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**EVIDENCE**

## Monday, October 6, 2014

## Chair

**Mr. Harold Albrecht**

# Standing Committee on Environment and Sustainable Development

**Monday, October 6, 2014**

● (1530)

[*English*]

**The Chair (Mr. Harold Albrecht (Kitchener—Conestoga, CPC)):** I would like to call to order the 30th meeting of the Standing Committee on Environment and Sustainable Development.

Welcome back, with a special welcome to Stella Ambler, a new committee member—at least for today. At some point we hope we can reconvene officially as a new committee.

At this point we'll carry on. As you all know, we are continuing our study as stated in the minutes:

> That the Committee undertake an eight (8) meeting study on the management of municipal solid waste and industrial materials. This study will focus on (a) technological innovation in such management; and (b) best practices of provincial/territorial/municipal jurisdictions.

Today I believe we are at our fifth meeting in the study. Our witness is Dr. Stan Blecher from Port Hope Residents 4 Managing Waste Responsibly.

Welcome, Dr. Blecher. We will have an opening statement from you, for up to 10 minutes, followed by rounds of questions from government members and members of the opposition.

Welcome to our committee. Proceed.

**Dr. Stan R. Blecher (Port Hope Residents 4 Managing Waste Responsibly):** Mr. Chairman, and ladies and gentlemen, thank you very much for the invitation to address you. I consider it an honour and a privilege.

I will start with a few words about my background. I will then present my reasons for seeking an audience with this committee, namely, to prevent polluters from getting to damage our environment and exposing citizens to cancer by misleading authorities through false claims. The main thrust of my presentation will be to document the disreputable record of falsity of the polluters I am referring to. I will then mention my vision of how waste can be managed without recourse to polluting technologies.

First, to help you assess the validity of what I will say, I will state my qualifications. I am a medical doctor and a specialist in medical genetics on both the clinical and research sides. I am a fellow of the Canadian College of Medical Geneticists. I am an emeritus professor of molecular biology and genetics and an emeritus director of the School of Human Biology at the University of Guelph, in Ontario. During my career, I held a World Health Organization fellowship in human genetics and a U.S.A. Fulbright fellowship in cellular genetics.

As a doctor, I am passionate about human health, and as a medical geneticist I am obsessive about preventing those terrible diseases such as cancer that arise from preventable genetic damage from pollutants. I have been active in campaigns against cancer-causing agents such as tobacco smoke and radioactive contamination. I am also a passionate Canadian citizen.

It is these two passions for human health and for Canada that aroused me to action when I learned that blatantly false and misleading information about a potential environmental cause of cancer had been given to this committee of the House of Commons of the Parliament of Canada. I viewed this as an act of contempt toward Canada's most prestigious institution.

I am referring to the testimony given to this committee on June 5, 2014, by senior executives of an incinerator company, Entech-REM. After seeing a transcript of that evidence, I wrote to you, Mr. Chairman, and in citing references to the scientific literature, I outlined two specific examples from amongst the many examples of misinformation given to your committee. I am grateful that this has led to your kind invitation to appear here today.

I believe members of the committee have seen my original letter, so here I will only briefly summarize the two items I mentioned as examples.

The executive vice-president of the company, when asked whether the incinerator they wished to build in Port Hope, Ontario, would emit toxic substances, indicated that only carbon dioxide and water vapours would be emitted, but the company's own environmental screening report admitted to 18 cancer-producing poisons being released. When asked about the local resistance to the project, the executive VP replied that “local resistance is really such a small percentage”. But in rejecting Entech-REM's application for zoning and official plan amendments, Port Hope council cited the “overwhelming community opposition to this application”. In the recent Ontario provincial elections, local riding candidates from all parties —Conservative, Liberal, NDP, and Green Party—declared themselves opposed to this incinerator.

Incineration, which this company is trying to foist on an unwilling municipal council and citizenry of Port Hope, constitutes a major threat to the health and well-being of humans and all life forms. In my letter, I briefly referred to the scope of the deadly emissions from the incinerator. I will be happy to provide more information in the question period, but here I wish to use my remaining time to explain in greater detail the very disturbing nature and extent of the misinformation that the company Entech-REM has been spreading far and wide, including in testimony to this committee. It is my hope that in doing so I may contribute to preventing heedless polluters such as Entech-REM from spreading cancer around our country.

Entech-REM has systematically misinformed the public and decision-making agencies for the five years of the company's existence. In a moment, I will mention a few specific examples, and in a written brief that I have also submitted today, I list the company's top 20 items of misinformation. The flood of misinformation is substantial and, when believed, is dangerous to public health.

We, the members of the grassroots incorporated non-profit organization Port Hope Residents 4 Managing Waste Responsibly are left wondering: what will it take to bring the miscreants to account? Entech-REM has spread its misinformation by way of advertisements and statements in newspapers, on the radio, on websites, in fliers and circulars, and in presentations to municipalities, to the Government of Ontario, and now to a parliamentary committee.

The most important items of their misinformation include, first, false advertising of the nature of their technology and, second, false statements about their past credentials. They have repeatedly promoted their technology as being clean and green, but the scientific literature indicates that some 250 poisonous emissions are given out by incinerators, and as I indicated in my letter to you, sir, and as mentioned above, even their own environmental screening report admitted to 18 cancer-producing toxins, as well as unlimited amounts of carbon dioxide, the major greenhouse gas.

