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Chair: The Honourable John McKay

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• (0815)

[English]

The Chair (Hon. John McKay (Scarborough—Guildwood, Lib.)): I gavel the meeting to order.

Prior to asking our witnesses to speak, parties should take note that our next anticipated meeting is on Tuesday afternoon. However, as you know, we may anticipate a voting marathon on Tuesday afternoon or evening, or Wednesday afternoon or evening, and Thursday morning, afternoon or evening. Keep an eye on whether we are actually going to be meeting on Tuesday and/or Thursday.

With that, I'm going to invite Dr. Ferguson, associate professor at the University of Manitoba, to give his five-minute opening statement. He will be followed by Dr. Sauvé from the Université de Montréal and Dr. Feiyue Wang from the University of Manitoba.

I look forward to what all of these university professors have to say about contaminated sites.

With that, Dr. Ferguson, go ahead, please.

Dr. Philip Ferguson (Associate Professor, As an Individual): Thank you very much, everybody.

Good morning. My name is Dr. Philip Ferguson.

My colleague Dr. Feiyue Wang will read a treaty acknowledgement a little bit later, so I'll leave that to him.

I am a professional engineer in the field of aerospace systems and an associate professor in the department of mechanical engineering at the Price Faculty of Engineering, University of Manitoba.

My research explores how to make aerospace technology more accessible to communities in Canada. Specifically, I study aerospace remote sensing and guidance systems on drones, airships and satellites in co-development with northern indigenous communities in Canada, such as Chesterfield Inlet, Nunavut, and Churchill, Manitoba.

I'm happy to answer any questions I can on this topic, to the extent that I can, given my area of expertise.

Thank you.

The Chair: That's very efficient. That's great.

With that, we'll call on Dr. Sauvé.

[Translation]

Dr. Sébastien Sauvé (Full Professor, As an Individual): Hello. My name is Sébastien Sauvé. I am not sure that I am going to be able to be as effective as my colleague before me, but I will do my best.

I am a professor of environmental chemistry at the Université de Montréal. I work on contaminants in the environment, legacy contaminants such as lead or cadmium, but mainly emerging contaminants, such as pharmaceuticals, hormones, pesticides, plastics and, at the moment, mainly PFAS, also known as forever chemicals.

PFAS are recognized as carcinogenic, cause cholesterol problems, reduce the response to vaccines, and are suspected of affecting the liver, kidneys and thyroid. Quality criteria for PFAS in water are constantly evolving worldwide, but despite Heath Canada's recommendations they are still not regulated in Canada.

In my research, I examine the presence of PFAS in water, fish, food, sewage sludge and the environment in general. I assume that my experience around the Bagotville military base is the reason why I was invited to testify before the committee.

We carry out water analyses using a rather original procedure: we travel around and sample publicly accessible water points, water fountains in parks or libraries, or washrooms in restaurants or convenience stores. We stop in these places, we take a sample of water from the washrooms, for example, we leave, and we do the same thing in the next village or town. I could also work with municipal governments, request permissions, and have them send me a representative sample, but you will understand that if I did that, I would still be trying to extricate myself from all the paperwork and I would not have published anything on this subject. So I analyze water that is publicly accessible.

Through this work, we have identified drinking water contamination issues in five or six Quebec cities where the drinking water system or wells were contaminated. One problem we have seen is that there was a very high level of PFAS contamination in the drinking water from the water system in La Baie, located some ten kilometres from the Bagotville military base. To confirm this, analyses were carried out in my laboratory and at the Quebec ministry of the Environment, and I assume that other federal agencies have also done this. Those analyses showed that a water table had been contaminated somewhere between Bagotville and La Baie, over a ten-kilometre stretch. This means that regardless of where the well is located in that stretch, several nearby wells are contaminated.

When I saw this, my first reaction was to inform the Quebec Ministry of the Environment, which is responsible for distributing water in this kind of situation. I quickly realized that all these people did not talk to one another much. We would like them to talk more, but that is not the case. I also informed Health Canada and the Department of National Defence, assuming that it was of interest to those departments, and the City of Saguenay. I sent this information several months before the story came out in the media, but those organizations did not see fit at that time to inform people.

In conclusion, I leave you with this question: why is it a chemistry professor's work that identified a contamination problem in the drinking water around a military base?

Thank you.

• (0820)

[English]

The Chair: Thank you.

Dr. Wang, you have five minutes, please.

Dr. Feiyue Wang (Professor, As an Individual): Thanks, Mr. Chairman

Thanks, honourable members of the House of Commons Standing Committee on National Defence, for inviting me to share my perspectives.

My name is Dr. Feiyue Wang. I'm a professor and a Canada research chair, tier one, in Arctic environmental chemistry at the University of Manitoba. I lead the new Churchill Marine Observatory, located in Churchill, Manitoba, which was officially opened in August this year. Some of you have probably heard about it, so thanks again for the support from the government. I'm also associate dean of research at the Riddell faculty of environment, earth and resources at the University of Manitoba.

I want to acknowledge that we're here meeting on the unceded traditional territory of the Algonquin Anishinabe nation.

To talk a bit about my own background, I'm an environmental chemist, and I study contaminants in the environment, especially in Arctic and northern Canada. It might sound counterintuitive but, despite the remoteness of its location, Arctic and northern Canada receives more than its fair share of many contaminants, either transported from the south or from local sources such as mining and, in this case, military operations. The contaminants that I study the most are legacy contaminants: Those are the ones that were, primarily, used in the past. The ones that I study the most are mercury as well as emerging Arctic contaminants such as microplastics, and, increasingly, we worry about oil spills. My research addresses the sources of these contaminants; their movement; their changes in the air, snow, ice and waters; their risk to the health of ecosystems and humans; and, of course, ultimately, what we can do to reduce and mitigate the risk.

From that background, it should not come as a surprise that I call your special attention to the Department of National Defence and Canadian Armed Forces contaminated sites in northern and Arctic Canada. One location I work at the most is Churchill, and many of you would know that, from the 1950s to the 1980s, Churchill saw extensive rocket-launching activities by the U.S. army and Canadi-

an government. There are, of course, many Distant Early Warning Line stations throughout the Arctic and, in addition, there are ongoing military operations across northern and Arctic Canada.

Contaminated sites in northern and Arctic Canada are of particular concern for several reasons. The very first thing is that the northern environment is highly vulnerable. Those sites are located in remote and, often, culturally and ecologically sensitive and vulnerable regions. Also, because of the remoteness, they tend to be forgotten. They are poorly documented and even poorly monitored. They are also long-lasting, given that the region has relatively lower temperatures and is covered with seasonal snow and ice, and sometimes perennial ice. The contaminants at those sites are more persistent, probably, compared with those in southern locations.

One area that I study the most are complications due to climate change. If you have contaminants in the environment, ongoing climate change makes things even more complicated in terms of the impact and how to mitigate that. However, when I point out the challenges in northern and Arctic Canada with respect to the sites, I also want to make the committee aware that, in this country, we have great capacity to actually address those issues. Many researchers in Canada, including me, are global leaders when it comes to northern contaminants, and throughout the country we have many state-of-the-art laboratories—of course, including my colleague from the University of Montreal. There are also a lot of research facilities in the south that could help, and there's a network of northern colleges and fuel stations in the north. Throughout the decades of research there's also extensive experience, with knowledge co-development, with indigenous and northern communities. This is demonstrated by many community-based monitoring pro-

Thanks for the opportunity to share my perspectives. I'm happy to speak more to any of those points and beyond if there are questions. Thank you.

• (0825)

The Chair: Thank you, Dr. Wang.

For a six-minute round, we have Mr. Allison.

Mr. Dean Allison (Niagara West, CPC): Thank you very much, Mr. Chair.

To our guests, thank you for being here.

Dr. Sauvé, one thing I've learned since I've been up here is that departments don't really speak to each other—you just alluded to that pretty well—and we haven't even added in municipal and provincial levels on top of that. Maybe that's a discussion for a whole other day, but given your experiences with that, do you have any thoughts for us on how we could do a better job of not being so siloed? I'm talking federally about departments that don't necessarily talk to each other.

Dr. Sébastien Sauvé: It's a tough question.

My experience has been more within the provincial level or within what you would think would be friendly zones. Public health does not necessarily get the information that the environment department gets, etc., and you get the same thing at the federal level.

There's no easy solution, but maybe having centralized data might be a start where newly generated data is available for all government agencies. That might be one way—at least there's some forced sharing of information that would help in a case like this.

Usually the information has to be accessible—but it's hidden or it's not shared. If someone knew that the report existed, they could get at it, but they just don't know.

I'm not sure which mechanism can break down those silos. I don't think it's an easy task.

Mr. Dean Allison: That's fair.

Along those lines of sharing information, certainly with AI and a number of things that are going on now, do you see that playing a role?

You talked about how you were physically mapping out spots in trying to figure out.... Do you think there's a role for AI to try to come up with some type analysis that this is how we expect things are going to travel and move in a certain way?

Dr. Sébastien Sauvé: In a case like this, I think AI might be useful in collating the data, getting the data together and making it easier to find the appropriate data. I think that's probably more where I would think it's useful.

Some AI—I haven't done that yet, maybe I should—might be useful in predicting areas that would need to be sampled or where there's a higher risk of contamination. We did a fairly thorough sampling, but it's partly random, and there are areas of the country that need to be sampled to see whether the drinking water is tainted or not.

There are definitely ways—but I'm not sure how—where AI can help better plan that sampling, because sampling is very expensive. Yes, the analysis in the lab is expensive because you need fancy instruments, but oftentimes—and it's probably even more true for my colleague—getting out there and getting the samples back to the lab is very costly.

• (0830)

Mr. Dean Allison: Do you have any comments on that?

Dr. Feiyue Wang: I agree.

I think on the AI side, equally, there's a lot of room to play as well, especially when we talk about those emerging contaminants. There are just too many of them. We talk about the thousands, the tens of thousands, even hundreds of thousands when it comes to PFAS alone, for example.

Often, the traditional way of doing this analysis, one compound at a time, simply doesn't cut it. With AI, there's definitely room to play. AI will play a role, not necessarily in identifying individual compounds but a group of compounds. Ultimately, when it comes to effects, to risk reduction, that might actually play a major role there. **Mr. Dean Allison:** And also, as it relates to those who have obviously been affected by it...maybe what they could be expected, based on the contaminant, to find in humans, possibly....

Dr. Feiyue Wang: Yes, especially in cases when you're trying to pinpoint what chemicals. If we think about the health impacts experienced by staff or by committee members, often there are so many other complicating factors, not necessarily from that contaminated site, but there might be other exposures as well. How do we actually deal with this mixture of exposures? That's where I think AI potentially could play a major role.

Mr. Dean Allison: Yes, go ahead.

Dr. Sébastien Sauvé: There's still some concern. AI will be trained by the existing data, so with new emerging contaminants, new threats, something different, it won't see that. Yes, it's a tool, but it's not a magic solution either.

