



## bulkley valley - lakes district airshed management society

### **2007 Burn Operators' Forum**

#### *Proceedings*

Thursday, September 6, 2007

9:00 am to 4:00 pm

Houston Firehall, 3382 11<sup>th</sup> Street, Houston BC

**Proceedings and presentations are posted at <http://cleanairplan.ca/fhdb.shtml>**

The facilitator opened the forum with a welcome to participants, a thank you to sponsors District of Houston – Fire Department and BC MOE, and reviewed the day's agenda. She noted that AMS is a consensus-based organization and participants are expected to commit to exploring fully all ideas and solutions that best serve the airshed. A roundtable of introductions was made as follows:

Ben Weinstein	Ministry of Environment/Airshed Management Society – Smithers
Uwe Gramann	Ministry of Environment – Smithers
Gabi Matscha	Ministry of Environment – Prince George
Colin Vandergaag	Houston Forest Products
Maureen Bilawchuk	Ministry of Environment – Prince George
Barb Beyer	Ministry of Environment – Prince George
Ross Hyam	Burns Lake Community Forest Ltd.
Walter Tymkow	CANFOR Houston
Dan Metcalf	Corwood Timber Products Ltd.
Paul Schwarz	Pacific Inland Resources/Airshed Management Society
Richard Vossen	Babine Forest Products
Darwin Zimmer	Lakes District Woodlot Association
Dave Duncan	Ministry of Forests/AMS
Kevin Nixon	Conservation Officer – BC Ministry of Environment
Jeff Anderson	Consultant -
AJ Downey	Environmental Section Head – BC Ministry of Environment
August Meutzner	Nadina Woodlot Association
Phillip Mann	BC Timber Sales - BC Ministry of Forests
Laurie Gallant	Forum facilitator – Footprint Environmental Strategies/AMS
Kevin Koch	Forum scribe – Chum Run Eco-Solutions

#### **Highlights from 2006 Forum – Laurie Gallant**

Laurie reviewed the history of the forum, noting that the first forum happened in 2003 and is an annual event. Her PowerPoint slides provided highlights from each forum, noting that significant progress has been made on the strategies first included in the Clean Air Plan in 2004 and at this

forum we are hoping for a breakthrough in identifying new opportunities for reducing emissions or reducing volumes to be burned under the forest harvest debris burning emission source.

### **Wood Processing Industry code of practice - Barb Beyer**

- An informal presentation to give forum participants an update – more formal information will be forthcoming
- MOE is changing from a prescriptive to a results-based approach (i.e. codes of practice)
- Waste Discharge Regulation – lists all of activities that require regulation
  - larger discharges that need to be permitted/regulated
  - smaller ones that fall under codes of practice
- A code of practice is currently being developed for the wood processing industry in 2 phases: Phase 1 deals with primary industries (and some secondary), Phase 2 deals with exclusively with secondary industries.
- Provincial team has been formed, scoping and intentions paper drafting done, expect a fall release of the intentions paper on the web (on web for 45 days, looking for comment)
- Following review period, incorporation of comments, to lawyers for final drafting, then to minister for approval (at which point it becomes a closed document)
- Note difference between 'code' and 'regulation'. Regulation signed by government cabinet, code signed by Minister.

### **Questions and Answers**

- When will 45 day time period begin?
- BB...Not sure, hopefully this fall.
- Will there be an opportunity for more of a public forum to discuss the code?
- BB...Will be doing a broad outreach to get input on code. Really looking for comments. Also a questions document that will go out. Open to any organizations in area that wish to have code forwarded to for comments.
- Pulp industry won't be included in this code.
- Code doesn't deal with greenhouse gases (GHG's). There is a political will to deal with GHG's, but this code focuses on particulates and harmful emissions.
- GHG's are being dealt with at a higher level.

**ACTION** – Laurie will put a link to Barb's site on the AMS site and follow up with Barb on consultation opportunities, as well as future forums to address needs of local wood processing industry, especially smaller operators.

*Break – 9:55-10:15am*

### **District Level Smoke Management Plans - Ben Weinstein**

- Smoke management plans are developed for human health protection.
- Burn plans are different than smoke plans - relate more to broadcast burning
- Status of each burn plan reviewed, noting extension to Skeena-Stikine Plan (see PowerPoint slides)

### **Reported Burns in 2006**

- 2006 total pm 2.5 emissions were 646 tonnes, compared to 2002 levels of 1430 tonnes.  
NOTE: this is likely due to the high snowfall in '06, and indicates that '07 could be a huge year because of backlogs from last year.

