

House of Commons CANADA

Standing Committee on Environment and Sustainable Development

ENVI • NUMBER 008 • 1st SESSION • 39th PARLIAMENT

EVIDENCE

Monday, June 12, 2006

Chair

Mr. Bob Mills



Standing Committee on Environment and Sustainable Development

Monday, June 12, 2006

• (1535)

[English]

The Chair (Mr. Bob Mills (Red Deer, CPC)): I believe we have a couple of guests caught in the lineup downstairs. I think it's quite long, so I believe we will start.

I'd like to take this opportunity to welcome our guests. As you can see, we have a number of presenters today. I would ask that you keep it as brief as you can. We do allow ten minutes. The main thing is that we would like an opportunity for the members to ask the questions they want to ask about the issue.

As for our guests, as you know, we are basically looking at a number of round tables dealing with different subjects. To this point, we've had one session. This one, of course, is designed to measure the success of CEPA, to give us an idea, as committee members, of some of the changes we might want to make or of just how effective CEPA really is. That's what we hope to hear from you today.

I believe we'll follow the order here, with Mr. Glover going first. We'll catch Mr. Moffet when he gets through security.

Mr. Paul Glover (Director General, Safe Environments Programme, Department of Health): Thank you, Mr. Chairman.

I am very pleased to be here today with other members of the round table. I look forward to the discussion.

First and foremost, Mr. Chair, if it pleases the committee, the last time I was before you, there were some questions about Health Canada's evaluation. It was a draft, and it was not available. I'm pleased to report that it is no longer a draft, and it is available. It was provided to the clerk. That is now available to all members.

With respect to measuring success, I'd like to begin, very briefly, by describing what Health Canada is responsible for under CEPA. It is an act that is shared between the Minister of Health and the Minister of the Environment.

The Minister of Health's role and Health Canada's role is really around health assessments of new and existing substances. If you're thinking about the act in particular, that's paragraph 64(c) under existing substances—the impact on human health. We're also required to do research on hormone-disrupting substances; there are a number of things we do there. We're also required to conduct research relating to the role of substances in illness and to publish health studies about the effects of different substances on human health. That's basically what we do. We take a look at these things from a health point of view to determine the impact they are, or are not, having.

The second thing I would like to provide to committee members is a brief outline of how we do that. Health Canada does adopt a risk-based approach, which is something that I'm sure you'll be hearing a fair bit about. Risk is made up of two key components: hazard and exposure. We believe it's very important to consider both of those.

With respect to hazard, we look at the impact a substance has on human health. In putting both the hazard and the exposure together, the way we do that is very conservative. Our process in doing a risk assessment is to take a look at the lowest observable effect that a substance has—not the highest, not the medium, not the average. As soon as we see an impact on human health, whether through research, lab studies, animal studies, etc., that is the lowest level. That's what we use to determine hazard information. Then on the flip side, for exposure, we take the worst case scenario and assume that is the norm.

If you take those two extremes and put them together, you can see how we have a very conservative assessment with respect to human health. That's how we go about it. That's the process for conducting a risk assessment for all existing substances. All our risk assessments are peer reviewed and published.

Because we understand that science can come forward on any one issue with multiple points of view, we take a weight-of-evidence approach. We find it's always possible for somebody to say that this other science is wrong and to present a countering view one way or the other. On the existing substances side, we tend to deal with datarich..., i.e. there's a lot of information. So we take a weight-of-evidence approach, that is information that is generally available in peer-reviewed, published documents. That's to help us counter the extreme views one way or the other. That's how we go about assessing substances from a health point of view: both hazard and exposure are put together in a very conservative manner to ensure that we are protective of human health.

I want to reiterate that both Health Canada and Environment Canada have a responsibility to deal with all new substances that want to be used in this country. That means some 800 substances, more or less, are brought forward and notified every year. That means they're asked to be used in this country. We go through a fairly similar process.... The timeframes are much shorter, so it's much more rapid, but we do come to a conclusion on those same terms.

We also do work with respect to air quality and water quality. We publish guidelines that the provinces use with respect to substances in water: arsenic, TCE, and other things. Those are made available. And we have been conducting studies on both indoor and outdoor air quality to determine the level of pollutants and the impact those have on human health. We have a number of examples in the report that you might find interesting.

● (1540)

We have also been conducting research, as per the requirements under CEPA, on hormone disrupting substances. That is ongoing work in an attempt to better understand this new and emerging science, and we'll continue that work.

The other point that I would like to make with committee members as I wrap up is that we have been very active in getting ready for categorization. That will be very important for Canada as a country. We will be the first country to have gone through all 23,000 substances in use domestically. Every country has its own inventory of substances already in use. Canada will be one of the first countries to have gone through that full list to determine priorities from both a health and an environment point of view. So Health Canada will have gone through all of those 23,000 substances and taken a look at them from two points of view. What do we believe is the hazard profile of that? Has anybody else declared that substance hazardous? It is on a list? That's a trigger for us to do more work.

The other piece will be ready in September, as per the legislation. It's the potential for exposure. We will be able to put those two things together to come up with the real set of priorities for those things that we think require further work both in terms of assessment, and in terms of management right away. We think this will provide an excellent base of information that few other jurisdictions in the world will have, and will really allow us to set our priorities as we move forward to make sure we're working on and assessing the right substances, and asking to manage the right substances from a human health point of view.

That, in a nutshell, is what we do, and how we do our work. If you're interested in numbers, I believe Environment Canada has reported on some of this in the past. In terms of schedule 1 risk assessments, we did some 69 representing over 550 different chemicals. We're involved in 12 prohibitions, 21 regulations, etc. There is a list of those things that we have been involved in. Again, Environment is the lead department. Our role is to contribute to health perspective on those, something we have attempted to do quite actively as we move forward.

That concludes my remarks about how we do our work and how we would assess and measure it.

The Chair: Good. Thank you very much. Thank you for keeping it to seven minutes and twenty seconds.

Mr. Smith, go ahead, please.

Mr. Robert Smith (Director, Environment Accounts and Statistics, Statistics Canada): Thank you, Mr. Chair. It's a pleasure to be here.

Good afternoon, ladies and gentlemen.

My name is Robert Smith. I'm the director of environment accounts and statistics at Statistics Canada. I don't have anything to tell you today about Statistics Canada's involvement particularly with the Canadian Environmental Protection Act, because we actually have no involvement with that act, but I am here to tell you a little bit about Statistics Canada's activities in reporting on the environment, which is obviously relevant to today's topic of measuring success.

I'll be very, very brief. There are just a few products that I want to bring to your attention.

In particular, I think copies of my presentation have been distributed to all of you, and attached to that I hope you will find copies in English and French of this particular publication that I want to draw your attention to.

If you look at slide three of my presentation, you'll see a bit of history of this publication. In fact, it dates back to the year 2000, when the finance minister at the time asked the national round table to make some recommendations to the government on how the government might report on sustainability in a broad way. The national round table convened a three-year process to consider that question of reporting on sustainability and ultimately recommended six indicators that the government might report, three of which were chosen by the government for reporting in 2004.

Environment Canada, Health Canada, and Statistics Canada were asked to jointly prepare these three new indicators, and this document is in fact the first report of those three indicators. So, in some sense, the report does represent the latest and one of the more significant efforts of the government to report on environmental progress, and I thought it was important that it be brought to the committee's attention today.

You can find an electronic copy of the report and the supporting documents to the report on Statistics Canada's website, and I've given you the address for that.

The next version of this report will be prepared in November of this year, and it will be an annual report from that point forward. We're working on improvements to the indicators on a variety of fronts—methodological, conceptual, and empirical—and there's the possibility that the indicator set will expand over time as new indicators of sustainability are proposed and adopted.

As I say, that was the particular report that I most wanted to bring to your attention today.

In the couple of minutes that I have left, I'll just draw your attention to two other sets of products that are produced by Statistics Canada.

The first of these is mentioned in slide five. This is a compendium of environmental statistics that Statistics Canada has been producing now for nearly 30 years, actually. We produced it for a long time on a five-year basis, but more recently we've been preparing this compendium on an annual basis. It's called *Human Activity and the Environment*, and it really is a report that describes exactly what its title would suggest. It is a broad statistical portrait of human activities in their broadest sense and their implications for the environment.

It's a very popular report. We put it out on an annual basis, as I said. It's used an awful lot by teachers because it's a reasonably accessible report. High school students can read it and understand it fairly easily.

Each annual version of the report covers one issue in depth. For example, if you look at the 2005 edition, which I've given you the web link for, you'll find that the 2005 edition covered waste management issues in considerable detail. The year before that, we dealt with water resources; the year before that it was energy; and before that it was air quality.

● (1545)

We're working on this year's report, which will look at transportation and the environment, and future reports we hope will cover issues related to cities and the environment. Then to mark the International Polar Year in 2008, we will focus on northern issues.

So I wanted to draw your attention to that report. You can access it quite easily on our website.

The final set of products that I'd like to mention to you quickly are simply the surveys that Statistics Canada runs on environmental topics. We have four surveys that we've been running for about a decade now and we have good established time series for those surveys. They cover the use of environmental protection technologies by businesses and governments. They also cover the production of those same technologies by companies that are specialists in environmental goods and services, and we also cover waste management activities in that set of established surveys.

Our survey program is under a considerable expansion right now. Statistics Canada has recently made a significant investment in the expansion of its environmental statistics program. With that money we're going to be undertaking new surveys in the areas related to households and the environment; the industrial consumption of water; a survey of water quality at municipal water treatment plants; and a survey of farmers, to get a handle on the quantities of water that they use for irrigation and livestock watering purposes.

That's a very quick overview of some of Statistics Canada's main environmental information products. There are others I could talk about, but I won't because of the need to keep my presentation short. In summary, we hope that many of these products do provide value in terms of measuring progress and success with respect to the environment.

