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Comments on Progress Report 2008: Canada United States Air Quality Agreement

On behalf of the Saint John Citizens Coalition for Clean Air, an environmental public interest group, I am pleased to provide the following comments on the 2008 Air Quality Agreement Progress Report.

One of the most important air quality initiatives taken between Canada and United States was the signing of this Canada United States Air Quality Agreement in 1991. This was and continues to be a significant treaty like agreement that addresses the impacts of transboundary air pollution between Canada and United States.

Since 1991 we have seen a slow but steady progress in reducing the transboundary air pollution problems between our country and the United States.

We recognize the Acid Rain Annex negotiated with the original 1991 agreement. It established specific objectives related to reducing the emissions of acid rain precursors sulfur dioxide and nitrogen oxides. In 2000 we were pleased to see the United States and Canada negotiated and Ozone Annex to this agreement. Those annex established

commitments related to the reduction of NOX and VOC's, ozone-forming air pollutants. Unfortunately, we have not been pleased with the state of progress made to reduce these pollutants that contribute (along with sun, heat) to ground level ozone levels. In this Province it is report by Dept. of Environment that 80% of our smog/ground level ozone we get from Northeast US, Midwest is still too high resulting in too many air quality health alerts advisories in the Quebec Windsor corridor. Although we do not get as many air pollution health alerts in this region we get too many days of "fair" readings.

For children, people with respiratory and health conditions and even healthy adults exerting themselves with a jog or golf game on these "fair" or "moderate" risk reading days under AQHI are just not acceptable. The Ozone Annex signed in 2000 just has not seen the expected results in reductions of those pollutants that contribute to ozone smog formation drifting into our region like a tail pipe at the end of the Bay of Fundy. Much more needed to be done, but unfortunately the previous US administration including our government made a strong enough effort to reduce NOX, VOC's ozone forming air pollutants.

With the election of President Obama and his environmental agenda that will reduce his country use of foreign oil along with reduction caps, CO2 reduction strategies and more renewable energy sources etc., we are really excited with the prospects of more substantive reductions of those pollutants such as NOX, VOC's and PM along with CO2 emissions.

We are concerned our own Canadian government will end up joining this effort “kicking and screaming” being such a big producer of fossil based pollutants especially with tar sand development in Alberta.

Here in our province our Premier Graham has identified this area of Saint John as an “energy hub” with several massive fossil fuel burning projects to be built in next 10 years including a second 300,000 bpd petroleum refinery, a LNG processing facility a proposed 600 MW natural gas power plant as part of this recent announcement of an energy corridor between NB and Maine there will be additional by sources of NOX emissions as well as CO2 associated with these proposed projects. Granted there will be some renewable (wind) generated electricity transmitted through this proposed transmission line.

I would recommend this agreement examine the Comprehensive Studies soon to be released under the EIA (Environmental Impact Assessment) for this second petroleum refinery by Irving Oil known as Eider Rock. There will be a comprehensive analysis on the generated air pollution from this proposed 300,000 bpd refinery. Many of the significant pollutants are the ones subject to this Air Quality Agreement. Pollution from this proposed will travel to Maine. As well this new LNG (Respol) processing facility will be a big NOX emitted as well.

In addition to this new US administration the downturn in the US economy (recession) is bound to impact the amount of pollution levels much of which travels into Canada. The next review, progress report needs to have dedicated section, analysis of these two

major developments impacting our two countries Vis a Vis air quality impacts or reductions.

Considering this recession could last several years and with the leadership of US President Obama we predict there will overall reduction of those pollutants subject to this Canada/US Agreement mandate. The former one (recession) a secondary impact that regrettably hurt so many Americans in being able to work and make a living. Even through we predict a reduction in these pollution levels as a result of this terrible recession, we take no pleasure in that achievement on the backs of millions of people who lost their jobs in US and Canada.

We agree with President Obama that with the development of renewable energy not only will it be positive for our economics but also for our air quality. That is a win win situation.

I would like to see this (AQA) analysis review those major developments in relation to these air pollutants being reduced over the next 10 years.

We continue to be supportive of this agreement and its limited success in fostering cooperation on transboundary air pollution control monitoring, research and information exchange.

Overall we are generally satisfied with the progress made by each country toward SO₂, NO_x, and VOC.

Is that progress sufficient or good enough to protect and restore the physical environment as well as to protect human health? Our answer to that question is NO.

ACID RAIN ANNEX

We often used hear the expression “we have won the acid rain wars”. That expression was more common in the late 1990’s early 2000 as progress in reducing SO₂ was being noted.

This Progress rightfully notes “despite these achievements (reducing impact of acid rain) of each side of the broader studies in each country indicate that although some damaged ecosystems are showing signs of recovery further efforts are necessary to restore these ecosystems to their pre-acidified conditions”.

Pleased to see this Progress Report acknowledge that it’s not just about protecting these ecosystems but restoring them as well. This is a point we raised in last Progress Report.

Canada efforts are acknowledged with a “55% reduction from Canada total SO₂ emission in 1980 and a 35% decrease from the 1990 emission level” (AQA Section 1).