Mr. Dean Allison: Further to that, then, in helping with diagnosis, if we understand what the contaminants are and what the challenges are, then I guess potentially over time that would also help us when we're trying to deal with our vets or with people who have been affected by the contamination. They may also help drive the solutions in terms of how we fix that.

Dr. Sébastien Sauvé: It could help in finding the most cost-efficient solutions, because for some of those, there are different options to do the treatment and to remediate, and it's probably going to be very efficient. Well, in that situation, given the data that we know, this solution or this type of treatment should be more efficient. In matching conditions to treatment options, that might be actually a useful tool.

The Chair: Thank you, Mr. Allison.

We go to Dr. Powlowski for six minutes.

Mr. Marcus Powlowski (Thunder Bay—Rainy River, Lib.): Professor Sauvé, you talked about contamination of the water supply between La Baie and Bagotville. Is that with PFAS? I don't think you said it, but you were talking to [Inaudible—Editor] PFAS. My understanding is that PFAS are pretty ubiquitous. I remember The New York Times citing one study, which seemed more like a meta-analysis, that seemed to find, as I recall, that 30% to 40% of water supplies have some PFAS in them. Do you think, necessarily, that this contamination was from a military site? You also mentioned five or six other cities in Quebec, which also have some contamination. Is that right?

Dr. Sébastien Sauvé: In that work and the work that continued, we sampled a few more than 500 sites or drinking-water sources across Quebec. Two of those 500 were without any PFAS detected, because our instruments were not good enough, I guess, but we have very good detection limits. Not being able to see PFAS is pretty rare. Within that dataset of about 500, I guess the average is around two nanograms per litre for the sum of all PFAS detected. At La Baie, we were between 100 and 200 in the tap water or the wells. Some of the wells had up to 300. There's no way that, with an average of two and a 95th percentile in terms of the distribution within that Quebec dataset—the 95th was at 13—if you have samples that are 100 or 200, it's just random contamination. There's no way.

In that case, the assumption that it comes from the military base is an assumption. We can't demonstrate that unless we know exactly what had been used in terms of foams. Basically, these would be coming from firefighting foams that would have been used at the airport, or for some of the military exercises that have been done at Bagotville. The pattern of the PFAS that we see in the water is compatible with its being residue from firefighting foam, but we can't prove it.

• (0835)

Mr. Marcus Powlowski: My understanding is that there are thousands of kinds of PFAS, so when you are looking at it, you do try to categorize that. There are certain ones that are associated with firefighting foam, so you have a pretty good idea that's where it came from. Is that right?

Dr. Sébastien Sauvé: Yes. There are thousands of different PFAS, but some of them are more theoretical. You can imagine chemical Legos of how you can structure those PFAS. We do measure 80 different PFAS and we can look for 200 more, but we usually find between 15 and 35. We never find.... Some of those are fairly rare and the concentrations are low.

Usually, on a contaminated site we'll find 30 to 35, and then you get a sort of fingerprint, in terms of the different concentrations that we observe in that fingerprint. Then you can see some are very high, some are low. I've compared it to a fruit salad. Then, if you get a fruit salad that has oranges, apples and blueberries, and you don't see blueberries very often, this is a strange fruit salad. Then, at some point, one fruit salad has a lot of cranberries, and you rarely see the cranberries, so you know something's funny. This is an easy image, but that's a bit of what we do when we're measuring 80 PFAS, and there's a peculiar signature in La Baie.

Mr. Marcus Powlowski: What's considered to be a dangerous level of PFAS? You mentioned two to three in some areas, and 100 to 200 around La Baie and Bagotville.

Dr. Sébastien Sauvé: It's a tough question. That's why we say it's an emerging contaminant, because regulations across the world are not converging yet. In the United States, they have a very strong regulation now, and two specific PFAS from the legacy PFAS are regulated at four—so PFOA and PFOS are regulated at four—and there are three others that are regulated at 10. Health Canada has a different approach: It uses a sum of 25 PFAS, and the sum of those 25 PFAS must be below 30. However, Health Canada's is a recommendation; it's not a true guideline, as in the United States. Europe has a similar guideline, but the summation for 20 PFAS should be

below 100. It's a bit confusing. The regulations are not entirely comparable. In the end, the U.S. ends up being a bit more severe and strict than the Canadian ones, but I think that what Health Canada's proposing is relatively safe.

Mr. Marcus Powlowski: What are people in the area of La Baie and Bagotville doing to address this problem? Do you have to just drill new wells? Is there any way to treat your water?

Dr. Sébastien Sauvé: The underground water is contaminated. If you build a new well, you're just going to tap the same water from a different well.

I think the city initially minimized the issue and didn't recognize the problem, so it said the water was safe to drink, but it put in \$12 million to treat the water. It was the same message. It was saying, "You can drink the water safely, but we'll invest \$12 million to treat it, just in case."

The Chair: Thank you. We're going to have to unfortunately leave the answer there. We appreciate it.

[Translation]

Welcome to the committee, Mr. Simard. The floor is yours for six minutes.

Mr. Mario Simard (Jonquière, BQ): Thank you, Mr. Chair.

First of all, it isn't \$12 million, it's \$15 million.

I am pleased to meet you, Mr. Sauvé. I have heard you in a lot of media in my region, Saguenay—Lac-Saint-Jean, talking about the situation in La Baie. I would like to review some of the details with you.

The information came out publicly on July 11, 2023—

[English]

Mr. Marcus Powlowski: [Inaudible—Editor]

The Chair: Go ahead. I stopped the clock. Don't worry about it.

Are we good to go? Okay.

[Translation]

Mr. Mario Simard: The information came out publicly on July 11, 2023. I know that because it was myself and the leader of my party, Yves-François Blanchet, who made it public.

At what point did you give this information to the federal government?

Dr. Sébastien Sauvé: The previous summer, in 2022, I informed the Quebec Ministry of the Environment. After that, I would have to look at my datebook to give you the exact dates, but it was at about Christmas 2022 or January 2023 when I had meetings with the people from Health Canada and the Department of National Defence. So Health Canada and the Department of National Defence were informed between December 2022 and January 2023.

• (0840)

Mr. Mario Simard: That sounds like what you said in the Saguenay—Lac-Saint-Jean media. You said you had informed the Quebec government in October 2022. If I understand correctly, you then informed the federal departments, in early 2023.

Why did so much time pass, between early 2023 and July, without the government seeing fit to inform the public in the La Baie area, where 8,000 people live? I would note that you have said publicly that you, personally, would not drink the water in La Baie.

How do you explain the more than six months that passed before the public was informed of this situation?

Dr. Sébastien Sauvé: There are two things getting mixed up here.

In the summer of 2022, I informed the ministry of the environment that the concentration of PFAS in La Baie was abnormally high. This was not in the paper that had already been published. I knew that I would be working on a paper that would be published very shorty, but I wanted to inform the ministry, because this was a question of public health.

However, at that time, the quality criteria for PFAS in the United States and Health Canada's recommendations about this had not yet been released. So we were in a situation where a water system contained a higher concentration of these substances than the others, but we had no threshold for making comparisons and stating that this was a disaster.

However, that information was released in February and March 2023. Once Health Canada launched its consultation to seek comments on its recommended standard of 30 nanograms per litre, stating specifically that the United States recommended four nanograms per litre, it became apparent that we were looking at a site where the proposed standard had been exceeded.

Mr. Mario Simard: So a fairly significant amount of time passed before—

Dr. Sébastien Sauvé: There was a delay between when Health Canada was informed of the situation and when it became apparent that the situation exceeded the standard proposed by Health Canada. During that time, people were not informed.

Mr. Mario Simard: So the public was not informed. I assume that the government took this seriously, since it allocated \$15.5 million for a temporary solution.

As well, on this subject, I believe it is impossible to completely clean the water tables affected. Other sources of water will have to be found for this population.

Dr. Sébastien Sauvé: Technically, it is definitely possible. There could be a system to pump and treat the water, but the costs would be incalculable. We would have to add some zeros to the \$15 million figure. So that is not a viable option.

The fact that these are nicknamed forever chemicals tells us that PFAS will be sticking around in the water table for a very long time. The alternative would be to get water from a well a long way away that is not contaminated and pipe it in to La Baie.

Mr. Mario Simard: If I accept what you are saying, the permanent solution would be to find another source of water for the people in La Baie.

Dr. Sébastien Sauvé: That is probably the least expensive solution.

It is possible to treat the water, and that is what is being done right now. A permanent plant, not a temporary one, could be installed to treat the water. However, the costs would be high. As well, the type of PFAS found in the water in La Baie is unfortunately more difficult to treat and eliminate.

Mr. Mario Simard: That may be what explains why the \$15.5 million that was to be used by the City of Saguenay to meet the public's needs until 2028 will unfortunately run out in July of this year. It is because the filters have to be changed six times more often than was estimated. The City of Saguenay is therefore looking at a liability of \$7 million per year.

Do you think there might have been a source of contaminants other than the Bagotville military base?

Dr. Sébastien Sauvé: Of the 400 sites we sampled throughout Quebec, five or six showed contamination rates that were high enough to call for intervention. Often, these were landfill sites, fire-fighter training sites or airports, for example. In this case, it is a military base. Are there landfill sites nearby? Certainly landfill sites could cause contamination in the past. It is not impossible for there to have been a landfill site that is contributing to a form of contamination. But landfill sites include a lot of old PFAS. The PFAS found in the water in La Baie, however, do not share that profile. They really have a profile that corresponds more to the substances used in firefighting foam.

• (0845)

[English]

The Chair: Thank you.

It's Madam Mathyssen for six minutes, please.

Ms. Lindsay Mathyssen (London—Fanshawe, NDP): Thank you, Chair.

Thank you to the witnesses for appearing.

What we've heard in past testimony is that for each contaminated site, the steward of that site has full control over the site. In the case of DND, they are responsible for whatever happens on that site, for testing and for communications and all of that.

You are experts in your field. In your determination.... We have base commanders, but we have environmental officers who are making these decisions for the health and safety of their people. What kinds of qualifications are truly needed to be able to do that work, to determine that a site—a Bagotville or what have you—is actually safe? I don't know if you know, but are those environmental officers trained to have that level of expertise?

Dr. Sébastien Sauvé: Well, the easy way to do this is if we have legacy contaminants for which we have clear guidelines. Then it's easy. We measure how much is in the drinking water and if we are above or below the guideline. Then it's clear.

In the case of something that's not regulated, it's a lot more complex and difficult, but once you have a recommendation from Health Canada that has all the required experts who looked at the issue, then you can compare your data to what is recommended by Health Canada. That's if you're looking just at drinking water. Of course, if you want to transfer drinking water, then it's a question that's a lot more complicated: Is it safe to have a garden and grow your own vegetables if you'll be using that water?

If you're comparing drinking water to something where some official body has made that level, then it's relatively straightforward.

Ms. Lindsay Mathyssen: Okay.

