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TO: Secretary Canadian Section

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# Comments to the International Joint Commission (IJC) on the 2004 Progress Report under the Canada US Air Quality Agreement

I am in receipt of the Progress Report 2004 forwarded to the Saint John Citizens Coalition For Clean Air, an environmental non profit organization concerned about air quality issues in our area. Thank you for forwarding a copy of this Progress Report which we have carefully read and prepared to offer the following commentary.

In respect to the covering letter inviting comments on this report we offer the following comment on the statement in the letter from Mr. Gray inviting us to offer comment.

"The report concludes that both the United States and Canada have continued to fulfill their obligations set forth in the Agreement and that "human health and the environment have benefited greatly from the progress made". (Letter of Dec. 13, 2004 from Herb Gray inviting comments on this report)

The claim that "human health and the environment have benefited greatly from the progress made" is a statement that I would challenge considering the number of air quality smog / health advisory in Toronto issued since the last report. The level of ground level ozone in our region of the Southern NB have basically remained the same over the years. This secondary pollutant continues to cause health impacts not only here but other parts of Southern Ontario. The reference in this covering letter of Dec. 13, 2004 needs to be substantiated and such claims have to be based on hard evidence. In the response to this report I would therefore like to see the scientific evidence by qualified health professional referenced in this report to substantiate this claim that human health has greatly improved which quite frankly I did not see.

The emission levels cited in this Progress Report are much too high resulting in thousands of citizens getting sick, causing asthma events and even premature deaths. Even for healthy children playing soccer in the summer during days when IQUA is "good" or "fair" is not really good because even healthy lungs can be restricted during exertion during those smoggy days where you are in South Ontario, Fraser Valley or the southern Maritime regions. The current levels of VOC's NOX interacting with hot sunny days cause ground level ozone levels to be high. Even the "good", and "fair" readings are unacceptable. Much more has to be done. I would like to offer two sources of

information from respected community stakeholders which we would have liked to see referenced.

The New Brunswick Lung Association have many many public presentations on air pollution and health effects over the last few years. The following reference statements have been cited in their presentations which we believe more accurately reflect and emphasis the adverse health impacts from air pollution. Compared to page 37 one pages in the 2004 Progress Report, we find the following statements from this reputable association much more to the point than the three bullet statements offered in the Progress Report. They are as follows under the general heading of Population Health Evidence one of the overheads used in their public presentations.

"1,000 deaths years from air pollution in Toronto (illness costs of air pollution 2,000)

50-75,000 deaths yearly from ozone in the US (American Lung Association)

10 billion dollars annually in Ontario (including cost of suffering and loss of life)
Ontario Medical Association

60,000 babies in US at risk from mercury exposure (National Academy Science)

In 2004 the highly respected organizations namely Environmental Defence and Canadian Environmental Law Associations prepared a public report read by thousands of people other directly or through media outlets. Their report "Shattering the Myth of Pollution Progress in Canada a National Report It is found on www.pollutionwatch.org.

Their research is based on analysis from Environment Canada's pollution reporting program namely the National Pollutant Release Inventory (NPRI).

Here are some statements cited directly from the report (Executive Summary p. 1

## Key Findings

"The amount of pollutants released and transferred in Canada increased between 1995 and 2002 (as reported to NPRI"

"When every reportable chemical is added up, including the new ones published more than four billion kilograms of toxic material were released from industrial facilities alone in 2002. Ninety two percent of those went straight into the air".

With this in mind how can this 2004 Air Quality Progress report claim we are making progress. There is a disconnect to these "making progress statements of this report to what Canadian experience and know from publicly available sources.

Question is, why is there such a wide gap between this report and its fundamental conclusions and the cold hard facts available in other recognized sources.

The Pollution Watch report states on page 1 "in fact 96% of the air pollutants released in Canada in 2002 were suspected respiratory toxins enough pollution to fill railroad cars stretching from Ottawa to Fredericton".

The Air Quality Agreement Progress Report 2004 needs to start describing the amounts, volumes into language that regular citizens can more easily understand like in the above report cited. Coloured maps graphics are helpful as on page 29, 21. We like the breakdown of tons per day as noted on Figure 33 page 35.

Describing these emissions in ways for the public to get the full impact is recommended. We recognize the format in this report is making this effort but could go further in this regard. A glossary of terms is recommended for terms like anthroprogenic emissions. We may understand what this means but that may not be the case for all the interested public.

