



## WPAC Safety Committee September 11, 2019 Conference Call Minutes & Action Items

Recorded by Gordon Murray

### Attendees:

John	Arsenault	Quebec Wood Export Bureau
Scott	Bax	Pinnacle Renewable Energy
Jimmy	Boudreau	Canfor
Robert	Boyd	Shaw Resources
Chris	Cloney	Dust Safety Science
Grace	Cox	Canfor
Daryl	Davidson	Pacific BioEnergy
Jeff	Johnston	Pinnacle Renewable Energy
Dustin	Meierhofer	BC Forest Safety Council
Steven	Mueller	Pinnacle Renewable Energy
Gordon	Murray	Wood Pellet Association of Canada
Jeff	Mycroft	Fike Canada Inc.
Shahab	Sokhansanj	UBC -Biomass and Bioenergy Research Group
Cherie	Whelan	BC Forest Safety Council
Fahimeh	Yazdanpanah	UBC -Biomass and Bioenergy Research Group
Chris	Zuberec	BFL Canada

### **Call to Order & Introduction**

Scott Bax called the meeting to order at 11:03am

### **Approval of the Minutes of Previous Meeting**

The minutes of the July 16, 2019 meeting are approved.

### **Approval of the Agenda**

The agenda is approved.

### **Discussion of Action Items**

1. **Process Safety Management** – It was agreed to schedule a workshop on the topic of bowtie analysis for November 13 in Prince George. Gord and Fahimeh will start the planning process. hat the next workshop will take place in October. **ACTIONS** (1) Gord to circulate a request for top six major unwanted events to committee members, (2) committee members to respond with suggestions, (3) prior to next conference call, Gord and Scott are to coordinate with Jenny and WorkSafeBC team to arrive at six top priorities, (4)

## WPAC Safety Committee Meeting Minutes

Gord and Fahimeh will proceed with planning and promotion.

2. **HCI Monitoring and Alarm Systems** – we agreed to postpone an HCI workshop until first quarter of 2020 and to include in the 2020 work plan. **ACTION** Gord is to flesh out a potential outline of a workshop by consulting with committee members and Jenny Colman, then include this in 2020 work plan.
3. **Plant Operator training** – The next planning session between Dustin, Steve, our consultant Greg Shorland and plant operators will be on September 16. Pinnacle and Pacific Bio have supplied plant operators to participate. **ACTION** Dustin and Steve are to report on progress during October safety committee conference call.
4. **Combustible Gas & Confined Space Workshop** **ACTION** Gord is to flesh out a potential outline of a workshop for Q1 or Q2 2020 by consulting with committee members and then include this in 2020 work plan.
5. **Combustible Dust in Raw Product Storage Areas** **ACTION** Members are to give feedback on how they are implementing the guidelines in their own operations. Guideline can be found here <https://www.bcforestsafesafe.org/node/3309> and here <https://www.bcforestsafesafe.org/files/WFS%20Risk%20and%20Mitigation.pdf>
6. **Combustible Gas and Confined Space.** **ACTION.** Dustin and Steve are to discuss with WorkSafeBC during the next Forest Industry Forum Manufacturers' Group meeting and report back during the next conference call. The guideline can be found here under the heading combustible gas <https://www.bcforestsafesafe.org/node/3309>.
7. **Incident Reporting.** **ACTION.** Cherie is to give an assessment of how well we are doing on incident reporting, how we might improve and what actions we can take from what we are learning from the data.
8. **Locally Available Nitrogen Initiative.** **ACTION:** Fahimeh and Scott are to coordinate information gathering on storage options and costs and report back on progress during October conference call.
9. **Forest Industry Forum.** **ACTION:** Steve, Cherie and Dustin will report back on what was discussed during September meeting.
10. **Safety Sharing –** **ACTION:** Daryl Davidson will do the safety sharing in October
11. **BCFSC: Cherie Whelan will be taking over from Dustin on the WPAC safety committee effective November.** **ACTION:** Dustin is to brief Cherie on his outstanding files: raw material storage, combustible gas, and operator training.

### Next Meeting

Next meeting is scheduled for Wednesday, October 9, 2019 at 11:00 a.m. Pacific Time.

## WorkSafeBC

### Process Safety Initiative - Wood Products Manufacturing

#### Phase II

**Team members:** Mike Tasker, Geoff Thomson

**Support:** Jennifer Fung

**Industry:** Wood Pellet Manufacturing

**Number of locations:** 14

**Major manufacturing processes:**

1. Mechanical material size reduction
2. Material drying
3. Pelletizing
4. Storage

**Critical hazards:**

1. In-process fire and explosions
2. Silo events (External spark, spontaneous combustion)
3. Combustible gas ignition

Step	Action	Approximate time line
1	<ol style="list-style-type: none"><li>1. Location to identify controls and critical controls to prevent fire and explosion in each of the four (4) major manufacturing processes.</li><li>2. Location to develop an effective management system for each critical control.</li></ol>	6 months from date of Phase II visit.
2	Process Safety Team to evaluate adequacy of critical controls and management system.	3 months after Step 1 complete.
3	<ol style="list-style-type: none"><li>1. Process Safety Team to conduct site visits and provide evaluation response to each location.</li><li>2. Location to develop an action plan where deficiencies exist.</li></ol>	6 months after Step 2 complete
4	Location to complete Step 1 for each of the two (2) remaining critical hazards.	6 months after Step 3 complete.

## Quick Tips: Building a Management System for Critical Controls

Each major hazard and critical control should have an “owner” assigned to it. The following is a summary of information presented in “A Barrier Focussed Approach, How to Get Started with Process Safety” from Energy Safety Canada.

Each major hazard and critical control should be assigned an “owner”, who is accountable to ensure that each critical control is:

1. Present
2. Functioning
3. Reliable (Inspected and Maintained)

A management system designed for critical controls should clearly document the following elements:

Element	Questions to ask
Objective(s)	In simple terms what exactly is the control expected to do?
Performance Requirements	In more technical terms what must the control do to meet the objective?
Supporting Activities	What systems or processes ensure the control delivers? (procedures, training, inspection, maintenance, reporting)
Verification Activities	What must be checked to ensure the control can perform its function? How often?
Triggers for Investigation	What threshold would trigger further investigation into a critical control?

The ownership structure for critical controls should be:

1. Documented in a simple straight-forward manner with clear accountabilities and specific activities.
2. Specifically captured in job descriptions for activity "owners"
3. Integrated into performance evaluations.

Below is a simple graphic to capture an accountability structure