Oftentimes, that amount of information seems to be going one way in terms of the communication on auditing and oversight. The issue with a lot of DND sites is that because of national security and what have you, there isn't a greater oversight from that larger community of experts like you. Have you run into that issue? Do you believe that we need to have better oversights built into the federal contaminated sites plan?

Dr. Sébastien Sauvé: Well, I don't know all the details of those oversights. The best example I can see is that if I could have access to all of the firefighting chemicals that have been used at the site, it would be a lot easier to answer the earlier question of whether or not it's definitely traced back to the base.

That information is not available, and I don't think using access to information with regard to the military is working. There's nothing strategic or tactical about the type of firefighting foams that have been used. It's mostly protection from liability. It's not so much a tactical question.

Dr. Feiyue Wang: To add to that, as I mentioned, I think that in this country we have a lot of expertise: from academia, from the consulting industry and from the government. You have ECCC and Health Canada. When we talk about PFAS or legacy contaminants, we have a lot of expertise.

It's more about how we get that expertise involved. Again, the oversighting with DND sites is understandable, but if there's a way that could build into some kind of mechanism, I think that would go a long way to help.

Ms. Lindsay Mathyssen: There are a lot of conversations about PFAS, for obvious reasons, but as well, I think, Professor Wang, you talked about mercury, microplastics and the oil spills. We've heard about TCE, about hydrocarbons.

Can you talk about how we are determining those longer-term impacts as we see them, especially as we talk about the legacy impacts, but also maybe the non-regulated and those longer-term health impacts? How are we measuring that? How are we looking at that? Do we have enough resources?

• (0850)

Dr. Feiyue Wang: Yes, mercury is the contaminant that I study the most. I think I can use that example.

I'm not pointing fingers and saying that DND is responsible for mercury contamination in the country. It's only a small player in a big, complicated picture, and we do have long-term monitoring from the environment, from water and air, but also from fish. Actually, when it comes to mercury, we have long-term monitoring for people, for human health—for example, blood—especially in women of childbearing age across the country and especially in the north.

Those data are valuable. That could serve to some extent as an example for other contaminants, right? When we're doing this kind of human health study, it would make sense to start to monitor other contaminants.

In terms of emerging contaminants, there are the microplastics and the oil spills, especially in the Arctic. An oil spill per se is not necessarily an emerging contaminant, but in the north, as we start to see shipping throughout the High Arctic, say, and Hudson Bay, those oil spills will happen, whether it's from the ships or when they were refilling communities or when you have a military base operation in the north. Those things do happen.

A lot of this is still in the early stages, as Dr. Sauvé mentioned, so that we don't really have a very good idea of what's going on. That's something we can build on based on the lessons we've learned from mercury and others.

The Chair: We have Ms. Gallant for five minutes.

Mrs. Cheryl Gallant (Renfrew—Nipissing—Pembroke, CPC): What are the health risks for contaminants like benzene, toluene or ethylbenzene if an individual were to be exposed to them via groundwater?

Dr. Feiyue Wang: I can address that a little bit, but maybe Dr. Sauvé could add to it.

Yes, that's what we call "BTEX", right? We're talking about the relatively small organic hydrocarbons. Those often are associated with petroleum oil, let's say, as well as other sources.

Those are not necessarily long-lasting, so if there's any good thing, those typically do not last in the environment for very long, but when you have them in groundwater, they still could persist for a relatively long time. Those are relatively easy to monitor, and it's often relatively easy to identify their sources.

Mrs. Cheryl Gallant: Is groundwater contaminated with PFAS safe to drink?

Dr. Feiyue Wang: For PFAS, I will defer to my colleague here.

Dr. Sébastien Sauvé: It depends on how much, because "contaminated" means there's more than the background.... I think it's a question of how much, and the answer varies between what the countries are and what the experts have evaluated. There's a bit of a gray zone, but—

Mrs. Chervl Gallant: All right.

What are the health risks for individuals exposed to polycyclic aromatic hydrocarbons that have seeped into the groundwater?

Dr. Feiyue Wang: That's what we call PAHs. Again, those are known or probable human carcinogens, and again, the bottom line is that it's always about the concentrations, right?

As an environmental chemist, I can tell you that if I have good enough detection limits, the chances are that I could detect just about everything in any media. Just because something is showing up in your water or in the air it's not necessarily a huge concern. It's all about the dose, the concentrations. We need long-term monitoring data to see the concentrations and to see how long a specific human population or ecosystem is exposed to that.

Mrs. Cheryl Gallant: Okay.

We know that during the 1950s and 1960s, in Winnipeg and Suffield, the populations in those areas were sprayed with a cadmium gas. When you go out sampling public water places, are there any traces of cadmium still lingering in the water and, for example, in Winnipeg?

Dr. Feiyue Wang: Yes, I've heard an anecdotal story, and I don't really have the primary literature to back me up, but I think what you mention is probably related to Churchill. I thought I heard a story that could be related to that.

As I've mentioned, in Churchill you had a quite extensive military operation by the U.S. during the rocket-launching era, but I'm actually not aware of such things happening in Winnipeg.

Mrs. Cheryl Gallant: Okay.

In your testing, is there any evidence in these public water samplings that any population in Canada, no matter how concentrated or maybe remote and dispersed, is being tested upon, other than perhaps the usual agricultural chemicals that are sprayed on farms?

• (0855)

Dr. Feiyue Wang: I think there are a lot of ongoing monitoring programs that would include, say, cadmium, as you mentioned, right? Drinking water is tested, commonly, and for those contaminants, the drinking water guidelines are very well established.

I would assume that the health authorities or whoever is monitoring in a long-term program should have access to that data. One thing, of course, is that often in this country what we hear about in the news is lead. That's not necessarily due to military operations, but it gives you an idea of those monitorings that are ongoing.

Mrs. Cheryl Gallant: Have you found any peculiar substances that were rather inexplicably assigned? Is there any evidence of any low-flying balloons, for example, or any type of dispersal that is non-agricultural and is still occurring somewhere?

Dr. Sébastien Sauvé: There are some pesticides used within forests or for non-agricultural applications. They would still be pesticides, but they would be non-agricultural, and pesticides contain PFAS—

Mrs. Cheryl Gallant: Is there any evidence of or background in what you have done to suggest that there had been previous military spraying or a use of chemicals in Attawapiskat? The tables are showing us that there is quite a bit of non-natural substances there

in the groundwater. I just wondered if that was related to any military activities at some point in time.

The Chair: Please be very brief.

Dr. Sébastien Sauvé: I don't know about that.

Dr. Feiyue Wang: I have no idea. **The Chair:** Thank you, Ms. Gallant.

Madame Lambropoulos, you have five minutes, please.

Ms. Emmanuella Lambropoulos (Saint-Laurent, Lib.): Thank you, Chair.

Thank you to our witnesses for being here to answer some of our questions.

[Translation]

Mr. Sauvé, you said you had met with representatives of Health Canada. I would like you to tell me about your experience. Were they receptive to what you had to tell them?

Dr. Sébastien Sauvé: I would say that the people at Health Canada were very happy I had contacted them and had shared the information I had. I assume that not all professors send them information. Some of the information sent had not yet been published, so I just asked them not to distribute it outside the department. However, I told them they could use that information to hold discussions about certain problems that were raised. When it comes to questions of public health, I tend to be pretty generous. That said, there is no reciprocity on the part of Health Canada and the Quebec Ministry of the Environment. I send them information when there is a public health problem, but the two departments won't inform me about their new data. It is a one-way street.

Ms. Emmanuella Lambropoulos: Have you found that they were receptive, despite everything? Did they react or take measures to improve the situation, in your opinion?

Dr. Sébastien Sauvé: We had taken almost 500 water samples in Quebec. That was probably the largest database on PFAS in drinking water in Canada. It was very valuable information that the people at Health Canada could have based their recommendations concerning PFAS on.

The recommendations do have to incorporate the effects of PFAS on health, but we have to come up with something that can be managed reasonably. It includes an element of management. We can't say that all Canadians' drinking water is no good and all water has to be treated. We have to do a cost assessment and see whether it is reasonable. The data show, based on what Health Canada proposed, that less than 5% of water systems had water that needed to be treated. It is complicated for the people in La Baie, for example, but these are very special cases. If we know the places where water poses a problem, we can manage that handful of cases.

Ms. Emmanuella Lambropoulos: You talked a bit about the guidelines in the United States and Europe. You said they were stricter than here in Canada.

I would like to know whether you have a recommendation regarding the limit for PFAS that should be set here in Canada.

Dr. Sébastien Sauvé: The United States is stricter, but for five or six very specific PFAS. It depends a bit on how the precautionary principle is applied. There are other PFAS that have chemical structures similar to the others, but for which we do not yet have all the toxicological information we need. If one PFAS molecule resembles another, but we have no evidence of its toxicity, do we assume it is not toxic and not regulate it? Do we assume that the resemblance is close enough for us to regulate that substance the same way as the others while awaiting further information?

That is the big difference between the United States, which regulates four of these substances, and Canada, where the regulations cover 25 of them. I think Health Canada's approach is the right one. At this point, a lot of information about toxicology is being published every day. We are going to clarify it, but while we are waiting to know where we stand, let's be cautious.

• (0900)

Ms. Emmanuella Lambropoulos: You asked a question at the end of your testimony: why is it an independent researcher who identified this problem?

What can the Canadian government do? Should it take preventive measures? Could it do more of this kind of testing on its own initiative? Do you believe there is enough information to say that a certain site might contain somewhat more contaminants, to give the government an incentive to do more analyses? What are your recommendations in this regard?

Dr. Sébastien Sauvé: A PFAS analysis in a private laboratory costs between \$350 and \$500. So it is a question of budget. You need to have the money to do the analyses. You also need to have laboratories that have the right capacities for detecting PFAS. Good laboratories have to have slightly higher standards when it comes to detection limits.

Take the Bagotville site, as an example. The military and the people from Health Canada were not completely surprised to learn there was a problem. They may have been a bit surprised at the scope of the data I presented, but they were not completely surprised. They had their suspicious about potential risks.

There has to be a combination of two things: there have to be the budgets for doing environmental monitoring, but also compulsory transparency mechanisms, so the results are genuinely available and published. At present, they can be accessed, but it is a bit obscure

Ms. Emmanuella Lambropoulos: Thank you.

[English]

The Chair: Thank you, Madame Lambropoulos.

I'll just take note that we've gone for one and a half rounds, and Dr. Ferguson has been unable to interject, by either using the raise hand function or signalling by some means if he has something to contribute

Dr. Philip Ferguson: I appreciate it.

Thank you.

The Chair: It's disadvantageous being virtual as opposed to being present.

[Translation]

Mr. Simard, the floor is yours for two and a half minutes.

Mr. Mario Simard: Thank you, Mr. Chair.

Mr. Sauvé, you said that the people at the Bagotville base did not seem to be surprised at the information you presented to them.