They have used spin to give the impression that their process entails recycling, but it does no such thing. They also use spin to suggest that it produces no landfill, but their own data reveal that it will produce 16 tonnes per day of bottom ash that would end up as extremely toxic landfill. They promote their system as unique, proven, and, at the same time, cutting edge, but gasification is in fact an obsolete and widely failed technology.

They initially successfully convinced the decision-makers in Port Hope that they have a splendid past record in building and managing so-called clean and green waste-to-energy plants until we did due diligence and showed that the claims of past experience and success were false. Entech-REM has never bought or managed an incinerator or waste-to-energy plant. They proposed to process 550 tonnes of household and industrial waste per day in Port Hope. The only Entech plant for which documented information exists, and the one that Port Hope officials site-visited, is a small project in Poland that processes only 3.5 tonnes a day. That's 3.5 tonnes compared to 550, and that's medical waste, which is much less challenging to process than household and industrial waste.

Worst of all, concerning credentials, they claimed in their advertisements to have plants in places where they do not. These include Australia and Hong Kong. Our due diligence discovered that these plants do not exist. At our instigation, these items of misinformation were directly challenged and the non-existence of the two plants was admitted, respectively by the company's president and their VP of engineering.

The now former executive VP, the person whose misinformation to this committee I drew your attention to, stated publicly in the Port Hope council chamber that the proposed project for Port Hope had been “endorsed by the Province of Ontario”. We knew this to be untrue. We sought official comment from the provincial Ministry of the Environment and we received official confirmation that this claim was false.

In my profession, if someone were discovered to have falsified their credentials while negotiating for a position, it would not only bring the negotiations to a screeching halt, but the person would also be instantly struck off the medical register. In this case, the company's falsifications have been repeatedly documented, but the company remains in good standing. If government agencies continue to allow the company to conceal its tarnished record and to brush aside our outing of the falsifications, the community at large will be exposed to poisoning of the air, water, and land, of the vegetation and crops, and so of the livestock, fish, poultry, and dairy products. What we breathe, drink, and eat determines life.

We, the concerned citizens, are puzzled that a polluting industry such as incineration is even given any serious consideration at all. We conclude that it is because the industry spin is so effective that it pre-empts the enlightened trend towards social acceptance of the three Rs: reduce, reuse, and recycle.

I know that members of this committee need no convincing of the wisdom of the three Rs, but I cannot leave it unsaid that we believe from our research that in our area of Port Hope and elsewhere a thrust toward further developing our recycling program would not only protect our community's health, it would also serve our economy. An incinerator in our area would cause job loss in our most important industries: agriculture and tourism. Recycling has been shown to conserve much more energy than waste-to-energy programs can produce, and recycling would provide a major source of local jobs and community prosperity.

● (1535)

In conclusion, we wonder how long this company can continue to get away with systematic deception. The company, evidently, believes it can fool most of the people most of the time. How much further can this go? I am deeply disturbed that the company has gone so far as to make false statements to a parliamentary committee. I respectfully appeal to you to make clear to the Canadian public that you, the committee, find false testimony unacceptable.

Thank you very much.

**The Chair:** Thank you very much, Dr. Blecher.

I'm going to move now to the opening round of seven minutes each. We'll move first to the Conservative Party.

Mr. Carrie.

● (1540)

**Mr. Colin Carrie (Oshawa, CPC):** Thank you very much.

Thank you, Dr. Blecher, for being here.

One of the things we're looking at in this study is best practices. I'm really interested in your opinion. What type of waste management strategy do you support? You mentioned recycling, but my understanding is that not everything can be recycled. What strategy do you support and think is the best?

**Dr. Stan R. Blecher:** Sir, we already have in our area in the town of Grafton, which is close to Port Hope, a recovery centre. That plant very successfully separates materials that are recyclable and sends them to recycling plants elsewhere, out of town, and, I believe, very largely in Toronto. So I would very much like to see our area, our municipality, and our county promote recycling by encouraging the establishment of recycling plants so that we wouldn't have to be trucking the material out of our area and to other areas for the actual recycling.

I believe there's no question that the future of waste management is definitely in recycling. There are many centres in the world that are succeeding with this, even in an area as close to our own as Markham, north of Toronto, which has achieved a success rate of over 80% diversion from landfill in recycling. Areas in the United States, such as California, are in the high eighties and approaching 90%. The goal of reaching 100% diversion is a realistic one, and it really can be done.

**Mr. Colin Carrie:** That goes into my next question. Where do you think the best practices are around the world? Who do you think are the world leaders in waste management?

I had the opportunity this summer to spend a little bit of time with the environment ministers of each province. Even in our own country, there are certain provinces, such as in P.E.I. and Nova Scotia, that are doing a really good job versus other ones. As I said, one of our purposes is to see what we can come up with and let Canadians know what the best practices are.

But ultimately, there still is some leftover waste that cannot be recycled, some of this in Canada. I think most of it ends up in a landfill. Would you be able to tell the committee who you think are world leaders and who we should be looking at?

**Dr. Stan R. Blecher:** I'm afraid I'm not an expert on that, sir.

I do know that California is a world-leading area. California aims to reach 100% diversion by 2020, and it's well on its way.

I know that some countries in Europe have been notorious for doing a lot of incineration and are reforming themselves. For example, Denmark, a country I know a little bit about, used to be known as the world's incinerator champion. Last year, its minister of the environment, a lady called Ida Auken, declared that Denmark, having been the world's leader in incineration, has now seen the light and is going to switch from incineration to a recycling program. Sweden is following suit. Other countries in Europe are doing great jobs in recycling.

