

Milestone Report 2007

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Smithers BC**



Outline



- Airshed jargon
- Major accomplishments since last AGM
- Highlights of NEWPRO report
- 5 minute video of CANFOR Houston beehive burner deconstruction
- Presentation of Clean Air Awards

Technical terms



- **Airshed** - A geographic area that, because of emissions, topography and meteorology, typically experiences similar air quality.
- **PM - Particulate matter**. Tiny solid or liquid particles that come in many shapes and sizes and from many sources, both natural and human-caused. PM10 refers to particles 10 micrometers or less in diameter, and PM2.5 refers to those with diameters less than 2.5 micrometers. PM2.5 are also referred to as 'fine particles'.
- **Woodstove exchange** - A program in which education and financial incentives are available to people wanting to trade in a non- emission certified appliance in exchange for a new one that emits less PM

Is Plan Implementation on track as expected?

- **Yes but we can do better...**




10 Top Milestones



1. Clean Air Bylaw Workshop – April 2006, Smithers (sponsored by Town of Smithers)
2. District of Houston adopts Wood burning appliance smoke control bylaw, July 2006
3. Town of Smithers adopts Wood burning appliance smoke control bylaw, August 2006
4. Village of Burns Lake adopts Wood burning appliance smoke control bylaw, April 2007

Key bylaw components

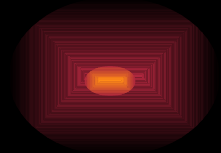


- All new wood burning appliance installations must meet environmental standards for particulate emissions
 - During an Air Quality Advisory, do not use wood burning appliance unless it is your sole source of heat
 - Only seasoned wood or pellets can be used as fuel
 - Target dates for removal of uncertified appliances (Houston and Smithers December 31, 2010, Burns Lake December 31, 2012)
 - Non-certified appliances must be removed before transfer or sale of property (Smithers as of January 1, 2007, Houston as of June 30, 2008 and Burns Lake as of December 31, 2010)
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1. Burn Operators Forum held in Burns Lake, September 2006



1. AMS Woodstove
Demonstration
Trailer makes 9
appearances
throughout the
airshed (August
2006 – May
2007)



1. 116 non-emission certified wood burning appliances decommissioned as part of the BVLD-Skeena Woodstove Exchange Program. (February – May 2007)



- Annual Clean Air Day green commuter challenge and free pancake breakfast in partnership with One Sky (June 6, 2007)

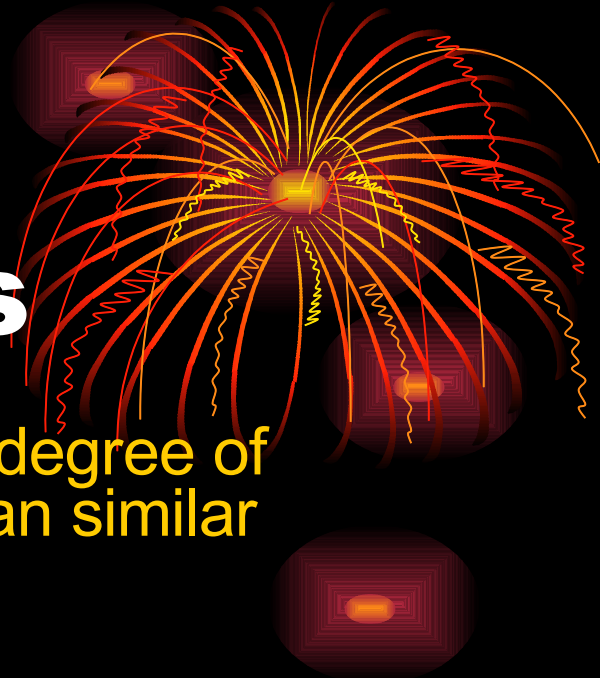


10. NEWPRO Emissions Study



- March 2007 – public report
- Evergreen Engineering (Evergreen) was contracted by MOE to research and report on the characteristics of air emissions from particleboard plants in North America.
- Goal was to help the MOE better understand air contaminant emission mechanisms and control technologies so that it might appropriately regulate and permit the operations of the Northern Engineered Wood Products' (NEWPRO) particleboard plant in Smithers, BC.


Observations and Recommendations




- NEWPRO's overall air emissions and degree of control are comparable to or better than similar particleboard plants in North America.
- The NEWPRO plant appears to have PM emissions under good control.
- Normalized PM emissions from the plant are lower than six of the seven plants with which it was compared.



- NEWPRO is employing Best Industry Practices for PM control in most systems. The only exceptions to this are:
 - Use of two standard-efficiency cyclones to reclaim small amounts of dry material from pneumatic transport systems.
 - The practice of storing some dry planner shavings outdoors.
 - Use of a wood dust burner to direct fire its green dryer without fine particulate control.

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- No analysis has been done to determine the cost/benefit of upgrading PM control on these systems. Our impressions are:
 - It may be reasonable to invest in improved control of the cyclones.
 - It would be difficult to justify enclosing the dry shavings storage area on the basis of reduced fugitive dust losses.

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- The NEWPRO plant is located in a valley with poor air dispersion characteristics, and an area where residential wood stoves are commonly used.
 - Under certain weather conditions, NEWPRO's wood dust fired dryer does contribute to poor ambient air quality.
 - However, the agreement presently in place to curtail green dryer operations during such episodes is a practical and adequate control measure.