I understand that in science, we do not deal in approximations. However, you explained earlier that there was a bouquet of PFAS that we could see as being like a fruit salad. If I can pick that image up again, I assume that one of the fruits found in the contaminated water at La Baie bears a strange resemblance to the fruit found in firefighting foam. Am I wrong about that?

Dr. Sébastien Sauvé: No, that is exactly right.

Mr. Mario Simard: You talked about dumps, where the buried garbage contains PFAS that are different. We might therefore say, in a way, that the source of water contamination is probably the PFAS from the foam used at the Bagotville base.

Dr. Sébastien Sauvé: Given the profile of the PFAS in the La Baie water, contamination by firefighting foam is plausible. Contamination by a landfill site is not plausible, because the bouquet of PFAS would be more complex if it was old PFAS.

Now, do the firefighting foams come from Bagotville or not? I can't confirm it by doing a water analysis. However, the profile of the PFAS in the water is compatible with the profile of the PFAS found in the firefighting foam.

Mr. Mario Simard: I can certify that there are not a lot of farmers around the Bagotville base who used firefighting foam.

Dr. Sébastien Sauvé: It might come from a fire station or a fire-fighter training site.

Mr. Mario Simard: Yes, I understand, but let's say the probability is low. I also don't want to put words in your mouth.

That said, you talked earlier about the current problem in the City of Saguenay, which has had to change the filters much more often than anticipated. Is this because it is a particular type of PFAS?

• (0905)

Dr. Sébastien Sauvé: It is precisely because of the type of PFAS that is associated with certain recent firefighting foams, in which the particles are smaller and more difficult to eliminate.

One reason for the city not having the budget may also be because of the way the contract was organized. It could have been a turnkey contract where a certain amount would have been allocated for treating the water for five years, for example. Apparently, that is not what was agreed to in this case. There should perhaps have been greater vigilance in drafting the contract, in my opinion.

Mr. Mario Simard: That is very possible, but, in your—[*English*]

The Chair: Thank you, Mr. Simard. Sorry.

Madam Mathyssen, you have two and a half minutes.

Ms. Lindsay Mathyssen: Professor Wang, I'd like to take you again back to mercury, and it may not be as related to on-base contaminations. There are instances in Goose Bay, for example, where buildings were shut down because of its being used in dental work, for example. Do you see a lot of that in any of your research?

Dr. Feiyue Wang: Definitely. Even though we call mercury a legacy, it's still ongoing. The major sources have been placed under control, but, yes, mercury continues to be used in certain applications

With the new international treaty called Minamata Convention on Mercury, which Canada signed on to, there is a plan; there are limitations on how those practices can continue. I would say that, with time, as the convention starts to be more enforced, the application of mercury in dental practice, in thermostats and so on, should become less and less.

However, the challenge with mercury is that, even though it may be a very small amount that is used in dental practice, it doesn't take much for mercury to actually have a major impact. To some extent it's very similar to what we talked about with PFAS earlier and about which amount of it is safe. With contaminants like mercury, it's very difficult to prescribe a number for a guideline in water because this contaminant biomagnifies. Even though the concentration in water could be extremely low, by the time it gets accumulated in fish and in humans, the concentration could be high enough

Ms. Lindsay Mathyssen: We did an Arctic study that talked about the opening up of our Arctic, the increased transit through these areas and the fragility of the land in that regard. I'm interested to know about studies being done on the impacts on indigenous people in those areas, even in terms of the land, the food that they live off of, the traditional foods, that sort of thing. What kind of research is being done?

Dr. Feiyue Wang: There are actually extensive studies going on in this country as part of a research network called ArcticNet. We've been monitoring contaminants, as well, as part of a northern contaminants program within this country. In many cases, there have been decades of data, both from ecosystems and food items, all the way to human health, but in the meantime...

The Chair: Unfortunately, Ms. Mathyssen has left you no time to answer the question.

Mr. Bezan, you have five minutes.

Mr. James Bezan (Selkirk—Interlake—Eastman, CPC): Thank you, Mr. Chair.

I want to thank our witnesses for joining us today.

Professor Sauvé, in your testing with La Baie near the Bagotville air base, how many tests have you done since your first report came out?

Dr. Sébastien Sauvé: Well, originally we just had one or two, so we had to confirm that, and then we had about 10, which were doubled by what the ministry and the city measured. I went back this summer to take another 15 samples, to see what the situation was, whether the treatment was working and whether the others were still...so I don't know. There may be 25, more or less, from around La Baie.

Mr. James Bezan: Has the situation improved, or is it still the same problem?

Dr. Sébastien Sauvé: Well, the treatment in place in the areas that were treated, for the most part, were below the threshold of 30 recommended by Health Canada, except one sample at the end of the network that seemed to be around 40—so one of them was above 30, probably because it was a bit further down the aqueduct network. The few samples from wells that were not treated or had not been through the treatment that's been in place were still around 80, or something, so well above the threshold of 30.

• (0910

Mr. James Bezan: Have you been able to rule out any other sources of the contamination, other than CFB Bagotville?

Dr. Sébastien Sauvé: We can't rule out any other source of fire-fighting foam. It's compatible with contamination from fire-fighting foam. The Bagotville base uses fire-fighting foam, so that seems to be, in our logic, the most plausible explanation.

Mr. James Bezan: Would the municipality not be using the same type of foam in their operations, and in practice?

Dr. Sébastien Sauvé: Well, firefighters would use this on a chemical fire. If you have a big industry using chemicals or hydrocarbons, or if you have an oil spill, you would use this. However, if a house is burning, you just use water. You don't use that. It's really just for a chemical fire, or hydrocarbons.

Mr. James Bezan: In the subsequent tests you've done, you still haven't had much of a conversation with the Canadian Armed Forces and National Defence to go over your findings.

Dr. Sébastien Sauvé: I haven't pursued the conversation.

I must say that, the way the situation in La Baie was presented to the media, I didn't get a good communication link with either the city of La Baie or local public health. The initial, nice conversation with Defence has sort of shut down. Nobody liked that I presented the data.

Mr. James Bezan: Okay.

Well, I think one of the recommendations we'll want to make is to ensure those conversations take place, going forward.

Professor Wang and Professor Ferguson, we've had conversations in the past.

I want to talk about mitigation, especially with the experience you guys had up at Churchill at the rocket facility and the old base there.

What can we be doing to ensure these legacy contaminated sites are properly mitigated, in order to protect local populations and the environment?

Dr. Philip Ferguson: I can jump in on that.

Thanks very much.

I think the biggest thing we can do is collect data. Data is what will inform these decisions. As you've heard from my colleagues, there is so much that can be done—different sampling across different areas.

I also want to echo what my colleagues said about artificial intelligence. It can be used—if used appropriately—to collect data and look for patterns in that data. However, we need to collect that data and transmit it to people who know how to handle it and can actually crunch it in a way that will tell us those answers.

It's all about data. It's about collecting that information and looking at it.

Mr. James Bezan: We need to have that data line. However, how do we then fix it? Where's the mitigation? How do we contain it and ensure it's removed from the site?

Dr. Feiyue Wang: First of all, I have to say that, at this time, we don't really know too much about what's left there. I'm using Churchill only as an example. That's the site I know the most. Still, we don't have much information. A lot of these things were poorly documented and even poorly studied. The first thing is that we need to identify what kind of contaminants are there. Is it qualified as a contaminated site, for example? Then we start to look into how to mitigate it. One good source we could use, in addition to scientific testing, is information from the community. Many folks are still there and know the operation.

The other part of mitigation is making sure that any new development will follow a very different model. You mentioned the Churchill Marine Observatory that I'm leading and the kind of research we're doing. We want to make sure that we learn the lessons from the past and engage community folks from the very beginning, so it's transparent and they are fully engaged in this process. We hope, as our study in Churchill is ongoing, and that kind of—

The Chair: Unfortunately, we have to leave it there. I apologize for cutting people off, but it is what it is.

Mr. Collins, don't let me cut you off. You have five minutes.

Mr. Chad Collins (Hamilton East—Stoney Creek, Lib.): Thank you, Mr. Chairman.

Good morning to our witnesses.

Dr. Sauvé, coming from the municipal sector in the city of Hamilton, where we've had a lot of industry and contaminated properties over a period of a century and a half, I have found that, when dealing with contamination and public health-related matters, the community wants to know as much information as possible, as soon as possible, to ensure they can take measures within or around their home to protect their health and the health of their family.

You described a situation very similar to a couple of situations I've dealt with in Hamilton. I had the opportunity at our last meeting to ask government officials about transparency—what policies

the government has around transparency. They noted that, in 2019, they improved policies around transparency and gave some examples of how they're trying to make those policies better. You described a situation where it looks like there's some room for improvement. This committee is undertaking this study to look for recommendations to improve policies. I know you dealt with, probably, three levels of government in the La Baie situation.

Can you provide specific recommendations the federal government can take into consideration for the purpose of improving the transparency measures we have in place today?

• (0915)

Dr. Sébastien Sauvé: Again, it's a tricky question. There's no easy solution. As has been mentioned by my colleagues, I think getting as much data easily, or getting data that can be found easily.... It's not just acquiring the data, but also getting access to it so that people can understand and can get access to the data. I think that would help quite a bit.

Mr. Chad Collins: If I could interject, I think if government officials were here, they would probably point to the government website to say that they list all of the contaminated properties that we have here, and that information is there for the public to review. I don't think, based on your comments, that's good enough.

Dr. Sébastien Sauvé: Have you tried to find that data on your website that has all of it? It's very difficult to find. Even sometimes I work with someone from some ministry, and they say, "Hey, it's all on the website." I ask if they can send me the exact link, because I will not be able to find it.

In terms of "findability", it's important. Yes, sometimes the data is out there, but it's difficult to find. It's that one step.

Mr. Chad Collins: That's fair enough. Thank you for that.

The other question I had was about compensation. There are instances where—the term we use is "custodian"—we're the custodian of these sites with legacy contaminants, and sometimes those contaminants find their way off a property. You've highlighted the impact it had on a community. I've dealt with that situation with both the federal and the provincial governments, and it's not easy getting compensation for individual property owners and/or for the community at large. It's almost like pulling teeth, and it can take many years in order to just get basic compensation. It always seemed like, in my mind, we were never fully compensated for the issues we were dealing with.

You've described a situation where there's still an impact today. Do you have recommendations around compensation as it relates to the government knowing its site has caused this problem? What recourse should there be for individual residents or for a whole community that's been impacted by those issues?

Dr. Sébastien Sauvé: It's tricky, and it goes back to maybe your earlier question about liabilities, tools and means that are intermingled among what is federal, what is provincial and what is municipal. I'm not a constitutionalist expert, but maybe make the rules or the processes through which we deal with these more clear. Everybody's sort of touchy, and nobody wants to put their toes in the water because they don't want to get the liability for the whole thing. Just recognizing that there's a problem then becomes a liability.