I read the testimony of your last meeting. A lady and a gentleman were interviewed. Information came forward from their testimony about the remarkable advances in technology that are taking place in Europe, which now, for example, allow automatic separation of different kinds of plastic. This is quite incredible.

The recycling industries promise tremendous growth in the economy. They promise tremendous numbers of jobs and a great move forward in the economy. It's a new industry that I firmly believe should be encouraged. I would love to see this committee, our country, and our provinces endorse and support this as a new and upcoming industry.

**Mr. Colin Carrie:** I think most people around the table here would certainly agree with you. I'm wondering, though, if we could get back to my first question. I just want to explore it a little bit more.

Let's just say, as an example, that we are able to recycle most of it but we do have an end amount that we have to do something with. We're faced with a couple of options. In Canada most of the time they just put it in a landfill, other countries do incinerate, and there's new technology. You've heard of Plasco and some of the things they're looking at.

What do you think is the best method of getting rid of that last leftover bit of waste that you can't recycle? Are there pros and cons on the different end routes of diversion? If you can get most of it recycled and you have only a little bit left, which method do you think we should use to get rid of that last little bit?

● (1545)

**Dr. Stan R. Blecher:** I regard that problem as a temporary problem. It's an interim solution we need, because the time will come when we'll be able to recycle everything. The interim solution should absolutely not be incineration.

There are now methods of doing landfill—and I say this with caution, because I don't want to be seen to be advocating landfill—in sealed containers, which totally prevents any leakage out into the groundwater. I believe that the small amount of residual material—if we now could reach, as Markham and California are reaching, and Halifax, for example, over 80%, and approaching 90%, and heading for 100%—should be committed to this secure and insulated landfill, again as a temporary solution to the problem until new recycling techniques are developed.

As we have not yet made a thrust towards recycling as a new industry, this remains to be done. It remains to be developed. But from the reading I've done—everything I've read convinces me—I'm absolutely sure that the time will come when everything will be recyclable. We have to encourage manufacturers to make materials that are recyclable. We have to discourage manufacturers from making unrecyclable plastics, for example. Packaging must be made in materials that are recyclable.

I believe an entire switch in our mentality and in the industrial approach to this problem is necessary, but it can be done and it will be the ultimate solution.

**The Chair:** Thank you.

Thank you, Dr. Carrie.

We'll move now to Mr. Choquette, for seven minutes.

[*Translation*]

**Mr. François Choquette (Drummond, NDP):** Thank you, Mr. Chair.

Before I ask my first question, I would like to come back to this study, which we conducted a while ago. We did that before the summer break, a period during which we worked in our constituencies. I am trying to find a quote from one of our witnesses. I will have found it by the next meeting. That witness mentioned that Canada had one of the worst track records in the world when it comes to waste management.

That struck me even though, at first, I was wondering why we were studying this issue rather than Arctic pollution or GHGs, for instance. But given this information, I figured this study may be relevant.

Mr. Blecher, you talked about a number of issues, and I would like to go back to one of them.

Of course, waste management comes under municipal and provincial jurisdictions, but it is also a federal responsibility.

What are the most important measures the federal government, within its jurisdiction, should implement to improve the situation in terms of waste and health quality? As you said, the environment and health are closely inter-related.

[*English*]

**Dr. Stan R. Blecher:** Well, I wish I could give a sensible answer to that question, sir. I would love to see better coordination of waste management procedures in the different provinces coming from a federal coordinating body. I would love to see a general change in the philosophy in our country, a move towards a philosophical acceptance that the three Rs and recycling are the mode of the future. I would imagine, and I think I believe strongly, that a federal body and a federal parliamentary committee such as this could strongly influence that philosophy and the change of mindset that we need.

I think that it's very fundamentally a change of mindset; I think people need to be encouraged to understand that it may be a little bit of extra work to put your plastic cans into a recycling bag instead of dumping them into the garbage. It's not a great effort and it's not a great cost, but it's a matter of encouraging people to get into the habit. This is how the communities that have done so—for example, Halifax, Nova Scotia—have accustomed the citizens to understand this and to believe that it's something in everyone's interest and for the community's benefit.

I'm not an expert on the political side of things, but my sense tells me that what could come from the federal arena would be a thrust in supporting this philosophically, and then a systematic attempt to educate and to change attitudes.

● (1550)

[*Translation*]

**Mr. François Choquette:** Thank you very much.

The attitude and actions of every Canadian, as well as companies and corporations, are very important. Everyone must play an active role in this initiative.

You talked about using waste incineration to create energy. Concerning air quality, you also talked about the polluting emissions the incineration process releases into the atmosphere.

The air quality issue falls largely under federal jurisdiction, since air flows among provinces. So what measures do you think the federal government could adopt to reduce the air pollution caused by incineration?

You even mentioned that greenhouse gases may be the product of that process. I would like you to elaborate a bit further on this.

[*English*]

**Dr. Stan R. Blecher:** I'm reluctant to speak about measures that can be taken to mitigate the effects of incineration, because my thrust is that there should be no incineration. I would like to see whatever can be done to simply bring an end to incineration.

The reason why incineration still exists to this day—and it exists, as we know, in various parts of Europe as well—is that the people who promote incineration, the incinerator executives of the companies, do precisely what was done in the case of the witnesses I'm speaking about who appeared before your committee, that is, they present a story as if they put across the idea that incineration can be clean.