The steps outlined in the Progress are very positive particularly for Canada with its Federal Agenda on Cleaner Vehicle Engines and Fuels announced on Feb. 19, 2001.

The report acknowledges that ozone levels were high in 2002 relative to a multi year average reflecting weather patterns of that year as well as emissions. This supports my understanding. The report under Summary of Ozone Annex Review Meeting notes as well "while composite site average ozone shows no real trend..."

Again ground level ozone even at the National Air Quality Objectives are not health protective. This conclusion was reported at the Ozone PM National Multi Stakeholder Consultation Meetings when the first Ozone Annex was finalized several years ago. The health science background documents clearly illustrated that conclusion..

The major issue here is, that even with reductions in some pollutants some progress made they are insufficient to protect people from adverse health impacts.

I certainly acknowledge the many initiatives being taken between the two countries. Hopefully these will result in more substantial emissions in the next report in 2006. The question is do they go far enough to satisfy public expectations? We conclude they do not and fall below public expectations for governments who have mandates to protect citizens from harm.

# In respect to Section 2 New England Governors and Eastern Canadian Premiers

One of the most impressive structures within jurisdictions of North American is this organization both from a representative unique political organizational perspective.

but also from a real concrete outcome perspective. Section 2 of the Report does not all do justice to this impressive structure and organization that includes the political leaders of many Northeastern US states and four Eastern Canadian provinces representing millions citizens in the northeast continent of North America.

This report should have had a more in depth analysis of adverse health and death statistics caused by air pollution from Canadian/US Lung American Lung Associations or jurisdictional public health agencies from both countries. Once the International Joint Commission Canada and United States claim that "human health and the environment have benefited greatly from the progress made" they have to be prepared to back it up. Now if I missed a public health risk study or health study reference in this report that substantiates this claim, I will acknowledge but I did not see much in way of documentation backing up this claim. All one has to do is to consult Ontario Medical Society, Ontario, NB Lung Assoc.'s to get the statistics of thousands of premature deaths just in Toronto area due to air pollution. The three or four paragraphs on page 37 does not fully describe the seriousness of Health Effects.

The fact that this organization is headed up by the leaders of these jurisdictions who have made undertakings to substantially reduce several criteria air contaminants and air toxics is very impressive. There is no reference to the various agreements and public commitments these Governors and Premiers have made. The response to this report needs to list these commitment caps for reductions but a supplementary progress report on that organizations (NEGECP) successes should be reported.

There needs to be a similar model of Governors and Premiers for other parts of North American whose jurisdictions are affected by air pollution. We would like to see Western Canadian Premiers/Western US Governors set up a similar body to collaborate on air quality issues in these regions.

I was very disappointed by the limited and inadequate coverage this unique and impressive organization was given in the Canada United States Air Quality Agreement Progress Report (2004). The one page (26) titled Related Air Quality Efforts included a third of the page with two coloured pictures.

The biggest limitation on page 26 was that it failed to describe the actual emission reduction target caps percentages for the region in air number of pollutants including CO2 / Climate Change Strategy Mercury etc. to reduce emissions.

## RE: Summary of Ozone Annex Review Meeting

One of the major focuses of the Quebec City Meeting had to do with a review and update on health impacts of air pollution related to Ozone Annex. The only slight reference to health in this Ozone Annex Review Meeting was "Continued efforts in health and environmental effects were described".

A great deal more related to health impacts etc. was presented. This summary should have presented some highlights from these health impact perspectives presented at this Quebec City meeting. This was a significant omission that must be addressed in the response to these comments. A web site on the Summary of proceedings so the public can read these presenters reports needs to be included. The reports and presentations from health leaders, ENGO's should have been cited or referenced.

#### **Acid Rain Annex**

Even though Canada and US have taken significant actions to address acid rain those actions are still not adequate to prevent and <u>restore</u> the harm of lakes, trees, vegetation from current acid rain levels. The acid rain story has seen some success on this front but to get the lakes, trees restored emissions will have to be reduced by 75% according to earlier reports on the National Acid Rain Strategy to fully restore them from the damage caused by Acid Rain.

The goals for continued reduction must be such as to allow lakes, <u>trees be restored</u> from the damage they have experienced. The Canada-Wide Acid Rain Strategy Post 2000 identifies the 75% levels needed for restoration. We need to focus now on restoration not just protection. Damage has been done now time to reduce to restore.