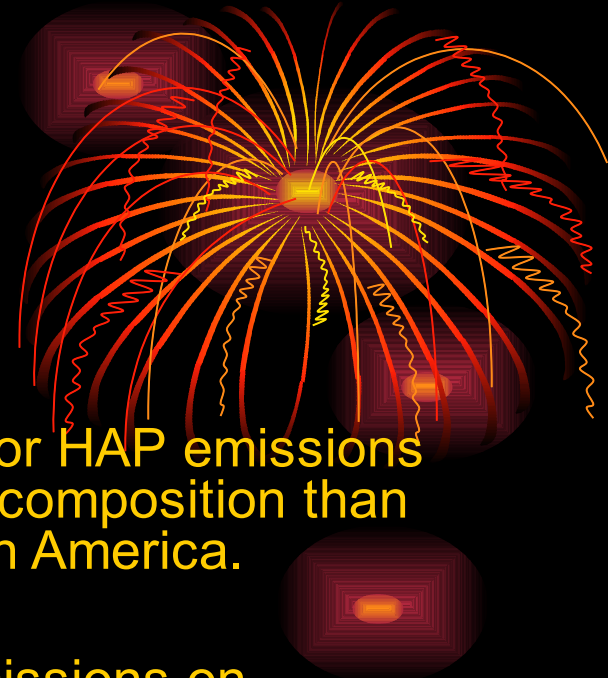


- Although NEWPRO does not employ any VOC or HAP control on either of its dryers or press exhaust vents, this is not unusual for plants of its size and location.
- VOC controls on particleboard plants built before 1995 are not the norm in North America.
- VOC controls are required on new, major sources that emit over 100 tons per year, and on older plants that have expanded significantly.

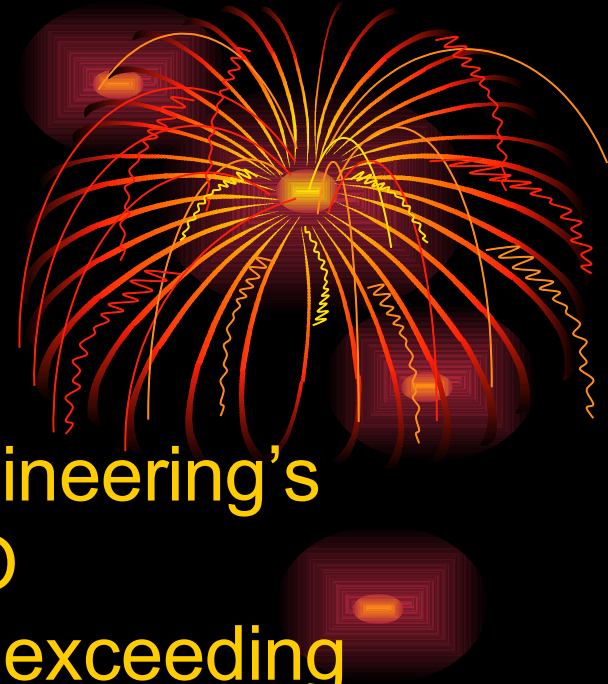
U.S. EPA standards



- “New USEPA regulations will soon come into force that will require all US particleboard plants to either control HAP (mainly formaldehyde) emissions, or demonstrate that they do not pose significant risk to public health. “
- “We are very familiar with both the regulations and the associated risk analysis. It is our opinion that if NEWPRO was located in the United States it would be able to demonstrate Low Risk and become exempt from HAP control requirements.”



- There is no reason to suspect that the VOC or HAP emissions from the NEWPRO plant are any different in composition than those from other particleboard plants in North America.
- The impact of NEWPRO's VOC and HAP emissions on ambient air quality and public health are undoubtedly much less than from most North American particleboard plants because of its small size.
- NOx, SOx, CO and metal emissions from NEWPRO have not been quantified. However, because of its small size and fuel burning practices, there is no reason to believe these emissions adversely impact ambient air quality.

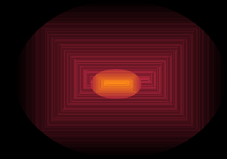


- “In summary, it is Evergreen Engineering’s expert opinion that the NEWPRO particleboard plant is meeting or exceeding industry standards with respect to air emission controls and should not be burdened by further regulation unless warranted by some local condition.
- We offer no recommendations for further study.”



1. CANFOR Houston closes down beehive burner May 2007.

BVLD Clean Air Awards



1. Ken Thomson, District of Houston
2. Town of Smithers
3. Jim McBride, Village of Burns Lake
4. Pacific Inland Resources
5. Leroy Reitsma, CANFOR Houston
6. North Central Plumbing and Heating
7. Iqbal Kalsi, Northern Health
8. Skeena Region, Ministry of Environment
9. Doug Bysouth, Babine Forest Products
10. North Central Plumbing and Heating

Draft workplan priorities



- Continuation of Wood Stove Exchange Program
- Annual Burn Operators Forum
- Strategies for reducing emissions from transportation sources
- Work with elected officials and developers to manage new sources of pollutants
- Sharing information and new research from around the province and North America
- Community education
- Clean Air Awards