**ACTION** – BEN will report out to group in a couple weeks on backlog numbers from last year.

- Arnel did an infrared scan of leftover piles by chopper. Infrared scanning tells what the temperature of old burns is; fire hazard risk management tool (fires can go underground and flare up in the spring).
- Provincial estimation system grossly under-estimating amount of wood being burned – are trying to figure out why this is happening. Could licensees start inputting burn info into RESULTS (software program)?
- Colin (HFP) tried and could only input estimates by area, not actual volume - nowhere in RESULTS to put quantity of pile.
- Walter - Heard rumour that with CANFOR's burner going down, emissions should have dropped, but apparently emissions went up. Is that true?
- Ben – don't really have the data yet to support any conclusions – the shutdown was too recent (May 2007); will have to wait at least one full year. Driving in today, we could clearly see the impact of mills producing smoke, as it hit the inversion layer and spread in both directions of the valley. Noted that anytime an emission source is turned off, the result is less emissions from that source but overall air quality is determined by total emissions by all sources – many variables to consider, including weather.

*Break – 10:55 am – 11:20 am*

#### **Custom Venting Forecast Service - Ben Weinstein**

- see PowerPoint slides
- MoE always trying to improve service
- Total number of forecasts for 2006 – 685; a bit lower than '05 (801 forecasts)
- MoE now providing CV forecast services in areas not normally serviced
- Forecasts don't always open up days for burning, sometimes shutting them down.
- MoE hopes people rely on their service, as it's the most accurate
- closed 3 days in Smithers, 4 in Burns Lake last year
- Always good to have communication between office-bound folks (MoE) and field folks (licensees) as maps/computer screens show different things than the real world.
- Environment Canada forecasts are inconsistent. MoE compares how consistent they are in contrast to EnvCan. MoE forecasting in '06 had fewer inconsistencies than in previous years, and fewer than EnvCan.
- Arnel taking forecasting training and employment opportunity with EnvCan, Uwe (pronounced Oova) is taking his place (local Smithers based weather forecaster).
- pretty key to have forecast out by 4:30-5:00pm
- MoE going to strive for 4:30PM
- Ben – in Prince George Dennis would handle the forecast (except in bowl area). Wouldn't get this info on the 1-800 #.
- Maureen - How do people pay?
- Ben – funding is provided partly through users (i.e. Licensees) also thru MPB initiatives and MoE in general. Have got enough money for a half-time position until end of March '08 (Uwe's position). Licensees pay based on their AAC. Some inequities involved with this system, so Ben & Arnel came up with a minimum \$300 charge. For very small businesses, MoE money is designated.
- Dan – how about for BCTS? Ben – it all works out... can provide more details when back at the office.

- Uwe – asked for input from licensees on area-specific feedback. Also, because he's new, there will be a learning curve w/regard to clients and what specifics he needs to know on a daily basis to make things run smoothly for their operations.
- Walter felt there were some missed opportunities for burning last season.
- Ben – realizes this, and so is hoping for more input to avoid this, and is striving to provide more opportunities rather than missing them. Communication needs to be increased between forecaster and licensees.
- Kevin Nixon – there is a real balancing act between appeasing the public and industry.
- Ben - people often don't know who really is burning on a given day. Often it is the smaller operators closer to town who don't know the rules that cause the problems.
- Paul – if we have to start using the EnvCan site they have to wait until morning (7am or so) instead of getting the info the day before at ~4:30-5:00. So, even if we have to wait until 5pm or so it's a lot better than the next day at 7am.

### **2006 Air Quality Review**

- see PowerPoint slides
- Ben - often small fires can freak out the MoE monitoring system. Can skew the averages. i.e. Town of Smithers cleaning dust right beside the data logger.
- Air Quality Episode matrix charts number of episodes per month over multiple years
- Smithers has a higher average PM2.5 than Houston, in spite of Houston having more beehive burners.
- % of days in exceedence is increasing for Smithers
- Ben took a detailed look at an air quality episode using two actual episodes from 2006. Three determining impacts of an episode are emissions, transport of emissions to people, and receptors
- Nov 30, 2006 - the day before, the burning looked good at PIR, but the next day the air quality was horrible in Smithers.
- Concentration of particulates is inversely proportional to wind speed.
- For Telkwa, peaks were often recorded at midnight, indicating Telkwa has a major woodstove problem.
- Wind- funnels from Burns Lake, down the Skeena to the Hazeltons and Kitwanga, indicating the importance of one community contributing to air quality in others several hundred kms away.
- Things change very rapidly in the wintertime with regards to forecasts.
- communication is the key over the wintertime – extra important as it looks like we're in for a big burning year.