No one can expect the ladies and gentlemen of this committee and similar committees worldwide, all with the best of motives for promoting the environment and the health of a nation, to be experts on all the technologies they're confronted with. No one can expect anyone here in this room to have sat here and known that what was being said to them at the June 5 meeting that I'm referring to was not correct.

These people get away with it. They convince governments and decision-making bodies that what they have as a product is safe and clean, and this is false. My view is that what governments can do is promote the understanding that this is not a safe and clean technology.

[*Translation*]

**Mr. François Choquette:** Like you, I think it is very important to think about the four Rs: reduce, reuse, recycle and recover. I completely agree with you. As you said, we have to change our practices and attitudes in order to move forward. This is a major challenge.

I had another question for you, but unless I am mistaken, my time is up.

[*English*]

**The Chair:** You still have ten seconds.

[*Translation*]

**Mr. François Choquette:** Did you say 10 seconds?

[*English*]

**The Chair:** Finish your question.

[*Translation*]

**Mr. François Choquette:** It will be a bit difficult to finish my question in so little time.

Be that as it may, I wanted to talk to you about the process developed by Enerchem. The process does not involve incineration, but the creation of biofuels. I would have liked to hear your comments on that. You may be able to talk about this later on.

[*English*]

**The Chair:** Unfortunately, his time is up.

We may have an opportunity to come back to the thread of the question.

We're going to move on now to Mr. Sopuck for seven minutes.

**Mr. Robert Sopuck (Dauphin—Swan River—Marquette, CPC):** Thank you, Mr. Chairman.

It's great to be back at the environment committee after this hiatus.

Dr. Blecher, the industry was telling us, of course, that all of these plants would have scrubbers put on them. Could you tell us what compounds are emitted even after the scrubbing process? Could you be somewhat specific in terms of what compounds would be emitted?

● (1555)

**Dr. Stan R. Blecher:** Well, I could. I have a whole list of them here.

First and foremost, there are many heavy metal poisons, such as arsenic, lead, mercury, antimony, molybdenum, chromium, copper, or cesium. There are literally hundreds of them.

One of the most important substances that have come to light and have been studied in recent times are the minute, little particles of ash called nanoparticles. Nanoparticles are a fairly recent discovery. They are little bits of ash that are about one-millionth the size of a pinhead. They are very minute, and you might wonder if they're so minute whether they do much damage. The reason they can do so much damage is precisely that they are so minute.

Our lungs are constructed to prevent foreign bodies from getting through the airways of the lungs and into the blood, but there is a little pore system inside the lungs, which is very, very minute, and it's normally there to allow only oxygen to get through into the blood and to go around in the blood circulation to the various organs, including the brain.

These nanoparticles are so small that they are the size of molecules, and they can get through these little pores that are actually meant to let only oxygen in. They get into the blood. They can get into all the internal organs—the brain, the heart, the lungs, the liver—and they carry with them these highly dangerous poisons I mentioned, including lead, arsenic, mercury, chromium, cadmium, and all the other heavy metal poisons.

The filter systems that incinerators have on them, which these salesmen will tell you filter out all the poisons, cannot do that. There is a massive amount of research on this. There certainly have been improvements. There certainly are fewer emissions now than there were previously. But here's the point: a small amount of these poisons is about as bad as a big amount of these poisons for the following reason. I'm a geneticist, and I have to tell you that this is the most important thing for me. Cancer is the result of a change in what is known as a gene, the genetic material. We all know about DNA these days.

DNA is made into little packages called genes, and these genes are very susceptible to being damaged by various environmental toxins and poisons. A change or damage in the gene or the DNA is called a mutation. It takes one molecule of a poisonous substance to cause a mutation; it does not take a large amount. If you are told—and these people who are trying to sell the incinerators keep telling us—we're going to decrease the amount of poison and it's within the limits that the government sets, that makes absolutely no difference. Even one little minute bit of this poison can cause and does cause mutation, the change of the DNA, which causes cancer.

There is no safe dose. There is absolutely no safe dose for these poisons. No matter how much better these filters are than they used to be, they're still letting these poisons through. The reason governments have so-called guidelines is that they're not zero. The guidelines should be zero, but governments have recognized that there's no way, there are no technologies yet discovered that can totally filter out these poisons. I would like to see guidelines for all these poisons being zero. There's no excuse for them being anything more than zero, because there is no safe limit.

Not only is there no safe limit of these poisons causing mutation and therefore cancer, there's also the issue of so-called bioaccumulation. Bioaccumulation means these little minute bits of poison that get emitted out of the smokestack of an incinerator float through the air, settle down into the lake water, settle down onto the land, settle down onto the crops, gather into the crops. Even if it is only a minute amount every second, it's being pumped out of the incinerator stack in billions of molecules per second. These float around, and a few land here and a few land there onto the crops. They get into the crops that become our vegetables, get into the crops that become the livestock feed, get into the livestock and accumulate gradually in the livestock. Over a few years you get enough into the livers and the muscles—which become the meat that ends up on our dinner tables—into the beef, the sheep, the poultry, and the fish. They accumulate gradually.

Bioaccumulation is a well-studied scientific phenomenon, and it underscores what I said previously about a single molecule causing mutation. Also, these single molecules accumulate.

● (1600)

There are no safe doses for these poisons. There is no way we know of for restricting their emission. There are no such things as filters that can keep them out.

**Mr. Robert Sopuck:** Are these elements that you refer to unique to the waste incineration process or are they common to all incineration processes?