#### RE: Acid Rain Annex Canada:

In respect to the effort of the United States efforts in reducing SO2 emissions there is reference to "tradable allowance". It notes every year, however each individual source must hold enough allowances to equal or exceed its annual emissions. Allowances that are not used or sold in a given year are carried over (or banked for future use. Banked emissions give sources the flexibility to emit more in years when energy demand is higher without affecting the total emissions cap under the program". This capacity and opportunity to "emit more in years when energy demand is higher" is a significant area of concern because we believe there should be a continuing effort and best practices to keep reducing those emissions that contribute to acid rain. The cap is set in these regions with input from multiple stakeholders including the big emitters. In our view, the final authority for setting the cap should rest primarily with the Provincial and Federal Public Health Departments and or agency in these regions to ensure that any cap set is truly health protective for citizens. We have reason to believe that these caps are not stringent enough to protect and restore the environment from the adverse impacts of acid rain. The same could be said for the health protection of people in these area.

It is my understanding that Canada is soon to embark on "a cap and trade regime" similar to US. NOX/SOX emissions trading program. I expect to see references to this in the next (Progress Report 2006). Since this program is cited in the United States segment of Sulphur Dioxide Emission Reductions (P 2) it would have been

helpful for those citizens in Canada unfamiliar with a cap and trade program to have had a section on what it is and how it works in US including its effectiveness or lack thereof. There should be a dedicated multi stakeholder workshop consultation process on this specific subject. Are such programs shell games or do they really work to reduce emissions.

There needs to be a public education program for Canadians on this emissions trading regime especially if it becomes a government regulatory initiative that I understand is now being studied for implementation. Canadians at large have not be adequately educated or consulted. How effective are such programs in US jurisdictions? This Progress Report failed to help the public in this regard in respect to public education aspect.

An area of concern is how does this emission trading approach handle <u>local</u> <u>conditions</u> especially when it has "the flexibility to emit more in years when energy demand is higher..." Such a program may not respect local conditions "where more reductions are required. Such a program with high energy use could result in unacceptably high emissions without solid reductions.

In respect to the year 2003, National Annual  $SO_2$  emissions under the Acid Rain Program were 400,000 tons 4% higher than 2002. Reasons cited was nuclear generation was down by 2% in 2003 for first time since 1998. The rise of natural gas process resulted in a 9% decline in natural gas generation to meet electricity demand. The fact that this need was primarily filled by coal-fuel / oil fired generation is most discouraging. We are concerned that there was an increase in emissions from 2002 levels under the Acid Rain Program despite this increase emissions were lower than 2000 levels and substantially lower than 1990 levels.

Even the Dept. of Environment and Local Government claims that department has a long way to do in improving air quality in New Brunswick. Telegraph Journal Feb. 2005.

The 2003 Air Quality Monitoring report released two weeks ago illustrates that smog levels across the province were similar in 2003 to 1980 and smog over Saint John has either remained the same or gotten worse. Progress that New Brunswick had been showing between 1989 and 1995 on reducing acid rain seems to have now stopped.

The Minister's representative publicly acknowledged that smog levels haven't shown much improvement over the past decade or two.

This resulted in smog/particulate levels, visibility impaired up along the Northeast US and Southern Ontario when this emissions travelled to our region from long range transport. This is unacceptable. Steps must be taken to guarantee a steady decrease year by year not these periodic increases. When are the two countries going to get serious about renewable alternative new energy sources such as more wind, solar, biomass to energy. More money needs to be allocated for partnerships, demonstration

projects for the development of alternative renewable energy sources. The Feb. 23, 2005 Canadian Budget included funding in these areas which was encouraging.

I like the web site references at the end of the various sections such as ones on page two and three as well as throughout the report. Next Progress Report should report on how these programs, tax instruments are being used with examples.

Progress on Canadian and US Nitrogen Oxides / Emission Reductions, p. 3

There should have been a review of progress of Canadian jurisdictions in developing plans to meet the Canada Wide Standards for PM and Ozone by 2010. Its been several years since the United States and Canada signed the Ozone Annex to the Air Quality Agreement. This would have been a good opportunity to see how these jurisdiction are developing their "plans". Its only sixty months before jurisdictions will all have meet Canada Wide Standards for PM and Ozone. A status report of these plans of the Canadian jurisdictions would have been informative New Brunswick still have not released its "implementation plan". What about other jurisdictions? Next report should report on these "plans" and effectiveness.