### **12-1pm lunch break**

Laurie welcomed everyone back from lunch and outlined what's lined up for the afternoon.

### **OBSCR – Coordinated Enforcement (Kevin Nixon, Conservation Officer – MoE Smithers)**

- CO's receive calls from public and MoE regarding concerns over air quality.
- in general, it's small operators and landowners that cause the bigger problems with air quality, usually due to a lack of awareness.
- probably responded to a dozen calls last year, where they brought the issue to the attention of the person/persons and gave them a warning. 1<sup>st</sup> offenders get this warning, 2<sup>nd</sup> time offenders generally get taken to court.

- over last few years they've used choppers to monitor. Often see burns happening on Friday afternoon when people think nobody is watching.
- NOTE that if CO's ever do get called in to investigate a potential violation, the situation is treated no differently than any other criminal matter, and CO's follow necessary procedures.
- the due diligence of the person being investigated is the most important factor in determining whether charges are laid, and prosecution is sought.
- CO's will rely on experts like Ben & Uwe for information regarding whether the burn should have happened or not.
- Ben - When burn operators phone in for a registration number from Victoria, they should be told that they need a customized venting index. All conversations are taped. MoE has gone to properties and have had people try and deny that they were told they needed a registration number, and were able to play the audio tapes for them, to prove them wrong.
- Philip – Is the custom venting forecast posted?
- Ben – They are helping people assume risks, but if people are repeat offenders MoE won't help people assume risks, they'll order them to follow the EnvCan rules.
- Ben - Only category 3 fires need to be registered.
- Laurie – outside of forestry sector there have been some complaints about open burning, i.e. BC Hydro and backyard burning, especially on First Nation reserves in Hazeltons. Some educational brochures available to help members of the public approach their neighbours or other members of the public. Some confusion over applicability of regulations on reserves.
- Kevin N – Provincial legislation does apply on reserves. Education is chosen before education. For burning prohibited materials, the charge for a first offence is \$575. This applies to reserves. If people are burning within 100m of another residence, then it doesn't matter if the venting index is good, it is still an offence.
- Laurie – Since the custom venting indexes for small operations are paid for by the ministry, could municipalities get a venting forecast, therefore allowing people to phone the band/municipal office instead of the ministry line?
- Ben – They avoid giving an entire municipality a venting forecast, because it doesn't necessarily apply to the entire municipality.

### **Reducing Emissions Revisited – Group Exercise**

- Laurie noted that each year when they have the AGM and Clean Air Plan review, as well as when the notice of the Burn Operators Forum is given, suggestions are always received from general public on ways to reduce emissions from forest debris burning. This year we had hoped to present on some successful new strategies and case studies from outside the region but nothing really noteworthy is available to report on. Instead, we are going to review all the strategies that have been proposed over the years, brainstorm on new ideas, and generate a brief report on barriers and opportunities. This information will then be available to assist with pilot projects and funding applications. Five groups were formed to review specific strategies and brainstorm.
- Philip – There is talk amongst RPF's to bring back broadcast burning. Unfortunately, safe broadcast burning days are calm days, which are the worst for venting. The reason for wanting to bring back broadcast burning is because there is so much dead wood out there, too much to deal with. Nothing is re-growing in forests killed by the mountain pine beetle. Fire risk increases when wood is on the ground
- Kevin K - recent research has shown that ex pine-beetle attacked forests do grow back to be very productive and biologically diverse stands. **ACTION** – dig up this research, believe it was UNBC.
- Dust from hauling wood in is another source of particulates. Another impact to consider when considering hauling in dead standing wood.