This Progress report noted the largest source of SO₂ emissions in Canada to be the base metal smelting sector. We need to point out the Maritimes especially NB and US have been big SO₂ emitters with coal burning power plants in US and oil fired electrical generating unit at Coleson Cove (1150 MW) as well as the Irving Oil Refinery capped at 7200 tonnes per year in their air permit. This Progress Report failed to mention the significant SO₂ emission reductions from NB Power’s Coleson Cove with the installation of emission control equipment (scrubbers) that reduced SO₂ 70% from 75,000 tonnes per year to 29,000 along with the high price of oil 2008 and this emission control technology (wet precipitator scrubbing technology low NO_x burners etc the biggest SO₂

emitter in the Maritimes has really reduced their SO₂ emissions. This Progress Report must acknowledge progress when big emitters spend 250-300 million dollars as Coleson Cove did to reduce SO₂ and NO_x.

The same kind of commitment to reduce SO₂ has been made by the Irving Oil Refinery the largest in Canada (280,000 bpd). They installed a Tail Gas Unit at cost of 80 million to tackle their SO₂ emissions. Even though they are permitted in their approval to emit 7200 tonnes per year this year will be about 2800.

Again a Progress Report must do more to identify the reduction efforts by big emitters. Such action will encourage fast trappers to pick up their efforts.

I would like to see a graph or index listing of the big SO₂, NO_x emitters who actually made very significant efforts to reduce their SO₂ levels.

It was positive to see Canada committed to further reducing acidifying emissions through the more recent Canada-wide Acid Rain Strategy for Post 2000.

We were happy to see New Brunswick and US, Quebec, Ontario set new stricter SO₂ emission reduction targets that are 50% below their 1985 eastern Canada Acid Rain Program targets, to be achieved by 2010 (2015) for Ontario.

We do acknowledge provincial measures such as NB's included refurbishing industrial and power generating sources with pollution control equipment. As noted above good examples such as NB Power Coleson Cove and the Irving Oil Refinery both tackled SO₂ emissions with their new emission control technologies. We believe it is important to publicly acknowledge those efforts in respect to SO₂.

We also need to point out that NOX emission reductions at Irving Oil Refinery have increased 38% post 2000 upgrade of the facility (Source Public Health Risk Assessment Validation Study).

This Progress Report rightfully studies:

“Despite these efforts, the control of acidifying emissions has not occurred to the extent necessary to reduce acid disposition below critical levels and ensure the recovery of aquatic and terrestrial ecosystems”.

I expect the next report will see significant reduction from these two big SO2 emitters I cited above. Coleson Cove has been operating at about 20% capacity during that long period when price of crude oil was so high. SOX/NOX emissions were greatly reduced as plant was not operating at capacity.

The new tail gas unit at the Irving Oil Refinery has only been operating for eight months. Big time of next Progress Report their SO2 levels will be reduced to about 2900 tonnes per year from their allowable level of 7200 tonnes per year. Hopefully, US's efforts to install emission control technologies on their coal power plants will result in much lower emissions.

One of the problems getting the required reduction results has been the lack of or just too generous legally binding emission reduction caps set by regulation on air pending. We have had to put up with voluntary measures, air quality objectives, guidelines and other soft, weak standards.

It looks like Canada and US are going to set regulations in place to get emission caps set under US Clean Air Act and Canada's Clean Air Strategy. The sooner we take a regulatory approach to set hard emission reduction caps the better as far as we are concerned. These big emitters have been working under voluntary measures and too generous not stringent enough caps for SO₂, NO_x for far too long.

COMMENTS ON UNITED STATES: SO₂ EFFORTS

KEY COMMITMENTS AND PROGRESS NITROGEN OXIDES EMISSION REDUCTIONS

We like the web references to various sources of information in the Progress Report.

Please continue to include this format references in future Progress Reports.

It's not clear who has done better in nitrogen oxide emissions reductions.

Next report needs to have a report card format with a symbol to indicate which country actually has done better. The public can then see clearly who actually did better.

From what I can determine it looks like Canada did best compared to U.S. Is this conclusion correct, if not then you need to simplify the context conclusions in "Key Commitments and Progress: Nitrogen Oxides Emission Reductions Section".

EMISSIONS/COMPLIANCE MONITORING

It is reassuring to read

“In 2008 almost all new and existing base loaded fossil steam plants with high emission rates have operated CEMS achieving 94% installation for SO₂, NO_X emissions is equally impressive.

Thank goodness Canadians have access to NPRI data base.

This Environment Canada mandatory reporting site is excellent (please add the web site reference here). How accurate is the data. Is it all from CEMS or are there predicted levels? A note of explanation here on how much accuracy there is for NPRI data. Often big emitters cites emission factors or math calculated levels like scientific guesswork leaving the public to wonder how much confidence we should place in the NPRI data.

ACID DISPOSITION MONITORING, MODELING, MAPS ANDS TRENDS

Under wet disposition rain and snow are mentioned but no reference to acid fog. This region along Bay of Fundy Coast Southwestern NB has a lot of fog from May to October. On page 8, I was pleased to see the acknowledgement of airborne pollutants deposited on the earth's surface (you forget to mention people's lungs, bodies) with “disposition by cloud water and fog”. This is what we refer to here as acid fog”.