We are encouraged by Canada's aggressive agenda to reduce the largest source of NOX emissions from vehicles and fuels.

### **Unites States**

The report has a graft (Figure 3) of US Nox Emissions from Electric Power Generation 1990-2003 with a downward trend. This report should have had another graft showing the Nox emissions from all sources, which I expect may have shown little reduction or stayed the same. Its hard to tell because there are no overall graphs to illustrate the trends in NOX emissions for both Canada and U.S. in all sources during this report period. This is a serious oversight in any progress report of this nature.

I am very concerned with the coal fired plants which were given an exemption from installing new technologies under US Clean Air Act. These old clunkers many western US are not always equipped with the top of the line control technologies resulting in acid emissions drifting into Southern Ontario and then drifting last to the Maritimes. This alone with the millions of cars, SUV's, in Northeast United States eventually drift from the Boston / Washington corridor up the Northeast seaboard cause ground level ozone/smog in our Maritime region. This is a serious public health issue.

I am very concerned about emergence of coal use and its use in power plants in Mid West of US. Additionally, even though natural gas is free from SO2 / particulate it is a major NOX producer unless there is control technologies such as MACT and BACT installed.

The short two sentence 12 line write up on United States "Progress on Canada and US Nitrogen Oxides Emissions Reductions" says it all which for us is nothing to

write home about. There should have been a more comprehensive explanation of the problems challenges and future efforts in this section. This was very disappointing but not surprising. No wonder our smog/ozone levels are so bad in our Maritime region. With these NOX and VOC emissions along with sun/heat were are seeing virtually no change or any reductions in our ground level ozone levels. Reference See 2003 NB Air Quality Report released Feb. 4, 2005 from Province of New Brunswick, Dept. of Environment and Local Government.

# **Emission Monitoring:**

Canada: The report notes that "the feasibility of cross border emissions trading is now being examined". This report missed the opportunity to provide citizens with a current update and progress of this "examination". The Canadian public at large appear to be left out of the loop. There needs to be much more citizen engagement, consultations in the development of a cap and trade or cross border trading regime. Remember it's the communities and people in them that will be directly impacted by such a program. When do we get advised, consulted and provided an opportunity for impact? No indication given in this Progress Report.

# Preventing Air Quality Deterioration and Protecting Visibility

The paragraph directly below this Sub Title says it all. It is worth repeating in this report because it reinforces the fact that despite progress in Mr. Grey's covering letter which states that "human health and environment have benefited greatly from progress made". In our view we still have a long way to go to get these emissions down to a point where we will not see "a vail of white or blue haze in the air, obstructing the view most of the year, as this report states.

In the section for Canada, this report makes reference to Federal, Provincial territorial governments are working with stakeholders to establish implementation plans and programs for the Canada Wide Standard for PM and ozone that apply pollution prevention and best management practices. These practices could include ensuring that new facilities and activities incorporate the best available economically feasible technology (BAEFT) to reduce PM and ozone levels..."

This type of technology is not adequate in our view. Best Available Control Technology (BACT) or ideally Most Achievable Control Technology (MACT) needs to be implemented to get the kind of emission reduction required to protect, restore the environment and protect human health. Its no wonder it is taking so long to drive down these emissions. To prevent the emissions going up the stack (pollution prevention) is the way to go not just command and control methods.

Here in New Brunswick the biggest acid rain contributor, a 1,150 MW electric power generation station (Coleson Cove) has completed a 750 million dollar refurbishment upgrade including 500 million dollars in "state of the art" emission control technologies that will reduce NOX, SO2 by 77% and PM by 70%.

I would like to see a section in this and future report in which these industries in both countries that have taken such steps to greatly reduce emissions are acknowledged. Reference to those industries that have invested heavily in new environmental control technologies would be welcomed and serve as role models for other major emitters.

#### **United States**

The Regional Haze Program noted, in this report requires states to develop plans to improve visibility conditions at Class 1 areas with the goal of restoring natural visibility conditions in about 60 years. This is much too long to reach this objective. We would recommend that this be reduced substantially. The first set of plans are due in 2008. Again, we would have seen first set of plan before 2009. No wonder its taking so long. Now I can understand. These long time frames are inconsistent with public expectations to reduce these haze causing emissions at a faster pace.