Strategy	Trial details (where, when, who, results?)	Barrier	Opportunity
Biomass energy systems such as biomass boilers for district heating systems and combined heat and power systems (CHP's).	<ul style="list-style-type: none"> <li>→Revelstoke community forest has boiler system set up for municipal buildings.</li> <li>→Also Europe where the wood gets chipped on-site and shipped to larger building complexes equipped with high-efficiency wood heating systems.</li> <li>→Phoenix.</li> </ul>	<ul style="list-style-type: none"> <li>→No infrastructure currently set up.</li> <li>→Fire hazard branch currently would prevent wood being left on-site to be burned later.</li> <li>→costs of transporting wood to central locations.</li> </ul>	<ul style="list-style-type: none"> <li>→lots of opportunity</li> <li>→lots of funding available</li> <li>→idea of using waste wood for pellets</li> </ul>
Value added products such as panel board and pellets for large sawmills.	<ul style="list-style-type: none"> <li>→Newpro Smithers</li> <li>→Canfor Houston pellet plant</li> <li>→many OSB plants throughout country</li> </ul>	<ul style="list-style-type: none"> <li>→requires high quality fibre</li> <li>→cost of bringing it to mill</li> </ul>	
Organize public firewood salvaging.	<ul style="list-style-type: none"> <li>→eg. Swiss Fire snag removal.</li> <li>→licensees do often leave wood on roadsides for public</li> <li>SUP's and Free Use Permits</li> <li>→ cash sales</li> </ul>	<ul style="list-style-type: none"> <li>→liability for licensees.</li> <li>→slash would have to be piled differently</li> <li>→advertising/awareness</li> <li>→companies lacking incentive to encourage this</li> <li>→road deactivation</li> <li>→worksafe BC requires wildlife(danger) trees to be assessed</li> <li>→ loggers permits require burning occurs ASAP</li> <li>→licensee concern about increase in this program could result in loss of merchantable timber</li> <li>→permitting process?</li> <li>→proximity to users</li> <li>→could spread pine beetles</li> <li>→recent road deactivation</li> <li>→logyards could leach toxins into soil</li> <li>→BCTS has to get piles burned ASAP or they don't get their money</li> <li>→accessibility to town</li> <li>→cost-effectiveness</li> <li>→safety</li> <li>→from a licensees perspective, if its not</li> </ul>	<ul style="list-style-type: none"> <li>→organize for public to go to block during breakup</li> <li>→leaving some roads un-deactivated</li> <li>→leaving piles near town with signs</li> <li>→establish areas close to users (not much opportunity to reduce burning)</li> <li>→write it into the licenses that companies have to pull out firewood and separate it at the landings</li> <li>→could be used in highly sensitive areas close to towns</li> <li>→could be part of burn plan</li> </ul>

Strategy	Trial details (where, when, who, results?)	Barrier	Opportunity
		managed you might get people cutting wood they shouldn't →legislative changes needed	
Leave more coarse woody debris on the ground.	→studies showing that leaving CWD isn't more expensive →have tried leaving more wood on-site →part of IFPA BMP's was looking at leaving it to buncher operators to decide whether wood was merchantable, and to actually place the wood on the block →PIR did small trial w/leaving more on-site →some companies retain CWD piles for wildlife →partial cuts for pine beetle logging often involves leaving spruce and fir behind, therefore reducing waste →IFPA – Ruth Lloyd's study in Morice TSA	→actually getting the operators to leave it →tough for skidder operators to tell what's merchantable (easier for buncher operator). →decreases area for planting →increases fire hazard →increased costs for mulching →fear that operators will get billed for leaving merchantable wood on site. →issues around how CWD has to be arranged or dispersed →if its already drug in accidentally, then there are costs to dragging it back →gov't disincentives to leave CWD on-site. →if steep can't plant →waste regulations favor clean logging →stumpage/waste residue penalties	→opportunity around utilization standards, if wood meets CWD standards, not being charged stumpage. →in-site plans have as a best practice leaving 10-15m3/ha of non-merchantable on-site (avoids them getting in trouble with regs)... likely leaving more than that, but this gets them thinking that they don't have to get the site logged clean. →train buncher & skidder operators to leave more wood on site →if written into site plans, then companies won't get billed as waste →log grading, utilization of stumpage →more CWD left behind means less debris in burn piles
CV forecast centre	→tested in fall 2006 →use on a daily basis	→too late in day (i.e. after 4:30pm) →not available to everyone	→earlier forecast →charge minimal fee to get custom venting for small operators (ie farmers) for short term period
Annual burn operators forum	→every year for last 5 years	→need to advertise better	→info sharing →continue forums on an annual basis
New Burn Plans adopted		→lack of flexibility to avoid backlog of unburnt	→provide Burn Plans that provide

Strategy	Trial details (where, when, who, results?)	Barrier	Opportunity
with emission reduction recommendations		piles →lack of consistency between Forest Districts (Burn Plans)	flexibility in sensitive areas and more restrictions in restrictive areas →consistency between Burn Plans
Liaise with other agencies to stay on top of emerging alternatives and best practices	<ul style="list-style-type: none"> <li>• Ongoing</li> <li>• new relationship formed with Omenica Beetle Action Coalition (OBAC) <a href="http://www.ominaccoalition.ca">www.ominaccoalition.ca</a></li> <li>• Laurie is doing a formal review of Okanagan airshed plans and will share any new ideas</li> </ul>		



- Walter – what does Laurie plan to do with the information? LG - Will be part of proceedings and posted on website. Will not form key messages of a public education campaign unless Board of Directors agrees to this.
- **Agreement:** LG will circulate table of strategies and proceedings to Forum participants to ensure ideas are recorded properly.
- Maureen felt the group at the table today was underrepresented, especially with regards to MoF.
- Kevin K agreed, especially when discussing alternatives to burning and benefits of not burning really need some representation here from the bio-energy sector, as well as ecologists/biologists.
- NOTE: Leroy Reitsma is a good person to talk with regarding bio-energy.