**Dr. Stan R. Blecher:** That's an excellent question. Thank you for asking that.

Some of these are unique to the incinerator process, especially the most highly dangerous of them all, known as furans and dioxins. These only exist from incinerators; that's the only place that we know of them coming from. They are the most highly dangerous, poisonous cancer-producing substances.

The others do exist, but are released very rapidly from incinerators. This is why, if I'm asked why we don't put our waste into an incinerator, burn it, and get rid of it quickly instead of putting it into a landfill where it will seep out into the water, in order to shock people I've sometimes said that I would rather see our waste dumped into Lake Ontario than see it incinerated. Now, I am not advocating that we do that with our waste, but if we dumped it into Lake Ontario it would seep out, and if we put it into landfill without any protection, into a raw hole in the ground without a covering, it would seep out, but it would seep out over months or years, and probably many years, whereas when we incinerate, it's out in a fraction of a second.

These others—mercury, lead, cadmium, chromium, and so on—do exist and they will seep out into the water over time, but not nearly as fast. Also, as mentioned, some of the most important poisons don't exist except from an incinerator.

**The Chair:** Thank you.

Maybe we'll have time later to follow that up. We're going to move now to Mr. McKay for seven minutes.

**Hon. John McKay (Scarborough—Guildwood, Lib.):** Thank you, Chair.

Listening to you, sir, I just wanted to crawl into some hidey-hole and pack it in.

Now, what brought you here was the response of the executive vice-president who, when answering Mr. Trottier's question about what's going up in the air, said that it was basically carbon dioxide and some water vapour. You thought that was absolutely not true. Then you listed at least 18 lethal chemicals that are going up in the air through this process.

I don't know enough about the Port Hope facility to know whether we're talking about apples and oranges here. When the people from Plasco came here, they talked about taking the product and using that gasification product to create energy. In fact, I just went to the Industry Canada website, which says, "Plasma gasification is a non-incineration thermal process which uses extremely high temperatures in an oxygen free/starved environment to completely decompose input waste material into very simple molecules."

I appreciate that I'm putting you on the spot a little bit here, but on the other hand, I'm a little confused. Obviously the people who were answering Mr. Trottier's question are trying to get a plant built, and maybe they're just saying what they're saying. I don't really know. But Plasco is actually an operating facility out here on the fringes of Ottawa and it is supported by the Government of Canada. It was supported by the previous Government of Canada as well.

The way I listened to your testimony is that possibly Plasco and other incineration processes that take the product and turn it into a gas are in fact built on a false process, and that in fact there is still product that's going out, whether's it's micro mini-molecules or something that the system simply can't filter. There's still stuff getting out. I'd be interested in your thoughts.

● (1605)

**Dr. Stan R. Blecher:** This is exactly correct, Mr. McKay. It's distressing to me that there are incinerators that are condoned and supported by governments and government agencies. This is precisely the problem. Governments have allowed themselves to be convinced by the smooth talk of the promoters of these poison-producing sites and plants that they are safe, but they are not.

Gasification and plasma are different technologies. This is also something that this company, Entech-REM, and other companies have attempted to confuse the public about. The plant that the Entech-REM company hopes to and wants to put up in Port Hope, which I do not want them to put up, is a gasification plant. Gasification is even more dangerous than plasma or other kinds of incineration because it functions at a slightly lower temperature, and at lower temperatures even more poisons escape. At higher temperatures some of the poisons do get burned and destroyed and can only reform later. But there's no question at all that the plant you're referring to, and every other plant of a similar nature anywhere in this country or anywhere else, is emitting highly toxic, highly poisonous, cancer-producing poisons.

Now, we don't worry about them, we don't concern ourselves about them, because we're constantly reassured that, oh, they're very small amounts being leaked out, and they're within so-called government limits. But the phrase "within government limits" is a very catchy phrase that can very easily confuse people. I'll remind you that cigarettes are also within government limits. Cigarettes are legal, and yet we all know that cigarettes produce cancer. It's a very similar situation here. Governments have not been able to totally ban cigarettes, and governments have not been able to totally ban incinerators—yet—but they should.

The fact that something is within legal limits, and within government guidelines, and within whatever other phrase one wants to use does not mean it's safe. There is no safe limit to any of these poisons. They all are producing cancer. That's why we have a cancer epidemic worldwide.

**Hon. John McKay:** These phrases come from the government's website:

> The extreme heat and lack of oxygen results in pyrolysis of the input waste material (pyrolysis being the decomposition of matter in the absence of oxygen). Plasma gasification operates as close to pure pyrolysis as possible, as opposed to starved air pyrolysis which is common with incineration type solutions. The by-products are normally a combustible gas and an inert slag.

I take it that what you're saying is that this is nonsense.

**Dr. Stan R. Blecher:** It's a little bit confusing. I don't know if they're deliberately or not deliberately confusing you with those words. Pyrolysis takes place in no oxygen, and gasification in a little bit of oxygen; that's a slight difference. The gasification also takes place at a lower temperature than pyrolysis. Pyrolysis takes place at a higher temperature.

Neither of them is any good. They both put out these poisons. The companies attempt to confuse the public by fancy terminology and big words. The bottom line is that these poisons come out of the gas stack, they get into the air, and they get into the food chain through this process of bioaccumulation that I spoke of previously. They get into our air and our water and our food, and they cause cancer. I really would love to see a way of stopping this.