Mr. Chad Collins: Chair, how much time do I have left?

The Chair: You have 31 seconds.

Mr. Chad Collins: Okay. Mr. Wang, can I quickly ask you that same question about compensation for communities? You're dealing with Churchill, and I'm sure there are impacts there.

Dr. Feiyue Wang: In 30 seconds, there's no way I can say it. However, one thing I do want to say is that you just need to avoid.... There are lessons to be learned from something like the Grassy Narrows kind of compensation. That should be something the government really seriously thinks about, and we should avoid any other cases like that. That's absolutely not the way to go when it comes to compensation.

I hope that's within 30 seconds. It's the first time I'm on time.

Mr. Chad Collins: Thank you.

The Chair: Yes, exactly. You have three seconds left.

On behalf of the committee, I want to thank—

Ms. Lindsay Mathyssen: I'm sorry, Chair. Since there were so many cut-offs and since there's a lot of information, I'm just wondering if we could make sure that the witnesses know that if they want to submit anything at the end, it would be....

The Chair: I was just going to address that issue.

 $\boldsymbol{Ms.}$ Lindsay Mathyssen: Great minds.... That's the nicest thing—

The Chair: We won't go the "great minds" route.

Some hon. members: Oh, oh!

The Chair: Before I was interrupted, I wanted to thank you, and now that I've been interrupted, I still want to thank you for your contribution to the study.

Along the lines that Ms. Mathyssen has alluded to, Canada is under enormous pressure from not only our allies, but also our adversaries to make minerals, in particular, available. The Chinese have just cut off certain critical minerals used in the creation of chips. We will be putting F-35s in Bagotville.

None of these problems are going to go away. The real question is about how to better deal with them. You folks, for better or for worse, have been "dabbling" on the edges, for want of a better term. I think the committee would benefit greatly from your thoughts on how Canada—DND, CAF—would better deal with our defence security pressures going forward. If we don't learn from the past, we're kind of hopeless. That would be a real contribution.

In the event that you just happen to be thinking about things like that, we would appreciate it. With that, we will suspend.

• (0915)	(Pause)_	
• (0925)		

The Chair: We're back.

Joining us in the second hour are Dave Hovington, chief fire inspector, and Shaunna Plourde, health services clerk. Appearing here personally is Erin Zimmerman.

I'll ask each of you for your opening five-minute statements.

I'll point out, colleagues, that we're almost 15 minutes behind the clock, and we have to yield the room to another committee. I may have to run the second round of questions a bit tightly.

With that, I'll call upon Mr. Hovington for his opening five minutes.

Mr. Dave Hovington (Chief Fire Inspector, As an Individual): Thank you, sir and honourable committee.

I joined the forces in 1985 and dedicated my career to protecting lives and training others as a firefighter. After completing my basic firefighter training at Borden in 1986, I served in Moose Jaw, Borden and on the west coast, responding to emergencies and training on countless fires. Back then, we used what was available: thousands of gallons of flammable liquids and thick layers of foam to simulate real-life scenarios. Safety and readiness were our focus. We never imagined the long-term health risks these materials posed.

Decades later, I now face the personal cost of those practices. In the fall of 2022, I was diagnosed with multiple myeloma and cardiac amyloidosis. These illnesses have drastically affected my strength and vitality, reducing me from someone who once ran daily and lifted weights to someone who struggles to walk 100 metres. The toll has been immense not just physically, but also emotionally. I'm grateful for the support I've received from the Saskatchewan Workers' Compensation Board for my present public service role, but I have yet to hear anything about my VAC compensation for military service.

My story raises serious questions. Why weren't the risks we faced as firefighters and military personnel more fully recognized? Why weren't steps taken to protect us even as we put ourselves on the line to protect others? This isn't about my personal journey. It's about a broader issue of accountability and transparency, especially regarding environmental safety.

Just a month and a half ago, an incident occurred that highlights these concerns. During a hydrant repair near hangar 6, workers unearthed soil with an extremely strong smell of fuel. The odour was so potent that it could be detected 20 metres away. Samples of water and soil were collected, but no one seems to know where these samples went and what the results are. Who is ensuring accountability for these testing processes? This was not an isolated case. At hangar 7, we had a pile of contaminated dirt that initially failed environmental tests. It was covered with plastic and tires to seal it, but this covering deteriorated, leaving the pile exposed to the elements for nearly a year. Workers expressed concerns about their health, and the pile was eventually moved behind the mess hall, out of sight. Following the relocation, a new test was conducted, and suddenly the contamination passed.

This raises troubling questions. How are these tests being conducted? Are the criteria being adjusted to meet convenience rather than fact? We have also noticed a pattern: Contaminated sites sometimes disappear from records after buildings are demolished or hazards are moved to less visible locations. Are these sites cleaned up properly, or are they simply being hidden from view? These are legitimate concerns that deserve clear and honest answers.

I have served this country proudly for decades. We trust that our institutions will protect not only us but also our families living on base. Canada is a democracy built on fairness, accountability and human rights. Yet, the lack of transparency in occupational health and safety meetings undermines these principles. How can we protect ourselves when we aren't even informed about the risks? How can we have meaningful safety discussions when critical environmental assessments are withheld? Our health, trust and well-being are at stake.

I ask all of you today to help ensure these issues are investigated thoroughly and transparently. Let us demand a system where contaminated sites are properly addressed, not just relocated. Let us push for environmental testing that is consistent, credible and reliable. Most importantly, let us make sure no one else has to face the challenges so many of us already are due to health effects from past practices, or from living and working in unsafe conditions today. I've given my life to serve Canada. All I ask in return is that we honour the commitment to protect those who serve and their families. It's not just about accountability. It's about trust, safety and doing what's right for us and future generations.

Thank you.

• (0930)

The Chair: Ms. Plourde, you have five minutes.

Ms. Shaunna Plourde (Health Services Clerk, As an Individual): Thank you to the chair and honourable members of the committee for granting me the opportunity to speak to you today, and for your time and dedication to addressing this critical issue.

Thirty-one years ago, I was a young, married woman full of excitement and hope for my future. My husband was an aircraft engine technician for National Defence. We were expecting our first child. We had just moved into private married quarters on the base, and I had begun working as a clerk at the base convenience store, the Canex. I felt incredibly proud of the life we were building, one centred on service, community and the Canadian dream. I never

imagined this dream would turn into a nightmare from which I cannot wake.

Nine months ago, a simple yet alarming question started being discussed in the building I work in: "Do you think our building is safe?" This question and the discussions that followed opened a door to truths that have been devastating to learn. I am proud to have served as a public service employee for over three decades, supporting members of the Department of National Defence. Yet, over the years, I have lived and worked in buildings, sent my children to day cares and schools, and used facilities that I now know are directly on contamination sites or within areas where contamination sites exist. Despite this, we were never told.

After moving onto the base in 1993, I began experiencing medical issues. At the time, I attributed them to the challenges of being a new mother and working hard. However, by 2001, after seven years on the base, I was diagnosed with a neurological disorder with significant neurobiological consequences. This has progressively worsened, requiring increasing medication that now affects my memory. Over the years, other warning signs emerged. In 2017, I had an emergency hysterectomy. Since this time, four other women I work with have all needed to have this procedure. Many of us were employed in the same building—building 143. Around the same time, we noticed that several colleagues, both military and civilian, were battling various cancers or autoimmune, thyroid and neurological issues.

This April, the pieces of the puzzle started coming together. After months of personal investigation, discussions and interviews, we discovered devastating patterns: over 50 deaths in a short time frame in seven buildings, and approximately 200 illnesses among those connected to our base, 15 Wing Moose Jaw. These include cancers, thyroid disorders, neurological conditions and other life-altering illnesses. These are not isolated cases. Our findings suggest a widespread issue of contamination affecting bases and military housing across Canada, impacting not only military members but also civilian employees, their families and even children.

I count myself lucky. My condition, though challenging, is somewhat manageable with medication. Many others are not as fortunate. My friend and colleague Erin Zimmerman, a 46-year-old mother of four, has been diagnosed with intracranial hypertension causing visual impairment and young-onset Parkinson's disease—a rare condition for her age that is linked to chemical exposure. Erin now works in building 143 and was previously with the Snowbirds in hangar 6. That is directly on top of an active contamination site in the federal contaminated sites inventory and where she spent one of her pregnancies. She was never informed of the risks. I think of my friend Dave Hovington, a fire inspector and devoted colleague who continues to work tirelessly despite battling cancer. I think of my own family. My pregnancies were complicated and my children were born with extremely low birth weights. My daughter now struggles with neurological and endocrine disorders, and my son faces chronic lung and gastrointestinal issues. I now wonder if these are the consequences of living and working in contaminated environments.

We have discovered that contamination exists all over our our small base where there are hangers, flight lines, fire halls, a previous school, day cares and homes. Yet, we were never informed. No one told us about the risks we were exposed to daily. My husband, who has served for over 35 years, has witnessed unsafe practices such as chemicals being disposed of improperly and without protective equipment. He now shows early signs of a neurological disorder. His colleagues, many of whom worked under similar conditions, have faced cancer, cardiac issues and other severe health problems. Some have passed away.

• (0935)

Through thousands of hours of research and data collection, we have uncovered a systematic failure to address these issues transparently and effectively. Those of us who have sought answers have faced skepticism, criticism and, now, retribution, but we persist, for those we have lost, for those who are suffering and for those who may yet be affected.

I ask you, why were we not given the right to know? Why are our children allowed to attend day cares in contaminated environments? Why is it acceptable to put lives at risk—military, civilian and our families'—and, most importantly, what is the cost of a human life?

We must act, not just to address the tragedies of the past, but to ensure a safer, healthier future for all Canadians.

Thank you.

The Chair: Thank you.

Ms. Zimmerman, you have five minutes, please.

Ms. Erin Zimmerman (As an Individual): Thank you, Chair and honourable members of the committee, for the opportunity to be here and for dedicating your time to this discussion.

While today's conversations centre around facts and policies, it is important to recognize that these are not just abstract issues. For many Canadians, these are personal.

People across the country are watching and seeking answers and oversight of safety in their communities. This conversation de-

mands urgency and compassion. It is crucial to find a path forward that prioritizes transparency, accountability and the health and safety of all Canadians.

Unfortunately, systematic issues have created a system made impossible for DND to review through an internal process. I strongly encourage creating a dedicated budget line item in the next budget to fund an independent comprehensive review of DND contamination sites. This initiative should be directed by the president of the Treasury Board, the Honourable Anita Anand, with oversight and involvement from the Canadian Centre for Occupational Health and Safety and Health Canada to ensure impartiality and effectiveness in moving forward.

A question has come forward on how employees and surrounding communities were not advised about the federally managed contamination sites in the areas in which they worked and lived. Without disclosure, employees and members of the community were unable to ask questions or raise concerns regarding these properties. A lack of transparency and communication on these sites has left and will continue to leave irreversible impacts for these communities and within these areas.