I want to see more health impact research focused on acid fog.

How is acid fog measured and monitored? What is being done to address acid fog in those areas like ones with so much fog from June – Sept?

PREVENTING AIR QUALITY DETERIORATION AND PROTECTING VISIBILITY

Good to see this joint effort of US Canada to review the history of the US visibility program including visibility improvement monitoring and tracking.

There is reference to Canadian Environmental Protection Act Canadian Environment Assessment Act in our country's efforts in addressing "the commitments to present air quality deterioration and ensure visibility protection".

The Government of Canada recently introduced changes to CEAA that will weaken and get that important piece of legislation. This Progress Report must mention this and review the changes in Federal legislation. We are very concerned that any attempt to weaken or otherwise gut CEAA will be hard for transboundary air pollution.

More has to be done both in Canada and US in protecting visibility. Anyone who has visited Toronto in last few years are shocked by the impaired visibility from all that smog blue haze created from local and long range smog drifting up from the Midwest of US from all those hundreds of dirty coal fire electric plants in the area.

Same for our region of southern Maritime region smog haze ruining our visibility.

Keeping Clean Areas Clean (KCAC) is very important part of Canada Wide Standards. I am very concerned Canada specifically this Southwestern NB area will not be able to keep that principle because of all these various energy hub projects being proposed including new 300,000 bpd oil refinery, soon to be opened Canaport LNG procession storage facility and now a new transmission corridor and natural gas plant all in the

greater Saint John region. This Progress Report must monitor these projects carefully to determine impact they will have on this Air Quality Agreement.

In the U.S. we note on page “the Clean Air Act established the goal of improving visibility in the nation’s 156 Class I areas and returning these areas to natural visibility conditions (visibility that existing before manmade air pollution)”.

This 1999 Regional Haze Rule prescribes the requirements that states must meet to reach that goal by 2064.

I thought there was a misprint when I read 2064! Now I understand why there has been such poor progress in restoring visibility and smog haze so think when you look out off Mt. Washington or even cast your eye over parts of New Brunswick.

The section under this leading preventing air quality deterioration and protecting visibility is the weakest and most discouraging part of this Progress Report as far as Canada and US are concerned.

There has to be more done here. The AQA needs to refocus and accelerate its efforts to tackle this serious visibility problem.

CONSULTATION AND NOTIFICATION CONCERNING SIGNIFICANT TRANSBOUNDARY AIR POLLUTION:

OZONE ANNEX

OVERVIEW

In the section overview this Progress Report states the Ozone Annex was added to the AQA in 2000 to address transboundary ground level ozone.

We were pleased to see the Ozone Annex added to this formal agreement as we believe those emissions of NOX, VOC's the precursors to ground level ozone are a very serious problem for millions of people and their natural environment. This Maritime Region, Provinces like NB, PEI, NS are all impacted with ground level ozone and associated smog. These high levels from May – Sept. – Oct. are a real concern with that primary (VOC's & NOX) and second pollutant (ground level ozone) drifting up to our region from that Boston Washington corridor – Northeast US area.

I was shocked to notice that commitments only apply to a defined region in both countries known as the Pollutant Emission Management Area (PEMA) excludes our region including Maritime Provinces. It includes 18 US states but does not list which ones. Are those states that make up Northeast US – Boston Washington corridor included? I assume that is the case. If so why is our region excluded in this PEMA.

If my conclusion is correct, then the next Progress Report period must expand the Pollutant Emission Management Area to include Maritime area especially southern NB, NS, etc. We worry that our area will not be subject to the commitments where emission

reductions are most critical for reducing transboundary ozone. This will be very important for the future. As New Brunswick is expanding its energy hub area to provide energy, petroleum products to Northeast US New Brunswick and Maine recently made an announcement last week to work on an energy corridor between the two regions?

Can you explain status of our area in respect to PEMA inclusion?

KEY COMMITMENTS AND PROGRESS

Just want to add that PEMA includes central southern Ontario southern Quebec and 18 states. This is positive as a lot our ground level ozone comes into our Maritime region from those areas. It should be noted, however, that most of the NOX, VOC's then ground level ozone originates from Northeast US 80% (Reference: Public Participation Reg for Irving Oil Refinery Facility Profile. (See web site Public Engagement Information Site for reference.

Our environmental (air quality) public interest group had been advocating for and supporting Environment Canada's decision to approve those new stringent NOX, VOC emission reduction standards for vehicles including cars, vans, light and a heavy duty trucks, off road vehicles small engines, diesel engines as well as fuels.

This is very positive. We were very happy to see such a regulatory approach to reduce these emissions that are precursor to ground level ozone.

There was, however, no mention of trains and ship engines being subject to these new fuel standards. This needs to be included. In this area of New Brunswick where there is

a strong fossil fuel industrial base with transportation modes of hundreds of ships and trains moving petroleum products for export.