**Hon. John McKay:** Thank you.

**The Chair:** We'll move on to Mr. Bevington for five minutes, please.

**Mr. Dennis Bevington (Northwest Territories, NDP):** Thank you.

Thanks to the witness.

You know, most things get burned in this world. What do you feel about burning wood in your home?

**Dr. Stan R. Blecher:** Wood also produces some of these poisons and some nanoparticles, but it produces such a minute amount that it's absolutely incomparable. It absolutely is not....

Again, the companies love to say this, that you're also producing nanoparticles when you light a candle.

**Mr. Dennis Bevington:** Let's go on to diesel in vehicles. Isn't that a recognized carcinogen? Let's say you have a bus with kids standing by the exhaust fumes off a diesel truck, a diesel school bus. What do you think of that?

● (1610)

**Dr. Stan R. Blecher:** I have three answers to that. First, they don't produce the furans and dioxins that are only produced in incineration temperatures. Second, they don't produce anywhere near the same quantity of poisons and cancer-producing molecules that incinerators do. And third, there is what I've called the “lesser evil” principle. I've put some words about that into the handout I gave the clerk to pass on to you at a later stage.

The lesser evil principle is—

**Mr. Dennis Bevington:** I don't know whether I'll have time with my question to go into all that.

The next question I would have, if you accept that there are a number of different things that cause these pollutants, is that some of them are okay because they're less dangerous but are perhaps more prevalent. There's that aspect as well. You might have a smokestack, but if it's scrubbed and some of this is taken out, there's less per unit of air than there is for people in a situation on a street with a lot of pollution going by them from vehicles.

Can you say emphatically that volume is also an issue with pollution?

**Dr. Stan R. Blecher:** Absolutely. I can emphatically say that no matter how well the so-called scrubbers in the incinerator stack are functioning, they're incomparably more polluting than the diesel motor of a car or a bus.

I just want to say one quick word about the lesser-evil principle, that we must have cars until we can totally convert to electric vehicles or some other non-polluting cars. I hate the fact that cars pollute, but they pollute far less than incinerators do. But we must have cars; we do not have to have incinerators. We have an alternative. It's the same in the arena of radioactivity. I don't like radioactivity, but sometimes we have to use it in the medical profession.

**Mr. Dennis Bevington:** Are you familiar with Borlänge, Sweden?

Years ago I visited the incinerator in Borlänge, Sweden, which produces heat for the communities. They buy garbage from all the communities around them, because it's a valued resource. They very carefully select and sort the garbage in the summertime, bale it, and prepare it for burning in the fall. They monitor the smokestack to the degree that they can determine whenever there is any kind of pollutant in their stream. They have a very elaborate system of computer-controlled garbage collection that allows them to then determine where the garbage comes from in the community. They can go back to the source and eliminate any of the pollutants that may enter the garbage process.

That's been going on for many years in Borlänge. It's been very well set up and organized. Do you see that having the same degree of risk that you would see from a plant in Port Hope?

**Dr. Stan R. Blecher:** Sir, respectfully, I know of that unit and it also puts out poisons. It also puts out these cancer-producing poisons. The fact that the promoters of it in Sweden claim that they are able to clean it out has been refuted by scientists and scientific studies. I do not support any type of incinerator for any place in the world. This is not only for Port Hope but for anywhere in the world.

**The Chair:** Thank you.

We're going to have to—

**Mr. Dennis Bevington:** Okay, so no matter how clean it is, you say that this other principle that you had doesn't apply.

**Dr. Stan R. Blecher:** No, sir. I didn't say that at all.

**The Chair:** Okay.

We're not going to allow a response to that.

Mr. Woodworth.

**Mr. Stephen Woodworth (Kitchener Centre, CPC):** Thank you, Mr. Chair.

I doubt that I can take the whole five minutes, but I've been surprised before.

**Voices:** Oh, oh!

**Mr. Stephen Woodworth:** I have a couple of questions, which I hope will be straightforward.

I regret, Dr. Blecher, that I did not bring with me my copy of your previous letter. I wonder if it was accompanied by that environmental screening report the company prepared and you referred to. If it wasn't, would you be able to provide a copy of that to our clerk so he can distribute it?

● (1615)

**Dr. Stan R. Blecher:** I included a link in that from which you can find that environmental screening report.

**Mr. Stephen Woodworth:** That will do the trick.

Thank you.

Secondly, I noticed in your material that you have written to the Ontario Minister of the Environment regarding your concerns. I wondered if you had received a reply from the Minister of the Environment for Ontario and whether we might have a copy of that if you have.

**Dr. Stan R. Blecher:** No, sir. I have not.

The process is the following. When a company applies to put something up like this incinerator, it goes through two different parallel processes. They have to—

**Mr. Stephen Woodworth:** I'm going to stop you there. I don't mean to be rude—

**Dr. Stan R. Blecher:** Sorry?

**Mr. Stephen Woodworth:** —but I was merely interested in the letter you wrote to the Minister of the Environment. I won't ask you about other processes.

**Dr. Stan R. Blecher:** You mean the original long letter I wrote to the minister? No, I've never had a reply from the minister.

**Mr. Stephen Woodworth:** Thirdly, do you know whether or not the Ontario government is in fact already providing economic or financial support for this project you're opposing in Port Hope?

**Dr. Stan R. Blecher:** They're not, to my knowledge. I don't think the government is even considering that or planning to provide funding.