The Canadian Council of Ministers of the Environment, the CCME, saw a need for implementing the requirements for a program to provide guidelines in identifying contaminated sites to ensure monitoring for the safety of the environment and for human health. In 2005, the federal contaminated sites action plan, FCSAP, began in response, to provide transparency to Canadians and federal departments by listing unprotected sites in the federal contamination sites inventory.

Under the Treasury Board's directive on management of real property, federal organizations are required to report, update and certify site data regularly. Under CCME guidelines, classified sites must be monitored for potential adverse health effects.

We must ask ourselves, if people on these sites were not informed or educated on the reporting process, how could they have known to report illnesses or deaths on or close to these properties, and where would they have reported? Given this gap, it is absolutely essential to determine how we can now align our actions with the program's established guidelines in order to move forward at this time.

Under CCME guidelines, how are health assessments on DND sites completed? DND is using "CAF medical", which has its own internal medical system. Within this system fall DFHP and also PMed, which is preventative medicine. They operate under a strict mandate focused on military members and operations only.

This excludes civilian employees and surrounding communities, leaving significant gaps in medical oversight. CAF employees do not always fall under certain provisions of the Canada Labour Code in certain instances, so how can CAF medical health assessments mandated to members only ensure that health evaluations are done for individuals on those sites?

The lack of disclosure of contaminated sites prevents individuals from applying for WCB and VAC compensation claims. Claimants must provide key documentation, including area worked, work time, a list of contaminants and their supporting medical documentation for a subject matter expert to evaluate if their illness is considered occupational.

Occupational illnesses are assessed by the recommendations made by the Canadian Centre for Occupational Health and Safety. These situations are to be looked at by Health Canada with the occupational illness list that is created by the United Nations. It is called the "ILO", the International Labour Organization. Looking through VAC public information and WCB policies shows that WCB follows this recommendation.

• (0940)

What standard is VAC following to assess occupational illnesses? If it is not using the recommendation, the question now is "Why?" Based on CAF policy, members sometimes fall outside of the Canada Labour Code standards while on domestic properties. These times occur during specialized operations and training only. This brings up an absolutely critical question. Should the ILO occupational illness list be applied when CAF members are exposed to contaminants at their home units as documented in federal inventory?

This raises absolutely significant questions about a potential conflict of interest for DND to evaluate the program and the management of these sites.

Thank you very much for your time.

The Chair: Thank you, Ms. Zimmerman.

Mr. Tolmie, you have six minutes, please.

Mr. Fraser Tolmie (Moose Jaw—Lake Centre—Lanigan, CPC): Thank you, Chair.

Thank you to our witnesses for joining us today.

For those who have served, I do appreciate your service.

Obviously, with the testimonies that have been shared today, we have to recognize that it's not just military personnel who operate on a base, but also civilian employees and civilian contractors who help keep bases, wings and naval stations open. I begrudgingly say "naval stations", being an ex-Air Force guy. I have a close friend of mine who's in the navy, and he's pointed out that I've not said that, numerous times, so I'm throwing it in there for his benefit.

We heard a bit of Mr. Hovington's service history, and I believe it was 1986 when he joined.

Ms. Plourde, you mentioned that your husband served as an air-frame technician. Could you give me the locations where he has served?

• (0945)

Ms. Shaunna Plourde: He has only been at Moose Jaw.

Mr. Fraser Tolmie: Okay. Ms. Zimmerman, just for the record here, in what capacity have you served? In what roles have you served?

Ms. Erin Zimmerman: I was an RMS clerk with the Snowbirds for four to five years, but then—

Mr. Fraser Tolmie: Was that in the military?

Ms. Erin Zimmerman: Yes, in the military. I am a veteran, but then I changed over to public service, so that means I can speak to you today.

Mr. Fraser Tolmie: Okay. I cut you off there. What roles were you in, as you said, as a clerk?

Ms. Erin Zimmerman: As a clerk, I was the claims clerk and HR clerk, so that was an RMS at that time for the Snowbirds squadron, which was very busy there. Also, I changed over to a public service role, and I've worked in procurement, contracting and finance.

Mr. Fraser Tolmie: How long have you been doing that?

Ms. Erin Zimmerman: I have been on base now for 13 years.

Mr. Fraser Tolmie: Have you served on other bases?

Ms. Erin Zimmerman: No, I am actually from Moose Jaw. It was my first place to be, and I met an amazing person, so I transferred to public service so that I could stay. It's a great place.

Mr. Fraser Tolmie: I'm very proud to serve as the MP.

We've been hearing testimony from the Treasury Board, from National Defence and Veterans Affairs, and we understand that they have a list. They have an understanding that there are contaminated sites and that they have to deal with contamination and the Department of Health, but you've mentioned the labour code.

I asked, in one of the meetings we had with Veterans Affairs, if they looked after civilian employees. Would you be classified as a veteran, or would you be classified as a civilian in order to deal with the health issues you're struggling with?

Ms. Erin Zimmerman: After I went through all of the policy for VAC, and through the policies and management of how occupational illness is dealt with, and went through the policies for WCB, it has become very evident that it will be very difficult for me to...well, I know I probably will never receive VACD, to be honest, with the policies the way they are.

Mr. Fraser Tolmie: Why is that?

Ms. Erin Zimmerman: It is caused by the fact.... If you recall, at the ACVA committee, there was a recommendation 17 that was exceptionally important. They have to use a calculation. None of us at this table, even though we're very educated people, are educated in the proper way, like the scientists before. They need to be able to calculate. I cannot tell you that my Parkinson's disease, with my education, is caused by the contaminated site. I can tell you what my doctors have said. However, to be able to prove it, I need to have a map and the list of contaminants, and I have to know how long I was there, but you guys haven't even allowed people to apply for WCB because they can't even get that information.

Mr. Fraser Tolmie: What do you mean by people not being able to apply to WCBs? Are you talking about civilian employees?

Ms. Erin Zimmerman: They don't know to apply, number one, because they don't know what their cancers could possibly be caused by, since they would have to know what the ILO is. Look at the ILO. The United Nations has done this very well. It was updated in 2010. You can go and take a look to see whether the contaminants you were on match your disease, within science. That's always changing, as we know. We need scientists from the United Nations to do this.

VAC and CAF, from my understanding, are using something called an index. I've done multiple interviews with people who are service managers doing VAC claims on the side, and old, retired medical staff and admin staff. What is happening is that we are probably using something called "the guideline" or "the index". We are deciding which occupational illnesses we will let through the gate. We have girls from the Women's Health Initiative who can't get compensation due to the fact that they can't get the calculation. They wouldn't even get a chance to get the calculation in a VRAP appeal, because the VRAP appeal needs them to pass the first gate.

I apologize.

• (0950)

Mr. Fraser Tolmie: Okay.
The Chair: You're out of time.

Mr. Fraser Tolmie: I have a lot more questions.

The Chair: Don't we all?

Ms. Lapointe, happy birthday, though this is a strange time to wish you happy birthday.

Anyway, go ahead.

Ms. Viviane Lapointe (Sudbury, Lib.): Thank you, Chair.

On behalf of everyone here on the committee, I want to tell you that we are very appreciative and grateful that you're here today. Hearing about your experiences is very difficult. I can assure you that no one in this room will forget your testimony here today.

Mr. Hovington, I believe you were the recipient of a Governor General's award for excellence in emergency services, so I want to acknowledge your service.

Mr. Dave Hovington: Thank you.

Ms. Viviane Lapointe: I would like to ask you what support or assistance you received from the department following this expo-

sure, and what support or assistance you weren't able to access that you believe would have been helpful.

Mr. Dave Hovington: I was guided by one general safety officer to apply for workers' comp in Saskatchewan, which worked very well for me. Within two weeks, they started to pay for all of my medications and for all of the time off I had to use to go to Regina for treatments, or to see the oncologist and whatnot. She also advised me to go to VAC, which I did. I have yet to get any reply from them.

Provincially, as soon as they saw "firefighter" and "multiple myeloma", it was automatic. I think something similar should be happening with VAC. It should be reflecting that. That would help a lot.

Other than that, if it weren't for Erin Zimmerman, man, we would be in the dark out there. She's done a lot of research and guided us through everything, which all of us public service employees really appreciate.

Ms. Viviane Lapointe: I want to tell all of the witnesses here today that I wish to provide them with a forum to further inform us about their and their families' experiences.

Please feel free to share that and continue to provide the experiences you have.

What changes would you like to see implemented within the department to ensure that the well-being and safety of employees working in potentially hazardous environments are given the utmost importance?

This is for any witness who feels comfortable speaking.

Ms. Erin Zimmerman: I believe that, first of all, we need to talk about transparency and what transparency means. I'm going to tell you—not just because we've served your country—why this is so important to Canadian citizens. Other people have mentioned that we have communities that surround these bases. If we are not coming up with the proper data because we are "interpreting" it and giving you the DND's interpretation, it means that we are in a dangerous place for public safety.

I am concerned for my family, but why are we all here? These people on the screen are incredibly brave. You have no idea, living day in and day out, what we have gone through for the last 12 months. However, why are we here? We're here because we're the older generation. I always called myself the mom, the mom of the base. The kids come in at 20 years old, learning to be pilots. Guess what? They are incredible. They are smart. They send us the best. The problem is that they're alone. They need somebody older who has four kids, like me, who can listen to life.

Why haven't I left with Parkinson's disease? I could possibly, at least, get disability; I don't know if I can. I'm very scared to leave because I have four children who are going through their education, and a family. I am doing it for the next generation. If you tell me that I don't get a dime of compensation, if I know for a fact that a mother does not have to have a discussion with her son about disability after 10 years of medication wearing off and about how Parkinson's will become a big part of our lives, I want to know that there's a woman out there who raises her child and never knows I exist

The people here, as well.... We do this for the next generation. We do this for the Canadian public. We do this for the kids in the day care centres and for every community. We fight for you. That's why we're here.

• (0955)

Ms. Viviane Lapointe: Thank you, Ms. Zimmerman.

An hon. member: Hear, hear!

Ms. Viviane Lapointe: Yes.

Are there others who want to share what changes they would like to see implemented?

Ms. Erin Zimmerman: I think they both have a lot to say, but Shaunna is very vocal about this.

You go.

Ms. Shaunna Plourde: The biggest thing, to me, is transparency. They're talking about doing these testings and that kind of thing, but I don't believe that we're getting the real results. They're getting hidden. They're getting softened, if you want to say that. When we get the test results....

For instance, in building 143, they brought somebody in to do some air quality testing. That was done for two months. We got the report back, and apparently the building is just fine. There's nothing wrong with the air quality.

Explain to me, then, why we have had three people I know of personally—and Erin does as well—who have passed away from breast cancer and who were in that building. There are other people who have passed away or are sick in that building. We have taken a monitor and gone down.... Poor Dave with blood cancer went down in a crawl space with the monitor, and the monitor was going crazy. However, everything's fine in that building.