Re the proposed Marine Spark Ignition Engine and off road Recreational Vehicle Emission Regulations. We note that were published in Canada Gazette Part 1 on Dec. 30, 2006.

We notice they are still “proposed”. Why? They should be approved now. We expect this Progress Report to identify need to get any and all outstanding proposed regulations approved consistent with Canada commitments under Ozone Annex.

This progress report gives a good overview of regulatory initiatives for fuels Sulphur in Gasoline Regulations.

We do see the reference to rail and marine engines where EC amended the Sulphur in Diesel Fuel Regulations to reduce the level of sulphur in diesel fuel for rail and marine engines .500 MG/Kg (as of 2007 Levels will be further limited to 15 mg/kg (15 ppm) beginning in 2012 for rail and marine engines.

Our group would have liked to see those time frames moved up as we have many rail, marine ships engines in our area from all the industrial activity here especially, the largest refinery in Canada.

It appears that Canada has been ahead of the game in response to regulatory efforts in reducing sulphur from gasoline, diesel. Certainly the local refinery here (Irving Oil) were ahead of the game in their efforts to manufacture these low and ultra low sulphur fuels

years ahead of regulatory requirements. Much of these low and ultra low products was and still is exported to California and US areas.

Perhaps I am wrong on who was more proactive on the sulphur content in fuels. If it was U.S. (California) then this Progress could clarify in the next report or its summary of comments of this Progress Report.

In our view this is a good example of how to table emission reductions by using regulatory prescriptive approach.

Many petroleum manufacturers resisted this approach especially those time lines for compliance. Some argued loss of jobs refineries needing upgrades. That because they neglected to take action years earlier on their own. The exception to this approach was the Irving Oil Refinery who saw the writing on the wall in 1997-98 when they announced a major upgrade to their facility to get ahead of the game in producing these low, ultra low sulphur content gas and diesel.

We still have issues with that facility regarding local, regional air pollution issues but they certainly moved fast years ago to produce low sulphur products before they were made to by regulation. We acknowledge this effort in respect to being proactive on the sulphur content in fuels much of went to California, US before the Canadian regulations came into force.

STATIONARY SOURCES OF NOX

“Canada is expected to comply with its commitment to cap NOX emissions from large fossil fuel fired power plants in the Ontario and Quebec portions of the PEMA at 39 kt and 5 kt respectively for 2007.

Our response to this statement in this Progress Report is that is well and good. Firstly if Canada had set a hard reduction cap to meet by regulation, a level more stringent, less than these levels then this pollutant NOX for stationary sources would have been reduced even more.

These current to be not tough enough to get the kind of reduction required to reduce protect and restore acid rain impacts as well as ground level ozone levels too.

We do acknowledge Ontario’s Cessation of Coal Regulation (O. Reg 496/07) under their Environmental Protection Act in effect Aug. 2007. This was an excellent regulation that ensures coal is not to be used to generate electricity at four big generating stations after Dec. 13, 2014. That should be moved forward to 2012-2013 if not sooner as far as we are concerned.

Ontario efforts in a number of clean energy projects to offset coal fired electricity generation are very positive. This is the way to go to reduce and prevent NOX, SO₂, and PM from being emitted into our environment.

Again Quebec used a regulatory approach to put on a specific cap of NOX at 2100 tonnes per years for the Tracy plant.

MEASURES TO REDUCE VOC's P. 17

This Progress Report identifies various regulations put in place in Ontario, Quebec.

New Brunswick recently announced its implementation plan to achieve its commitments for CWS for ozone.

This Progress Report failed to mention what New Brunswick is doing in its own implementation plans outlining its comprehensive actions to achieve the CWS's.

Why leave out Maritime jurisdiction especially NB, NS?

This Progress Plan needs to provide information on efforts of NB and other Maritime jurisdictions.

I would like to see web references to the various Provincial CWS Implementation Plans that are registered on CCME main web page. Then the public of these various jurisdictions can refer to these plans to see specifically how the Provinces will be implementing CWS – action plans.

I do see where Ontario's implementation plan can be found.

It is most regrettable that the province of Quebec is not a signatory to the CWS and therefore not required to develop an implementation.

It calls into question whether Canadian Wide Standards are really Canada Wide. With a section on actions by the Province of Quebec. Province of Ontario but no section on actions by Province of New Brunswick. Only in last 5 months did NB make its implementation public (Dec. 13, 2008). I want to see the Progress Report make

reference to this and its actions. They can be reviewed over next two years with an update report for 2009 or 2010.

ACTIONS BY THE PROVINCE OF QUEBEC

I like the regulatory approach this province has taken under its Draft Air Quality Regulation Respecting the Quality of the Atmosphere. Good to see these stricter standards aimed at reducing NOX emissions from new and modified industrial and commercial boilers in accordance with CCME guidelines.

We particularly like the rule of replacement of such boilers must be low NOX burners.

The length of time is factor long from Draft stage to now 2009. Four years and still not finalized. The Progress Report needs to give an update in its next report.

In fact there should be a page that summarizes all these regulatory efforts, status of and finalization of them to give public a quick one page list to see where these Federal / Provincial stand on regulatory change. Guidelines etc. should also be included as well.