### **Related BVL D Air Quality Initiatives (Laurie Gallant)**

- See PowerPoint slides – Milestone Report
- Woodburning Appliance Bylaws passed in Houston, Smithers, Burns Lake. Telkwa is interested. Common features to all – see Bylaw Basics handout – including 2010 target date for removal of old appliances, wood stove exchange programs and using seasoned firewood to help reduce emissions from woodstoves.
- Walter – With the weather we've been having, will there be dry wood to be gathered in the bush?
- Many people may have to change their regular firewood gathering habits in order to produce less smoke – wood should be split and dry properly before being burned – 12-19% moisture content – could take one full year for wood to season properly.
- Phillip – many people like to get their wood when they're out hunting in the fall
- Is the regional district planning any bylaw action?
- Laurie – They are concerned but haven't been as proactive as the towns; discussion is centred on residential outdoor wood burning boilers – many retailers refuse to sell these appliances now as they are not emission-certified and are notoriously smoky.
- Maureen - how do the municipalities enforce the bylaws?
- Laurie – AMS are working with municipalities - we helped them develop the bylaws and are working with them on education and exchange programs; enforcement of target date and moisture content is a challenge – complaint driven.
- Philip – Can you get your non-certified appliance tested to see if it meets efficiency/particulate standards? ...apparently you can for \$150.
- Paul – Did the wording issues get figured out with regards to the real estate component of the bylaws?
- Laurie – not that she's aware of; this requires follow-up with the Town of Smithers. The Wood Smoke Health Study provides an opportunity to do this.
- Kevin N – Moved into Smithers recently, new house has a non-certified stove, never heard about the bylaw.
- Laurie – likely due to high staff turnover at the Town of Smithers – what is your address?
- Ben regarding the NEWPRO report → report was okay, right now MoE working on emissions improvement plan with NEWPRO. There are a few areas of improvement being explored - emissions reduction plans during poor ambient air quality episodes are in process.
- David - thought that Smithers had a carbon monoxide issue
- Ben doesn't think so, but David maintained that the facts he has read indicates Smithers is worse off than North Van, PG, etc.; AMS and Ben can follow up on this.
- Jeff A - ... air filters in MoF building and courthouse noticeably blacker than in buildings farther from NEWPRO.

- Ben – could this be caused by CN?
- Jeff – they had monitors all the way down Railway Ave and it was only the buildings in close proximity to NEWPRO that had black air filters.
- Ben – still inconclusive...but it is good to hear these stories so we can confirm facts.

### **Closing Session – Burn Operators’ Roundtable**

- Walter – what are the plans for other operators regarding commencing burning?
- Paul – PIR - in a couple weeks
- Colin – HFP -not sure, pretty wet, kind of gunshy
- Philip – BCTS - up to the licensees to do their burning
- Richard – Babine - end of October, waiting for snow.
- Ben – MOE will be ready to go whenever the licensees are.
- Uwe's up and running, ready to go, contact number is the same.
- **ACTION** – Ben - follow up conversation with BCTS licensees.
- Colin – requesting that email list gets updated
- **ACTION** – Ben will get on that. Hoping to get a more comprehensive list, including guide-outfitters, charter airlines, etc.
- **All participants were asked to complete an evaluation form for the event, including recommendations for topics and speakers for next year if another forum is wanted.**

### **Summary of Action Items**

Laurie	Put link to Barb Beyers website on the AMS site re: new Wood Processing Industry Code of Practice consultation.
Ben	Report out to group in a couple weeks on backlog numbers from last year.
Kevin	Dig up research on regeneration of forests previously hit by MPB.
Ben	Follow up conversation with BCTS licensees.
Laurie	Circulate proceedings and strategies table; post on cleanairplan.ca website when approved along with presentations.
Laurie and Kevin Nixon	Work together to develop education program on OBSCR for private landowners, backyard burners and small operators.
Laurie	Report back on other emission reduction strategies
Ben	Update email list.
All operators	Follow up with Uwe to initiate Custom Venting forecasts for this year.

Forum adjourned at 4 pm.