I'm more than happy to respond to questions about any of the products, or indeed about some of the products I didn't talk about, if there's interest in those as well.

• (1550)

The Chair: Good. Thank you, Mr. Smith. I'm sure there will be some questions.

Mr. Khatter.

Dr. Kapil Khatter (Director, Health and Environment, PollutionWatch): Thank you, Chair, and committee members.

My name is Kapil Khatter. I'm a family physician, and I'm the director of health and environment for PollutionWatch.

I'll be splitting my time with my colleague, Rick Smith, who is the executive director of Environmental Defence.

PollutionWatch is a project of Environmental Defence. The mission of both Environmental Defence and PollutionWatch is to protect the environment and human health nation-wide, through research, education, and legal means when necessary.

CEPA has the same goals of protecting human health and the environment. We are here today because we believe CEPA is not accomplishing this task.

CEPA's goals are set out in the administrative duties. They include preventative and remedial measures to protect, enhance, and restore the environment; implementing an ecosystem approach that considers the unique and fundamental characteristics of ecosystems; establishing consistent standards of environmental and health protection; protecting the environment, including its biological diversity, and human health; and acting expeditiously and diligently to assess the risks that substances pose to the environment and human health. In addition, the preamble specifically talks about the need to virtually eliminate the most persistent and biocumulative substances.

In order the determine the success or failure of CEPA in terms of these goals, we can look at the impact that environmental pollution is having on the health of Canadians, the levels of pollutants being discharged into the environment, the number of toxic chemicals that have been assessed, regulated, and, in particular, eliminated, and the number of harmful substances that are found in our bodies. In our opinion, CEPA fails on all these tests.

In terms of the impact on human health, our colleagues from the medical association will talk about the fact that in Ontario alone two air pollutants, ground-level ozone and fine particulate matter, are responsible for over 5,800 premature deaths and over 16,800 hospital admissions. It's 2005 data. In addition, there are many health problems that we suspect have environmental contributions that are on the rise: autism, attention deficit disorder, certain birth defects, premature puberty, and certain cancers.

In terms of the CEPA goals, if you look at releases to the environment, Canada has fallen behind internationally on emissions. We're ranked 28th out of 29 in emissions among industrialized countries. According to the national pollutant release inventory, Canadian industry emitted over four billion kilograms of air pollutants in 2003. For facilities and pollutants reported throughout 1995 to 2003, it's an increase of 12%.

A recent comparison between Canadian and U.S. industrial sites in the Great Lakes found that per facility we emit 93% more potentially cancer-causing substances and over four times as many pollutants that can cause reproductive or developmental harm.

In terms of looking at the assessments and the elimination of substances under CEPA, we feel the CEPA process has been terribly slow. A really good example of that is virtual elimination. As I said, the preamble calls for the virtual elimination of persistent and biocumulative toxic substances. There is a mechanism for virtual elimination in the act, but only one substance so far has been proposed for virtual elimination and none have so far been eliminated.

Finally, in terms of the measures I pointed out, a fourth measure of CEPA's success or failure at protecting health in particular is the level of chemicals found in our bodies. Environmental Defence recently tested families for chemical contamination. My colleague Rick Smith will speak to those results.

Mr. Rick Smith (Executive Director, Environmental Defence, PollutionWatch): Thank you very much.

Thank you for the invitation to be here, Monsieur le président.

As Dr. Khatter just mentioned, we released a report last week, and I hope you have a copy in front of you, called *Polluted Children, Toxic Nation*. In a nutshell, we tested five Canadian families from right across the country—families from downtowns, families from rural areas, families from different walks of life, families of different ethnicities. Within those families, we tested seven kids and six adults. We tested for 68 toxic pollutants, and we deliberately chose a range of pollutants—some pollutants that our bodies primarily absorb through breathing air pollution and some pollutants that we pick up from products in our homes and offices.

What we found is that in the folks we tested, 46 of the 68 toxic pollutants were present; and probably most shockingly, in many cases, virtually every family of chemicals we tested for was present. There were some kids who had higher levels of these contaminants than their parents.

Surely this is precisely the kind of measure of success, or frankly, measure of failure, that this committee should be looking at when it comes to the performance of the Canadian Environmental Protection Act.

I think it's noteworthy that among volunteers from the city of Sarnia, Ontario, including volunteers from our first nations community within the boundaries of the city of Sarnia, which you might have seen profiled on *The National* a couple of months back, the pollution is so bad that the sex ratio of babies born in this community is now two to one, girls to boys. The pollution has actually changed the sex ratio of children being born in this community.

I was joking with somebody before this presentation that my presentation on measures of success for CEPA would be very brief, because frankly, I don't think that CEPA can be said to have been terribly successful. The act has not met its goals. It has not been effective in preventing pollution or in reducing toxic exposure. But we believe that there are ways to make CEPA better.

I want to outline very quickly just four areas that we hope this committee takes a look at in terms of improving CEPA: timelines, consumer products, burden of proof, and the Great Lakes and St. Lawrence ecosystem.

As my colleague underlined, CEPA sets out a duty to expeditiously and diligently assess and manage substances, yet it lacks timelines at important stages in this process, and this allows chemicals to remain on the market with unfinished assessments and inadequate data. All we have to do is look at Canada's performance with respect to other industrialized countries. For example, the chemical PFOS was mostly banned in the United States in 2000, but in Canada, it took until October 2004 to post an assessment, and that assessment still has not been finalized.

CEPA's preamble recognizes the need to virtually eliminate persistent and bioaccumulative toxic substances, but the mechanism in the act really does not allow this to occur. There are administrative barriers that prevent this, one example being the requirement to measure the smallest measurable level. This is the kind of administrative change that we think can be made to the act to make a big difference.

According to its administrative duties, CEPA sets out to create consistent standards, yet frankly, there are different standards when it comes to consumer products. As Mr. Glover pointed out, new substances introduced to the market have to meet one test; 23,000 substances that have essentially been grandfathered are held to a lesser test. Many of these substances are known carcinogens, known neurotoxins, and known hormone disruptors. They are still on the market. We have them in the bodies of Canadian adults and children. And the pace of change when it comes to regulating these substances is glacial, to say the least.

The burden of proof of safety is not consistent, either. Frankly, we have a major concern that when September of this year rolls around and Environment Canada finishes its categorization of these 23,000 substances, that the Government of Canada simply will not have the resources, as things are currently structured, to plow through the regulation of these substances. We think it's fair, as other industrialized countries do, to ask industry to prove that these things are safe before their continued use in the market is allowed.

● (1555)

Finally, let's take a look at pollution hot spots. The Great Lakes and St. Lawrence basin is home to over one-third of Canadians. It's also the source of about 45% of all air pollution emissions in the country, so we have in the Great Lakes and St. Lawrence basin a congruence between a large percentage of the Canadian population and a very large amount of pollution. We think that in terms of bang for the buck, different requirements and different provisions for pollution hot spots like this one make a lot of sense.

Let me just conclude by saying that I want to thank the committee very much for the care and the diligence you bring to this review. The Canadian Environmental Protection Act is a complicated and arcane piece of legislation. At the end of the day, this review is about getting this act right, getting our federal framework right to protect the health of Canadian children, to reduce the number of smog days in our cities, and to make sure that Canada starts measuring up to standards that already exist in the United States and in Europe. These are the kinds of measurable results that we're hoping to see out of this review, and I want to thank you very much for undertaking it.

The Chair: Good. Thank you very much, Mr. Smith.

Mr. Moffet, did you have anything you wanted to say, or would you just like to answer questions?

Mr. John Moffet (Acting Director General, Systems and Priorities, Department of the Environment): I'm here to answer questions.

The Chair: Okay, fine.

(1600)

We'll go on, then, to the Ontario Medical Association. I'm not sure who's going to speak first, or will both be speaking?

Dr. Levy, thank you.

Dr. Isra Levy (Chief Medical Officer and Director, Office of Public Health, Canadian Medical Association): Thanks, Mr. Chair and honourable committee members.

Good afternoon, everyone.

There will be copies of my notes circulated to you within the next day or two in both English and French. I apologize that they aren't available at the moment.

I am Dr. Isra Levy. I'm a public health physician and the chief medical officer and director of the office for public health at the Canadian Medical Association. I'm delighted to be participating in your round table today and I am grateful for the invitation. With me is Mr. John Wellner, director of health policy at our sister organization, the Ontario Medical Association.

Of course, CEPA is a key piece of federal environmental legislation. For us at the CMA and for our common members at the OMA, it is really primarily about health. Canada's doctors see the topic of hearings on measuring CEPA's success in terms of the impact on our medical practices, and more particularly on our patients, so to us the measurement of success that matters is actually simply good health in our patients.

Unfortunately, I must tell you that we still see the negative impacts of environmental degradation on many of our patients every day. We are pleased, therefore, to participate in this review of CEPA, because, as I've said, for us the measure of health benefits and health outcomes is what matters. Those health benefits and health outcomes obviously can occur over the short or long term, but those that stem from reduced exposure to environmental contaminants is, to us, an important measure of our health as a nation.

As you know, health outcomes are directly linked to the physical environment in many ways. We know from the crises in Walkerton, Collingwood, North Battleford, and many first nations communities the devastating effect that contaminated water can have on individuals and families.

We know from the smog health studies undertaken by my colleague at the OMA, by Health Canada, and by others about the public health crisis of polluted air that is now evident in many parts of Canada. It is a crisis; these are not empty words.

We're at the point now that science allows us to more clearly show the long-term lifetime burden of morbidity caused by some of these pollutants. We now know that there are thousands more premature deaths caused by air pollution in Canada every year than has previously been appreciated. Dr. Khatter has mentioned some of those statistics.