We note there are amendments are aimed at reducing emissions from petroleum refineries as well as other sources.

Why didn't this Progress Report include what NB and specifically the Irving Oil Refinery (biggest refinery in Canada) are doing? Not a mention. This is a significant weakness under Actions by Provinces (on p 2 only ones cited).

One of the important sections of the CWS's is Keep Clean Areas Clean. There is no reference in the section under CWS's what Provinces are doing in this aspect of CWS's.

Please review and include update in this report. NB admits that it still has not finalized its actions under this aspect of CWS's. What about Ontario, Quebec?

I want to single out Ontario's Drive Clean Program and the Vehicle Emissions Enforcement Unit (SMOG PATROL).

This is excellent. I would have liked to have seen more information on this aspect in terms of impact how many dirty smog causing heavy duty light duty vehicles have been fined or ordered to repair defective emission control equipment.

We need this in southern New Brunswick especially Saint John where we have more old smog causing sooty dump trucks some with no emission control equipment on the road. This area has seen massive levels of these trucks as private contractors working on the Canaport LNG facility, retail commercial developments, Emera Brunswick Pipeline (Natural Gas Pipeline). We could have benefited from such a program here in the Saint John area.

This 2008 Progress Report lists various actions by the Province of Ontario Quebec. The question is what have been the results of these regulations in respect to real reductions. How effective have been these regulations. What contribution have they made in terms of real quantitative reductions of NOX, VOC's.

This Progress does a good job listing these regulations but poor on the results and monitoring of their effectiveness. This needs more work. The next period should elaborate and present more on the outcomes.

NOX, VOC PROGRAM UPDATES – US

This report needs to explain NOX SIP CALL in the PEMA states. I understand it is NOX transport emission reduction program. Needs more explanation. Also need to list these 14 states. I see Fig. 14 has PEMA Region and NOX, SIP Call States no names on map.

Fig. 15 – P. 20

When you look at this graph from 2004 to 2007 there is little decrease. This is not satisfactory.

Considering 80% of our ground level ozone comes from northeast US and further we have to cope with the health impacts the US is not doing enough under this NOX Budget Trading Program to satisfy our expectations and the goals of the Canada US Air Quality Agreement. We would expect to see more reductions over these years. Is this 80% level accurate. The Provincial Dept. of Environment keeps reminding the public of this 80%.

Good to see national rules for VOC controls on a large number of various sources.

Canada has commenced a similar approach with the Chemicals Management Plan.

This Progress report needs to explain if this plan under CEPA. There was no mention of this Plan in the Progress Report. Perhaps there is no link to VOC controls?

CONTROLS ON HAZARDOUS AIR POLLUTANTS

Very pleased to read in this 2008 Progress Report that EPA has promulgated regulations to control hazardous air pollutant emissions for all of the 40 categories of the industrial sources listed in the Ozone Annex. The good news is “These regulations will

help reduce VOC emissions”. The time frame is positive (2008) with the exception of paint stripping and gasoline distribution facilities which have until January 2011.

It’s too bad we have to wait 21 years to see a reduction of these toxic emissions from passenger vehicles to 80% below 1999. At least the proposed mobile source Air Toxic Regulation will take effect in 2009 to 2011.

Good to learn on the Non Road Engine Control Program low sulphur diesel fuel to be limited to 500 ppm sulphur since 2007, and will align with on highway and non road fuel at 15 ppm in 2012. Reducing sulphur in diesel fuels for these non-road engines especially ships (marine and locomotive engines) is much needed.

ANTICIPATED ADDITIONAL CONTROL MEASURES AND INDICATIVE REDUCTIONS

CANADA NATIONAL REDUCTIONS

One of the values of this Progress Report is the up to date information on various measures, regulatory changes and programs. Most Canadians are unaware of many of these efforts such as under eco Transport Strategy to further reduce the environmental impacts of transportation. The three programs eco Technology for Vehicles Program, the eco Mobility Program, eco Energy for Personal Vehicles Program all need more public education and promotion.

As clean air advocates our group welcomes the Federal government (Oct.. 2006) publishing a “Notice of intent to develop and implement regulations and other measures to reduce air emissions”.

This 2008 Progress Report under this section states

“The resulting reductions in air pollutant emissions and improvements to air quality would occur across the country ... Then in 2007 the Federal government announced Turning the Corner an Action Plan to Reduce Greenhouse GASES and Air Pollution. We look forward to the approval of the Regulatory Framework.

This Progress Report failed to explain to the public that the proposed changes are intensity based as the unit of energy not direct, hard caps to reduce.

With this intensity based approach it is possible emissions could end up increasing. This needs to be explained.

The Canadian environmental community has criticized this intensity based approach. Please elaborate on this on page 22 and 33. If I have not been accurate on this please explain this in your summary of comments or feedback.

NATIONAL REDUCTIONS UNITED STATES

Canada needs to follow US EPA implementation NOX, VOC control measures in specific areas including “residential wood combustion”. This is a big problem these old dirty wood stoves. According to an official I spoke to last July 2008 at the NB Climate Change Action Plan consultation; wood stove, smoke are the biggest producer of particulate matter in NB I thought some of our petroleum refineries.

