

Standing Committee on Environment and Sustainable Development

ENVI • NUMBER 040 • 1st SESSION • 42nd PARLIAMENT

EVIDENCE

Thursday, December 1, 2016

Chair

Mrs. Deborah Schulte

Standing Committee on Environment and Sustainable Development

Thursday, December 1, 2016

● (1535)

[English]

The Chair (Mrs. Deborah Schulte (King—Vaughan, Lib.)): I would like to welcome everybody. Today is our monitoring panel. We really appreciate all the witnesses who are with us, and those who are joining us through video conference. I will introduce everyone in a minute.

We are going to be on a fairly tight timeline because we have votes tonight. I just wanted to know how much time everyone thinks they'll need to get back over to the House and be sitting in their seat for votes. Would 20 minutes be enough for everyone to get over there, so we know what we're shooting for here? I'm just trying to get a handle on it. Is 20 minutes reasonable?

Mr. Mark Gerretsen (Kingston and the Islands, Lib.): I think the rule, Madam Chair, is that once the bells go then we have to unanimously decide at that point.

The Chair: I'm just trying to get a sense of what we might be able to do, because it will help me decide on the number of questions I'm going to allow.

Hon. Ed Fast (Abbotsford, CPC): I think 20 minutes is more than enough to walk from here to there.

Mr. Mark Gerretsen: As long as I get a five-minute head start on

The Chair: Okay, as you are absolutely correct, we will have to deal with it right as bells start. I just wanted to give everyone a heads-up to be mindful of where I'd like to go.

Let's introduce our guests. We have John Smol, professor and Canada research chair in environmental change at Queen's University. We have from the Forest Products Association of Canada, Robert Larocque, vice-president, climate change, environment, and labour.

We have quite a few today from Alberta's Industrial Heartland Association. I want to mention they have brought quite a lot of information in their package. It's not in both official languages, so we're just going to make it available at the back if you should want it. If you'd like a package, there's one at the back in English.

From the association we have with us, Ed Gibbons, who's chair and councillor for the City of Edmonton. We have Pam Cholak, director of stakeholder relations. Both of them are going to be doing a presentation. On video conference, we have Brenda Gheran, executive director of Northeast Region Community Awareness Emergency Response. We have Iain Bushell, who's chair of Northeast Region Community Awareness Emergency Response

and Strathcona County's fire chief. We also have Nadine Blaney, executive director at Fort Air Partnership.

Thank you all for being with us today. We're going to start with the witness statements.

You each have 10 minutes, so there are 30 minutes of witness statements. When you have one minute to go, I'm going to hold up the yellow card, just to give you a warning, so you know where you're at. When we get to the red card, that means you're out of time. Don't just stop, but wrap up your thoughts fairly quickly and concisely. That would be very much appreciated.

We're going to start with John Smol.

John, if you don't mind, the floor is yours.

Dr. John Smol (Professor and Canada Research Chair in Environmental Change, Queen's University, As an Individual): Thank you very much, Madam Chair and honourable MPs, for inviting me to join you today. My name is John Smol and I'm a professor at Queen's University, where I also hold the Canada research chair in environmental change.

While I am not an expert on the Canadian Environmental Protection Act, I am someone who has been involved in environmental monitoring and environmental issues in this country for over three decades. I also acknowledge that I seem to be offering more problems than solutions, but recognizing problems is an important first step, I think, to finding solutions to them.

The world has changed a lot since CEPA's inception in 1999 and especially on the environmental front. We have many new challenges, but also new understandings of how ecosystems are being affected by human impacts.

First, I think we have to realize that we have opened a perpetual Pandora's box of new stressors, as we release new problems for the environment to cope with on a daily basis. Many of the new and emerging problems are chemical in nature, which is a major focus of CEPA, but they are also compounded by biological issues, such as exotic species, and physical changes to our environment, such as habitat disturbance and climate change. Many of the effects of these stressors are interactive and additive, or even multiplicative, often resulting in unpredictable interactions leading to even more complex problems. In simple terms, our world is getting more difficult to predict.

I am reminded of the Red Queen's race in Lewis Carroll's *Through the Looking-Glass*, where the Red Queen and Alice are constantly running but remain in the same spot. In some respects, given the complexity of new environmental issues, standing in the same place might be the most optimistic viewpoint we might have, unfortunately. I feel we are constantly falling behind, despite our efforts. How do we evaluate whether we are falling behind or improving when it comes to the overall environment?

This brings me to my first recommendation. Improve the generally poor state of environmental monitoring in this country. The only way we can know what our baseline conditions are, how our ecosystems are changing, and whether our environmental policies, laws, and regulations are in fact working is to know what is happening in the environment, and that requires effective, evidence-based monitoring.

The situation is complicated when proponents or polluters are authorized to carry out their projects and development on the condition that they self-monitor the effects of their own actions. In my experience, self-monitoring by proponents can often fall well short of the mark because it is typically not subject to peer review, which is the underpinning of legitimacy of all science.

Proponents can turn in thousands of pages of documents without independent and scientific checks, or most importantly, follow-ups to ascertain whether the proponent-based monitoring is effective. In many cases I think it may not be. Of course, I believe in the principle that the polluter pays and that proponents should be paying for the monitoring, but it is the job of independent scientific bodies, like our government, to oversee and scientifically assess these efforts.

I had first-hand experience in investigating one such monitoring program in the oil sands, when I was asked to be part of the six-person oil sands advisory panel back in December of 2010. Yes, monitoring was ongoing and the consultants doing the monitoring were, by and large, doing exactly what they were tasked with, but the scientific underpinnings of what should have been the backbone of the monitoring program had disappeared. A scientific monitoring program needs scientific oversight. The federal government has outstanding scientists who are well prepared for this oversight, perhaps with assistance from universities or other institutes.

Financial considerations are often a quick and easy excuse to cut environmental programs. However, it is well established that it is best, and certainly cheaper, to recognize these environmental problems early. Looking to the past at acid rain, something I was involved in when I was younger, as an example, and since we always worry about how much things cost, it is legitimate to ask whether the acid rain monitoring program was worth it to identify and deal with this problem.

Researchers did such an analysis in 2005 in the United States. They calculated that the cost of monitoring was about one-half a percentage point of compliance costs and less than one-tenth of a percentage point of the estimated health and ecosystem costs. Similarly, the U.S. EPA concluded that the estimated costs of cleaning up industrial groundwater contamination is often 30 to 40 times, and sometimes up to 200 times, greater than the costs associated with simply preventing the contamination from happening in the first place.

It sounds as if monitoring is a bargain. Surely, we can learn from history and realize we should be increasing our environmental monitoring and research. This, however, is not happening.

● (1540)

My second overall point, as I said at the start of this presentation, is that we keep opening new Pandora's boxes, continually developing new stressors and releasing them into the environment before their environmental impacts are sufficiently understood.

CEPA is very chemical-focused and often seeks to control chemicals individually, based on assessing the impacts of individual chemicals in isolation with little regard to their cumulative, interactive, or long-term impacts. Assessing individual chemicals in isolation from other compounds and natural stressors, as well as anthropogenic stressors such as climate change and habitat degradation, is overly simplistic and may create unacceptable environmental risks.

In Europe, the idea of trying to assess and regulate chemicals by considering the environmental mixture and how a new chemical might contribute added toxicity to the chemical soup is emerging as part of their evolving regulatory framework. This might fit well in an updated CEPA.

My third point is that there are certainly more opportunities to improve chemical-based monitoring by bringing in biology, so-called biomonitoring. Biological organisms are excellent indicators of environmental conditions and provide the ability to track not only chemical stressors but the cumulative impacts that have ecological and economic relevance.

It may seem naive for me to recommend increases in the breadth and resources to support enhanced environmental monitoring. But we spend a lot of time talking about how much a new science initiative costs and very little into considering how much inaction costs in the long term if we choose not to avoid or mitigate environmental harm before it occurs.

Universities are not appropriate places to undertake long-term monitoring programs. It is not consistent with our primary research mandates, nor is the tri-council funding structure amenable to supporting long-term monitoring programs. Clearly, monitoring is the domain of our government programs and scientists who can work under national mandates and have access to national networks of environmental laboratories and opportunities to collaborate across departments. In my opinion there are some successful templates of such programs already, perhaps the northern contaminants program, which is celebrating 25 years of activity in 2017.

My fourth point addresses the issue of institutional silos in government. We often hear phrases like "ecosystem management", which sounds good and makes good press but is not being achieved because it relies on different departments working together, despite having different priorities, different mandates, different legislation, and different programs and budgets.

I want to emphasize that over my career, many of the finest, most dedicated, and hard-working scientists have been in the federal government. This brings me to the last point I have time for; Canada must invest in and support the highly skilled scientists who can actually do the job. To do so effectively will involve continuing with important research programs to fill in gaps in understanding. This new knowledge will allow you legislators to integrate the results of relevant science into the decisions you collectively make in drafting new legislation or amendments or the rigorous science-based decision-making, which is a central premise of this current government.