We are learning that central Canada is not the only place that has a smog problem. The OMA has shown, through its model on Iilness costs of air pollution, which I believe some of you are familiar with, that it is plausible to think in terms of substantial costs to the health and pocketbooks of Canadians because of environmental risks across the entire country, not just in central Canada.

The CMA has developed many environmental policies pertinent to these discussions today; they are outlined in the text. I'm sorry you don't have that in front of you today, but they will be there; we can certainly take questions on that material, either today or at some later stage.

I do want to say, though, that doctors understand the concept that success from an intervention can be nuanced. In the case of disease, physicians know and accept that the benefit of treatment is not always a cure for a patient—sometimes we just reduce symptoms or slow the rate of decline—but in treating the physical environment that is so critical to human health, we suggest humbly that we cannot accept a palliative solution: we must aim collectively for cure.

We urge you to commit to measures of success in terms of real improvement, rather than merely accepting slight curtailments in what is sometimes thought of as inevitable increases of environmental contamination.

The issue of greenhouse gas reduction is one that illustrates this point. Just as slowing the progression of disease can never be considered a cure, referring to an inevitable increase in emissions and attempting only to limit the growth of those emissions cannot result in true success by any serious measure.

We have seen good-news press releases on environmental initiatives from various federal and provincial governments, but from our point of view, regrettably, the news isn't always worthy of praise.

● (1605)

There's no question, there have been some wonderful environmental successes that we should be proud of as Canadians. But the measure of overall success on all contaminants of concern, we can only say, has been incremental at best.

For example, when policy-makers speak about industrial emission reductions of any kind, we sometimes hear wordings such as "emissions intensity"; that is, the emissions per unit of production, rather than total overall emissions. To be health-relevant, the only meaningful way to report emissions reductions is to present them as net values, not the all-too-common gross valuations. The reason is that an emission reduction from a particular source is only health-relevant if we can guarantee that there is not a corresponding emission increase at another source nearby, because it is the absolute exposure an individual experiences that affects the risk of an adverse health effect in that individual.

This kind of issue becomes especially tricky with regional pollutants, things such as smog precursors, because you have to take the whole airshed into account. For this reason, cross-jurisdictional pollution control initiatives are critically important. In Canada, that means federal oversight.

To our understanding, that's what CEPA does. It gives the federal government jurisdictional authority and, dare I say, a moral obligation to act to protect the health of Canadians. As I've said, to the CMA and we believe to most Canadians, the real measure of success is going to be a reduction in the illnesses associated with pollution. That said, it's important not just how we measure this ultimate success but also how we measure our progress towards it.

Environmentally related illness is essentially the combined result of exposure and vulnerability. We are vulnerable because as human beings each of us has different physical strengths and weaknesses. Some vulnerabilities to environmental influences are genetic and some are the results of pre-existing disease. There is not much we can expect you policy-makers, or government in general, to do about this part of the equation.

Our exposure to contaminants, on the other hand, is related to the air we breathe, the water we drink, and the food we eat. This is where CEPA comes in, and this is where your role is critical and where measures of success will be most important.

Proxy measures for the health outcomes that matter must be relevant from a health perspective, as I've said. Health-based success can only be measured by quantifiable reductions in the exposure levels of contaminants in our air, water, and food.

In this context, Canada has historically relied on only guidelines for contaminants of concern: memoranda of understanding with polluters, voluntary goals and targets. Our American neighbours prefer the legally binding approach: standards, strict emissions monitoring, and pollution attainment designations.

While there may well be some benefit to the Canadian approach, we are clearly behind in some respects in this area. For example, in many parts of the United States, counties at the local level try desperately to avoid attaining a non-attainment designation. Such a designation would be based on, for example, ambient air pollution

target levels that haven't been reached. If they are designated to be a non-attainment zone, these counties risk loss of federal infrastructure transfer payments. So the consequences are very real.

In Canada, we have Canada-wide smog standards, for example, for 2010. But of course these are non-binding, they have no penalties for non-attainment attached to them, they provide loopholes for any jurisdictions claiming cross-border pollution influences, and they allow provinces to opt out with only three months' notice.

We think we must be more forceful. And for the many more chemicals of concern besides those listed as CEPA-toxic, where such forceful action is certainly justified, we also realize that where the evidence isn't in, a precautionary approach is called for. We think there are many chemicals of concern where such a precautionary approach can be brought to bear and more forcefully implemented.

Although the presentation of environmental information such as the ambient pollution levels in the state of the environment report or health-based air-quality-index kinds of work is beneficial, provides information that is useful, and helps Canadians enable themselves to reduce their exposures, ultimately it isn't enough.

● (1610)

The CMA believes that true success would entail going beyond reporting the danger, to actually reducing it. We believe that's the purpose of CEPA, and that's why we look forward to working with you to improve CEPA, and to ensure that the measures of CEPA's success will be to the benefit of the health of our patients across Canada.

Thank you.

The Chair: Thank you, Dr. Levy.

We'll go to our first round of questions. Members have ten minutes.

Mr. Godfrey, go ahead, please.

Hon. John Godfrey (Don Valley West, Lib.): What I found interesting about the documents put forward by Environment Canada this afternoon—both the "Bearing Point" document and the document on Canadian environmental sustainability indicators, which unfortunately we haven't had a chance to read in detail because we just received them during the meeting—is that they certainly seem to be about process, but I'm not sure how helpful they are in evaluating with any degree of accuracy the effectiveness of CEPA.

I would be interested in hearing from the non-government presenters, Dr. Levy, Dr. Khatter, and Rick Smith, as to whether they think these particular approaches are very helpful in allowing us to measure success.

Mr. Rick Smith: I'll give a brief answer, to start.

Whether it's for kids in school or for governments, at a certain point you have to stop producing report cards and start improving the grade.

I do think it's fair to say that the federal government has been mired in process on the issue of pollution over the last few years. I would agree with Dr. Levy that a much more effective, commonsensical measure of success for CEPA would be to determine whether it is decreasing emissions into the air and water of key toxic chemicals. Is it ensuring that levels of toxic chemicals like brominated flame retardants, PFOS, and other things that other industrialized countries are well on their way to banning are decreasing in the bloodstreams of our children? We can measure these things now. Doing so is actually quite cost-effective. These are the kinds of measures that I would suggest are more effective. In fact, the United States, for instance, for many years now has been testing hundreds of people every year for the levels of toxic chemicals in their bloodstreams and in their urine, in order to track progress on pollution reduction.

Hon. John Godfrey: Let me come back to Mr. Glover.

Do you think the kinds of hard-edged criteria that have just been described by Rick Smith are fair? Is it reasonable that we should be tested on an international comparable basis for the more rapid elimination of these substances? If those are fair measures, how are we doing?

Mr. John Moffet: Without a doubt, the absence in Canada of programs like systematic biomonitoring, which many other jurisdictions have, limits our ability to speak to meaningful outcomes.

I will fully admit that I spoke to process, the number of assessments we did, etc., and it is because of the lack of that kind of program that I am not able to systematically say we took lead out of gas, and we know what's happening with lead in the environment, but do we know what lead levels are in people across this country? It's not a requirement of CEPA, and therefore it is something that we do sporadically, in a number of spot studies on a priority basis for the most critical of issues. We are not in a position to have a systematic program that would really inform us of whether the levels are coming down such that we could be satisfied that we've done enough, would know that we need to do more, or that they could inform our priorities in the actions we've taken to date. These are, in short, reasonable measures.

• (1615)

Hon. John Godfrey: Your argument for the reason we're not doing biomonitoring is that it's not mandated by CEPA, and that it's presumably expensive? What are the reasons we're not doing it if it seems like a good idea?

Mr. Paul Glover: If we speak specifically to what the act calls for, there is a requirement for a national pollutant release inventory that is funded and appropriately operated. There is no equivalent in the legislation for the health minister or the health department to carry out a similar program. We know it's released into the environment and there's a requirement. There is no similar requirement. Therefore, our ability to obtain the funds necessary to do that is somewhat limited. Recognizing the need for it, we do ad hoc studies. They're not systematic. They are not what we could call comparable to what

the Americans or other jurisdictions do. We'll do a small sample in the north, a particular geography, etc.

Hon. John Godfrey: So if we were to make a recommendation as a committee for ways of strengthening CEPA, from a Health Canada perspective it would be a useful thing for us to propose biomonitoring, because it would give you the additional information that would allow us to answer the questions that have been put by the other witnesses.

Mr. Paul Glover: We believe it would allow all of us to answer transparently, what are the levels, and are they going up or are they going down? Absolutely.

Hon. John Godfrey: Well, I think we're making progress here. Maybe I could ask the witnesses whether they have other useful suggestions that we can test, either for Environment Canada or Health Canada.

Note this for the final report, by the way.

Dr. Isra Levy: I wish I could be specific in that way, but I certainly agree with the conclusions. I would say yes, the process measures seem very heavy, but I would be a little concerned about giving you the impression that they're no good. A great deal of work over many years at Statistics Canada and Health Canada has gone into developing programs. As I think we just heard Mr. Glover say very tactfully, they're doing the best they can, sometimes in a funding drought because there are no obligations defined in the legislation.

So the work at the scientific level that does get done is often a good foundation and a good building block, but as I pointed out in my testimony, it is not focused in a meaningful way, in a way that relates to the interventions that CEPA brings to bear. Part of that is that some of the interventions haven't been brought to bear, but what we really need is tight regulation that's very clearly focused on specific things, with evaluation frameworks that are designed to measure the impact of the policy intervention.

I don't think we're there yet. The legislation has not been constructed or certainly has not been implemented in a way that allows us to measure progress. That is where I think, quite rightly, your thinking is going, and I very much support the conclusion you've just come to.

Hon. John Godfrey: Rick Smith, and Dr. Khatter.