**Mr. Stephen Woodworth:** Lastly, regarding your comment that government guidelines concerning chemical substances in the environment should generally be at zero but are not, I wonder if there is any ministry of health in any government in Canada that has adopted the recommendation you're making, that tolerable guidelines should be no greater than zero for these kinds of chemicals.

**Dr. Stan R. Blecher:** They have not to my knowledge in Canada or anywhere in the world, but I do know that there are government agencies in certain parts of the world—including Australia, for example—where the topic is up for debate.

**Mr. Stephen Woodworth:** Right. Okay.

I understand very well what it's like to be somewhat ahead of the debate on things, and I'm going to take it that on this point at least that's where you are.

Mr. Chair, if the parliamentary secretary wishes—

**The Chair:** You still have two minutes.

**Mr. Stephen Woodworth:** —I will share my time with him or with any other member on this side. Otherwise, I'm done.

Thank you very much, by the way, Dr. Blecher. I should say that your evidence is extremely relevant to what we're doing, and it's very good to have on the record the comments you made about the June 5 witness, so thank you.

**The Chair:** We're going to go back to Mr. Sopuck, then, for a minute and a half.

**Mr. Robert Sopuck:** I have just a quick question on a related topic.

I used to manage a wastewater treatment plant in a previous life. Many wastewater treatment plants take the sludge and spread it on farmers' fields as fertilizer.

What is your view of that process? I know it's not related to this topic here, but I'm intensely curious as to what your view is and what the research shows about what's in that sludge.

**Dr. Stan R. Blecher:** I'm afraid that's outside of my expertise. I can't answer that.

**Mr. Robert Sopuck:** Okay, thank you.

**The Chair:** We'll move on now to Madame Freeman for five minutes.

**Ms. Mylène Freeman (Argenteuil—Papineau—Mirabel, NDP):** Thank you, Chair.

Thank you for being here, Dr. Blecher. That was very interesting testimony.

I'd like to ask you a few questions, because I just want to be sure I understand this. Is the gasification technology that was put forward by REM in the proposal to build a large garbage incinerator in Port Hope currently in use anywhere else in North America or western Europe?

**Dr. Stan R. Blecher:** I really like that question. Thank you. The answer is no, not in North America—

**Ms. Mylène Freeman:** Okay, not in North America.

**Dr. Stan R. Blecher:** —and as far as we know, nowhere else. We have not been able to document its existence except in the town of Kuznica in Poland, which I've mentioned has a plant that processes 3.5 tonnes a day, compared to the plant they want to construct to process 550 tonnes in Port Hope.

We've done careful due-diligence research, and we have not been able to find.... But I have a concrete statement from the U.S. Environmental Protection Agency that categorically states there are no commercially functioning gasification plants anywhere in North America. There have been some, and they've all failed, and that's why I have called it a failed technology.

**Ms. Mylène Freeman:** Is there any verifiable scientific evidence to say that they could work at all, or is that what's causing them to be denied or to fail? What are the reasons they don't exist anywhere else?

● (1620)

**Dr. Stan R. Blecher:** I can't answer that, but I imagine it's because they have put out such enormous amounts of poisons that even the local agencies have been unwilling to allow them to carry on exceeding the so-called limits.

**Ms. Mylène Freeman:** At the June 5 meeting, the president of Renewable Energy Management, or REM as you've been calling it, Lewis Staats, was here. I was looking at the testimony just now. He said repeatedly that their process adheres to the Ontario Ministry of Environment regulations.

Is that true?

**Dr. Stan R. Blecher:** They have no way of stating that, because they have not built the plant. He has repeatedly made such statements, both here to your committee and elsewhere all over Northumberland County, but they have no idea what their emissions are going to be, because they've never built a plant. They can't state that.

**Ms. Mylène Freeman:** Okay, and there's no evidence to suggest that they would fall within—

**Dr. Stan R. Blecher:** Well, what he's talking about is guesswork. They've produced a whole lot of figures.

The environmental screening report that was published comes out with these figures, and that's what I'm referring to when I say that they themselves admit they would be putting out these poisons. They give what they claim to be figures that will be the amounts they'll put out, but this is guesswork. They have no way of knowing this because—

**Ms. Mylène Freeman:** So it's not that the ministry's regulations would need to be stricter. It's that they can't prove that they would—

**Dr. Stan R. Blecher:** They have no way of knowing what they're going to put out. Everything that they've claimed would be the figures is what I call guesswork; they calculated it from certain figures, they multiply this by that, and then they get a figure.

The Government of Ontario, incidentally, doesn't put out regulations or limits, which is also something incorrect that the company tells you. The company tells you that they're going to be conforming to the Government of Ontario limits, but the Government of Ontario doesn't put out limits. It puts out guidelines.

**Ms. Mylène Freeman:** Right, okay.

The federal government has signed on to the Stockholm Convention on Persistent Organic Pollutants. We signed on in 2001. It clearly states that authorities are obliged to give priority consideration to waste management methods that "avoid the formation and release" of dioxins. Do you feel that REM technology—the Port Hope incinerator—would be contrary to the Stockholm convention?

**Dr. Stan R. Blecher:** Absolutely. There's not the slightest question. There is no incinerator yet constructed that doesn't produce dioxins, and I'm delighted to hear the sentence that you read out there.

**Ms. Mylène Freeman:** Thank you.

Unfortunately, I'm going to interrupt you because I want to use my last 30 seconds to read into the record two motions we have. Thank you very much.