There is an absolute disconnect here. To me, things are being hidden. Things are being shovelled under the rug so that nobody knows. It's all kept hidden.

My 30-year-old daughter came in to me yesterday after having tests done at the doctor's office. She most likely will never be able to have children. She's 30 years old. It has been attributed to living in private married quarters on the base. The private married quarters that we lived in have now been dismantled. They're torn down. Why? They were supposed to be so safe.

To me, the DND is supposed to be there to care for and protect Canadians. It is our safety. I'm a Canadian, just like you, just like everybody else. Why have I not been safe? Why have the other

people on that base—military, civilian and contractor—not been told? Why have they not been kept safe?

We've all given our lives to Canadians, to protect Canadians, but we're Canadians, too, and we haven't been protected.

The Chair: Yes. Thank you very much.

Mr. Sauvé is next, but he will be speaking in French.

For those of you who are not bilingual, you can switch. We hope it's...

[Translation]

Mr. Mario Simard: I don't know whether Mr. Sauvé is going to speak, but Mr. Simard is definitely going to be speaking in French.

[English]

The Chair: Oh, I'm sorry. I apologize.

[Translation]

Mr. Mario Simard: No worries, Mr. Chair.

What the witnesses are saying is very important and touching. That said, I would like to take 30 seconds to introduce a motion on behalf of Ms. Normandin. Right after that, I am going to address the witnesses. The motion reads as follows:

Given that the Bagotville military base is responsible for the PFAS contamination of the drinking water sources of nearly 8,000 residents of the La Baie area, and that the \$15.5 million granted to the City of Saguenay by the government to ensure the treatment of these waters will be completely exhausted in July 2025, with the treatment of the waters requiring six times as many filters as planned, the Committee believes that the Minister of National Defence should enter into a formal agreement with the City of Saguenay to ensure that all costs associated with the temporary treatment of PFAS contaminated water and the establishment of a permanent treatment plant at La Baie are covered by the federal government, failing which the citizens of Saguenay will have to assume these increased costs through an increase in their municipal taxes of more than \$7 million annually, and asks the Chair to report back to the House as soon as possible.

We will be able to debate this later, Mr. Chair.

I am now going to turn quickly to the witnesses. I'm sorry, I didn't want to be cavalier, but I had to introduce that motion.

Ms. Zimmerman, what I very clearly understood from your testimony is the lack of transparency and the difficulty in getting occupational diseases recognized for members of the military who are exposed to contaminants and toxic substances or chemicals on bases.

When you are a civilian employee, there are mechanisms for having occupational diseases recognized. In Quebec, it is the CNESST, the Commission des normes, de l'équité, de la santé et de la sécurité au travail, which can recognize these diseases. Health Canada can also determine what types of chemical substances have an impact on health. And there is certainly a medical service on the various bases.

How do these three types of services coordinate among themselves? Is there sufficient coordination for you to be able to have your occupational diseases recognized?

• (1000)

[English]

Ms. Erin Zimmerman: Okay. You're not being cavalier. You're being somebody who is asking such an important question, because your question is actually connected to ours.

I'm going to base everything I tell you on fact or on something odd I have noticed, because that is how I've been running for the last 12 months.

Right now, the fact is that PFAS is being cleaned up in North Bay, for \$20 million. PFAS is being cleaned up with you guys. We've had TCE cleaned up from Shannon. Why is that? That brings in Gagetown, but we'll discuss that another time.

Why is this issue important? TCE and PFAS are what Health Canada is allowed to see. That is why you guys are being classified differently, because Health Canada is seeing it when it enters the communities, because then the province and the federal government can get Health Canada involved.

Health Canada is a department. Let's look at it as the pyramid that it is. The only person who can come onto a DND base is not Health Canada. They're a department. They can't tell on each other publicly. This is a problem. They can't. Neither can the environment commission. The only people who can come are the labour board. What does the labour board have to say?

After lots of emailing with them, I've realized that the problem is that if DND can show they are bringing in privatized firms to do the testing, like on building 143, where they've also done the list of contaminants, they will not come in, because they don't have enough to issue a complaint. They don't have enough, because there's enough money being spread out that they should know....

I'm going to tell you what's happening with 143, and I might not have a job when I go back: 143 has an issue. First, I found out.... Do you know that a CR-4, a procurement finance clerk, had to run around in the middle of the night and look at every single environmental assessment she could pull from the United States to be able to slip it to everybody who is DND to put it on...? Do you know that they took all of those chemicals off?

If you do not test for it, it is not there. Is that how we're closing our sites? We know that DND, based on ADM(IE) testimony and the fact that Environment here was sitting on the TCE board as what is an assistant deputy minister.... They told you TCE. They told you what Health Canada knows. They have not told you what is on those bases. That is the problem: Health Canada cannot come in. The environmental board will not come in, because DND is showing, based on paper and statistics, that they are looking into it. That is a problem. We don't split contracts. That is an ill intent. We need to decide what is our intent behind our actions.

Now we have criteria issues. How does a pile sitting right by the day care centre, blowing—where my son went for a year—not pass when it has contaminants that last for over a thousand years in our soil, like you were dealing with, like so many of us are dealing with? The only thing I can come up with, based on talking to retired members, is criteria: How are we classifying the sites? Are we

looking at it as far away behind the mess? Guess what? If that is it, it's different criteria, because it's not by a person.

Why are some of our sites closing immediately after being knocked down but the land isn't...? Because, based on CCME documentation, policy and guidelines—

The Chair: Excuse me. I'm just—

Ms. Erin Zimmerman: Oh, I'm sorry, Chair. I'm a lot—

• (1005)

The Chair: I appreciate it. I have been running a very slack clock, shall we say?.

[Translation]

Mr. Mario Simard: I would just like to point something out, Mr. Chair. I believe that no one should be afraid to testify before a committee. I hope no pressure is brought to bear on Ms. Zimmerman because of her testimony. If that does happen, I urge her to get back in contact with all of the members of this committee.

[English]

The Chair: I think we'd all see it the same way, Mr. Simard.

Madam Mathyssen, you have six minutes, please.

Ms. Lindsay Mathyssen: I too want to thank everybody for sharing their stories today. It is extremely important that we get to make some changes, which are very clearly needed and, as many of you said, not only for yourselves, but for the next generation.

I did want to ask about this. It seems to me that in many of the studies that I've been a part of, and in conversations around DND, especially when it comes to sexual misconduct within the military, it was made very clear that there had to be an external review, right?

There had to be, and rightly so. The government is trying to ensure that cases are not internally investigated. This seems to me to be very much a parallel: there's an internal investigation and things aren't being brought into the public. There's this idea that it has to happen under a cloud of national security. We've heard many times that DND is risk averse. Does this fall into all of that? Is that your opinion?

Ms. Erin Zimmerman: Yes. I'm not saying this to be awful to DND. I love DND. It's my life. The people are my family.

What I am telling you is that DND, to me, is about the human beings who work there and what we do. A system has been built. It's built on budget cuts and a lack of positions. We keep the same amount, but we do more and more. We transition people, and we lose things. We've created a system. The problem is that we have people in high positions who are educated and should be there. However, there's a lot to lose.

I've realized personally what it's going to be like if I'm unemployed with Parkinson's and a visual impairment. I'm great at my job. I am good at policy. I'm going to tell you something, though. Who wants to hire a visually impaired person with Parkinson's disease? That is my reality. My brain doesn't stop.

I want this to be fixed. Yes, it has to be out of DND's hands not because it's not made of amazing people but because we have created a system where we can't tell the truth. If we tell the truth, we get demoted. We lose our jobs. We lose our incomes. We hurt our families. We leave in disgrace. That's not what we need to do here. We need to rally together, and be stronger and better. My dad was RCMP for 35 years. My grandparents served. My sister serves. My brother-in-law serves. My niece is growing up in this queue. We are an amazing group of human beings.

I am not disloyal. I'm disloyal to the system that was built, which cannot look at this.

Ms. Lindsay Mathyssen: You started to cover what needs to happen for investigations.

Where is the ILO, in particular, pointing on this topic? Would you recommend there be an entire rethinking of this idea of stewardship? I would assume it's for all bases. How do we start that?

• (1010)

Ms. Erin Zimmerman: We already tried to change this.

When the program started in 2005, we were able to look at how the system fell apart. Guess what? The federal government left us a bread crumb trail. The Auditor General came out with a report in 2012 stating that, with budget cuts and lack of positions, they knew the safety of their people was at risk. However, preventative safety didn't matter, because they had fewer positions and less money. We are doing everything. We are all doing three full-time jobs with one person. This isn't a DND issue. This is a real issue of time.

I'm sorry. I got off topic.

Ms. Lindsay Mathyssen: I was talking about the ILO.

Ms. Erin Zimmerman: Oh, the ILO is very much.... I would like to ask you, during COVID.... If we don't recognize occupational illness.... Health Canada is a department they cannot talk out. Who's paying for cancer treatment for service-related occupational illness? Is that through Health Canada during a medical emergency? If we do not have the ILO, how am I going to retire? Do you know my reality? I will be a few years short of retiring well based on the time when I'm going to have to retire, or I will need work accommodations that will probably not be given to me after this. We have to support people, because then they go on Service Canada. We are spending the money. The money has already been spent on all of our veterans, but it is being spent out of the wrong pocket.

I'm going to tell you something. I'm part of an invisible demographic, and so is Dave. What happens is this: If you are unhealthy, you usually stay in and flip to a public service role. You're sick at the beginning. We see people with smaller illnesses. You are not reaching universal.... I can't say it. Soldier qualifications.... What this means is that you were....

I'm sorry. Am I done?

Mr. James Bezan: It's universality of service.

Ms. Erin Zimmerman: Yes, that's it exactly.

We are releasing members before we get their data. Remember, we have CAF data. I do not exist. Do you know that service managers at the Legion have now figured out they can never put down "cancer"? Cancer is under the disability index. It is not under the one you get for occupational illness. What is happening is that they're putting it in per symptom. I'm telling you that we have RCMP now—I'm doing their VAC claims on the side, in the evening—who are thinking it's occupational illness, because they have—

Okay. I'm sorry.

The Chair: Thank you, Ms. Mathyssen.

As you can see, colleagues, our time is almost expired, but I still want to get in another round. If we're tight, we won't lose the room too quickly. We could do two minutes.

It's two minutes for Mr. Tolmie, then two minutes over here.

Mr. Fraser Tolmie: Thank you, Chair.

I understand that we're compressed for time here.

My understanding is that base commanders have a legal obligation to report contaminated sites, that there are things like fix apps and that they're the custodians of the base. We want to go from contaminated sites to prevention and want to look after the next generation, as you talked about. What's your perspective on that? What should be implemented to be able to close the gaps between the different organizations and the reporting?