Mr. Rick Smith: I've been sort of a harbinger of doom and gloom in the last couple of weeks with this polluted-children report, so I just want to point out one good piece of news in the report, which bears directly on your question.

Two of the substances we tested for in children were PCBs and DDT. These are both substances that have been banned in Canada for quite a few years now—in the case of PCBs, I believe it was in 1977, so going on 30 years. What we found was a good news, bad news story.

The good news is that the levels of these things in kids were measurably lower than in adults. The bad news is that, 30 years after these substances were banned, they're still in kids. So this kind of measurement can be valuable to point out successes, and frankly, in this case it also points out the need for timely action, that even when decisions are made today, these substances are so persistent that it takes decades before they're flushed out of ecosystems and our bodies. But if you look closely at our report, you do see these differences in levels of substances, those banned and those still in use.

• (1620)

Mr. John Moffet: I'd like to elaborate on Dr. Smith's latter point. I think the remaining presence of those substances indicates not just the need for rapid action, but I would urge the committee to think in an international context. The reason that stuff is still present in our kids' bodies is because other countries are still using it and still putting it in the environment, and it's a shared environment. So we need to look at not just action in CEPA, but action internationally.

If we want to address the problem of contaminated products, we need to make sure that the countries making the products apply the same standards that we do. That's not something we can legally impose; that's an international process.

Hon. John Godfrey: Mr. Wellner.

Mr. John Wellner (Director, Health Policy, Ontario Medical Association): I'm going to speak further to your suggestion of possibly testing the departments with some ideas. I'm particularly interested in further investigating what Dr. Levy talked about—that is, the issue of attaining standards, the issue of measuring our country's attainment of particular pollution standards, be they ambient air standards, water standards, or whatever.

I'm wondering if there is an interest, and if in fact it's simply because there's no mandate at the moment to investigate ways to ensure that we make and attain measures such as Canada-wide standards for smog. We see very different approaches in Canada and the U.S., and it seems that the only reason for a province to do so—except for doing the right thing, possibly—the only real threat of a province not attaining a standard is potential political embarrassment.

That, from a health point of view, doesn't seem to be quite enough. If there were some mandate given to designate attainment and non-attainment zones, and penalties attached, that might help us a little bit.

I'm wondering if there are any thoughts we can gather on those.

The Chair: The clerk will certainly take note of that. As we examine these hearings and from what we have heard, it's certainly a suggestion we will look at.

Mr. Bigras.

[Translation]

Mr. Bernard Bigras (Rosemont—La Petite-Patrie, BQ): Thank you, Mr. Chairman.

First of all, I would like to thank the witnesses for being here today. Mr. Glover, thank you for the evaluation report. We had been

waiting for it for over seven years, ever since the vote on the CEPA was held.

While reading over your report quickly, I was struck by the difficulty departments have hearing each other and speaking to each other. I will give you one example. Recommendation 1 by the consulting firm you engaged states "[...]Improving the interdepartmental management of CEPA across Health Canada and Environment Canada [...] A little further, it states "[...] makes it very difficult to determine overall CEPA's achievements because of overlaps and gaps in the individual reports."

So your consulting firm is telling us today that it is almost impossible to determine whether CEPA has been successful or not, because of the gaps and overlap among departments.

My question could also be directed to Mr. Moffat. I would like you to tell us specifically what, in your opinion, are the gaps observed in the reports you are required to submit. Where is the overlap among departments? This is important. Within the framework of the legislation, departments have to communicate. Could you tell us about some of the gaps in the individual reports, as well as some of the overlaps you have observed between your two departments.

Mr. Paul Glover: Thank you. That is a very good question, but unfortunately it has no simple answer.

In our view, the major challenge is the issue of partnership — partnership among a number of sections in both departments.

[English]

The challenge we face in measuring performance is that CEPA is a large act. It is shared between Environment Canada and Health Canada, and within the different departments, different areas are responsible.

● (1625)

[Translation]

Each department has a number of sections, and all of those sections have very specific responsibilities.

[English]

One thing that we tried to do with the evaluation was to be very transparent about what we were doing and how we would measure it.

As we did the report, we realized that on new substances, you worry about the specific act and what it says on new substances. On existing substances, you worry about what you have to do with respect to existing substances. If you're in food and drugs, you worry.

[Translation]

Thus, each section of a given department has its responsibilities and its success indicators, naturally.

[English]

What are the things that are important in order to say we've achieved success? We realized that when you added them all up, there wasn't a coherent picture.

[Translation]

So in general it is the overall framework which is lacking. [English]

Specifically, we found that we could measure individual transactions. But when you put the pieces together, was there a shared framework that we all used for measuring success? It's one of the things we've learned.

[Translation]

This report has taught us a number of things. Your answer is that a framework will have to be developed for all parties involved, and for both departments.

[English]

We are working to develop a shared framework that will allow us to have the same success measures among the different parts in the same department and between the two departments.

[Translation]

I hope that answers your question.

Mr. Bernard Bigras: I'm always surprised when I read your reports. CEPA came into effect in 1999. Yet, seven years down the line, you have not yet been able to establish a final interdepartmental strategic plan. Why is it that, seven years after passing the Canadian Environment Protection Act, you have been unable to establish a strategic direction for your actions, and put them into an interdepartmental strategic plan?

First of all, how do you explain the fact that you have been unable to agree on a plan?

Second, can you tell us what your timetable is?

We could amend CEPA, we could spend six months here amending its provisions, but if officials cannot agree amongst themselves on how to apply it, there will be a problem when it comes to application.

How do you explain the fact that, seven years after Parliament voted on CEPA, you still do not have a final interdepartmental strategic plan?

Mr. Paul Glover: The answer to that question is a little easier. It is simply because Health Canada and Environment Canada are extremely busy with meeting the legal requirements in the legislation.

[English]

Health Canada has limited resources, and we're responding to the immediate requirements. When you're in the new substances program and you have 800 notifications, you have a very specific timeframe within which to respond to those. If you don't in that timeframe, they are, by default, allowed onto the market. Stopping to ask what we should do that's strategic matters less when you're trying to keep your head above water.

[Translation]

I hope that is clear.

Mr. Marcel Lussier (Brossard—La Prairie, BQ): I have a question on Canadian environmental sustainability indicators. We have an air quality indicator, a water quality indicator, and a greenhouse gas emissions indicator, but I thought we said there were six possible indicators.

What are the other three? Has Health Canada expressed the intent of establishing a health indicator? Should we be thinking about a food indicator as well?

A little earlier, we heard that PCBs and DDT are found in children's bodies. Should we insist on having food indicators or are foods already checked? What are the three additional indicators we are waiting for? What will we do with the results indicators provide on water quality, air quality and greenhouse gas quantities? What are the recommendations?

(1630)

Mr. Robert Smith: Thank you for your question, Mr. Lussier. I want to start by saying that it is my fault if I gave you the impression that the report refers only to the indicator definition process. The report you have shows the indicators as such and the results of those indicators. It is a statistical report. I wanted to mention that before answering your question.

The other three indicators recommended by the National Round Table on the Environment and the Economy are forest cover, wetlands and human capital. The National Round Table on the Environment and the Economy received its mandate from—

[English]

Mr. Mark Warawa (Langley, CPC): On a point of order, Mr. Chairman, we do not have translation.

Mr. Robert Smith: I can speak in English, if that's preferable.

Some hon. members: No.

Mr. Robert Smith: Is it back?

Mr. Mark Warawa: Yes, it is, thank you.

Mr. Jeff Watson (Essex, CPC): We missed the three indicators, though.

Mr. Robert Smith: I'll quickly repeat it in English.

The three indicators were an indicator of forest cover, an indicator of wetland cover, and an education indicator.

[Translation]

I was just about to tell you why we have five environmental indicators and one educational indicator. This may seem somewhat strange. It is because the terms of reference set out by the Minister of Finance were to establish indicators of overall sustainability, not just environmental sustainability. That is why we selected the indicator of human capital, meaning education, and the five indicators of natural capital, meaning the environment. Those are the other three indicators.

Mr. Marcel Lussier: Did you consider adopting an indicator on health care?

Mr. Robert Smith: Health care was the subject of much discussion during meetings of the National Round Table on the Environment and the Economy, but we did not consider it as an indicator. I can assure you that we discussed health care in depth.

Mr. Marcel Lussier: So you did not see a link between sustainability and health care.

Mr. Robert Smith: Health care falls under human capital, and, in its recommendations, the round table focused more on the environment than on the human aspect. We recognized, however, that health care is important.

We published the air quality indicator last December, and Health Canada is currently developing another version of this indicator, which will further develop the link between air quality and human health. This is the direction of our work, but the research has not yet been completed.

Mr. John Moffet: We are currently doing the same thing with regard to the indicator on water.

Mr. Marcel Lussier: Okay.

In your fifth slide on the statistics, you mention that the data on transportation are available but data on cities are not yet available.

Mr. Robert Smith: The data on transportation will be available this fall. The data on cities will be available next year, and data on the north will be available in 2008.

Mr. Marcel Lussier: Thank you.

[English]

The Chair: Mr. Cullen.

Mr. Nathan Cullen (Skeena—Bulkley Valley, NDP): Thank you, Mr. Chair, and thanks to the witnesses.

I want to step away from this. We're trying to understand today if we're measuring properly and if the measurements that we're using are actually giving us the results in this piece of legislation to protect Canadians' health and the environmental health of the country.

I'm looking at the NPRI list right now, and I can't help but be consumed with the notion that in order to manage you must measure. It seems like there's a certain amount of measuring that's going on, but the indicator that has been mentioned by the panel—and this is particularly for Mr. Moffet and Mr. Glover—of there being fewer toxins released into the environment that can potentially harm people is ultimately one of the key measurements.

Under that one measurement, how have we done as a nation since CEPA has come into effect? Have we done well? Have we done poorly? Or is my premise wrong?