Canada could and should be leading in both fundamental and applied research. Historically Canada has punched far above its weight in areas such as freshwater and marine science. Not allowing and encouraging government scientists to continue to engage and collaborate in world-class research programs is a waste we cannot afford.

Research gives us options and when it comes to the growing number and importance of major environmental issues we are now facing, we are going to need all the options we can get. In the end, we have to remember the environment does not negotiate. Nature is slow to pardon our mistakes. We need the air, soil, and water. The air, soil, and water does not need us.

Thank you very much.

● (1545)

The Chair: Thank you very much. I really appreciate that testimony.

We will now move to Robert Larocque, and then we'll go to Alberta's Industrial Heartland Association.

Mr. Robert Larocque (Vice-President, Climate Change, Environment and Labour, Forest Products Association of Canada): Thank you, Madam Chair and members of the committee. Copies of my remarks are available in English for people after the session is over.

[Translation]

My name is Robert Larocque. I'm very pleased to be here to represent the Forest Products Association of Canada as part of your review of the Canadian Environmental Protection Act.

FPAC provides a voice for Canada's wood, pulp and paper producers nationally and internationally in government, trade and in the area we are discussing today—environmental affairs.

[English]

Let me give you a quick snapshot of how important the forest products sector is to Canada's economy. It is a \$65-billion-a-year industry that represents 2% of Canada's GDP. The industry is one of Canada's largest employers, operating in 200 forest-dependent

communities from coast to coast. We directly employ about 230,000 Canadians across Canada.

The sector is also important when it comes to the Canadian environment. As custodians of almost 10% of the world's forests, we take our responsibilities as environmental stewards very seriously. In fact, repeated surveys of international customers have shown that the Canadian forest products industry has the best environmental reputation in the world.

We work very closely with forest communities and take chemical management and public reporting extremely seriously. Our sector is committed to continued environmental improvement. For example, we have eliminated such toxins as nonylphenol and its ethoxylates, as well as PCBs. Both of those were the result of product substitutions. Since 2005 we have also cut water pollutants by 70% and air pollutants by more than 50%. Pulp and paper mills have cut their greenhouse gas emissions by about 60% since 1990.

Canada has the most independently certified forests in the world—about 166 million hectares, or about 43% of all the certified forests across the world. Recently FPAC pledged to remove 30 megatonnes a year of greenhouse gas emissions by 2030. That's about 13% of the government's emissions reduction target There is no question that the Canadian forest products industry is an environmental leader.

[Translation]

As a sector, we feel that the Canadian Environmental Protection Act, or CEPA, largely works well. Except for parts 6 and 9, the rest of CEPA applies to our sector.

For today, I would like to focus my remarks on chemicals management, equivalency agreements and information gathering and sharing.

[English]

The Canadian forest products industry supports the chemicals management plan as a leading program globally for the sound management of chemicals. From information-gathering authorities to sound risk assessments to a suite of tools to manage the risks around toxics, CEPA is a sound act that could be improved but should not be overhauled. One of the core principles in the chemicals management plan is the need to balance hazard and risk. Risk assessments under the act are based on scientifically credible information that considers hazards such as carcinogenicity, vulnerable populations such as Canadians with asthma, and exposure in terms of whether Canadians are exposed. This is extremely important.

The flexible risk managements tools of regulations, codes of practice, and guidelines under the act protect against the release of toxic elements into the environment as well as their use in products and processes. Our sector has demonstrated that the flexible risk management instrument can work, and should be maintained. The forest sector wants to make sure that the people who live in our communities and Canadians are well protected.

I will make a few comments on equivalency agreements. In order for our facilities to operate, they all have permits from the provinces that regulate their processes, including air and water emissions. We all know that the environment is an area that crosses federal and provincial jurisdictions, and environmental matters often require intergovernmental co-operation. For example, there are already equivalency agreements between Ottawa and Alberta regarding two CEPA regulations for pulp and paper mills. Maintaining the option of equivalency agreements in CEPA is key to minimizing regulatory duplication and administrative burdens. However, we do feel that equivalency agreements are not used often enough. CEPA should be modified to ensure easier implementation of equivalency agreements between the federal and provincial governments.

The last area I would like to address has to do with information gathering and sharing. The forest sector works hard to provide accurate information to government. As an example, our sector has taken advantage of the flexibility under the section 71 survey notices to provide voluntary information to Environment Canada and Health Canada. After two years of implementation, this flexibility has saved our sector about \$1 million a year in reporting requirements.

One area where CEPA could be improved is requiring chemical suppliers to provide more accurate and timely information to the users of those substances. Too often we have seen companies use section 313 of the act to request that all information sent to Environment Canada and Health Canada be considered confidential. It is very difficult, as a sector, to take actions to address potential toxins at our mills if we don't even know which potential toxins our facilities are using.

● (1550)

[Translation]

In conclusion, we think that CEPA is working well as Canada remains a world leader in chemical management. There can always be improvement—for example in ensuring flexibility and taking into account provincial legislation. However, this can be done by minor tweaks; there is no need to overhaul the legislation.

Thank you for your attention and I welcome your questions. [English]

The Chair: Thank you very much. We really appreciate that.

We're going to hear from one more group, and then we'll open the floor to questions.

I'm going to turn it over to Councillor Gibbons and Pam Cholak. I'm not sure if you're going to do five minutes and five minutes, so I'll leave it between the two of you for the 10 minutes.

Ms. Pam Cholak (Director, Stakeholder Relations, Alberta's Industrial Heartland Association): Thank you.

Mr. Ed Gibbons (Councillor, City of Edmonton, and Chair, Alberta's Industrial Heartland Association): Thank you, Madam Chair and honourable committee members.

On behalf of the Alberta's Industrial Heartland Association's board of directors, thank you for providing the industrial heartland association and our partners in the industrial heartland region the opportunity to present to you and share our views and our experiences with you during the review of the Canadian Environmental Protection Act.

My name is Ed Gibbons. As mentioned, as a municipal councillor for the City of Edmonton, I'm also the chair of the industrial heartland association. Joining me today in Ottawa is Pam Cholak, director of stakeholder relations for Alberta's Industrial Heartland Association.

We are appreciative to the committee for including via videoconference in Edmonton representatives from two of our five partner organizations in Alberta's Industrial Heartland Association.

I will turn it over to Pam, and I would like to thank those on the video for coming in as well.

Thank you.

Ms. Pam Cholak: Thank you, Ed, and thank you, Madam Chair, and honourable members.

I'm going to continue the remarks by saying the Northeast Region Community Awareness Emergency Response— a mouthful, but it's also known as NRCAER for those of us who know it well—is a mutual aid, emergency response association with a 25-year history of collaborating for safe, informed, and prepared communities. Their members include 30 local industries and eight municipalities, which form a best-practice network of emergency management professionals. They are the organization that coordinates and executes emergency planning and protocols in Alberta's industrial heartland. The organization is represented today by the chair, and Strathcona County fire chief, Iain Bushell, and by executive director, Brenda Gheran, both of whom should be considered Canadian experts in emergency preparedness.

Thank you for coming here today.

Also participating today, as you know, via video is our Fort Air Partnership executive director, Nadine Blaney. The Fort Air Partnership, or FAP to those of us who know it well, is an independent, multistakeholder, air monitoring organization, or airshed, that monitors air quality in and around Alberta's industrial heartland. This organization is a collaborative effort between provincial, federal, and municipal governments, industry, and communities. It is a model to emulate.

Fort Air Partnership collects the air quality data required to calculate the air quality health index. This data is also used to compare provincial and federal air quality standards, including the recently implemented Canadian ambient air quality standards. Fort Air Partnership works closely with the Alberta provincial government and other airsheds in Alberta to implement regional monitoring to inform cumulative effects management of air quality. We should be proud of it as Canadians.

Directly related to the Canadian Environmental Protection Act, the Fort Air Partnership completed a volatile organic compounds monitoring project in collaboration with Environment Canada in 2006. The Fort Air Partnership has also initiated a volatile organic compounds speciation study in a community within our heartland and will be initiating a fine particulate matter speciation study in 2017, both of which are expected to be completed, and results shared with the government and public, in the next three years. The details of these studies can be provided to this committee as a follow-up to this presentation.

Both Northeast Region Community Awareness Emergency Response—and I'm going to refer to that as NRCAER—and our FAP activities are impacted by the Canadian Environmental Protection Act, making their inclusion today beneficial to your deliberations. It is our hope that you will engage them directly in the questions after our overview remarks.

Environmental stewardship, emergency preparedness, air quality monitoring, municipal co-operation, and direct communication with residents regarding their health and safety as it relates to industrial development in our region, are all vital activities through the Alberta industrial heartland and its communities.

Let me tell you a little bit more about who we are, how environmental legislation, including this act and the processes it outlines, impact collaboration in our region, and how changes to the legislation that are intended to improve the health of Canadians can have unintended consequences.