It is most discouraging to read on page 8 "Data from the Improve (Interagency Monitoring of Protected Visual Environments) network indicate little change in visibility during the past decade" and further.

"Overall visibility in the East is still significantly impaired in national parks and wilderness areas especially on haziest days". We would urge both countries and all jurisdictions to implement emission reducing plans at a more accelerated rate.

There is a reference to the International Joint Commission Air Quality Advisory Board having held a workshop on Clean Area and PSD in Vancouver. The workshop examined the PSD and Regional haze Programs in the US and the KCAC provisions of the Canada Wide Standards for Ozone and PM. We would like to have seen a web site with the Record of Proceedings summarizing the outcome of such a workshop. The response to the public comments should have such a reference so citizens and communities can access such workshop results.

# Consultation and Notification of Significant Transboundary Air Pollution

The reference to Algoma Steel that cause the citizens in Michigan concern about the pollution from this plant is a real source of concern despite the Canadian federal and provincial agencies working with this steel plant to achieve emission reduction. Much more has to done to protect the people of Michigan from this Canadian plant. Canada as a good neighbour has to do more to ensure this plant reduces its emission much more aggressively.

# **Ozone Annex Key Commitments and Progress**

Canada's efforts are very impressive and positive as described in Vehicles, Engines, Fuels section. Thankfully, we are going to see some regulatory action to control sulphur in diesel fuel for use in off road, rail, marine engines. Here in Saint John New Brunswick there is heavy shipping and rail infrastructure. Such regulatory changes are welcomed.

Again under Stationary Sources of NOX it is discouraging to read "Emissions from power plants in the Ontario PEMA were approximately 78 Kt in 1990 and approximately 79 Kt in 2002"

The report states further 'but progress is underway towards reductions by 2007". Ontario decision not to permit coal use as fuel for these big power plants is good news. Ontario is to be congratulated in its decision to move away from coal fired power facilities to a less polluting fuel source such as natural gas for co-generation applications.

Again same problem in Quebec where NOX (as No2) emissions from power plants are above the 5 Kt cap (preliminary data for 2003). This is not very encouraging as far as we are concerned.

#### Measures to Reduce VOC's

The two regulations, one on dry cleaning and another on solvent degreasing are positive but a drop in the bucket in comparison to the VOC's fugitive emissions emitted from the 19 petroleum refineries in Canada from storage tanks, terminals and pipes, compressors seals and fuel transfers from these facilities to other modes such as trucks, ships, rail cars. Volatile Organic Compounds are elevated in our neighbourhood monitor near the fence line of the largest petroleum refinery in Canada.

I was surprised there was no mention of the CCME sponsored initiative under National Framework Emissions Reductions for Petroleum Refineries (NEPFER).

This CCME and industry supported initiative deserves to be cited (See CCME web site for details).

There was extensive consultations of which our ENGO was an official member delegate of Canadian Environment Network. The CCME through the Ministers have or about to sign off on this emission reduction initiative for petroleum refineries. The recommendations for this Framework were <u>worked out by consensus</u> by ENGO's jurisdictions industry and other stakeholders. The process alone was unique and effective worthy of mention as a process to work constructively together to reduce emissions from this sector up to 50% over the next ten years.

There should have been more mention of the number of CCME Codes of Practice and Guidelines for Petroleum Storage Tanks, etc. developed in the early 1990 that are being reviewed for updating. We would have liked to have seen them cited. Our group participated in the ones for VOC / CCME Code Guidelines for Petroleum Tanks and other related systems. The next Progress Report should report on this important development as such changes are expected to reduce VOC emissions even more from

this industry. A section on regulatory changes in progress or finalized should have been in this report.

I would have like to have seen a update on the status of these important CCME reviews of Codes and Guidelines on VOC's. The public have missed the opportunity to be updated. The response to comments should provide such an update and status of these important reviews.

# Measures for NOX and VOC Emissions to Attain the Canada Wide Standard for Ozone

The list cited under Multi Pollutant Emission Reduction Strategies (MERS) lists a number of sectors which are key to achieving the Canada Wide Standard for PM and Ozone. What about the petroleum refinery sector with 20 refineries in Canada. There is no reference to how or what this sector is going to have to do to reduce.

## Quebec Portion of the PEMA

It is positive to see the City of Montreal currently enforcing regulatory provisions concerning gasoline vapour recovery in its territory. We are of the believe that a regulatory approach is required to reduce these emissions as opposed to a voluntary one. The time has come for a more prescriptive approach as opposed to more voluntary one. Clearly voluntary agreements have been ineffective to get these major industrial sources of air pollution reduced.