• (1635)

Mr. John Moffet: I think that's one of the measures. I think the other is the one Mr. Glover responded to earlier, and that's what's getting in the human health. This is an act to protect the environment and human health.

One of the things the department is not very good at, frankly, is we collect a lot of data and we're not very good at disseminating it and explaining it. So we have a lot of data about trends with respect to the emissions of substances under the NPRI, and there are dozens of substances, and in fact for the vast majority of substances tracked

under the NPRI the trend is a reduction over time. There are some for which emissions are increasing.

So I think the answer has to be on a case-by-case basis. We've done well on some, on others either we haven't managed them, we haven't managed them adequately, or industrial output or consumption has just increased and offset the reduction measures that we've put in place. I don't think, frankly, it's all that helpful to look at an aggregate number and say overall, on average, NPRI emissions have gone down or up.

Mr. Nathan Cullen: But let's take a specific example. In one of our recent panels we talked about the case of mercury and trying to understand the processes that have been applied under CEPA, and the inability of the government to actually be able to list a single substance in this length of time for virtual elimination.

Mr. John Moffet: There are two points there. The emissions of mercury have reduced significantly, dramatically, in Canada, as they have in most industrial countries. That's a fact.

Have we done enough? I think you heard last week that there are plenty of opinions out there that we haven't done enough, but the country has reduced emissions of mercury significantly through various initiatives of the government and of industry. That's not a static picture, however, and mercury emissions will increase if we start to place a heavier reliance on coal, for example, to generate electricity.

But let me talk a little here-

Mr. Nathan Cullen: Allow me here for a moment, though.... If the claim is true—and I believe it to be—that mercury has gone down because of the valiant work of the government, and Ontario decides it wishes to produce a lot more energy through coal, and mercury emissions go up, what tools have we made available to ourselves to prevent that, a thing we know to be bad for human health?

Mr. John Moffet: The federal government could address the use of mercury-emitting fuel under CEPA, if it wanted to. It hasn't yet, but it could.

Can I speak to the issue of virtual elimination for a second? I think there's a little confusion there.

The federal government, under CEPA, has banned a lot of substances. So to say that we haven't virtually eliminated anything is a little misleading; we've banned substances, which goes well beyond virtual elimination. Virtual elimination is a concept that relates to virtually eliminating the release of a substance. That's not as strict as banning a substance. So we've gone beyond virtual elimination in a large number of cases.

The act sets up a very complicated regime for virtual elimination. The main reason the regime hasn't been used, frankly, is that it's very complicated and imposes what I think have been judged in the past to be unnecessary additional steps that add no environmental or health value. If you ban a substance, what's the merit of adding it to the virtual elimination list? So we haven't added DDT to the virtual elimination list. Should we? That would be a process step that has no environmental or health benefit whatsoever, because it's banned.

● (1640)

Mr. Nathan Cullen: That's appreciated.

Mr. Glover, I just have a process question. When a company wants to introduce a new chemical onto the market or to use a chemical in a new way, where does the onus of responsibility sit right now to prove that chemical is safe?

Could I hear Mr. Glover from Health Canada on that?

Mr. Paul Glover: The onus is on industry to provide data to the federal government, Health Canada, and Environment Canada, in order to allow us to assess that. So they do provide us data, and they make assertations about the safety, and we double-check those.

It's important to know that even with reverse onus for existing substances, that would not be a silver bullet; we would still have to assess and validate all of the claims made by any industry. That's a process we always go through.

Mr. Nathan Cullen: You replicate the tests in Health Canada that the industry has done?

Mr. Paul Glover: No, we set standards with which they must be done. We look for their quality measures to make sure the data we're provided meets those standards and were done to protocols that are internationally accepted. When we're sure and satisfied that those are done, we accept them. There are test guidelines that are internationally accepted and approved, and there are ways to validate and replicate those, so it's not necessary to repeat all of the tests in order to be confident in the data provided to us.

If I may, Mr. Cullen, I'll answer your first question. You asked about the health side and how we would measure. The short answer is, I can't—for the reason we talked about earlier. The absence of biomonitoring means that we don't know what's in people in order to measure systematically if things are going up or down. That is a gap that we have.

I'd also like to point out to the committee that while that is very important, it is also not a silver bullet. We would need to consider where those exposures are coming from. As Mr. Smith said, sometimes it's an environmental release; sometimes it's a product release; and it could be in indoor air, more than in ambient air. It's important for us to find all of the exposure pathways and to take action in an integrated fashion—and not all of those will always rest with CEPA. In fact, some of them might be international.

We've banned it; it's no longer used here, no longer used by companies here, and it's no longer in products made here, but the products are coming in from other countries. Are they declaring that? It's transboundary...getting into the air and ending up here, etc.

Mr. Nathan Cullen: Just as a quick follow-up to that, when we ban the use of a particular chemical in this country, do we also ban its manufacture in total from any export as well? If a chemical or product is deemed banned within Canada, do we also ban it in terms of exportation?

Mr. Paul Glover: Without a doubt it would be banned, and that would mean for use or production here.

Mr. Nathan Cullen: For anything. Okay.

Mr. Smith, I wonder if I could get your opinion on this.

Mr. Rick Smith: Thank you. I have just a couple of quick points.

First of all, the federal government has not been doing the proper measurements. Let me use two examples—trends and biomonitoring. We've already talked about biomonitoring. As far as I know, my organization, Environmental Defence, has published the most ambitious biomonitoring studies in the country to date. Frankly, it's bizarre that the government of the United States and governments all over Europe have tested hundreds of their citizens, and it falls to a Canadian charity to do this rather than the federal government.

Second, on trends, for the last few years PollutionWatch, which is a joint project of my organization and the Canadian Environmental Law Association, has published the most complete analyses of pollution trends in the country. It hasn't been the federal government; it's been our organizations.

I want to take issue a little bit with Mr. Moffet. By and large, the trends are negative. That is, pollution is increasing in this country. We don't need to publish any great quantified studies to convince Torontonians, who deal with more and more smog days every year, or Montrealers, who deal with smog now as they haven't in the past, or folks in the Fraser Valley. Canadians see on a daily basis that air quality is deteriorating. But when you look at the numbers, let me just quote a few statistics. Between 1995 and 2003, if you try to compare apples to apples—so that is, if you only take a look at chemicals that have been consistently reported over that time and you only take a look at facilities that have consistently reported over that time, so you try to compare apples to apples—pollution across the country has increased by 12% between 1995 and 2003.

Another way we tried to take a look at this is by again comparing apples to apples, taking a look at similar Canadian facilities on the Canadian side of the Great Lakes versus the U.S. side of the Great Lakes. Dr. Khatter quoted the statistic "per facility we emit 93% more potentially cancer-causing air pollutants...". So whether you measure in terms of increasing numbers of smog days, whether you measure it in terms of the NPRI reporting every year, whether you measure it in terms of these pollutants in our bloodstreams, pollution is getting worse in this country.

● (1645)

The Chair: Mr. Smith, very briefly please.

Mr. Robert Smith: I don't want to muddy the waters too much, but I'd simply like to point out that statistical analysis of the NPRI data is a particularly challenging undertaking. There are considerable concerns about interpreting the time-series data from the NPRI in a meaningful way. The NPRI, unfortunately, does not provide a comprehensive estimate of any pollutant emission in the country.

Mr. Nathan Cullen: So is it wise to rely on the NPRI?

Mr. Robert Smith: I'm not going to say whether it's wise or not, but I will say that caution needs to be applied in interpretation of those statistics and in the conclusions one draws from them. They are not comprehensive. They don't cover all industrial sources, they don't cover household sources, they don't cover mobile sources. The methodology that's employed in the NPRI is one that is not driven by really true statistical concepts, but a mixture of statistical and policy-oriented concepts. So I would ask the committee to be careful in its consideration of those particular statistics.

The Chair: Mr. Harvey and Mr. Warawa.

[Translation]

Mr. Luc Harvey (Louis-Hébert, CPC): Thank you, Mr. Chairman.

You indicated that 800 new products were analyzed each year. Are these mostly chemicals, or are they also biomedical products, molecules, etc.?

Mr. Paul Glover: They are chemicals.

Mr. Luc Harvey: Only?

Mr. Paul Glover: More or less. The CEPA refers mainly to substances.

[English]

Mr. John Moffet: Well, that number actually includes fewer than ten products of biotechnology a year, so ten out of 800. The rest are chemical products.

[Translation]

Mr. Luc Harvey: You talked about the time needed to conduct this study and you said that, sometimes, when too much time is required, the product is authorized without having been validated.

What is the time period?

Mr. Paul Glover: I don't know the exact number of days. I could provide you with this figure at the end of the meeting in order to give you an exact answer, but the time period is not very long. I think it is less than 100 days. It is very quick. I'm being told that it is 90 days.

If the government thinks that there's a problem, we can take a break and ask for more time. So it is possible to indicate, for a given substance, that more time should be taken.

[English]

So we can stop the clock and say we need more time, but we have to consciously do that; otherwise the product is allowed.

[Translation]

Mr. Luc Harvey: Sometimes we realize after several years that some products are ultimately not what we thought they would be... In medicine, the second and third phases may take up to 10 years.

How can we then, within a 90-day period, complete the three phases for a chemical product?

[English]

Mr. John Moffet: Can I answer?

There are a few answers to that. First, no legal regime is perfect, so your scenario is plausible. The regulations have been designed to ensure that the proponent of the substance provides the government

with information that we believe we need to make that assessment. And it is interesting that these regulations have recently gone through an amendment that was the result of a two-year process that involved stakeholders. This is almost unique in the history of the two departments. That two-year process resulted in a consensus set of recommendations from industry, NGOs, and government about the nature of the information that should be provided. So there's a strong attempt to ensure that we address those issues.