Alberta's Industrial Heartland Association is a municipal not-forprofit organization focused on attracting and retaining sustainable industrial development in a specialized industrial region encompassing eight municipalities and covering over 582 square kilometres of land. This region is known as Alberta's industrial heartland. Membership is comprised of five regional municipalities: the City of Edmonton, the City of Fort Saskatchewan, Strathcona County, Sturgeon County, and Lamont County.

In addition, Alberta's Industrial Heartland Association has three associate municipal members, including the Town of Redwater, the Town of Bruderheim, and the Town of Gibbons. Collectively, our membership represents over 1.2 million residents. It is not insignificant.

For the past 18 years, our association has taken a proactive and cooperative approach to planning for industrial developments in the region. A leading principle of our association is promoting responsible, sustainable development within the region. This requires collaborative regional planning for infrastructure, services, emergency preparedness, and land use that is guided by the principles of environmental stewardship, sustainable community growth, and economic prosperity.

• (1555)

Our association is a model of collaboration, partnership, and synergistic operations that balance protection of our environment with sustainable resource and community development. We encourage public policy frameworks, like this act, that contribute to attainment of these goals.

Alberta's industrial heartland is Canada's largest hydrocarbon processing region and western Canada's energy hub. It is home to a synergistic industrial cluster encompassing over 40 companies that represent investment worth over \$30 billion in energy and petrochemical processing facilities. Companies operating in the industrial heartland representing mid- and downstream sectors provide 6,500 full-time jobs and an additional 23,000 indirect jobs, and account for \$1.5 billion annually in local spending, with additional monies in charitable giving directly benefiting our communities. These companies are also engaged directly in air quality monitoring with heartland partners, which is important to our residents and the sustainability of our communities.

In a 2015 poll of 400 residents in the area, nearly three-quarters of the residents in our region said they follow industrial activity closely or somewhat closely. It is important to residents to be informed about the industry and the environment. We do have a not-for-profit initiative called "Life in the Heartland", which provides information and improves communication with residents about industrial operations and development in Alberta's industrial heartland. It is a partnership of five organizations, including those represented here today, plus the heartland industry association, the Northeast Capital Industry Association.

Industry, municipalities, our air monitoring agency, and emergency response recognize the value of keeping the local community informed. This collaborative effort, formed without regulatory requirement, serves as a best practice model for other regions.

It's also important to residents that the environment is being properly managed to allow for responsible and sustainable industrial growth that does not impede their health or quality of life. When asked to rate the air quality in the region in which they live, almost 60% of the respondents ranked it as excellent or good, while 29% ranked it as average. This means that only 13% ranked air quality below average, which is an indicator of success, given the 40 companies operating. It means that innovation and environmental practices in the region are working.

Today we want to highlight the importance of clarity and certainty of regulation as critical for future investment that helps to build the sustainable thriving communities in which we live and operate. Business investment will be attracted to Canada and regions like ours if regulatory processes, such as those currently outlined by the Canadian Environmental Protection Act, remain clearly defined and consistent in application across jurisdictions and are not at risk of continual change. Due process is important to investors, to our companies, and to our region, and this act provides a fair, effective public policy framework for environmental oversight.

Definitions within the act do need to be clear so that expectations and outcomes of regulatory processes can be clear both to the capital investor and to the public. We also believe that regulation language should take into account—as well as foster—multi-agency collaboration and co-operation. In the case of emergency response, for example, it would be helpful to have clarity and language consistency when defining exercise types and schedules in the act.

While regulation is critical to risk management through the establishment of standards, not all positive actions necessarily result from regulatory requirements. Our heartland is a world-class example of successful collaboration and co-operation among many stakeholders who are motivated by a collective issue: mitigating risk to our environment for the protection of public health. While the act serves a critical function, it should be noted that it has not prescribed all of the efforts spent on environmental monitoring and innovation. If this act becomes too prescriptive and cumbersome because of unnecessary reporting, resources can be stretched, and we risk stifling the innovation and multi-agency collaboration that will move us to improvement.

We also need to consider the unintended consequences of regulatory change. Lack of timely decisions and the threat of changing regulatory frameworks result in an investment community that is tentative to engage in our Albertan and Canadian markets. Regulation change can be well intentioned, but if there's not some certainty on process and timelines and a recognition of that, the reliability of our regulatory framework is jeopardized.

To be clear, we are not advocating for a reduction in appropriate environmental regulations that establish important standards for the protection of our communities and the health of people who reside within them. We need to be clear, however, in the requirements we ask for, the manner in which the data is utilized, and the timeliness of change.

We appreciate the opportunity to be here today, and we look forward to the questions to come.

(1600)

The Chair: Thank you very much. I'm sorry for rushing you at the end. It's all good testimony.

First, before questions, I want to introduce MP Robert Morrissey. Thank you very much for standing in for Mike Bossio. Welcome, Garnett Genuis. Who else is here? I think Jonathan just stepped out, but he's here as well.

We'll get into questions, starting with Mr. Gerretsen.

Mr. Mark Gerretsen: Thank you very much, Madam Chair.

Welcome to the witnesses who have come forward today, in particular Professor Smol. It's always nice to see people here from the best riding in the country.

Professor, I'm curious if you were involved in either of the other two reviews that were done for CEPA in the late nineties or early 2000s.

Dr. John Smol: No, I wasn't. **Mr. Mark Gerretsen:** Okay.

You did talk a little about your involvement in the acid rain movement.

Dr. John Smol: Yes, sir.

Mr. Mark Gerretsen: Can you provide a bit of your experience on that, and if you see any relationship between that and CEPA?

Dr. John Smol: Yes.

I cut my teeth on acid rain; I was quite young when I was doing that work. I see many similarities between acid rain.... I think it's useful to go back in history and see how things change. Acid rain was an example where the first phase was, there is no problem. The second phase was, there is a problem but it's not our fault. The third phase was, it is a problem, it's our fault, there's nothing much we can do about it.

That's the danger in a lot of environmental work. Often you can go past a certain threshold and then getting the solution is very difficult. That's why I stress the monitoring. I think acid rain in many ways was a relative success story but not a 100% success story. With monitoring, with the proper research, we were able to find a solution and deal with the problem.

I think there are lessons to be learned from acid rain that we can use in many of the other things that CEPA is involved in.

(1605)

Mr. Mark Gerretsen: You talk about monitoring and self-monitoring. I'm curious if you can provide a little more insight into that. For instance, to what extent do you see people who would be self-monitoring versus your more traditional regulatory monitoring?

Dr. John Smol: To some extent I might bring my work when I was on the six-person panel to look at the monitoring going on in the oil sands, for example, which Liz Dowdeswell reported in 2010.

There are issues. A monitoring program requires a scientific base to be totally transparent, and also to be flexible, because science changes as it goes forward. What we saw in a monitoring program such as that is that consultants and so forth were doing pretty well what they were tasked to do, but there wasn't sufficient scientific oversight to determine if we were getting worthwhile answers. A lot of money is being wasted in some of these monitoring programs.

Many people get these results. They talk about getting binders and binders of data but they're never analyzed and they're never critically assessed. The effort is not put into seeing what the monitoring has done.

Mr. Mark Gerretsen: I think I understand correctly, but do you think that self-monitoring would be more compliant?

Dr. John Smol: My argument would be that I believe in polluter pays but not necessarily that the polluter does the monitoring. I think independent oversight is often critical to assess what is happening in the environment.

Mr. Mark Gerretsen: Okay. I think I understand you a little better.

CEPA currently takes the risk-based approach. We've heard a lot of discussion about moving to a hazard-based approach. Can you provide your input into that?

Dr. John Smol: I don't deal at that level of the monitoring program. Certainly that is the direction I think most people would feel it should be going. What are the hazards associated with that? To deal with that you have to deal with the risks cumulatively, which is what I was trying to get at. I'm not offering any simple solution here.

The Europeans have started to look at this in a more constructive way. They have several documents from a few years ago when they realized they have to deal with these cocktails to assess these things in a more scientific way. It's not a simple solution; I'm aware of that. It's often multiplicative too.

Mr. Mark Gerretsen: When you say cocktails do you mean multiple substances?

Dr. John Smol: Yes, multiple substances.

We tend to be dealing with most of our stressors individually, and that's a real problem, I think. That's the first cut-off in doing something.

Mr. Mark Gerretsen: Do you have an example of one of these cocktails?

Dr. John Smol: For example, almost everything I deal with...and it's not just the chemical cocktails, on top of that you put things like climate change and stuff. I'm quite surprised. You would think that, of several stressors, some would be additive and some would be antagonistic, if you like. I deal with climate change. Virtually every stressor I deal with seems to be worse in a warmer climate in Canada. It's quite remarkable actually, but that's now putting on another whole other type of stress. For example, you could be working where there are industrial emissions and you have, for example, PAHs, polycyclic aromatic hydrocarbons, being released, which is a carcinogen and so on and so forth. Often those same industries are releasing mercury, for example, in a cocktail of other types of metals. We come up with these analyses on what should be the limit for the PAHs, but we're doing it in isolation from all the other things that are also being released.

