

## Clean Air Forum Proceedings

Here are some of the questions from the audience, and the answers from panellists.

### **Air Quality in Action Panel**

- Each of you have technology as a major innovations; is safety a tough balance? What was a stronger motivator? Cost savings, or public pressure?
  - Anne: diverse fleet, snow plows, so no alternatives yet. Technology already proven. Sustainability framework: good for environment, business, and community expectations.
    - “Right thing to do”
  - Paul: makes our company more interesting, and it’s our contribution.
  - Darrell: social capital; business case is now there. Shrinking capital now, so leveraging social capital.
    - Being a leader in sustainability means stepping up to the plate; there will be a payback eventually
- Reefer: painfully obvious and loud. Is it advantageous to put power take-off?
  - High demand for hybrid reefers in theory; downside is need to keep the engine running. A bit technical, but essentially a battery makes the truck too heavy. This truck powers the reefer by braking, so the engine does not need to stay running.
- Solar panels on roof of truck?
  - Not sure that they would they survive road conditions, but they are used in marine technology.
- Have any of you contacted federal government regarding how to spend a federal bailout?
  - Anne: not contacted Federal Government *yet*, but Airport Authority will; Eco-Freight application is in.
  - Darrell: advantage of working with competitive ports is that we are made aware of other funding that competitors receive from US federal government. Eco-Freight is about to end; no announcement of future funding.
  - Paul: The more that various technology gets out there, the cheaper it gets.
- To Darrell Desjardin: is what you are currently doing enough? Container vessels, at delta port, belch black smoke when in the port. Is there more that you can do to encourage action on this, or regulate them? What about a fee structure?
  - We can always do more; we have lots of foreign flag vessels at the port, but we are working with federal government to generate an emission control area, do define emissions controls, mandatory reductions hopefully coming.
  - Short term: tools needed to control shipping lines.
    - Need resources to do these things.
    - Biggest offenders are bulk carriers.

## **Municipal Government Action On Air Quality**

- Prince George, Fraser Lake, and Vanderhoof are all in same district; Is Prince George only taking care of woodstove exchange refunds for the whole region, or just Prince George?
  - Dan: Vanderhoof has a program as well; any municipality can apply for funding; many towns can't afford these plans
- Municipal realm – three layers of control or influence – owned, regulatory, and larger community; where is the greatest opportunity for traction or impact?
  - Kim: All three crucial; own house in order first; carbon neutrality by 2012. What/where are the goal posts? Need an idea of what an attainable goal is first.
    - All three have to be done in tandem. Doing things in house gives more credibility to influence community action outside city hall
  - Dan: Prince George has signed the Climate Action Charter – voluntary to achieve carbon neutrality.
    - Ron: Education buy-in very important; by-laws can come in, and we can demonstrate leadership, but education is primary.

## **Waste to Energy Panel**

- Diversion: could you provide more detail on what the rates are for solid waste?
  - Ray Robb: Metro has a 50 –52% diversion rate, with a tentative target of 70%. First step is to consult with the public on what that number should be, and by what means to recover waste (composting, etc included).
  - Bob Smith: long term planning should aim towards 100% diversion, or some higher level.
- Comment: Whether Waste to energy is better than landfills is missing the point. We should be looking at the life cycle of every product along the way as well. BC Recycling regulation is strong here.
- Comment: local governments are very vulnerable right now; are engineers to come up with solutions ad hoc? What about the materials entering the incinerator – this is a bigger issue than in the past. We need to change this at the source. Creating a market for garbage means creating more demand for fuel; this is not an engineering issue anymore. It is a question of how we manage our affairs. We should no longer be giving our local government the job to clean up after us. Need new strategies.
- Emissions: dioxins and mercury has reducing technology. What about SO<sub>2</sub> and Nox? What fraction is reduced?
  - Studies show reduction, but studies could be comparing old landfills with new landfills where practices have improved, not because incineration is producing low toxins. Many different arguments on this.

## Diesel Emissions Session

Richard Holt – rail emissions

- Rail emissions are a complex issue. Locomotives can be rebuilt up to 5-10 times through their lifetime, and have a wide range of efficiencies. Federally regulated – include 80-90% of locomotives in BC.
- Mixture of jurisdictions: Whom do you complain to if you have a complaint?  
Confounding issue
- Rail may be better for GHG emissions, but worse for particulates/contaminates
- What about when they choose not to rebuild or buy new? Regulations apply to them?
  - Canada will be adopting US EPA standards in the future.
- Idle reduction: new locomotives must have auto-shutdown in US; hopefully in Canada soon. California leads the way in reducing rail yard emissions
  - Different regulation authorities to deal with
- Eco-Freight, and BC Locomotive and Rail Air Quality work Group
  - Eco-Freight – funded many emissions reduction projects
- Much going on in the voluntary side, especially to reduce fuel use.
- Communities move in around rail yards often, so whose problem is it?
- Many improvements being made in the rail industry

