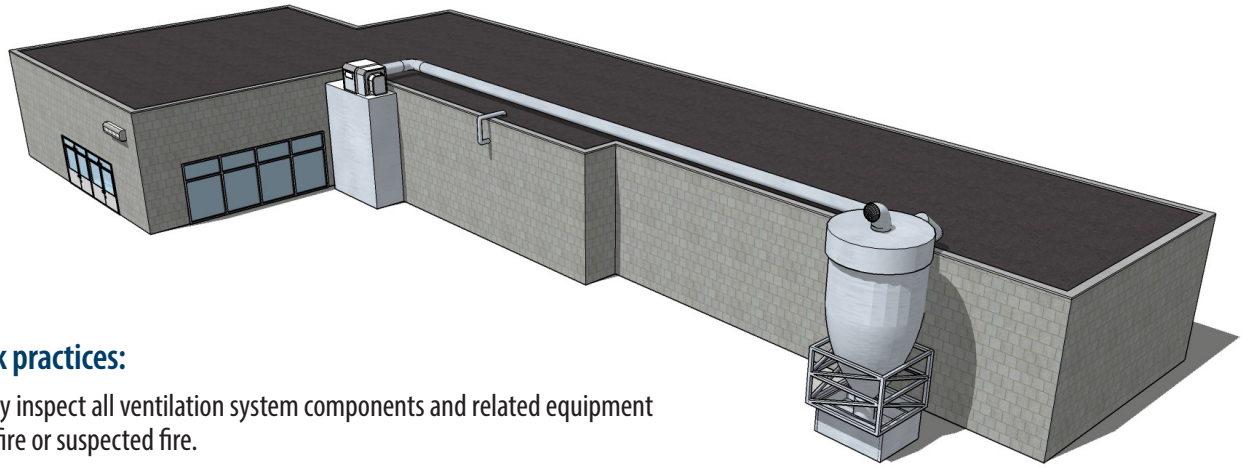
WorkSafe
Travail sécuritaire NB

HAZARD ALERT

FOLLOW SAFE WORK PROCEDURES WHEN STARTING VENTILATION SYSTEMS AFTER FIRES

Sawdust explosions occurred immediately after workers started the ventilation systems at two different mills in British Columbia. In the first incident, the ventilation system had been shut down in response to a fire. In the other, a worker smelled smoke during the night while the ventilation system was already shut down, but the smoke's source was not identified before the system was started for the next shift. In the first case, a worker suffered burns. In the other, the mill and surrounding area was evacuated.

Fires are a serious hazard in wood-processing facilities. Smouldering embers and sparks can be drawn into and stay in a ventilation system for hours or even days if not detected, causing an unsafe working condition. If a ventilation system is shut down because of a fire or suspected fire, extreme caution must be used when restarting the system. The start-up process disperses the dust already in the system and draws in new dust and fresh air. If any smouldering embers are in the system when it's started, the dispersal of the existing dust combined with new dust and fresh air can result in a sawdust explosion.



Safe work practices:

- Carefully inspect all ventilation system components and related equipment after a fire or suspected fire.
- Develop and enforce safe work procedures to identify and eliminate sparks, smouldering embers, and any other ignition sources inside ventilation systems and related equipment before restarting those systems after an incident.
- Consider modifying ventilation systems and related equipment to allow for more effective inspections of the inside of ducting and other components.

Smouldering embers and sparks can be drawn into various parts of ventilation systems. Carefully inspect blower fans, dust collectors, ducting, and all other related equipment after a fire or suspected fire.

August 2017

Adapted with the kind permission of WorkSafeBC.