Very often some of our assessments are based on overly optimistic scenarios. Very often it's from laboratories where they do ecotoxicological studies, and very often in the real world out there, the situation is far worse and there are other stresses that we haven't even thought of. If you want to quote some people, we have the known knowns, the known unknowns, and the unknown unknowns, and that is quite apparent also in environmental issues. We have some known unknowns, and we have a whole lot of unknown unknowns.

I tend to be an optimist in most things. Although people have called me just overly pessimistic about environmental issues, if I look back on my career of 30 years, I have been overly optimistic on things. Things are generally worse than we think they are in the environment, and we have to be prepared for surprises. Nature is slow to forget our mistakes, and very often if we pass a certain threshold, it's very hard to go backwards.

The Chair: Thank you very much. We appreciate that.

Go ahead, Mr. Genuis.

Mr. Garnett Genuis (Sherwood Park—Fort Saskatchewan, CPC): Thank you very much. It's a pleasure to welcome witnesses from the best riding in the country. Mr. Gerretsen misidentified it, but we do have witnesses from the best riding.

Seriously, I am very honoured to be the MP for the heartland area, and it was great this summer to be able to take some of my colleagues on a tour of the heartland. I'd encourage everyone, all the MPs here, to take an opportunity to visit my riding in the heartland and see the great work being done there.

I really appreciated the testimony from all of you, but I'm going to focus my questions on the witnesses from the heartland.

Ms. Cholak, you talked specifically about this issue of the importance of consistency in regulation, and this is a recurring theme that I hear. Yes, it's about getting the regulations right, but it's also about certainty of timelines and really the need not to have situations where regulations are constantly changing, so that industry says, "Well, this is what the regulation is today, but it might be something different tomorrow or something else the day after that." It's very hard to make investment decisions in a climate like that.

Could you speak a bit more to the importance of clarity and consistency when it comes to regulation, to industry being able to make long-term investment decisions knowing what the rules are going to be over a long period of time?

● (1610)

Mr. Ed Gibbons: I'll just start.

We have 30 large industries from Shell to Dow to Sherritt to Agrium, and they actually work very well together. They work with the team that's on the TV to present as well. We have ATCO in there, and ATCO gas not only draws in the water and provides the water to 90% of the industry; it also is going to build a gas-fired electrical plant. Its drive is that it comes into areas not only for business but also the fact that we have the caverns in our area, so we can put the propane, we can put the gas down into the ground and ATCO can bring it up, as it does.

Certainly regulations are not only a federal issue, but they are a provincial issue, and also municipal. We have to work together. We have to be able to work and bring this forward on a timely basis. Right now we have 33 billion dollars' worth of assets in the area. We have another just over \$20 billion being built right now. Depending on what happens in the next few months with the government doing the PDP program, which is propane to propylene, we need to be able to bring that to the table as quickly as possible.

Ms. Pam Cholak: If I may just supplement, thank you for the question, and I have to say I'm very proud to live in the best riding, along with you.

Thank you to the members for having us here.

Mr. Jim Eglinski (Yellowhead, CPC): Are you talking about Yellowhead?

Ms. Pam Cholak: I do love spending some time in all those great Alberta ridings.

I appreciate the question because, for us, certainty becomes very important. We don't operate in a bubble. We actually operate in the global marketplace. We are looking for investment dollars that are not just local and not just Canadian dollars. We are competing in that global market.

Certainty becomes important. The unintended consequence that I'm talking about means that, even when you look at whether it be environmental regulation—understanding that there will always be changes that need to be looked at, because we evolve over time—be it industry, be it as communities, and we need to make sure that we're current on things.... But when you don't provide some opportunity for that capital dollar to understand that this is the playing field that you operate in and that you will have some certainty around the kind of application process and the kind of regulatory process.... It's not just dollars, but it also means that you understand how the rules of the game are going to impact your business.

That becomes very important, on a comparative scale, as we look at it as a Canadian model. When we're talking to our global investors—and that's what our organization does—they're not necessarily concerned about, at the outset, Fort Saskatchewan, Alberta. They are concerned about the Canadian landscape, first of all, and how it works and the consequence of all kinds of regulation.

If it takes a long time to get a pipeline, it creates a threat that it might take a long time on environmental regulation. It might take a long time on health regulation. That creates a motive that says, they're not quite sure what they want to do. That's why timeliness becomes absolutely critical. Nothing's guaranteed, and industry and capital dollars don't expect that, but they do need to know, for the longer term, what it looks like in a Canadian, provincial, and municipal landscape.

● (1615)

Mr. Garnett Genuis: Those are excellent points, thank you. If I could just pick up on this issue of the benefit of international investment, could you just comment quickly on this issue of regulations that are competitive across jurisdictions?

Obviously we are competing with other jurisdictions that may have different kinds of environmental regulations from ours. Being sensitive to the fact that there are lots of other criteria we think about with environmental regulations, how do we develop them in a way that's competitive relative to other jurisdictions with which we're competing for investment?

The Chair: Give a 30-second answer, please, a very quick answer.

Mr. Ed Gibbons: Within our eight municipalities there are five voting members. We work very hard with government levels of all kinds.

The Chair: That wasn't necessarily as fulsome as you might like, but we ran out of time. We may get back to that.

Go ahead, Ms. Duncan.

Ms. Linda Duncan (Edmonton Strathcona, NDP): Thank you to all of you for appearing. Of course I'm well aware of the airshed groups, and I commend you. You have a good number of them across the province. I'm hoping I'll have time to ask you a couple of questions about the federal role.

But my first questions are to Dr. Smol. Thank you very much for coming. I know, regrettably, your colleague in much of your work, Dr. Schindler, just wasn't well enough to attend. I understand he's going to send a brief.

I'm aware of your work, from a distance. This is the first time we've met, and I'm happy you could come. On long-range monitoring in the oil sands and the identification, as I understand, that it may well be that some of those pollutants are going farther afield than we had thought, and that there may be some accumulation across projects, can you speak a bit about that?

When I was on the environment committee previously, we did a study on the impact of the oil sands on water. One of the frustrations voiced by the scientists who testified was that, while there is some research out in the field about the accumulation of these substances and the long-range transmission, there's not a lot of timely response by the government in regulation, for example, of PAHs and mercury and so forth.

I would appreciate if you could talk a bit about the relationship between the kind of research you do in collaboration with Environment Canada and so forth, and whether or not you think there is timely response to your findings by the authorities.

Dr. John Smol: Yes, thank you.

I've been involved now in oil sands research for a few years, working closely with Environment Canada, and this stemmed to some extent from the time when I was on the panel where we realized there were some issues with the monitoring. One of the biggest problems we have in environmental work is basically the lack of monitoring, and the only way we can get back in time to make up for missed monitoring opportunities is some of the work that I do with Environment Canada. We work on lake sediments and we track changes over time. We can go back hundreds, even thousands, of years. One of the biggest things we have to worry about is what the baseline is. What is natural?

Just to summarize some of this work we've done, we were able to show that in fact PAHs in this case, polycyclic aromatic hydrocarbons, are in fact increasing in the oil sands—they seem to be going in lock-step with the oil sands operation—and are actually being transported by air farther than I think most people suspected. In our first paper we published in the *Proceedings of the National Academy of Sciences*, at least one of our lakes was 90 kilometres away and we could see a record.

That is one aspect of it. We're trying to make up for missed monitoring opportunities. This is only one of the many contaminants that are out there. I spoke earlier of this soup of contaminants. In some ways, this is a more optimistic viewpoint. I think we're trying to push this information forward to show that there are actually other costs or other environmental costs that may not be accounted for, and we came to the story late because this work has all been happening in the last few years. I am a little more optimistic now with the amount of research and the peer-reviewed publications coming out. I think there's certainly a scientific base coming forward for what we can do in that part of the world.

Ms. Linda Duncan: We're both somewhat of the same vintage, although I won't suggest you're the same age as me. We have similar hair colour.

I'm aware that the federal level used to have a wonderful program called the Canada Centre for Inland Waters. Of course, the federal government also used to fund the Experimental Lakes Area. I wonder if you can speak about whether you think it would be important for the federal government to be reinvesting in that level of research and development on pollution control.

Dr. John Smol: The cheapest thing we can do is high-quality research, and to spend the money in a meaningful manner to get policy-relevant research done that's accessible to the international community.

Certainly the Experimental Lakes Area is something I was fairly close with. That was an outstanding facility. It's being reinvigorated now. It's been there since 1968, I think. It showed what the problems are out there. It was able to show it in a real, very unique kind of setting. It was basically an outdoor laboratory working on lakes extensively. We learned an awful lot from places like the Experimental Lakes Area.