Secondly, if in the assessment we say that we're confident that the use you're putting it to right now is safe, but we haven't been able to think about all the other possible uses to which this substance could be put in the future, the act allows us to do what's called a significant new activity notification. It says you can use it for that use, but if you want to use it for something different, you have to go through the whole process again.

And the third point is that if we do get it wrong, we can still assess it again, but then we have to assess it as an existing substance, not through the reverse onus new substance regime. So it's a substance on the market, it's in use. We can still assess any substance we want and determine whether further action needs to be taken.

(1650)

[Translation]

Mr. Luc Harvey: You said there is too great a workload. Given that the 800 new products being introduced in Canada are probably being introduced at around the same time in European countries or in the United States, why not have a relationship with other governments, for example the American, French or German government, with a view to sharing the workload? There are chemical substances that, on their own, are not harmful to our health but that, combined with other substances, can become dangerous.

Given that information and the fact that there is an infinite number of possible combinations, why not develop more direct relationships with other countries, in terms of these types of studies, in order to speed up the process and be more efficient?

Mr. Paul Glover: The good news is that we do have relationships with other countries. These are mutual relationships. One type of relationship allows for sharing information from product assessments. We also have agreements with various governments. For example, if a government conducts an assessment and we have an agreement with that government, because for example they conduct their assessments in accordance with standards that we accept, then the Government of Canada can accept that country's decision because that is what we would have decided. Thus, there are truly relationships that allow for decision and information sharing. It depends on the information that is provided by each company.

[English]

There are limits based on confidential business information, but there are agreements with other countries.

[Translation]

Mr. Luc Harvey: Fine.

Is this done officially or unofficially?

Mr. Paul Glover: Officially. It is done within the framework of an agreement signed by officials.

Mr. Luc Harvey: There is also the issue of chemical products. Would that include the issue of the presence of hormones in the water? For example, the estrogen contained in the urine of women taking ovulation suppression drugs can end up in our water supply system. Given that estrogen is not filtered out, it can end up in the environment and also in the glass of water of someone living downstream.

Have you studied this?

[English]

Mr. Robert Smith: I'm sorry, I don't have any statistics for you.

We know that we are finding estrogens in water. Part of the presence of estrogens in the water is from the synthetic hormones in birth control pills. One of the things Health Canada is working on is an environmental assessment regime for pharmaceuticals to help control that. We're certainly concerned it adds to the load of estrogens in the environment that people are exposed to. Estrogens are both hormone disrupters and potentially cancer-causing.

• (1655)

[Translation]

Mr. Luc Harvey: How much time do I have left, Mr. Chairman? [*English*]

The Chair: You have three minutes left. I'm not sure if you're sharing with Mr. Warawa.

[Translation]

Mr. Luc Harvey: One of you stated that the arguments that are made for each chemical product can be taken apart or supported depending on your perspective. It doesn't appear that the harmful or beneficial effects of each of those chemical products are mathematical or linear. Why not?

[English]

Mr. Rick Smith: Very quickly, there's very little, if any, human health data on the mixtures of chemicals we're talking about. For instance, we tested for 68 chemicals in our study, and we found 46 on average in everybody. We don't know the human health effects of that mixture of very different chemicals in our bodies.

I should add that it's very different compared to other consumer products in our lives. For instance, manufacturers of automobiles have to give a warranty on the safety of a vehicle before it can be put on the road. If there's a problem with the vehicle, it's recalled pretty quickly. The same sort of safety standard doesn't seem to apply to the chemicals we're talking about.

Mr. Glover has pointed out that there are two different safety standards, one for new substances and one for the 23,000 grandfathered chemicals.

Mr. Robert Smith: I have a comment in terms of what Mr. Smith is saying.

It's very hard for us to study all the different possibilities of mixtures and combinations that can happen.

From looking at some of the studies, we know there is something called "synergy". One substance will have a certain effect and another substance will have a certain effect, but when you put the two substances together, it's greater than the sum of its parts and you

get an enhanced effect. A simple example of that is when ozone, smog, and pollens affect people with asthma. When you put them together, you get an expanded effect in terms of what those things can do.

It's part of the reason we seek a more precautionary approach to assessments of chemicals and to getting rid of them. It's going to be impossible for us to know all the possible combinations and synergies that can occur among the chemicals we're exposed to.

[Translation]

Mr. Luc Harvey: Let's talk about the Kyoto Protocol and our emissions. Even if Canada's population doubled over the next 10 years, we would still be able to meet our CO_2 emissions quota. However, that would not make Canada a less polluted country nor would it necessarily reduce the effects of smog.

Is it more relevant to calculate our emissions based on population rather than on Canada's absorption capacity, water reserves, air volume, and so on?

[English]

Mr. John Moffet: Is there time to respond?

The Chair: Gentlemen, could you just keep your answer very short? I think you could take a day or so to answer that question, so if you could, just very briefly answer it, please. The time is up.

Mr. John Moffet: My response would be that the appropriate way to measure emissions and the adequacy or lack thereof of emissions has to vary on a substance-by-substance basis. If we're talking about a chemical substance that is a carcinogen, for example, you have to ask the question: Where does it have an impact? If it has a strictly local impact, then you need to measure the emissions of the substance within that local airshed. If the substance has some transboundary impacts, then we need to look at those impacts as well, because we're putting it up in the atmosphere and we're causing cancer in other countries.

The third example, of course, is greenhouse gas emissions. This is strictly a personal answer, but I think it's completely inappropriate to measure those based on our land mass. Just because we happen to have inherited the largest and least-inhabited land mass in the world doesn't give us the right to emit more than another country when the problem is a global problem.

So if the problem is a local problem, measure it on a local level. If it's a global problem—

● (1700)

Mr. Luc Harvey: The real question was that at present, we calculate based on our population. Is this a good way to make a calculation, or is it better to do a calculation based on the size of the country or the volume of the air or something?

The Chair: Mr. Harvey, we're going to have to move on. Maybe our guests could try to answer that in another context or in another round.

Mr. Silva.

Mr. Mario Silva (Davenport, Lib.): I'm trying to understand better how you do measurements, particularly around the Great Lakes and St. Lawrence basin, given the fact that's where the largest concentration of our air pollution comes from, in terms of both air and water, because it is shared and there are no borders there between Canada and the U.S. when it comes to air pollution.

How do you go about that? Do you work with the American EPA? How do you manage to get the right data so that we are comparing apples to apples and not apples to oranges?

Mr. Paul Glover: There is the International Joint Commission, and that has a particular focus on that geography. It brings together academia from both sides of the border. It brings together officials and experts, and it's the principal way to stimulate cooperation and develop site-specific work plans so there is cooperation between the U.S. EPA and the governments of Canada—Environment Canada, Health Canada, local, provincial, and state governments, etc. The International Joint Commission is the group that focuses on that area.

Mr. Mario Silva: I'm not surprised that there is a group that's looking at that. What I want to know is how you arrive at your numbers. Are you calculating them using the exact same formula, the exact same measurements, or are there really two different formulas at play?

Mr. Paul Glover: Through the International Joint Commission there are agreements reached between the parties on what to do, what to measure, how to measure. They are specific. There are watershed approaches that are adopted, and joint measures that they attempt to realize.

Some of the problems related to that would be data sources that are different on both sides of the border, how to capture and aggregate that data, but attempts are made to make sure we are comparing apples to apples.

Mr. Mario Silva: At the end of the day, do you arrive at the same information?

Mr. Paul Glover: We attempt to make every effort to.

Mr. Mario Silva: Has that been the case?

Mr. Paul Glover: It has, more or less. I wouldn't suggest that it's universal, but every effort is made to do that.

Mr. Mario Silva: I guess the way you monitor and evaluate these things is very critical. Every time there's a possibility of a new government coming in, whether it is this government or another one, future governments, there might be a fear that you might sort of manipulate the data somehow by taking away something from the equation.

Is there a chance of that? Is that something you're concerned about? Do you see any indication of going in that direction?

Mr. Paul Glover: The International Joint Commission is a signed agreement between the governments involved. It is multi-year, to convince the governments to act on multi-year work plans. Those have sustained the test of changes of governments on both sides of the border through numerous years. Data can always be interpreted, but—

Mr. Mario Silva: There's no fear on your part that somehow that information gathering could change in a little while, is there?

Mr. John Moffet: I've been an observer, not a member of government, for a long time, and I don't think you see a lot of manipulation. I think the issue with respect to changing governments, if I may—and Mr. Glover has spoken of this in a number of cases—has to do with the level of emphasis given to monitoring and reporting, and that is variable.

There are certain things that must be done under the act. We must assess and respond to the substance notifications. We must work our way through the categorization exercise. We must do PSL assessments in a certain period of time. We may do a bunch of other things, including science monitoring and reporting. Even if we must do reporting, how much do we have to do? If we must do monitoring, how much must we do? That, I think, is where you can see a degree of variability through the years.

● (1705)

Mr. John Wellner: Perhaps I may make a quick comment and answer that.

On the International Joint Commission and cross-border apples and oranges, it's important to note, with respect to Mr. Glover, that there are certainly greater opportunities than presently being recognized by bodies like the IJC. The International Joint Commission has commissioners assigned, but on something as important as the U.S.-Canada Air Quality Agreement, their only mandate is to report the concerns of stakeholders on progress reports presented by the two governments at hand, the Canadian and U.S. governments.

We don't actually have an opportunity to evaluate the progress reports or to ask questions about them. We don't have a body that comments on the government's report on that progress. And as a measure of health it's certainly, in our view, insufficient.

Mr. Mario Silva: Thank you.

The Chair: Mr. Warawa.

Mr. Mark Warawa: Thank you, Mr. Chair.

