on that."

Safety, as we all know, requires us all to make it a priority. It's that collective commitment and action that influences outcomes and the successful implementation of safety management systems.

"Over the years, the most significant safety change would be the engagement at the floor level," notes Herzig. "Trying to drive safety from the bottom up, giving people more autonomy over what they can control as opposed to that structure of top

WPAC members openness to share and learn has galvanized much of this frontline work. In conjunction with the BC Forest Safety Council, Dalhousie University, OPEX Risk, Dust Research Ltd., WPAC worked with a range of stakeholders in the wood pellet industry and combustible dust management sector to undertake a study examining deflagration isolation and how it can help enhance the safety of wood pellet operations. Much of this work has been supported and funded by WorkSafeBC.

In addition, world-leading research conducted by Fahimeh Yazdan Panah, Ph.D, Director of Research and Technical Development for WPAC, has resulted in a new global standard in the safe transportation of wood pellets.

All these people who work tirelessly to improve systems and communicate best practices will tell you there is just no point in making a product if you can't do it safely.

Herzig sums it up: "There's a good group of people here that are passionate about looking after each other and doing the right thing for the right reason."

Video: Power of Pellets Series, Innovating Our Way to a Safer Better Product •