We learned an awful lot from federal government scientists from Environment Canada, Department of Fisheries and Oceans, and also Parks Canada. They were really the backbone of a lot of the research programs. This has really declined dramatically, and that's really a shame. As I think I said, we have some of the most outstanding, dedicated, skilled scientists in the federal government service, and I really think that needs reinvigorating. They can be a major part of the solution if they're given the chance because certainly the quality is there.

● (1620)

Ms. Linda Duncan: You spoke, Dr. Smol, about the need for a baseline. I know there's been a lot of frustration in my province that we're just starting to do some of this research now. I can share with you that it was only because of my community organization, which hired one of David Schindler's associates who did the 100-year core sampling of two lakes outside of Edmonton and proved that mercury and other toxins were bioaccumulating associated with the expansion of coal-fired power—and that report being internationally published—that we finally got the first mercury control regs in Canada on coal-fired power.

That showed to me that even though there was both federal and provincial responsibility, they were falling down in doing just the basic monitoring of the pollution loading. Would there be a bigger role the federal government could play in ensuring that we do more of this baseline work, particularly with new kinds of industrial developments?

Dr. John Smol: I think definitely the role is for the federal government to do that. As I hinted at, it's not really university-based work. It's not part of our funding structure, it's not part of our mandates, to do just basic monitoring. I think it is really the role of the federal government to do that, and to have scientific oversight. You can always have help from university people in the scientific peer review, but this is something that's absolutely the underpinnings of an evidence-based, scientific basis to the future of our country.

I see a red sign up there so I think I'm supposed to stop.

The Chair: That's okay. That's good. I wanted you to finish your thought.

Mr. Amos.

Mr. William Amos (Pontiac, Lib.): Thank you to all of our witnesses, including those in Edmonton. I really appreciate the time and effort that you've put into this.

Dr. Smol, thank you for all that you've contributed over many years to our understanding of Canada's environment. It's great to be in the same room as you. I've followed your career with interest, and Dr. Schindler's as well. It's too bad he can't be here. I recall meeting him back in 1999 when I was advising the former federal environment minister. His impact has been incredible as well.

I want to ask you first about data access. Two days ago, we had the pleasure of having Environment Canada's enforcement branch with us. The discussion went to the issue of the ability of the Canadian public to access all forms of data in relation to enforcement. Obviously, there is also the national pollutant release inventory, which provides certain types of really important pollutant data.

I wonder if you could comment on the availability, the usability, and the need for improvement to the data that is provided by Environment Canada under CEPA.

Dr. John Smol: Over the last year or so, we've certainly seen some improvements in availability of data, for example, in the oil sands region, and so forth. Usability might be a better.... Definitely, I think to have your data believed by the world at large, just like scientific data, it has to be publicly available and it has to pass the peer review test for quality and the way it was collected.

The word "usability" is a good one. I've talked to many people who talk about binders and binders of data sometimes being submitted from some monitoring programs, and it's often not in a standardized format and has not been assessed in any scientific way. There isn't the oversight of looking at those data. There could really be some major improvements to the format and the usability of the data.

I think public access to the data is critical, and that's public access with a relatively easy way of accessing it and with an understanding of the methodology and all the other information you need to assess it properly. We still have a long way to go. I think we're starting to head in the right direction.

• (1625)

Mr. William Amos: Earlier this spring I read news reports of studies that had been conducted by Environment Canada, I think by Dr. Liggio. I imagine there was collaboration external to government on the issue of secondary organic aerosols and air pollutants that were being found in heretofore unknown high levels emanating from the oil sands. In particular, they were measuring 45 to 84 tonnes per day of these secondary organic aerosols, which is the same range as what is produced by Toronto, which is around 67 tonnes per day. These chemicals cause lung cancer, heart disease, diabetes, etc.

I wonder if you had any involvement in that or if you know those studies. Can you speak to their relevance in the context of a CEPA review?

Dr. John Smol: I know a little about the study. I had a partial read of it when it came out. So much information is coming out, it's very hard to keep up with everything, so I can't speak specifically to that study.

It goes to my analogy that we're constantly opening all these new Pandora's boxes of different types of cocktails of pollutants, and we have very little understanding of the accumulative and additive effects of any of them. Even there, we're often looking at one pollutant at a time.

Even Dave Schindler's work, which was outstanding, with Erin Kelly as the lead author who started a lot of this, was just looking at first at PAHs, and even with that there are hundreds of PAHs but sometimes it's looking at specific ones. It is a daunting task, but it's these cocktails, these combinations, and constantly releasing new things on top of other environmental stresses, like habitat destruction, and I could make a long list of things.

I can't speak specifically to that study, except that I'm aware of it. I think it does speak to how we're in a far more complicated world environmentally than we often think. Each year—we're onto the Red Queen again—we're trying to just keep up, but it's very hard to keep up if we keep releasing new substances and finding out new interactions every day.

Mr. William Amos: Okay.

I'll ask one last quick question.

We've had witnesses before us, both academic and nongovernmental, suggesting that CEPA needs to be modified such that substitution of a substance is required where a substance is deemed toxic, so forcing industry to find less toxic solutions. Is that something you would support, based on your research?

Dr. John Smol: If we can find less toxic solutions, that would certainly be a step in the right direction, but I think it's very hard to find out.... We have had examples in the past of things being replaced without sufficient study into what they were being replaced with. We need the sufficient study before we do anything, to find out the real consequences. Often we only find out about the consequences 10, 50, and sometimes 100 years later. I think, as much as possible, we need that research base on the substances before they are released. We'll never have it perfect, but we can do a lot better job than we're doing now.

The Chair: Thank you all very much.

Next is Mr. Fast.

Hon. Ed Fast: Thank you, Madam Chair.

Going back to Dr. Smol, you've talked a lot about cocktails of toxins. You've talked about the cumulative effect, something that's been a pretty regular refrain here at this committee as we've studied CEPA

Where there hasn't been complete clarity is on whether you take the risk-based assessment of substances and you replace it holusbolus with a hazard-based approach. Would you agree with me that CEPA could be improved by addressing the issue of cocktails of toxins and the cumulative impact, without necessarily jettisoning the whole risk-based approach?

Dr. John Smol: I'm not sure I know enough about the actual details, the ins and outs, of how the act is placed, but I don't think anyone is suggesting a complete overhaul of the process. I think there are certainly many things that it's been successful at, on one level, and we build on it from there.

I think we've learned over history, since 1999, just how much more complicated the situation is. That's my main theme, I think, without being someone who actually deals with the ins and outs of the implementation of CEPA.

● (1630)

Hon. Ed Fast: The same thing is true for substitution. From what I understand, you could actually introduce improvements to CEPA that would take into account a greater incidence of using mandatory substitution where it's appropriate, without completely overhauling the risk-based approach to assessment that we presently have in Canada and the United States.

Dr. John Smol: A strong scientific base to all these changes, I think, is what we need. It sounds as if it might be a bit of a cop-out on my answer here, but we have to know what all those details are on a peer-reviewed, scientific basis before we make major changes.

Hon. Ed Fast: Thank you.

Your panel was actually struck to address a specific point, which was monitoring and enforcement. We haven't actually heard a lot about that here. We tried to squeeze you into a panel where we would still hear you, but it would somehow flow into the various topical sections we had established.

What I would perhaps ask you to comment on, Mr. Larocque, is whether there are any clearly identifiable ways in which, within your industry, we could actually improve not only the monitoring but the enforcement.

Mr. Robert Larocque: Yes, I think there are a couple of examples. For example, better co-operation between the provinces and the federal government could improve enforcement. I think too many times legislation is done where it could be confusing, in that the test methods are not exactly the same as those of the provinces, so you would need to have double enforcement, or there is too much.

It could be the same air quality test, as long as it is recognized from a provincial or federal legislation. Then you can have better cooperation and that would allow more resources, instead of duplication going to a mill where we have a provincial enforcement officer and a federal enforcement officer coming in, just because there was a testing requirement difference between the two pieces of legislation. That's one of the examples I can show.

Hon. Ed Fast: Thank you.

You stated that your industry believes that the risk-based assessment process is one that has served Canada well, but would you agree that the process could be improved by addressing things such as Dr. Smol mentioned?

Mr. Robert Larocque: I completely agree with that. I think my point was not to go completely over, only on the hazard side of it. Maybe it's my view of the word "hazard", but when you are making pulp and paper or tissue or toilet paper, you do use hazardous substances, like bleaching, for example. We need to be able to continue to use that, but it doesn't mean that Canadians are exposed to a bleach chemical when they're using our products. We don't want to go too far down the road that some of that stuff will not be able to be used in Canada as a product.

Hon. Ed Fast: I'll go back now to Dr. Smol.

You had referred to the fact that we need to be investing in our scientists, that we should be improving the poor state of environmental monitoring in Canada. Is there an increased role that citizen scientists could play in improving the rigour of our monitoring and enforcement systems?

Dr. John Smol: That's a very good question. Citizen science is playing a role certainly at the provincial level fairly extensively in Ontario, my home province, and other places in assisting in providing the overall monitoring programs.