Canada needs to regulate these stoves. Currently many suppliers carry EPA approved stoves.

The Progress Report needs to highlight and focus in of these wood stoves in respect to particulate matter, VOC and harmful toxics from the wood stoves.

Could you please dedicate a page section on wood stoves both residential wood combustion as well as these outdoor wood boilers (Wood Doctors). As well as these outdoor wood burning stoves that are so popular in the summer backyards. There are other references to residential wood combustion in this report. Could be consolidated into a special section, unit as they have such a serious impact on our ambient air quality in many areas of Canada and US.

Some jurisdictions like Pointe Claire Montreal are restricting and banning their use.

REPORTING PEMA EMISSIONS

Good to see Canada's NPRI mandatory reporting program referenced including web site. The US National Inventory NEI is referenced but no web site like there is for CPRI. Should have web site available included. Is there not one like NPRI where a Canadian citizen can go to this NPRI site anytime look up their sources of pollution in their own community. Our members find the NPRI to be excellent and very helpful in identifying the quantity of pollutions being emitted from these major sources.

REPORTING AIR QUALITY FOR ALL RELEVANT MONITORS WITHIN 500 KM OF THE BORDER BETWEEN CANADA AND UNITED STATES

Our reaction to this section of the Progress Report 2008 is positive. This report under this section confirms what we have expected and understood. Both the United States and Canada have extensive network to monitor ground level ozone and its precursors.

Figure 23 shows that higher ozone levels occur in the Great Lakes and Ohio Valley regions and along the US East coast. Lowest Values are generally found in the West and Atlantic Canada.

There needs to be more clarification on “lowest values are generally found in the West and in Atlantic Canada. This implies this Atlantic Canada may not have the lowest values, could imply there are areas that are higher at time?”

Just because the values are generally lower does not imply we are not adversely impacted in this part of Canada. Even if ground level ozone is in the “good” range in the IQUA or “low risk” in the AQHI (Air Quality Health Index), there are people impacted especially those with respiratory or heart conditions. Even children over exerting themselves during these smog/ozone days are impacted.

This section fails to describe how weather, wind and patterns of ground level ozone/smog from that Boston Washington area drift up to Atlantic Canada. Here in Saint John at the mouth of Bay of Fundy we are often described as the end of a tail pipe of ground level ozone/smog drifting into our region here in Saint John NB. I would expect more explanation of how and why our area’s ground level ozone smog is 80% produced from elsewhere in US/Canada. The Dept. of Environment tells me 20% of our ground level ozone is from our own sources.

I would like to see this Progress Report look into this assertion. Is this correct? Where is the science, monitoring results to back up this claim? Our own Dept. of Environment likes to keep bring this up every time we raise our own local sources. For reference

refer to Public Participation/Engagement Site Irving Oil Refinery – Facility Profile Document.

AMBIENT CONCENTRATION OF OZONE, NOX AND VOC'S

Even though Ozone levels have decreased over the period with a notable decline in Ozone levels since 2002 the levels in both countries are just too high. In Canada 68 ppb to 78 ppb on Figure 24 are simply too high. In US worse even though decline. Not enough is being done. I expect this recession and consequent reductions in NOX, VOC's will show up as even more decline in next Progress Report.

Figure 26 notes NOX and VOC concentrations have fluctuated over recent years because VOC concentrations are influenced by temperature, these fluctuations are most likely due to varying meteorological conditions. It is positive to see the statement "overall, the data indicate a downward trend in the Ambient levels of both NOX and VOC's.

NEW ACTIONS ON ACID RAIN/OZONE AND PARTICULATE MATTER

We are encouraged to see the Federal government initiate its clean air effort. "Turning the Corner" an Action Plan to Reduce Greenhouse Gases and Air Pollution". We are pleased to see the government includes a regulatory framework for emissions that sets out proposed mandatory and enforceable reductions in emissions of air pollutants and greenhouse gases from industrial sectors and sets out regulatory and other action plans for transportation and consumer and commercial products.

As mentioned earlier we are concerned that there are no hard caps to reduce but government is using intensity based approach which could actually result in an increase in admissions. This section needs to elaborate and respond to the criticism the Canadian environmental groups have publicly said about the government's clean air initiative. Perhaps the intensity based approach is just for greenhouse gas reduction? Please clarify in this section.

We are encouraged to see the statement

"The industrial component of the regulatory framework included fixed emission caps for PM, NOX, SO2 and VOC, from key industrial sectors including petroleum refining. This is most welcomed here, the home of the largest petroleum refinery in Canada 300,000 bpd. This regulatory framework will also reduce expected increase of emissions from a second refinery being proposed here in Saint John NB (Eider Rock Project).

In respect to British Columbia's (BC Air Action Plan) which directly targets emission sources that contribute to the formation of ground level ozone and fine particulate matter, very interested "in replacing wood stoves with cleaner alternatives and implementing a provincial smoke management plan to improve burning practices".