Ray Robb – Off road diesel emissions

- Metro Vancouver's Strategy to address off-road diesel emissions
- Fine particulates get absorbed into the blood stream – cardiovascular system.
- Off-road diesel engines last a long time – hard to regulate because they don't change over that much
- How much should we try to reduce diesel emissions? Very recent decision to regulate non-road engines.
  - Regulation
  - Economic incentives
- Significant number of vehicles that are 1998 or older. Retrofits needed.
- California recently passed a law to regulate diesel emissions.
- OR a low emission zone with high standards – tight standards that increase over time.

Questions:

- Is there a difference between remanufactured engine, and an overhauled engine?
  - If major components of engine are changed, then it's a remanufacture. Transport Canada regulates overhauls. In terms of performance requirements, there are performance standards, but these are not tied to ambient levels of GHG emissions.
- Best practices to improve anti-idling, and what impact they have?
  - Automatic shutdown devices; Further opportunities: CSX rail in US – internal review of idling policy, and achieved 6 million gallon fuel improvement/year.

- Is there a standard idling policy for the rail industry?
  - Yes, it's 30 minutes, but CP Rail is looking at 15 minutes.

## **Wood smoke Session**

### **Woodstoves**

#### **Policy initiatives**

1. Policy to increase the scope of the regulation. (right now is only for woodstoves, so doesn't look at furnaces, fireplaces etc) Looking at what else to include in revised regulation.
2. Policy also to reduce pollution from sector, so looking at existing emissions standards.
3. Are woodstoves still a viable/ appropriate option?

#### **Open burning smoke control regulation:**

Industrial and general public (only refers to piled burning – does not include leaves and agricultural activity)

Goal: more protective around populated areas.

3 smoke sensitivity zones: high, med, low.

#### **Questions/Discussion**

- What of the communities that have not applied?
  - Community must be signed on because they want them to have the administrative role and take a lead on the program
  - Live Smart BC is an alternative
- Community: buffers by density for the air curtain barrier.
  - Air Curtain Barrier: debris has to be burned on land it originated from. Otherwise business based burning
  - Issue with pine beetle wood: southern interior: can not remove from “parcel of land”
- What is the intent of the program? Moving towards eliminating open burning entirely? Municipalities would have better power to influence reducing impacts (see below) so who's role should it be? Paddling up the fast flowing river.
  - Mainly reducing impacts of open burning on health. (NOT eliminating completely necessarily)
  - Depends on the region/area. Some are very active, whereas some aren't. Provincial is there to ensure that all are covered.
- BUT Okanagan is being affected by other people's emissions. We all share the airshed. Cooperation from other Federal land operatives? What is going on for that?
  - There's also an educational component of ppl not knowing issue.
  - Financial argument for Clean Air can be a strong component. Show the cost of poor air with cost of health.

## Chipping program

- RDOS is working on a bylaw that will not regulate burning, but will fine you for smoke leaving your land. Applying for more funding from government (\$100,000) has already reduced emissions by a lot.
- 54 growers were in the chipping program, and education made them not take the burning option. So education is important too.
- Programs could go a lot farther if Health BC is on board. Ambient Air protection program is going to allow collaboration with Healthy Living.

## Q: Other alternatives to chipping?

- Depends on scale: bioenergy strategy, portable pellet plants \*lots of interest in this - Revelstoke, may need regulatory muscle to push.
- Chipping options: leaving as undergrowth. Can't leave too much, needs to be control

Transform composter etc. other technologies

Ministry of Forest and Range may change rules around hazardous material.

Chips are dangerous in Okanagan, so what to do with it? 4X fuel for co generation??

Outdoor boilers: Will this be included in regulation? Types will be looked at now, set for 2010.

Regulated wood boilers? (Cannot be EPA but there is a voluntary tag program)

## Air Quality and Public Health: A Fresh Look

- Public health (i.e. prevention) has an important role to play in the health care realm, even though it only comprises 4% of the health care sector.
- Has the Ministry of Healthy Living and Sport taken over air quality monitoring?
  - No, that will stay with the Ministry of Environment
- Absence of air quality monitoring stations? Not really there
- Compelling link made in a paper by Paul Hassleback on the cost-benefit between health care and air quality.
  - Respiratory rates are huge, especially among children; must make relationship known between illness and air quality
  - Find balance between our work, and the data we are seeing.
  - Falls off the political radar, unfortunately.
- Smithers – is there funding for BVLD Airshed management?
  - MHLS doesn't allocate funding to groups, but can provide data.
- Smithers – indoor air quality: who addresses mould in homes?
  - Put together a fact sheet on mould, could be on the public health website.