I was recently in beautiful Banff, Alberta, at the North American Lake Management Society. There were whole sessions on citizen monitoring. These provide really important supplements to, let's say, a more professional monitoring program. I guess professional, because we're paid to do it. For example, often cottagers are very much associated with their lake, and they can provide very strong, realistic data that can be used in a very accessible way.

The Ontario ministry has these fairly large programs, for example the Secchi disk, a simple instrument that measures how clear the water is. A lot of cottagers do this on a very regular basis. They put it in a database. We're learning a lot about the clarity of lakes in Ontario based on pure volunteers. It engages people, and it engages people in understanding the environment and so forth. There is definitely a role for citizen-based science.

Hon. Ed Fast: Thank you to all of you.

The Chair: All right. Next up is Mr. Fisher.

Mr. Darren Fisher (Dartmouth—Cole Harbour, Lib.): Thank you very much, Madam Chair, and thank you to everyone.

I'm going to ask my question of Mr. Smol, but I feel so bad looking at these three folks, who are sitting here looking at the monitor and not a single question has gone their way. I wish they had been part of the testimony.

Mr. Smol, I'm just giving you a chance to elaborate on something that I found really thought-provoking to me when you said it, which was on the enhanced environmental monitoring versus the cost with regard to inaction. You glossed over that, and then you moved on because you only had so many minutes. But that made me think, and I'd like to know if you'd be willing to maybe stretch that a little bit and give me a little more feedback on what your thoughts are.

• (1635)

Dr. John Smol: Yes. I deal in environmental change over not just years, but decades and centuries. History teaches us a lot. It reminds us of our successes and it shows us many of our failures.

Unfortunately, the environment has many failures in it. We talk a lot about the cost of monitoring, the cost of science. We should start talking more about the cost of not doing it. Climate change is a terrific example. I know this isn't a climate change hearing, but we hear a lot about the cost of dealing with climate change. Why is no one talking about the cost of not dealing with climate change?

Mr. Darren Fisher: It's the same thing you said about not putting a price on pollution.

Dr. John Smol: Exactly.

The other thing is that once a pollutant is out, PAH and stuff, to use an analogy, the toothpaste has gone out. Getting it back is not going to be easy. This is true of exotic species too. If you have exotic species that invade by some boat dumping, it's there. You have a problem now for billions of dollars potentially.

The cheapest thing is to not pollute. The cheapest thing is to mitigate very early on. The only way you can mitigate very early on is to have the proper monitoring program in place. Otherwise, we're just going non-scientifically and blindly.

Mr. Darren Fisher: Will referenced our meeting a couple of days ago, and I was thinking about inspections and proactive versus inactive. We had that same kind of discussion, although not exactly the same.

I'm going to blue sky for a second, if I could.

We talked about data, actual accessible data that is open to the general public, be it through Facebook or be it through Twitter. I know that we have Twitter feeds in Nova Scotia that tell you when restaurants have failed inspections. It lets the general public know what's going on in their community. I think about a former Ford dealership that's been a vacant lot for somewhere short of a decade, where kids have played in the grass. It's now being remediated and you can't not smell the hydrocarbons as they're digging up the soil from this 30-year-old car dealership. I think the general public has no clue that their kids have been throwing fly balls to their buddies on the grass in behind the dealership for years. It just makes me think about this accessible data.

Do any of you have thoughts on true accessible data that would let people in the area know what's going on as far as monitoring is concerned, and what's going on as far as—not that it's your field—inspections and environmental issues in communities, because every gas station that's closed down is a brownfield site?

Dr. John Smol: That's true. An increase in the accessibility of scientific data is obviously an important thing, but it also needs some interpretation. The problem is that we have some areas—and it reminds me a bit of the binders of data that some of my colleagues talk about that they get from monitoring programs—where it's basically binders of data. Then people do not have the resources to actually analyze that data to find out if the environment is changing, getting better or getting worse. The data access is critical for peer review, so that people can assess whether or not the people are capable of assessing—perhaps university people or others—whether it's being collected in a scientifically sound manner.

But then, especially when it gets to the general public, they need some interpretation of that data, done by an independent body. I believe that the government, again, is the logical place to do that, not necessarily the proponents who are in the industry. I think that is the main role for the government, to take the data, to actually use the data that it has mandated as required, and to use it in some meaningful manner. One of those meaningful products is to explain to the public what's actually happening.

Even for people like me who are scientists, who see these data, it would take a year to analyze even a possible trend, because it just hasn't been done to that level. If the data is never going to be used, then you wonder why we are collecting it.

Mr. Darren Fisher: Sometimes the data is used by industry.

Dr. John Smol: Yes, of course, but if it's being mandated by the public through the government, I would think that it requires some product that is useful to the public.

Mr. Darren Fisher: I'd even pay a \$1.99 for that app.

Dr. John Smol: There you go.

(1640)

Mr. Darren Fisher: Ms. Cholak, I'm just going to give you a chance, if I could, to extrapolate on something you said as well.

You talked about regulation being critical. You talked about mitigating risk and critical functions. Then you said that, if the rules are too cumbersome, there would be unintended circumstances.

I wasn't really sure where you were going. Were you suggesting that, if regulation were too stringent, if the rules were too stringent, industry would just ignore those rules or would fight back? What exactly did you mean by that?

Ms. Pam Cholak: I don't think industry ever says it's going to ignore them.

Mr. Darren Fisher: I just wasn't sure what you meant by-

Ms. Pam Cholak: Certainly, I think the consequence is that you run the risk that new investment coming in and new capital looking at that might say it's far too complicated, far too onerous, and too costly to understand what that may be. That becomes an unintended consequence of trying to protect the health of and do the right things for the environment.

But on the other hand, to the outside global marketplace that we're also trying to attract, to say that we actually want to create jobs and have that good kind of sustainable development in our regions—not just the heartland; I mean this is about a Canadian model that we're looking at—then you want to make sure you have an opportunity to say you understand the playing field. "Cumbersome" may not be the right choice of word there, but you don't want to create an environment where the investment potential looks at that and says this is far too onerous to continually apply it.

To your point about data, it's a complicated factor-

The Chair: I'm sorry to have to cut you off here.

Ms. Pam Cholak: No, that's fine. Sorry, Madam Chair.

The Chair: We're really past the time.

Go ahead, Mr. Shields.

Mr. Martin Shields (Bow River, CPC): Thank you, Madam Chair.

Thank you. It's good to see all of you here today.

Here is the airshed question I have. It was mentioned that we have a person here with airsheds, so I'd like to direct the question to you.

The comment was made that it's a very independent body. Can you explain the independence of the body?

Ms. Nadine Blaney (Executive Director, Fort Air Partnership, Alberta's Industrial Heartland Association): Do I assume you're directing that question to me?

Mr. Martin Shields: I can't remember which one of you was directly involved with the airshed.

Ms. Nadine Blaney: Yes. I'm directly involved with the airshed. Yes, we are an independent, transparent body. We are a multistakeholder organization. We have representation on our airshed from all levels of governments, industry, and communities. We also make data available to the public and to all of our stakeholders through a variety of means. We post our data live on our website, as do all of the airsheds in Alberta, so it's immediately available to the public within an hour of its being collected, with a caveat that it is raw data. That data is validated by our data validators, and it's housed in a provincial data warehouse. Then that historical data is available to anybody to use, so policy-makers, industry, universities, or anyone has access to that data.

Mr. Martin Shields: When you say you're independent you named all those pieces to it. What drove this organization to exist and how is that independent? Did the government form it? Is it sourced by industry? Can you back up one more step?

Ms. Nadine Blaney: Fort Air Partnership specifically was formed over 20 years ago through a grassroots approach, as were most of the airsheds in Alberta. People within a community or an area saw an issue with air quality and decided they wanted more monitoring, so they got together with other community members, got industry in the area involved as well as governments, to make sure that everybody who is involved or has an impact on air quality in a region is part of the solution.

We all work together to determine what needs to be monitored. We obviously follow regulations with regard to provincial as well as federal air quality monitoring data needs, but we do have that collaborative effort in place.

Mr. Martin Shields: Are you self-directed, or do you get directions from anyone else?

Ms. Nadine Blaney: Obviously, we follow provincial government requirements for air monitoring in a region. That's mainly directed by operating approval requirements under the Environmental Protection and Enhancement Act, so we have to follow those.

We also are able to go above and beyond that, so we do special monitoring projects. Right now, we're starting a volatile organic compounds speciation project. That is not mandated by anyone. Our organization has received funding and is able to do it. We're also starting a particulate matter speciation project. All these things are over and above what is required by government.

● (1645)

Mr. Martin Shields: The government has a mandate for these things that need to be monitored, but beyond that you can pick projects that you choose as a committee that are important for the airshed.

Ms. Nadine Blaney: That's correct. A couple of years ago we had an independent network assessment done by an organization out of the United States that specializes in modelling and things like that. That directed the development of a long-term monitoring plan where we indicated what projects we would like to work on, and then obviously searched for funding for those projects.