I'd like to start off with a comment to Mr. Smith. I found your toxic reports very interesting. I'm from British Columbia. Robert Bateman is very popular in the art world, as you know, and he lives in an area of Canada that you'd expect the chemicals in his body, the toxins in his body, to be minimal. I was quite shocked, as I'm sure he was. So I found the studies very interesting, and thank you for the efforts you've made.

I'd like to ask a question regarding the 93%. I think you used that figure in the Great Lakes area. I think Mr. Wellner also used that statistic. Is there consensus from Health Canada and Stats Canada and Environment Canada? Do we agree with the figure of 93%? I think that was where Mr. Silva was going. Is there consensus that we have 93% more pollutants coming from Canadian industry in the Great Lakes area than from the U.S. side?

Mr. Robert Smith: Environmental statistics are very much in their infancy in comparison with most other domains of statistics. Economic and social statistics have been around for a hundred years. One of the things that we've achieved in the economic and social statistics to a much greater extent, particularly in economic statistics, than we have in environmental statistics is international comparability, harmonization of concepts, harmonization of methods, and harmonization of data collection activities.

We're a long way away from that kind of harmonization in the world of environmental statistics. So I'm not in any kind of position to say 93% is right or wrong. I am in absolutely no position whatsoever to say that. But I can assure you that the quality of environmental data, as a general rule, in comparison with their economic and social cousins is of a degree of magnitude less.

I'm an environmental statistician. This is what I do for a living. Our view is that the numbers need to be interpreted cautiously and carefully. There's no doubt about it. I don't know whether 93% is the right number or the wrong number, but there are reasons to be careful in the interpretation of the numbers.

Mr. Mark Warawa: Then without using the term "93%", in the Great Lakes area do we have substantially more pollution from Canadian industry than from the U.S.?

Mr. John Moffet: If I can refer back to the comment I made earlier, I don't think it's helpful to say there's more pollution or less pollution; the issue is what kinds of pollutants are there. Mr. Smith can correct me, but I think the point was made in the study about comparable types of industries. The idea was to compare the same types of industries; the point was that comparable Canadian industries emit more of certain kinds of pollutants.

This committee's looking at a wide range of issues. On a large number of specific toxic chemicals, Canada's track record on emissions levels is as good as, or better than, that of any country in the world. On smog-causing pollutants, NOx, SOx, VOCs, particulate matter, Canada's track record, by and large, is not as good as that of the United States. Some provinces are better than others; some industries are better than others. I think the point is that by and large, for smog-emitting, smog-causing pollutants, particularly in the Great Lakes, we're not performing to the same standard.

Mr. Mark Warawa: I'll move on to my next topic, because I'm limited on time. It's regarding the substances that are being manufactured outside of Canada, being imported into Canada, and being used in Canada by Canadian purchasers.

Mr. Smith, in your report you said people who use computers—

Mr. Rick Smith: Yes—and Blackberrys, I regret to say.

Mr. Mark Warawa: I have a garment bag I picked up my clothes in. There are fumes coming off it. I'm not sure what they are, and I don't know if it was manufactured in Canada or overseas; I don't know where it came from.

We are using products that are imported into Canada. Do they meet the CEPA requirements of assessment or not? I thought I heard no, and then I've also heard yes.

Mr. Rick Smith: Can I very quickly correct something said earlier? The 93% statistic that I quoted was actually carcinogens. For

known carcinogens, trying to compare apples and apples on each side of the Great Lakes, our assessment is that the Canadian facilities pollute 93% more. It is actually a narrower suite of chemicals than Mr. Moffet was talking about.

You referred to the chemicals in consumer products; in this area things have really fallen through the cracks of CEPA. I can go down a list of consumer chemicals that are in everyday products in our house; frankly, Canada is increasingly lagging behind the rest of the world in grappling with these things.

My son has squeaky bath toys—little rubber ducks and various little animals. The chemicals that keep those toys pliable are called phthalates. It's an example of a chemical that Europe is moving to phase out; they're of great concern in other jurisdictions around the world; there's been essentially no action in Canada.

Bromated flame retardants are painted on a lot of upholstery and are in a lot of computers. Again we see jurisdictions around the world taking action; there has been very little activity until recently in Canada.

I can go down a list of chemicals that are in your garments or on the chair you're sitting on. This is a particular area in which the federal government has lagged behind the rest of the world in risk assessment and attention.

In fact, I should tell you that in the last two years, in answer to a question from us directly to the federal government as to whether these things are even covered by CEPA, we've received two entirely different—diametrically different—answers. A couple of years ago we were told no; more recently we've been told yes.

At the very least, I would suggest the committee delve into this a little bit and assess the extent to which these things are covered by CEPA—or not. At the very least, it needs some clarification.

The Chair: We will now go on to Mr. Bigras.

Hopefully, Mr. Khatter, you can get that in in a future question.

Mr. Bigras.

[Translation]

Mr. Bernard Bigras: Thank you, Mr. Chairman.

I have two brief questions. My first question is for Mr. Moffet or Mr. Glover.

In terms of the marketing and use of certain chemical products, I would like to know if the ministerial processes include a mechanism for pre-authorization of certain substances or products, a type of pre-authorization to market a product subject to a final assessment on the part of Environment Canada or Health Canada.

Can a product be pre-authorized based on information currently available, but then be withdrawn after the analysis has been conducted? One of the Commissioner of the Environment's reports mentioned pesticides that were registered but that could be withdrawn on the basis of assessments of their impact on health and the environment. Does the same apply to chemical products?

(1715)

Mr. Paul Glover: It is not exactly the same procedure for new products. There is a process of notification and assessment.

[English]

When we see a product that will take some time for us to evaluate we can indicate that we need more time, and that essentially stops the clock so that we have more time to conduct that analysis. While we're doing that, the government has a number of choices. We can indicate that these are the allowable uses, while we're doing that evaluation, or we can indicate that there are no uses allowed until we conclude on our evaluations. So we have a choice, but there is not a pre-allowed condition. There isn't a pre-authorization that exists.

[Translation]

Mr. Bernard Bigras: So some products can be used and marketed conditionally and then withdrawn at a later date. They can be used in some cases.

[English]

Mr. Paul Glover: No, we would not do that. There is no preauthorization. If we have a new product that comes forward, we will assess it. If we find we need more time than is allowed, we'll say "Stop, we need more time. We can do the assessment." If we are confident that some uses are reasonable, we can condition it for those uses only while further work is done, or we can limit its use to only those. So we have a choice.

The potential you are talking about should not happen.

[Translation]

Mr. Bernard Bigras: Have you ever, in cases where there have been assessments, told companies that they had to restrict the use of a product? That is what I understood from your statement.

Mr. Paul Glover: Yes, of course.

Mr. Bernard Bigras: Have you ever, in the past, not only told a company that the product's use had to be restricted, but that it had to be withdrawn? Has that restriction, based on a final assessment, ever become a withdrawal of the product?

[English]

Mr. John Moffet: I think we're maybe confusing new and existing substance regimes a little bit. For a new substance, the substance cannot be used until we say so. So there's no going back and saying now you have to take it off the market. You can't put it on the market until you've gone through this process. So that's the new substance regime.

For the existing substance regime, we are explicitly talking about things that are in use. When we say here are the rules, the limit in which you can omit it or use it, or when we say you can no longer use it, then we're absolutely imposing a new obligation on an existing industrial or commercial process or use. And in some cases we're requiring that activity to cease.

[Translation]

Mr. Bernard Bigras: My second question is for Mr. Smith.

Your recommendations, including those on the importance of reducing pollution in the Great Lakes Basin, do not appear to include the polluter-pays principle. You recommend, among other things, allocating new money for the cleanup of sensitive areas in the Canadian Great Lakes.

Do you not think that, according to the principles of polluter-pays and businesses being accountable, those companies should participate in a fund in order to ensure that the polluter-pays principle is truly being enforced and that taxpayers will not end up being responsible for the negligence of certain industrial sectors?

● (1720)

[English]

Mr. Rick Smith: Yes, we certainly agree with the idea of "polluter pays". That's one of the fundamental concepts of modern pollution legislation.

With respect to areas of concern around the Great Lakes, some of these are legacy areas. I believe there are 17 or so identified areas of concern on the Canadian side of the Great Lakes. As a nation, I think we've cleaned up one of those; I would have to check on that, but I think that's roughly correct. We have a poor record, to say the least.

In terms of pollution of the Great Lakes, I think we need to require polluters to pay to clean up their pollution, but the Government of Canada also needs to invest more. If you look at what's happening on the United States side, there's a huge bipartisan effort at the state level, in Washington, D.C.—I mean, billions of dollars on the table—to clean up the U.S. side of the Great Lakes. Again, why bipartisan support? I think—I believe I'm correct—that in Budget 2005, the federal government allocated \$45 million Canadian to Great Lakes cleanup.

Regardless of how you measure it, whether it's political attention, political priority, money on the table, or engagement with the big polluters, the Government of Canada has not been doing its job with the Great Lakes and the St. Lawrence basin.

The Chair: Mr. Watson, please.

Mr. Jeff Watson: Thank you, Mr. Chair.

I'm finding some of the discussion very helpful. We're obviously getting down to problems of implementation. We've identified interministerial management gaps; you've identified limited resources as being a challenge to implementation.

I have a few other questions here. In the "Bearing Point" report here, we expect that the domestic substances list will be completed by September 2006. It's a requirement of law; that's an outcome that is required within the legislation itself, if you will. Are there other requirements that we need to be putting into CEPA? In other words, are there other outcomes that should go into CEPA itself, and if so, can we be specific about what should be in there? I don't want to get into processes; I'm talking about specific outcomes and types of outcomes that should be in CEPA itself.

Anyone on the panel is free to answer that question.

Mr. Paul Glover: I think there are certain limitations with respect to how I can answer that question.