The first is that the Standing Committee on the Environment and Sustainable Development invite the authors of the "2014 Fall Report of the Commissioner of the Environment and Sustainable Development" to appear no later than October 9, 2014, for a two-hour-long meeting. The second is that the Standing Committee on the Environment and Sustainable Development invite officials from Environment Canada, the Canadian Environmental Assessment Agency, the National Energy Board, as well as the Canadian Nuclear Safety Commissioner, to appear no later than October 22, 2014, for a two-hour-long meeting.

Thank you very much, Chair.

Thank you to our witness.

**The Chair:** Mr. Woodworth.

**Mr. Stephen Woodworth:** Mr. Chair, in accordance with our usual practice, as these motions are dealing with committee business, if we are to discuss them at this time I propose that we move into a closed, in camera meeting.

**The Chair:** We definitely have it on the record that we are having committee business at 4:30. We can move into it now, if the committee so wishes, or we can set this aside, allow one more question, and then move in camera.

**Mr. Stephen Woodworth:** I'd be happy to wait, if that's suitable to the mover.

**Ms. Mylène Freeman:** That sounds good. Thank you.

**The Chair:** Okay. We'll move to Mr. Toet for the last five-minute round of questions.

**Mr. Lawrence Toet (Elmwood—Transcona, CPC):** Thank you, Mr. Chair.

I may share my time with Ms. Ambler. I have a couple of questions.

I want to focus, Dr. Belcher—and I thank you very much—

**Dr. Stan R. Blecher:** Actually, my name is "Blecher".

**Mr. Lawrence Toet:** I'm sorry.

I thank you very much for your testimony today. I want to focus on how you believe very strongly that we have the ability to go to 100% recycling of waste products and waste materials. In your opinion, how are we best served in bringing that forward, in conjunction with municipalities, to embrace new technologies?

You referred to the technology we heard about from one of our witnesses regarding the ability to separate plastics by just a reader, basically, which will see what's in that plastic and will be able to separate it out. It doesn't have to read a bar code. It doesn't have to read any kind of recycling symbol or anything. It actually reads the material itself.

I know that from one of our other witnesses after that meeting, when I talked to one of the municipal groups, there's some resistance to that. There was a sense of "well, we've always done it this way, we separate it at the home, and it's a new technology".

How do we work to try to encourage municipalities? I say so because part of our study focuses on technological innovation in such management and on the best practices of provincial, territorial, and municipal jurisdictions. How do we work with those municipalities to bring forward those best practices that you've referred to?

● (1625)

**Dr. Stan R. Blecher:** Well, sir, I'm not sure this is in my area of expertise either, but I would answer it in a manner similar to the way I answered a question previously, that is, I can see a role for government agencies and federal agencies in encouraging a change in attitude in the population. It's a philosophical question: what makes people think this way and not that way? I think it's an entire culture change that we need, and I would imagine that a committee such as this could have a strong influence in creating such a cultural change.

All I can say on the matter is that I would love to see the promotion of the three Rs and the promotion of the recycling industries. These are an industrial potential for this country that this country has not yet fulfilled. I think any encouragement of recycling as an industry would be something worthwhile doing.

**Mr. Lawrence Toet:** So from that, can I take it that you're saying that what we want to do is encourage the movement in that direction, facilitate the thought process in that direction, but actually the private sector developing these technologies would be the ones to actually bring it forward to our municipalities?

**Dr. Stan R. Blecher:** Well, sir, I really and truly believe this is not something that I can answer. I'm a geneticist and a doctor, so I'm not sure that's where I can give any advice.

**Mr. Lawrence Toet:** All right. Thank you.

I'll give the rest of my time to Ms. Ambler.

**Mrs. Stella Ambler (Mississauga South, CPC):** Thank you.

Thank you, Dr. Blecher, for being here today.

I wanted to ask you about the health concerns, in particular in the geographical area around Port Hope. I'm wondering about the specific incinerator. What, in your opinion, is the area of concern? In other words, how far out does the danger zone go? How many residents, how many Canadians, would be affected? Would it just be in the County of Northumberland? Should Mr. McKay's constituents in Scarborough be concerned? How about mine in Mississauga?

I know that's probably not an easy question to answer.

**Dr. Stan R. Blecher:** No, actually, it's quite an easy question to answer, and I'm glad you asked it.

Dioxins—the worst of the products of the incinerator—produced in Florida have been detected in our Great Lakes here, in Lake Ontario. They can travel thousands and thousands of kilometres. So yes, your ridings in Mississauga and Scarborough and everywhere else in Ontario, everywhere else in Canada, are at risk.

We have detected particles from dust and other waste products from across the Atlantic. Particles originating in Europe are being detected in the United States. Particles originating in Africa are being detected in Great Britain. There is no limit. These things do not stop at boundaries.

**Mrs. Stella Ambler:** Thank you.

Do you know anything about compost facilities? Specifically, there is one in Peel Region that creates, from compost material, soil that is then sold to whomever wants to buy it.

**Dr. Stan R. Blecher:** Yes. I understand it's a very good and clean procedure, and I encourage it, but I'm not an expert on it.

**Mrs. Stella Ambler:** Thank you.

**The Chair:** Thank you very much, Dr. Blecher, for being here today.

Thank you to our committee members for some great questions.

This will certainly be helpful in producing our final report as we conclude this study later on.

**Dr. Stan R. Blecher:** Thank you very much for having me here.

**The Chair:** Thank you.

[*Proceedings continue in camera*]