Mr. Martin Shields: What science resources do you have to work with to support your airshed committee, volunteers, or contractors?

Ms. Nadine Blaney: We have a science advisory committee that drives how our network is operated. We have Environment Canada sitting in that group, as well as Alberta Environment and Parks's monitoring and science division. Then we have a lot of experts from industry who give their expertise in kind, environmental health, safety, that kind of expertise. Then we also contract experts to do the actual monitoring.

Mr. Martin Shields: In the area you work in, do you have any idea of how much public perception there is that you exist?

Ms. Nadine Blaney: Public awareness of us? It's increasing. I know at Alberta's Industrial Heartland, because we have the communications group that Pamela mentioned, the "Life in the Heartland" group, we are able to communicate what we are doing through social media, so we use that as a communications tool. We also do presentations throughout the region and we have annual reports to the community.

Mr. Martin Shields: Thank you very much.

Dr. Smol, to clarify, you said "oversight by government", but you also said "oversight by the scientific community", so who's overseeing whom here? You said both.

Dr. John Smol: Yes. Oversight by government could have advice from the external scientific community. That would be my view.

Mr. Martin Shields: The scientists are not overseeing-

Dr. John Smol: There are many good examples of joint independent reviews from scientists. It needs independent peer review from the scientific community. Some of that could be from the federal government to start with, but it always helps to have people, including international, seeing what you're doing.

Mr. Martin Shields: I got the peer review. I just want to know who has the last card? That's what I want to clarify with you. Is it the scientists or the government?

Dr. John Smol: I'm trying to say both.Mr. Martin Shields: You did say both.

Dr. John Smol: Yes.

The Chair: We're going to have to leave it at that.

Thank you. It's nice to have had a chance to hear from at least someone from the video conference in Edmonton.

Next up is Mr. Amos.

Mr. William Amos: I'd like to explore with the Alberta's Industrial Heartland Association a little more of the conversation around regulatory certainty and timeliness. Having significant forestry sector interests in my riding, I appreciate how preoccupying it can be for industry when there is great uncertainty around any regulatory regime. This comes up every single time any regulation or legislation is contemplated by any level of government; the issue of uncertainty is invoked.

We'll all agree here that CEPA has not been amended for many years, despite two legislative reviews, both of which recommended significant changes and resulted in no change.

Now we have a committee looking at this. The government has made no statement one way or the other as to what it intends to do with CEPA, so all we have here is a committee looking at this. I don't expect that generates great investor uncertainty, but I just want to open the floor to you on this one. Correct me if I'm wrong. If a standing committee decides to explore an issue of statutory reform on a statute that's been in place for some time, does it give rise, in your estimation, to significant investor uncertainty?

• (1650°

Ms. Pam Cholak: Thank you for that question. I think it does raise an important point about how we get to actually making the changes.

You raise an important point about process through the government. Certainly, just having a committee look at regulation and look at what is happening doesn't necessarily invoke massive amounts of fear and threat out in an investor community. I would say to you that most of the folks out in the global marketplace are not looking at standing committees of the federal Parliament in Canada regularly, even though the work you do is incredibly important.

However, I would say to you that this is a part of what happens along the line. This is the starting point of a discussion, and in the course of the discussion certain issues arise that can certainly raise concern, not necessarily for just the new companies but you have to remember that there are operating companies here with global reach that are paying attention.

From a standing committee perspective, is investment going to be fleeting because of the discussions at the table here? No. However, there certainly is historical precedent that sometimes these discussions end up taking a long time. You alluded to that and to the fact that discussions went on, and there was then a lot of discussion around what would happen. In the absence of knowing what will happen, a lot of that capital dollar investment and growth, a proper kind of growth, can be stifled. That money will go someplace else, because we're always in comparison to other jurisdictions outside of what Canada offers.

Mr. Ed Gibbons: Just jumping in on this, I mentioned some of the names. Maybe the fire chief from Strathcona can actually talk about this. The fact is that they're going to expand, and they're already very big, and there are other places in the world—whether it's Shell that might be in Philadelphia next or whatever—and we need to be able to make sure that they feel.... I think the chief will actually mention that he's dealing with them all the time.

Their municipality of Strathcona is very strong and regimented on moving forward, so I'm not sure if you'd like to hear that from one of the—

Mr. William Amos: Actually I don't think I need that added input.

Where I'd push back a bit is that it's sort of standard procedure. Every single government that is elected examines the public interest of health or environmental or other types of public interest statutes and evaluates if these are strong enough. The tendency, at least over time, with the possible exception of the last 10 years, has been to strengthen environmental laws.

My sense is that industry builds this kind of expectation into its understanding of how the world works. There is legislation, there are regulations, and it is possible that the legislation and those regulations will be strengthened over time and those additional costs, which may have to be built in, will be built in.

I wonder if Mr. Larocque, from the Forest Products Association, could speak to that.

Mr. Robert Larocque: I completely agree. The standing committee looking at all this is not going to be.... We're following it. I totally agree with you. The uncertainty would happen if there were significant changes to CEPA. Sometimes there's an uncertainty on how it would be implemented following those changes, and that could take three, four, or five years. We saw it on SARA. It took a long time for it to be implemented and we're still dealing with some issues with the act initially.

That's the uncertainty that we're tracking; what were the changes and were they clear? If they were clear, we'll build into it, but if they're not, it will lead to uncertainty on how those changes will impact moving forward.

• (1655)

Mr. William Amos: Clarity on the actual changes and their implementation....

Mr. Robert Larocque: Exactly.

The Chair: Thank you very much. We now have Ms. Duncan.

We have a little bit of extra time. I'm looking at the clock. I've suggested that we do three more minutes for each side, which means I can add those three onto you and we do what we normally do. That means you have six.

Ms. Linda Duncan: I'll try to be relatively brief.

I'm a little bit puzzled by what some of my colleagues were saying on the other side, because we do have the NPRI and that information on pollution is publicly available. For example, I can look on the NPRI and find out if the units of coal-fired power in my city are emitting more mercury than the units of coal-fired power in another jurisdiction. A lot of that information that's collected federally is already readily available. It's something that the Commission for Environmental Cooperation has been very involved in. I think Mr. Amos is interested in pursuing it in more detail, which is good.

I am a little bit concerned with what I'm hearing from the heartland association and I think I'd like to give you a chance to clarify what you're saying. We have this unique institution in Alberta called the Clean Air Strategic Alliance. I used to sit on the board of

that entity. It's tripartite with federal and provincial governments—Councillor Gibbons has been part of that off and on—senior members of industry, and then senior representatives of the environmental community. We have indigenous people, we have farmers, and so forth, and regularly the provincial government refers any pollutant controls. For example, we did a big review on air emissions from the electricity sector.

I'm a little bit puzzled that there would be concern that there might be any surprises thrown at the petrochemical sector. My experience at both the federal and provincial levels is that there's a long-standing relationship with the industrial sectors on any pollutants of concern. For example, one is that the public is getting fed up with no action on the fine particulates. I'm hoping that your response to me would be that you're not suggesting that the government should not regulate a substance simply because it might be a risk to investment.

Mr. Ed Gibbons: The answer is no. I'm totally agreeing with you. Fort Air Partnership is already going through this and we work with them as partners. For NCIA, which is the industry and has already come in front of your committee before—whether it's Dow or whether it's whatever—Laurie Danielson is actually the representative and Laurie's a very strong advocate of the environment.

Ms. Linda Duncan: That's my understanding.

Mr. Ed Gibbons: So the answer is no; we're with you. I sat on CASA with you for four years. I totally—

Ms. Linda Duncan: Exactly. That was the impression that was being left with me and I was getting very concerned. We actually have a trade agreement that would not allow that. Canada's not allowed to change their environmental protections for an economic advantage, so there are many drivers in that direction.

Mr. Larocque, I'm a little bit puzzled about your concern about the overlap in duplication in federal and provincial monitoring and inspection. It's my understanding that at the ground level in the field there has been a lot of effort in reducing that duplication and cooperation. Can you give us any kinds of examples where you're seeing that's causing a problem for your sector?

Mr. Robert Larocque: Yes, sure. One of the latest examples we have was the latest multi-sector air pollutant regulation that came out, where some, for example, testing done under the provincial government may not be accepted under federal regulation, so now we're going to have to go back and retest, and it could be just because it's a test method that was not initially in the regulation. It could be that the boiler doesn't have a sampling port, so under the provincial government we sample somewhere else, but we can't do it under the new federal legislation.

Those are examples, from when the legislation was written, that create duplication and then duplicate enforcement, because when you go in, you're doing a certain method and the other one does not.

Ms. Linda Duncan: If there any kind of specific recommendations you want to send us after, we could always include those in the report. We did have the enforcement panel on Tuesday and they were reassuring us that the federal and provincial governments in the field are working very closely, but I know exactly the kind of situation you're talking about. Sometimes it's a problem in the regulation.

Mr. Robert Larocque: Exactly.