There is one thing I would like to point out to members in terms of our discussion today. We've had a lot of talk about ambient air. I would like to remind the committee, as it does its work, that we have one set of lungs; we breathe air, indoors and out; and we spend 90% of our time in a built environment. That is not to diminish the importance of ambient or outdoor air. We've done the studies that show the number of premature deaths attributable to smog and other bad air quality, and that on a bad air day hospital admissions go up.

At the same time, as we consider the importance of ambient air, we should be cognizant that it's one set of lungs. That bag you talked about opening up, that's in a built environment. We need to be very careful about the built environments and the pollutants and substances that we find in that area as well. They also have health implications, as we're seeing. We need to be careful about that as we move forward.

Dr. Kapil Khatter: Mr. Watson, as you mentioned, the categorization process of the domestic substances list is just finishing. One of the things we can think about in terms of outcomes is what we are doing with the substances that have been flagged in that process as being the worst actors. We have substances that Health Canada and Environment Canada have now determined are toxic to humans and the environment, and that are persistent in the environment. In terms of outcomes that can be put in CEPA, we can think about the mandatory timelines for when we deal with those particular priority substances and what kinds of action plans we're looking for to make sure that with these real baddies—we're talking about 100 out of 23,000—something is done about them promptly.

Mr. Jeff Watson: Regarding the terms of the surveillance we're doing, are we simply choosing the wrong types of surveillance? Should we be looking at something much different, or are we just using the data incorrectly? I guess I'm just looking at the construct of CEPA itself. Are we doing the wrong types of things? Should we be doing something different with respect to surveillance or monitoring or reporting, that type of thing?

• (1725)

Dr. Kapil Khatter: I think we'd support Health Canada's position that bio-monitoring needs to be done, that there needs to be a better measure of the changes in chemical exposure reaching humans, in particular, in the environment in Canada. There is more in CEPA to establish environmental indicators than human health indicators.

At the same time, we don't want the wait-and-see approach—"Let's continue to do more research on these potentially toxic chemicals in people's bodies to see how they're going up or down."

On the ones we're seeing in people's bodies that we know are sticking around and are having a human health impact, we think we should be moving very quickly to eliminate them from our environment.

Mr. Jeff Watson: You're suggesting there's both environmental and human health "low-hanging fruit" and wondering whether those outcomes or targets should be in CEPA itself.

Dr. Kapil Khatter: Yes, and we're in the process right now of figuring out what that low-hanging fruit is.

The Chair: Mr. Wellner.

Mr. John Wellner: Thank you, Mr. Chair.

On the issue of measures and what we might ask for, we talked earlier about the challenges of NPRI and some of the indicators we need to see in the emissions. One of the greatest challenges, and one that is essential to health, is the ability to transfer what the emissions are to the actual exposure, be it ambient or wherever the exposure may occur, and the human intake. We have still not managed that. If we could move to a measure where we could identify exposure, that would be great.

I think it was Mr. Smith rather than Mr. Glover who mentioned it, but there are indicators being developed, and one being developed by Health Canada that I think could be a very helpful tool has the acronym AQBAT. It's an air quality evaluation model of some sort that actually identifies a way to plug policies into atmospheric models, etc., to give us a more detailed understanding of what we're going to get out of particular policies. I think cross-party support for these types of initiatives will certainly help us have better health measures down the road.

The Chair: Mr. Smith, if you would, be very brief. Then we'll go quickly to Mr. Cullen, and that will be the last question.

Mr. Robert Smith: Just in response to Mr. Watson, the only data collection activity I know of that's mandated by CEPA is the NPRI. There are clear shortcomings in that particular data collection activity, so it would be, I think, a shame if this review of CEPA didn't look at the NPRI in some detail and take into consideration its particular shortcomings as a data collection vehicle.

The Chair: Mr. Cullen.

Mr. Nathan Cullen: Thank you, Mr. Chair. I'll keep this brief.

Mr. Glover, in one of your statements you talked about how chemicals go through the process while the clock is ticking, and if you don't finish and complete the assessment, they automatically default to having passed screening. Is that correct?

Mr. Paul Glover: We have a very specific timeframe at Health Canada and Environment Canada to assess new substances. The default is, I believe, 90 days—I would like to confirm that with the committee—at which point in time we have two choices: to render a decision, or indicate we need more time. Failure to do either of those allows the substance onto the market.

Mr. Nathan Cullen: Could you present to the committee how many times since CEPA's existence a default has happened? Has it been zero times?

Mr. John Moffet: That's my understanding. We've never reached a situation where a substance went on the market we were not comfortable seeing go on the market.

Mr. Nathan Cullen: How many folks in each of your departments are specifically assigned to the assessment of new chemicals coming onto the market?

Mr. John Moffet: We'll have to get you that information.

We can all take issue with existing substances, but the new substances regime in Canada is held up as possibly the best in the world. The only country in the world that has legislation that automatically recognizes other countries' decisions is Australia; the only country they've recognized is Canada. So let me respectfully suggest that the real issue that needs to be focused on is the assessment and management and the prevention of risks from existing substances. That's where the challenges lie.

● (1730)

Mr. Nathan Cullen: I'll take you at your word for that. I would also like to see the number of staffing people committed to this, and also, if it's possible, what that level's been like over the last ten years.

The Chair: Perhaps you could get that to the clerk, Mr. Moffet.

Mr. Nathan Cullen: Mr. Khatter, did you want to comment on that?

Dr. Kapil Khatter: I think we agree with Mr. Moffet that the issue is with existing substances. When we look at the mandatory timelines that are there for new substances and the resources that are put into it, if we put those same kinds of resources and timelines into putting the burden of proof on industry to submit data for the existing substances, we could get the same kind of job done.

We're putting 800 substances through new substances notification per year. We could be doing the same thing through existing substances as well, but we aren't choosing to do that.

Mr. Nathan Cullen: That is interesting. On the grandfathering process of the 23,000, which is the number thrown around, is there no federal government assessment of those 23,000 chemicals?

Mr. John Moffet: We've referred to the categorization exercise. CEPA 1988 didn't address those substances other than to say you must establish a priority substances list and you must assess those, and in addition, you can assess anything you want from that list.

CEPA 1999 said you must categorize all 23,000. The categorization is not an assessment.

Mr. Nathan Cullen: It's placing them into various categories of potential threat.

Mr. John Moffet: Well, it's identifying certain hazardous characteristics associated with each of those substances. That exercise is completed and will be formally finished in September. That exercise has never been done anywhere else in the world. What we do with that information is going to determine the future of chemicals management and the safety of Canadians and their environment from chemicals in the future.

Mr. Paul Glover: We have submitted to the committee.... We do assessments of those existing substances. We've completed assessments. Some 69 were published through the *Canada Gazette*, part I

and part II, representing some 550 of the existing substances. So there is work to go through those as we think there are issues to attempt to complete. So it's not like there is no work whatsoever. We have categorized and we do risk assessments of those existing substances.

Mr. Nathan Cullen: You've done 550 risk assessments so far?

Mr. Paul Glover: I want to make sure exactly what the numbers are.

Mr. Nathan Cullen: But it's in that ballpark.

Mr. John Moffet: We haven't done 550 assessments. We've done fewer assessments that cover 550 substances.

Mr. Nathan Cullen: Out of the 23,000?

Mr. John Moffet: Yes. You can cover more than one substance in a single assessment.

Mr. Nathan Cullen: Mr. Levy, one of the things we struggle with as we talk about the various families of compounds and chemicals is the causality. Industry will often say to us, well, it's much like the cigarettes conversation for so long: it's impossible to prove. Is there anything within CEPA as a piece of legislation or that needs to be put in to increase our certainty in times—and this speaks to the precautionary principle a bit—and avoid the 20-year, 30-year-long conversations of industry being able to fall back and say you don't have perfect science on this, therefore you can't ban a substance out of the market?

Dr. Isra Levy: Certainly I don't think you can avoid those conversations. In a way it comes back to Mr. Watson's question. I'd say the generic answer to what we could do to enhance the science base that CEPA facilitates is to create obligations, not permissions, at the very generic level. So let's collect the information that's meaningful and relevant.

Secondly, invest in the biomonitoring. I think that's clear. Now, whether that needs to be legislative or some kind of implementation tool, I wouldn't venture into how one does that, but invest in the biomonitoring.

Pertaining to your question, the third comment I'd make is build evaluation frameworks that are robust and that allow for solid interpretation, given the epidemiological limitations. Epidemiology is ultimately a crude tool. Into the future, that might improve a little bit, but the debates are going to be there forever.

I thnk the precautionary principle is a very valid approach to take. You use risk-monitoring approaches, and as long as the evaluation frameworks are constructed in a robust way that withstands transparent scrutiny by all sides of the debate, I think that's probably the best you can do.

● (1735)

The Chair: Thank you, Mr. Cullen.

I'd like to thank our guests for being here. I think you've opened up a lot of questions, and we might well need to have you back again to look at some of those. I think there have been enough questions here to cause that.

The meeting is adjourned.

Published under the authority of the Speaker of the House of Commons Publié en conformité de l'autorité du Président de la Chambre des communes Also available on the Parliament of Canada Web Site at the following address: Aussi disponible sur le site Web du Parlement du Canada à l'adresse suivante : http://www.parl.gc.ca The Speaker of the House hereby grants permission to reproduce this document, in whole or in part, for use in schools and for other purposes such as private study, research, criticism, review or newspaper summary. Any commercial or other use or reproduction of this publication requires the

express prior written authorization of the Speaker of the House of Commons.

Le Président de la Chambre des communes accorde, par la présente, l'autorisation de reproduire la totalité ou une partie de ce document à des fins éducatives et à des fins d'étude privée, de recherche, de critique, de compte rendu ou en vue d'en préparer un résumé de journal. Toute reproduction de ce document à des fins commerciales ou autres nécessite l'obtention au préalable d'une autorisation écrite du Président.