I would like to see a section on wood burning impacts efforts by various jurisdictions in tackling the wood burning problem that is such a big PM contributor. In NB for example PM from wood stove burning is biggest source of particulate matter more than industry! (including petroleum refining).

This Progress Report or at least next one needs to zero in on this wood burning problem that causes so much pollution especially particulate matter. There outdoor

wood stoves so popular should be burned as they result in direct impact to people nearby including our own family from next door neighbor who has one in his backyard.

OZONE STANDARDS AND IMPLEMENTATION – US

It's expected that once research on health effects from ozone becomes evident. Federal regulatory agencies like EPA would promulgate a new tighter primary and secondary NAAQS for ozone. In this case 0.075 ppm, with an 8 hour average.

As new compelling research comes in on impact air pollution has on health we expect both countries to take strong regulatory actions to reduce pollution levels to protect populations.

There does not appear to be enough information or illustrations of the EPA or EC formally working with Health Canada or US Health Secretary to combat these air pollution challenges as they impact people's health. I would like to see a section in the Health Effects section that show formal consultations collaboration is occurring.

PARTICULATE MATTER STANDARDS AND IMPLEMENTATION – US

SECTION 2

RELATED AIR QUALITY EFFORTS

New England Governors and Eastern Canadian Premiers

I was very pleased to see this section included in the 2008 Progress Report as per one of my previous suggestions.

I would have like to have seen a summary of their commitment and target to reduce various emissions in some cases up to 50%. There were some impressive commitments made on mercury CO2 emissions.

May I suggest you review their public communications and resolutions with specific target dates and pollution reduction efforts. More detail is required. This year the NEG/ECP is meeting in Saint John NB (Sept. 2009). May I suggest those responsible for this report keep up to date on their impressive work in their jurisdictions. Keep in mind these top elected political leaders represent 70 million people.

I would like to see some reporting on the Midwest Governors/Western Provinces. Are they working together like the NEG/ECP. If not they should be and the Canada US Air Quality Agreement structure need to promote, encourage them to do what the New England Governors and Eastern Canadian Premiers are doing .

SECTION 3 SCIENTIFIC AND TECHNICAL COOPERATION AND RESEARCH

This is the appropriate time to provide comment on the overall layout and content of the report. Section 3 is a good example of the clear presentation with graphs and clear summaries comparing Canada and US National Emissions big Section for various Pollutants 2006 (Fig. 28, Fig 29 30 illustrate clearly the Natural SO2 NOX Emission from all sources for both countries.

Overall the Progress Report is well organized clear and well put together. I hope you will build on this format. It makes it very easy to understand the level of progress on the air pollution status between Canada and US.

I would have liked to see a more breakdown on the Section (Fig 28) specifically industrial with a further breakdown on the oil/gas refinery industries. There are 17 petroleum refineries in Canada, the largest one in Saint John NB (Irving Oil Refinery) Sarnia has three along with many petrochemical facilities. I am not sure what the Solvents cover. Needs more breakdown industrial could be broken down to the petroleum oil gas up and down stream sections.

A special section on the horrific contribution of the 20 projects that make up the tar sands would be helpful.

AIR QUALITY MAPPING MONITORING AND REPORTING

There is no mention in this section of how many of these monitoring systems are operated on the property of the large polluters. In our region there are six to eight monitors operated on and on the property of large polluters. All the information on these industrial sites gets fed into the Provincial monitoring network.

There needed to be more elaboration in this section.

In addition the two countries are continuing to develop national air quality models. This work should have been accelerated years ago. I would have liked to learn more from the statement “jurisdictions consult in preparing routine forecasts for border regions and in developing communication materials for the public.

No mention of real time monitoring data being available to the public like it is to the regulators. I have asked our Provincial Dept. of Environment to make the data coming in on real time available to the public. For example there are several monitoring stations

in our neighbourhood. I would like to be able to turn on my computer and tune in to the local monitors that measure VOC levels in area.

Since this is a public report more information examples of communication material for the public.

Pleased to learn in Recent Developments section that US EPA is enhancing their National Ambient Air Monitoring Strategy. We note the “objective of this network is to gather additional information needed to support emissions and air quality model development – air quality program accountability and future health studies.

I want to stress how important it is for both countries to enhance and maintain to notched air quality monitoring capacity. This is important to drive the regulatory world to provide them the required data to crack down on pollution. From a policy perspective you need the scientifically based accurate data. These monitoring systems play an essential role to keep us aware of the problem and the data to the research to protect our health and physical environment.

There is an area in this 2008 Progress Report that is missing.

There needs to be more reporting on community and public participation in the efforts to reduce these emission levels.

For example Province of NB under its Clean Air Act Public Participation Regulation provides the community an opportunity to be notified of and provide input into these Certificates of Air Quality Approval. See Dept. of Environment for Province of NB then go to Public Engagement ... Site where several large Class I industries are currently

undergoing a Public Review. In fact NB Clean Air Act is the most progressive in Canada and the only Province in Canada (not sure of US) when the public has considerable input prior to the Minister approving air permits. Other jurisdictions in Canada and US need to be made aware of this health based public engagement act. Please add web site so the public can learn more.