Ms. Linda Duncan: If you can give us more specifics of how that could be resolved in specific regulation, that would be helpful.

Dr. Smol, in the application of CEPA across the country, I would really appreciate it if you could put your mind to any specific recommendations that you would make for where we could be doing a better job of monitoring so the federal role could be more of a preventive mechanism rather than responding after the fact.

● (1700)

Dr. John Smol: I don't want to repeat myself, but trying to embrace what I think some of the Europeans are trying to do, realizing that we're not dealing in isolation and realizing that a lot of our problems do not come out on the point samples that we often do monitoring with.... This is where I tried to suggest the biomonitor—not suggest, but there are certainly technologies such as using biological organisms as part of a chemical monitoring program that take into account episodic events. Sometimes pollution is released at two o'clock in the morning and that happens to be in a river where you are taking the sample, but sedentary biological organisms are always there. There is certainly the scientific background to use them, and they are certainly used in many different ways.

Expanding what we monitor is one aspect of it. I understand industry always wants to know what's coming and have certainty, but we need some flexibility in the program too because we don't know what's coming. One of the issues was in the oil sands, if I could just bring up that example. Things changed in the last 16 years or however long that industry-sponsored monitoring program was going. Those scientific advances weren't implemented into how the monitoring program should have changed. We have to keep scientific oversight, again, and realize that we can't say this is permanent for 30 years. I think things change and we have to have some flexibility with that.

The Chair: Thank you very much.

Mr. Fast, you have three minutes.

Hon. Ed Fast: Okay, thank you. I'll be quick.

First of all, just to debunk something that Mr. Amos said. He suggested that except for the last 10 years, other governments had always made progress in addressing environmental regulations. Nothing could be further from the truth. I could spend the next half hour or hour regaling you with things that we—

The Chair: You don't have half an hour.

Hon. Ed Fast: I'm not going to, but let's be fair. Every single government in Canada has tried to improve the environment. We sometimes disagree over the speed at which we want to do that, but I can assure you that Mr. Amos does not have a monopoly on virtue.

I want to go back to the heartland association and air quality monitoring because this is supposed to be a panel about monitoring and enforcement. Do you have some suggestions as to how we can additionally improve air quality monitoring and the regulations that support that monitoring?

Ms. Nadine Blaney: From the point of Fort Air Partnership's perspective, our monitoring program is mainly based on what is required under regulation as per operating approval requirements. Then we also add into the net needs of the provincial and federal

governments with regard to the ambient air quality objectives that are set and the Canadian ambient air quality standards.

From our point of view, we are more than happy to monitor and report on things of interest. We've worked with Environment Canada before on launching volatile organic compounds monitoring projects, and we'd be happy to do that in the future if that's required, if that's an interest in this region. Any feedback or resources working together to determine what type of monitoring is necessary would be appreciated.

Hon. Ed Fast: But you don't have any specifics on what kinds of improvements you would like to see in the monitoring regime.

Ms. Nadine Blaney: Not that I can speak to right now, no.

Hon. Ed Fast: Okay, if you do come up with some on further reflection, make sure you get those to our committee because that will then form part of the evidence that we'll base our report on.

Ms. Nadine Blaney: Yes, I will do that.

The Chair: You're done; you're good. Okay.

We have Mr. Bossio.

Mr. Mike Bossio (Hastings—Lennox and Addington, Lib.): Thank you, Madam Chair.

I'm sorry that I missed everyone's presentation.

Professor Smol, it sounds as if a lot of what you were talking about was around monitoring and the bioaccumulation that we see in our environment from the introduction of numerous chemicals that are mixing within our environment. Would you agree that when a substance has clearly been identified as toxic, like asbestos, and substitutions have been identified to replace that substance, that we should set clear time frames in the regulations as to when that substitution should be introduced to society, hard time frames so that asbestos is not in brake pads, so it's not being imported?

It's great that we're not manufacturing or not exporting it, but as far as imports, as far as brake pad and piping systems....

• (1705

Dr. John Smol: Yes, I would. That's a simple answer.

Mr. Mike Bossio: Given that technology has improved dramatically as far as our ability to test these different mixes of chemicals that we're now seeing within our system goes, should we not be....

It has been identified by a number of witnesses that risk assessment is not enough to really be able to get to the threat that is posed by a number of chemicals, or the bioaccumulation of those chemicals, or the mixture of those chemicals, and that we should establish a hybrid of risk assessment to take risk assessment beyond its capability and move towards hazard-based assessments.

It's not eliminating it but going beyond it.

Dr. John Smol: We are overly optimistic in the environment. Our history shows that continuously. We have totally underestimated throughout history the consequences of our actions. We know a lot of known unknowns, and there are a whole lot of unknown unknowns we don't know about yet. We just have to realize that we are overly optimistic.

I don't think there's any argument, if you look at the data, that we have totally underestimated our various risks through time. We haven't even begun to put together the multiplicity of how things interact together.

Mr. Mike Bossio: Thank you.

Chair, I'd like to share the rest of my time with....

The Chair: You have 30 seconds, Mr. Gerretsen.

Mr. Mark Gerretsen: Mr. Larocque, when you talked with Mr. Fast, you were talking about the risk-based versus hazard-based and I didn't quite understand. Are you saying that you are content with the existing risk-based approach, or do you see an opportunity for a hybrid, as Mr. Bossio just indicated, involving both risk- and hazard-based approaches?

Mr. Robert Larocque: I do believe that the risk-based approach is working well. I understand that bioaccumulation is something that needs to be looked at.

Mr. Mark Gerretsen: Are you open to the idea of a hybrid?

Mr. Robert Larocque: Without knowing exactly what that means, if it could be improved, yes.

Hon. Ed Fast: I don't know what it means either.

The Chair: We're not sure yet either.

We're out of time. I want to thank our guests very much for sharing your wisdom and your experiences with us. We have a very short time frame because we're going to hear the bells very soon. We need to clear the room because the next session is in camera.

Thank you so much. We have just a couple of minutes to clear the room

Again, I appreciate your time. Take care.

[Proceedings continue in camera]

Published under the authority of the Speaker of the House of Commons

SPEAKER'S PERMISSION

Reproduction of the proceedings of the House of Commons and its Committees, in whole or in part and in any medium, is hereby permitted provided that the reproduction is accurate and is not presented as official. This permission does not extend to reproduction, distribution or use for commercial purpose of financial gain. Reproduction or use outside this permission or without authorization may be treated as copyright infringement in accordance with the *Copyright Act*. Authorization may be obtained on written application to the Office of the Speaker of the House of Commons.

Reproduction in accordance with this permission does not constitute publication under the authority of the House of Commons. The absolute privilege that applies to the proceedings of the House of Commons does not extend to these permitted reproductions. Where a reproduction includes briefs to a Committee of the House of Commons, authorization for reproduction may be required from the authors in accordance with the *Copyright Act*.

Nothing in this permission abrogates or derogates from the privileges, powers, immunities and rights of the House of Commons and its Committees. For greater certainty, this permission does not affect the prohibition against impeaching or questioning the proceedings of the House of Commons in courts or otherwise. The House of Commons retains the right and privilege to find users in contempt of Parliament if a reproduction or use is not in accordance with this permission.

Publié en conformité de l'autorité du Président de la Chambre des communes

PERMISSION DU PRÉSIDENT

Il est permis de reproduire les délibérations de la Chambre et de ses comités, en tout ou en partie, sur n'importe quel support, pourvu que la reproduction soit exacte et qu'elle ne soit pas présentée comme version officielle. Il n'est toutefois pas permis de reproduire, de distribuer ou d'utiliser les délibérations à des fins commerciales visant la réalisation d'un profit financier. Toute reproduction ou utilisation non permise ou non formellement autorisée peut être considérée comme une violation du droit d'auteur aux termes de la *Loi sur le droit d'auteur*. Une autorisation formelle peut être obtenue sur présentation d'une demande écrite au Bureau du Président de la Chambre.

La reproduction conforme à la présente permission ne constitue pas une publication sous l'autorité de la Chambre. Le privilège absolu qui s'applique aux délibérations de la Chambre ne s'étend pas aux reproductions permises. Lorsqu'une reproduction comprend des mémoires présentés à un comité de la Chambre, il peut être nécessaire d'obtenir de leurs auteurs l'autorisation de les reproduire, conformément à la Loi sur le droit d'auteur.

La présente permission ne porte pas atteinte aux privilèges, pouvoirs, immunités et droits de la Chambre et de ses comités. Il est entendu que cette permission ne touche pas l'interdiction de contester ou de mettre en cause les délibérations de la Chambre devant les tribunaux ou autrement. La Chambre conserve le droit et le privilège de déclarer l'utilisateur coupable d'outrage au Parlement lorsque la reproduction ou l'utilisation n'est pas conforme à la présente permission.

Also available on the Parliament of Canada Web Site at the following address: http://www.parl.gc.ca

Aussi disponible sur le site Web du Parlement du Canada à l'adresse suivante : http://www.parl.gc.ca