#### Ontario Portion of the PEMA

There are many excellent efforts Ontario has implemented as noted in this section. We particularly like the Drive Clean's Smog Patrol. We would like to see other jurisdictions implement such a program including New Brunswick. It would have been useful for this Progress Report to have reported on similar programs in US jurisdictions with a review of their effectiveness. The public need to learn of successful programs and practices so we will not get completely discouraged.

## Anticipated Additional Control Measures and Indicative Reductions

"By 2005, all jurisdictions will have published their implementation plans outlining the measures they will take to achieve the standard".

Its encouraging to learn that Ontario continues to make progress toward its commitments under Ozone Annex and has committed to reducing NOX and VOC emissions by 45% below 1990 levels by 2015 under the Anti Smog Action Plan.

As part of this Progress Report, I was disappointed to read of only two jurisdictions (Ontario, Quebec) that have area specific reductions. This report should have listed all jurisdictions such as NB, NS, BC etc with a report on their progress even

if there was none. At least the public in those area would learn who is proactive and taking this air quality issue seriously.

## Reporting PEMA Emissions

One of the best services Environment Canada provide to Canadians is the NPRI which is cited in the Progress Report. More substances are listed but there is always room for improvements as reported in the PollutionWatch.org site. We would recommend that the recommendations of the recently published report from that group be implemented by NPRI.

We are glad to see that in 2003 the NPRI was further expanded to require reporting of 60 additional VOC species.

We see the US has the National Emission Inventory (NEI). We would like to see the US regulation changed from three year reporting cycle to a two year cycle.

RE: Figure 16: Ozone Concentrations (ppb) along the US-Canada Border (average annual Fourth Highest Daily Maximum 8 hour average ozone 2000-2002.

Figure 17 Composite Trends: Annual Fourth Highest Maximum 8 hour Ozone Concentration for sites within 500 KM of the US-Canada Border.

"Trends in ozone concentration over time are presented in this figure 17. Ozone trends are nearly flat for the period though there is a complex regional pattern".

Figure 18, 19 depict the trends in the ozone precursors NOX, VOC's in eastern US and Canada. These measurements represent information from a more limited network of sites than is available for ozone. I was shocked to learn "there are no suitable NOX sites in the western United States within the border region". This is unacceptable and has to be corrected.

Monitor capacity network limitations as cited are inexcusable in our view, considering how important it is to have quality monitoring data to assist with improved practice and policy development. There is a need for good science to make decisions and to have inadequate monitoring capacity such as identified in the information provided under Figure 15 is just not satisfactory in our view. We have 17 air quality monitoring stations in our city area. See DELG Prov of NB 2003 Air Quality Monitoring Report for reference. Three new ones added recently as part of the NB Power Coleson Cove Power Plant refurbishment.

## Under Summary of Ozone Annex Review Meeting page 23

I was very discouraged to learn under key points that "within 500 Km of the United States-Canada border ozone levels were high in 2002 relative to a multi year average, reflecting weather patterns of that year as well as emissions".

## P. 24 Progress and Updates on Ozone and Particulate Matter

Canada: We acknowledge efforts identified that Canada has done. In our region of the country, Southern / Western NB of the Maritime region, generally we are plagued by smog / ground level ozone in which we get on average six air quality advisories per summer. It is reported that up to 70-70% of our ozone / smog conditions are from long range transport from Boston/Washington corridor. Despite any efforts made her reducing the precursors emissions of (VOC/NOX) it doesn't really provide us with the relief because the emissions are still heavy in the Northeast US (Boston/Washington corridor) that drift up here in the hot sunny summer days. Its all very discouraging quite frankly. Recently in Toronto where our adult children live with their families were was a bad three day period of winter smog with advisories. This is a serious worry affecting millions of people in the affected regions. This is why we find it hard to recognize "the progress cited in some parts of this Progress Report.