Ms. Erin Zimmerman: We must have people who are educated in the roles they're going into. You cannot expect a DND flight surgeon or doctor to have the expertise they require for occupational illness. We need to be transparent. If we do not have funding, we need to get resourceful. We're talking about protected properties. Do you know that the majority of the stuff that I can tell is protected is way lower than the unprotected? The issue is that we can. Security doesn't matter. We can bring in other people, but we have to bring in Health Canada.

Mr. Fraser Tolmie: Are you saying that the expertise on base right now is not there?

Ms. Erin Zimmerman: No, bases managed real property up until 2016, and then it was pulled and went to ADM(IE). The ADM(IE) took over, and there are two audits: one done in 2018, and one done in 2022.

Mr. Fraser Tolmie: Just for clarification, we might need to know what ADM(IE) stands for.

Ms. Erin Zimmerman: It's Assistant Deputy Minister of Infrastructure and Environment.

Mr. Fraser Tolmie: Okay. I just want that on the record.

Ms. Erin Zimmerman: Environment falls underneath them, and they were both here together that day. They had a lot of information.

Mr. Fraser Tolmie: Okay, thank you.

Ms. Erin Zimmerman: We need more expertise.

The Chair: Thank you.

Mrs. Lalonde, you have two minutes please.

Mrs. Marie-France Lalonde (Orléans, Lib.): Thank you very much.

I want to say, first of all, thank you to our three witnesses today, who came in front of this committee. I think we all can attest to how emotional it is for you. Some of you were nervous, and I would say that you did very well, so I commend you for this. I thank you for your service.

With a little bit of time left, I would like to hear from our three witnesses about key recommendations that you would like to see as part of this study, please.

I would like, Mr. Chair, maybe the three witnesses to say a few words to close.

(1015)

The Chair: It's going to be difficult for all three to speak in a minute and a half. How would it be if we start with Ms. Zimmerman and then go to Mr. Hovington if we have time?

Ms. Erin Zimmerman: It's about transparency of history. We know for a fact why I pulled 20 years of contamination ATIs that were already completed. It's that the federal government doesn't change. We just get smaller. What ends up happening is that we follow the same things. We need to go through what happened in Shannon, because there's a lot of new information out there, and we need to go through what's happened with the Senate committee regarding Gagetown, because this is what this is about, and all of these stories put together. It's about all these stories put together.

Why was I told by union to leave Moose Jaw? That is a big question. Why do I not have union representation? That is a very big question. I haven't heard from them in months. We have a situation where DND is too close to itself and where too many people know a little bit. No one knew what happened in history. No one has enough that we are ever guilty of anything, but we are scared that our positions are going to be cut and that we are going to be totally blamed based on historical stuff. With historical stuff, transparency, the ILO and Veterans Affairs, we will start moving forward out of this mess.

The Chair: Thank you, Mrs. Lalonde.

You have one minute, Mr. Simard.

[Translation]

Mr. Mario Simard: Thank you, Mr. Chair.

Ms. Zimmerman, I find your testimony not just deeply moving, but also extremely distressing, I won't pretend otherwise. I don't

know whether you can submit a document to the committee describing the entire process you have to follow to have an occupational disease recognized. I think it might be useful for us to understand the steps that must be taken. I understand that you probably have to meet with a doctor, first, but there are certainly other steps to prove that exposure to a contaminant is the cause of your occupational disease.

I don't want to be intrusive, but I wonder whether the three witnesses might not send us information detailing the steps they had to take, to have their occupational disease recognized.

[English]

Ms. Erin Zimmerman: I believe it's very hard for occupational disease. It's something that's a specialty. I want you to know that I am living in Saskatchewan. That means that I don't have doctors, but I also don't have the information for the WCB and VAC.

My husband and I had very nice savings. They are gone. I needed it to be able to proceed with this because I had to know from a doctor, a doctor specialized in visual impairment and neurological conditions, that they felt the same as I do—that it is toxic related.

I had to spend my own money on hotels so that I could come here today with facts. I'm a facts person. I'm a data person. I like policies, and I like pulling them apart and seeing how they work. However, I'm going to tell you something: It's very hard to physically have the money, and I'm lucky that I am in the age demographic I am. If somebody younger were sick, they couldn't get this assistance.

The Chair: Thank you, Ms. Zimmerman.

You have one minute, Ms. Mathyssen.

Ms. Lindsay Mathyssen: We've been told several times that there is a great deal of openness and information out in the public.

Were any of you told, when you started to work or during your course of time working on this highly toxic site, that it was highly toxic?

Ms. Erin Zimmerman: No. I'm also getting.... I know that two people....

Mr. Dave Hovington: Never.

Ms. Erin Zimmerman: Never.

I have also gone back to safety officers on base until the time the program started, and not one of them was informed until recently about the program. When they saw civilians getting sick, general safety didn't even know to tell them to report.

I've contacted people from multiple bases because now my phone rings off the hook all night long. I take messages from people with questions. None of them were disclosed to, and they are all across the country.

Ms. Lindsay Mathyssen: Mr. Hovington.

• (1020)

Mr. Dave Hovington: Yes, I've been doing that since 1996 and have never been told anything otherwise.

We used a lot of PFOS foam between 1996 and 1998 until the government shut us down to not have any fires there. Yes, foam is very bad for your health; we all know that. The previous board discussed that at length.

As you can tell, I'm sick from it, so thank you for listening.

The Chair: Thank you.

Ms. Erin Zimmerman: Our building was also built on top of the foam—just to let you know—with one foot of dirt taken out in 1902

The Chair: Mr. Tolmie, you have two minutes.

Mr. Fraser Tolmie: Oh, you've given me another minute.

The Chair: I've given you another two minutes.

Mr. Fraser Tolmie: Oh, you've given me another two minutes. Okay, I was ready to pack up.

Tell me a little bit more about building 143.

Ms. Erin Zimmerman: Building 143 was built in 1992, and in 1982.... I have talked to some retired members who caught hold of other people who had seen environmental...doing sampling around that area.

Yes, we don't know what PFOS is, but we also know that in that area, they had fuel to start the fires. It's the hydrocarbons. Yes, PFOS is just as big, but I'm going to tell you that the DND is going to tell you about PFOS.

I'm sorry.

Mr. Fraser Tolmie: I'm just going to.... There is a thought that's just come into my head.

One of the things that we heard is that there are living lists, buildings that have been knocked down that may have been on contaminated sites. Are you aware of the living lists? Have you been able to access those?

Ms. Erin Zimmerman: There is a way, and I'm not going to tell you how to access protected protected B buildings, measurements and years built. I cannot find out any criteria on the actual contaminants, but I want you to remember that the DND was the one making the lists. It decided.

Mr. Fraser Tolmie: Okay, but what I am saying is that, based on what they're saying, there are living lists that people can access.

Ms. Erin Zimmerman: No, the living list is the unprotected properties, but it is just for the contaminants they found between 1990 and 1993 when they did the cross-Canada environmental assessment for the DND.

Mr. Fraser Tolmie: So, protected buildings are....

Ms. Erin Zimmerman: Protected buildings are still within the PSPC and Treasury Board world, but what happens is that we deem them protected for security. It's very interesting what they're deeming as protected because I see those buildings now coming down without the proper stuff, so if you worked there, you will not be able to ever get a map.

With regard to environmental assessments, the Kemptville RCMP facility is the perfect example.

Mr. Fraser Tolmie: Okay. Thank you.

The Chair: Mrs. Lalonde.

Mrs. Marie-France Lalonde: Thank you very much.

Mr. Hovington, you worked as a firefighter, and we've heard numerous times about the significance of PFAS and what it means.

For this committee, as you are going forward, do you have any suggestions or recommendations of other types of material or perhaps other newer ways of better protecting yourself and others who are having to do the training and are still using some of the material for your work?

Mr. Dave Hovington: Yes, ma'am.

The CFFM—the Canadian Forces Fire Marshal's office—has come up with a lot of new guidelines. We went from C8 foam in the eighties and nineties to C6. Now they're probably going to C3, which is not as good as C6, for sure. It hasn't been approved. Time will tell where we're going and how this will be guided by them. That's pretty well it.

There are PFAS and PFOS. Where we used to train in Moose Jaw was about 150 metres from building 143. We used to dump all kinds of waste fuels and flammable liquids in there, and just lighting [Technical difficulty—Editor] from just about every evening and on weekends, fully. It's highly contaminated from probably 40 to 50 years of using that site, which is, like I said, 150 metres from building 143.

That's why we're so concerned about our health. It was caused by that

Mrs. Marie-France Lalonde: Thank you very much.

I'm going to close by saying that I had the privilege of going to Moose Jaw this summer.

Ms. Zimmerman, you mentioned the people on base, working every day. I want to commend every single person—CAF, DND and civilians—who are doing extraordinary work there.

Thank you, again, for joining us today.

• (1025

Ms. Erin Zimmerman: We're lucky to have the people we have there. They are the best of the best. They're amazing.

The Chair: Unfortunately, that brings this very compelling testimony to an end.

Colleagues, what we heard in previous hours is not reconcilable with what we heard this hour. We are going to need to rethink, I think, how we shape this study.

Ms. Zimmerman, Ms. Plourde and Mr. Hovington, you can take some comfort in your having been impactful with the committee. I thank you for your willingness to appear, and for the risks you are willing to take. Insofar as this committee has anything to say about mitigation of risk, I think it's fair to say that we will all stand with you.

Mrs. Cheryl Gallant: I have a point of order, Mr. Chairman.

Mr. Dave Hovington: Thank you, Mr. Chairman.

The Chair: Yes.

Mrs. Cheryl Gallant: If the witnesses suffer any remuneration or employment changes as a result of their testimony today, could we ask them to report it to our committee?

The Chair: That was a bit more direct than what I was saying.

Ms. Erin Zimmerman: Can I respond?

The Chair: Yes.

Ms. Erin Zimmerman: I'm going to be honest.

I'm already at loss with everything. I went from being a really great employee who has received coins and certificates, and who got some really great promotions from my bosses. I'm going to tell you something: I have never been treated so poorly. It's the same for Shaunna and Dave. Shaunna has had to take time off work, from the effect. Why have I stayed? My neurologist asks why I'm on a contaminated site. I need a job. I need a public servant position. You have these people there. I'm not going back to a great job.

I talked to my doctor this afternoon. I'll be open about my condition. I haven't slept in two months. I'm not allowed to work on this. I'm not here on vacation leave. I'm supposed to have paid leave here. I'm using every ounce of leave without pay to talk to you today, making sure I can sit here and look into your faces, so you realize I'm a human being. I need you to understand. I might have to come off for a few weeks. I was terrified. If I come off for a few weeks, they're going to kick me out and I won't get information.

This is the problem you have.

Where do I go, as a public servant? I don't even have a union. I'm telling you that the vice-president of my union sits on the environmental board as a rep. They are all DND employees. We are all worried about our jobs in the economy we're in.

I'm sorry, sir. Thank you. We need assistance. Please.

The Chair: I am truly sorry to bring this meeting to a close.

Again, thank you for your courage—all of you.

With that, we're adjourned.

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