# SAWMILL EXPLOSION

## 2 killed, 2 dozen injured at sawmill

An explosion and subsequent fire at a sawmill in British Columbia has killed two workers and injured two dozen more. Although the cause of the explosion is not known, there have been five explosions linked to wood dust in British Columbia since 2009.

"The order that is coming from WorkSafe . . . . asks industry to look carefully at dust, and asks them to look at ignition sources."

- BC Labour Minister Margaret

### Cause Map

An analysis of the cause map reveals:

- **Cause Map:** Cause Mapping is a Root Cause Analysis method that captures basic cause-and-effect relationships supported with evidence.

## Step 1: Problem

**What**
- Problem: Explosion, fire

**When**
- Date: April 23, 2012
- Time: 9:38 PM

**Where**
- State, city: Prince George, British Columbia
- Facility, site: Sawmill
- Task being performed: Processing wood ravaged by beetles

**Problem Solving • Incident Investigation • Root Cause Analysis**
- Different, unusual, unique
- Mill processes pine beetle wood (drier)
- Sawmill, log processing facility, sorting facility destroyed
- Smoke migrated to nearby town
- Two deaths; two dozen injuries

**What’s the Problem? Why did it happen? What will be done?**
- An explosion and subsequent fire at a sawmill in British Columbia has killed two workers and injured two dozen more.
- Although the cause of the explosion is not known, there have been five explosions linked to wood dust in British Columbia since 2009.

## Step 2: Analysis

### Step 2.1 Safety

- Safety Goal: Two deaths, two dozen injuries

### Step 2.2 Customer Service

- Customer Service Goal: Smoke migrated to nearby town

### Step 2.3 Production-Schedule

- Production-Schedule Goal: Shutdown of facility

### Step 2.4 Environmental

- Environmental Goal: Sawmill, log processing facility, sorting facility destroyed

### Step 2.5 Property, Equip. Mills

- Property, Equip. Mills Goal: Investigation, cleanup

### Step 2.6 Labor, Time

- Labor, Time Goal: Two fatal explosion since January; five explosions linked to wood dust in British Columbia since 2009

**Impact to the Goals**

- Two deaths; two dozen injuries
- Smoke migrated to nearby town

**Impact to the Goals**

- Safety Goal: Two deaths, two dozen injuries
- Customer Service Goal: Smoke migrated to nearby town
- Production-Schedule Goal: Shutdown of facility
- Environmental Goal: Sawmill, log processing facility, sorting facility destroyed
- Property, Equip. Mills Goal: Investigation, cleanup

**Problem(S)**

- Explosion, fire

**Date**

- April 23, 2012

**Time**

- 9:38 PM

**Zone**

- An explosion and subsequent fire at a sawmill in British Columbia has killed two workers and injured two dozen more.

**What's the Problem? Why did it happen? What will be done?**

- Although the cause of the explosion is not known, there have been five explosions linked to wood dust in British Columbia since 2009.

**State, city**

- Prince George, British Columbia

**Facility, site**

- Sawmill, log processing facility, sorting facility destroyed

**Impact**

- Safety Goal: Two deaths; two dozen injuries
- Customer Service Goal: Smoke migrated to nearby town
- Production-Schedule Goal: Shutdown of facility
- Environmental Goal: Sawmill, log processing facility, sorting facility destroyed
- Property, Equip. Mills Goal: Investigation, cleanup

**Frequency**

- Two fatal explosion since January; five explosions linked to wood dust in British Columbia since 2009

**Step 3: Solutions**

### Step 3.1 Possible Solutions

1. **Increase humidity**
2. **Reduce presence of dust**
3. **Reduce ignition sources**
4. **Increase ventilation**
5. **Milling dry pine beetle wood**
6. **Smoke migrated to nearby town**
7. **Safety Goal Impact**
   - Two deaths, two dozen injuries
8. **Cutting back on cleaning**
9. **Economic downturn**

**Possible Solutions: Increase humidity**

**Possible Solutions: Reduce presence of dust**

**Possible Solutions: Reduce ignition sources**

**Possible Solutions: Increase ventilation**

**Possible Solutions: Add detail as information becomes available.**

For a free copy of our Root Cause Analysis Template in Microsoft Excel, used to create this page, visit our web site. 

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