## Comment on Public Education/Advocacy

We were disappointed that there was no summary or write up on citizen engagement, advocacy, public participation activities in this report. I am sure there are many educational, advocacy efforts going on in both countries which this report does not even mention. It would be encouraging and interesting to learn on what is going on in this citizens public engagement areas. For example in New Brunswick the Clean Air Act has a regulation on public participation/review of Air Quality Permits which is unique in Canada. There has to be some coverage in the Canada US Air Quality Agreement Progress Report to cover what is going on at the community/citizen level especially role of ENGO's who are always included in these various regulatory, multi stakeholder consultations. Lets have a section next time on their efforts affecting change. It will help citizens recognize, its not hopeless, you can make a difference etc. We, as community members need all the help, linkage we can get to promote the objectives and reach outcomes in this Agreement. All jurisdictions in both countries have to work harder to engage, inform and empower citizens to support emission reductions, etc.

Under Progress and Updates on Ozone and Particulate Matter, I did not find the write up on United States part all that current. The EPA designated 126 areas as non attainment for the 8 hour ozone standard are for the future implementation 2007 2021. The non attainment areas are required to develop and implement control plans to reduce emissions of ozone-causing pollution. This should have been done years ago. If so we would more advanced on reducing the ozone levels that drift up here to the Maritimes and adversely affect our health and environment. I have concluded that despite what may be some progress, it is not enough, it lacks political will to tackle this major public health problem with the vigour it has deserves. One of Governments primary responsibilities is to protect its citizens from harm. In my view we have not been protected sufficiently despite "progress" this report likes to acknowledge. Much more has to be done. Too many people are at risk to their health to maintain this pace. "Progress" cited in this report fall below what is needed to keep people safe and prevent premature death. Please refer to my comments earlier in this commentary.

#### Clean Air Interstate Rule

It cites this proposed rule would cover 29 states and District of Columbia. Under this rule the <u>proposed</u> cap and trade program <u>if adopted</u> by the states, would annually reduce power plant SO2 emissions by approximately 3.6 million tons by 2010, across states covered by the rule, with reductions ultimately reaching more than 5 million tons annually <u>when</u> fully implemented.

Again this is an update not substantiated progress because it is all quite "ify". To cite it as progress may be premature at this point. This report should be more clear before you include unadopted proposals as real progress.

The problem with old coal fired plants given an exemption under US Clean Air Act years ago from being to required to install top emission control technology is still a problem with all these dirty emissions drifting up to Southern Ontario/ etc. If these plants had been required to clean up years ago these proposed reductions would have long been achieved. Citizens in both countries have paid a big price by having those old coal fired power plants grandfathered under US Clean Air Act / regulation so they didn't have to later install MACT or BACT equipment. Only new plants we understand, were required to install new control equipment. This rule needs to be changed to include these old plants that burn coal. Canada should ask the US to get rid of this loophole to ensure these big polluters clean up these dirty coal fired plants.

## In respect to the Transbourdary Particulate Matter Science Assessment, p. 33

It was good to see that the both countries have completed a joint science assessment report on PM. Results from the three binational workshops between 1999 and 2003 identified several key objectives for a Canada-United States transboundary assessment. The findings with several figures from the report reinforce our concern over these emission particles that are of adverse health impact.

The statement "The northeast United States is again a region of high ambient PM levels with 98th percentile values in excess of 30 ug/m³ at many of this sites Canadian locations exhibit generally lower levels of PM 2.5 although concentrations greater than 30 ug/m³ occur in several regions of the country for the years 2000 to 2002 particularly in the Windsor/Quebec City corridor".

Objective 3 Describe the PM issue in terms of geographic regions (e.g. West, Central, East.

It is again discouraging to read "current ambient levels of PM 2.5 in the border regions exceed the standards set for PM 2.5 primarily in the eastern portion of the border domain".

In Objective 5 Describe source regions of PM and its precursors in the context of geographic regions i.e. West, Central, East.

Emissions from the northeastern United States and southern Canada have an impact on PM 2.5 levels in many areas of the two countries including as far east as NS and our area New Brunswick.....

# Re Objective 7 Identify the effect of current and proposed emission reduction scenarios on fine PM levels in North American

"US and Canadian controls that are expected to be implemented were found to result in a maximum annual reduction of PM 2.5 of 2.3 ug/m<sup>3</sup> in 2020".

Question is, will such reduction be sufficient to protect health knowing what we know about PM 2.5 and these tiny particles in which the body cannot defend itself from them entering the lung?

What kind of percentage reduction is 2.3 ug/m<sup>3</sup> in 2020 compared to now?

Question that needs to be answered is do both countries believe even these reductions are sufficient to protect their population both vulnerable and healthy groups?