I would like to see a section in the Progress Report that would provide Canadians, Americans with information on how they can or cannot be involved.

In US specifically Santa Barbara Air Resource Management Area they have a unique structure including community representation on the structure that takes responsibility for managing that air shed.

I would like to see these and other models where there are unique, progressive approaches to air resource management issues at the grassroots level.

NB used to have five Air Resource Management Area Committees (ARMA's). For more information contact Dept. of Environment, Fredericton.

HEALTH EFFECTS

This is a section I have been promoting to be included for several years with these comments.

The examples of various health studies are excellent. Unfortunately no studies that focus on southern Maritime region specifically Saint John NB area.

I see you reference Border Air Quality Strategy. I was a community member on a steering committee. Could you provide web site that permits people to read the reports.

I would like to see more on AQHI, In fact Saint John was the area selected to officially launch this health risk based notification system. This report did not include these research studies that include Saint John, as well as southern New Brunswick region. There was no reference to any Public Health Risk Assessment being completed in Canada or US. There was a major one done as part of an EIA Condition for the Irving Oil Refinery Upgrade Project in 1999. No mention to those major studies known as Seven Cities Study. Harvard University School of Public Health was involved.

Also no reference to ENVIRONMENT CANADA's Health Prevention Unit. That major Canadian Government Dept. has a health unit and works closely with Health Canada. This report and future ones need more reporting on the results of their health impact research on air pollution.

Overall very pleased to see summaries of health impact research.

I would like to see some more reporting on health impact from the various VOC such as Benzene. Many are cancer causing. There are hundreds of thousands of people living next to these big industrial sites. We need to see the research summaries on these fugitive emissions.

Despite this section not covering Maritimes, Saint John Region it was good to see the summaries of health impacts from air pollution.

COMMENT ON REVIEW OF US OZONE AND PARTICULATE MATTER AIR QUALITY STANDARDS

We were pleased to learn that “Based on the results of recent research on the health effects from ground level ozone on March 12, 2008 EPA promulgated tighter primary and secondary NAAQS for ozone of 0.075 ppm with an eight hour average”.

The precautionary principle (CEPA) needs to be the guide when deciding to tighten up standards.

I would like to see the recently published Canadian Medical Association (CMA) Air Pollution Study Report cited and referenced name of report is “Breathe Easy”. Please include this important Study – Report in your next report.

ECOLOGICAL EFFECTS

Along with Health Effects section this section on Ecological Effects is another positive feature of this 2008 Progress Report.

As noted earlier this is the best Progress Report yet in respect to layout, clarity and organized information. Our environmental group found the comparative information between Canada and US to be very clear and informative. Please build on this format. Having the web site for deeper reference and detail is excellent. Please continue providing those web page references.

RE: CRITICAL LOADS AND EXCEEDANCES

It was discouraging to learn in the last paragraph of this section the following conclusion: “in southeastern Canada in particular, the risk for continued ecosystem damage exists, despite past reductions in acidifying emissions.

There needs to be more research on this especially for the next Progress Report.

The Progress Report failed to identify clearly what levels of reduction will be required to restore these lakes, soils to ensure these damaged lakes are restored brought back to their pre polluted impact periods.

There needs to be more emphasis on restore not just protect these natural systems of nature. Same for keeping clean area clean (KCAC) as part of the Canadian Wide Standard regime.

In respect to United States section under Critical Loads and Exceedances, page 58 last paragraph is most discouraging with the statement:

...that acid sensitive ecosystems in the northeastern United States might still be at risk of acidification at current deposition levels”.

We hope the US will follow the recommendation: “as a result additional reductions in acid deposition from current levels might be necessary to protect these ecosystems”.

Canadian supported by other recent analysis such as the 2005 National Acid Precipitation Assessment Report to Congress.

Again no mention in 2008 Progress Report what needs to be done in terms of acid reductions to restore these lakes etc.

CANADIANS FINAL COMMENT

We note in the conclusion “Both countries have made significant progress in reducing acid rain and controlling ground level ozone in the transboundary region.

If this is the case why are millions of people in both countries still suffering from the adverse health impacts with the various health studies validated. We need to do much more to see these efforts translate into saving people from premature deaths and aggravating their respiratory and heart conditions.

We are encouraged both Canada and US are committed to reducing cross border air pollution and thankfully recognize the significant human health and ecosystem effects including acid rain and regional haze associated with PM 2.5 and it’s precursors.

Unfortunately both countries have had weak leadership and questionable commitment to tackle the air pollution problems of both countries. With new US administration elected and taking office January 2009 we are beginning to see the renewed commitment demonstrated in regulatory, legislative frameworks. As far as we are concerned this is best most effective approach. Past voluntary measures and trust us we will reduce approach have just not been effective over the years.

Canada needs a dedicated Clean Air Act like the US that is legally binding.

Hopefully, our Canadian government is getting the message from President Obama and will follow with finalizing new regulations not with these deceptive intensity based reduction goals but with hard caps to reduce.

Thank you for the opportunity to comment on the Progress Report 2008.