It is our view that these reductions will not be health protective. If we are wrong we are open to be corrected in your response document you will be preparing later.

### **Health Effects**

We note Health Canada completed health science updates for PM 2.5 and Ozone in support of Canada Wide Standards process.

"The updates to the health science assessments for PM 2.5 Ozone conclude that the new evidence gathered from clinical toxicological and epidemiological studies continues to support the standards".

Quite frankly I find this hard to understand especially when the Science Background documents are used in advance of the CWS's for PM and Ozone should health harm at these regulatory levels.

In New Brunswick significant ozone episodes occur on average about six times per summer, mainly affecting the southern part of the province. Please refer to Air Quality Monitoring Data Report for 2003. I worry about our adult children and their children now living in the Greater Saint John area.

We recognize and are very concerned that much of this ozone originates from populated regions of the north eastern United States especially the Washington to Boston corridor.

Ground-level ozone irritates the lungs, causing air way inflammation and can make breathing difficult. Expose to high concentrations can result in chest tightness,

shortness of breath, reduced lung capacity and exercise performance, and coughing and wheezing.

## Recent health research suggests there is no clear "safe" threshold for ozone.

(Statement taken from 2003 Air Quality Monitoring Report released Feb. 4, 2005. See document on line at Dept. of Environment and Local Government, Province of NB).

How can those health assessments for PM and Ozone that conclude that the current standards can be supported when on the same page results of some recent research related to PM health effects state;

"Recently published epidemiologic studies have continued to provide evidence linking serious health effects with exposure to fine particles" further on the same page

Of particular note are the re-analysis and follow up analysis completed using updated data from the American Cancer Society cohost that show long term expose to fine particles and sulfates (a fine particle component) to be associated with increased mortality from cardiovascular diseases".

Again in the last paragraph we read -

"Multiple hypotheses now exist describing the biological mechanisms by which very small concentrations of inhaled PM produce cardiovascular and pulmonary changes contributing to increased illness and death".

With this kind of health researched cited on page 31 under Health Effects its beyond me how even the new Canadian Wide Standards to come into effect can be supported from a health protection perspective.

These Health Effects points cited should serve as a powerful reminder to both governments that more must be done in respect to emission reductions, industrial practice, life style changes of populations and regulatory interventions. The regulatory regimes must be more in keeping with health impact science to ensure regulations are designed to be health protective.

Any "progress" reported in this document is not sufficient in our view to meet public expectations to be protected from the adverse impacts of these many air pollutants particularly the precursors to PM, Ozone.

We need more citizen empowerment education and engagement to support and help the elected officials realize that both countries are going to have to move this agenda along at a more effective pace.

#### In conclusion

Our environmental group would have liked to see a open frank statement on key findings with more specific recommendations summarized in a section.

This was nicely done in the above cited report "Shattering The Myth of Pollution Progress in Canada (by Pollution Watch) page 21 in which I would like to quote. Our group completely agree and support their key findings as I am sure many Canadians would also.

"The current amount of pollution in Canada is unacceptable. It is not acceptable or necessary to continue releasing large amount of CEPA toxics carcinogens and other pollutants known to damage human health and the environment".

My own concluding comment would be upon reading this report is that we cannot let our precious atmosphere be used as a toxic waste dump any longer. I urge the National and Provincial State jurisdictions on both sides of the US/Canada border use this report to further the objective of pollution prevention significant reductions and the elimination of these toxic smog causing emissions by encouraging renewable and alternative energy sources energy efficiency and conservation measures. This progress report in our view fails to present the facts in a manner that motivates society in ways to move the air quality agenda down a more determined one of change and improvement. Perhaps the next report will be more definitive and less business as usual, "or we'll get there perhaps someday who knows".

Finally based on our experience as a citizen based clean air environmental group, we have shown that when citizens and the public become engaged and start demanding improvements change comes whether its regulatory (We have the toughest Sulphur Dioxide standard in Canada at 170 ppb compared to 340 ppb for rest of NB and Canada), industrial action such as the massive environmental control technologies at the Irving Oil Refinery and NB Coleson Cove Electric Power Generating Unit (1,150 MW). We believe the improvements at all levels here in New Brunswick including a progress Clean Air Act is worth exploring and studying as a model for other communities.

Perhaps the next Progress Report will have a section on innovation improvement models and various examples to use as role models for other jurisdictions in North American.

Respectfully submitted,

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