

LEGISLATIVE ASSEMBLY OF MANITOBA
THE STANDING COMMITTEE ON LAW AMENDMENTS
Thursday, February 1, 1990.

TIME — 10 a.m.

LOCATION — Winnipeg, Manitoba

CHAIRMAN — Mr. Helmut Pankratz (La Verendrye)

ATTENDANCE - 11 — QUORUM - 6

Members of the Committee present:

Hon. Messrs. Connery, Cummings

Mr. Burrell, Mrs. Charles, Messrs. Harapiak,
Kozak, Pankratz, Patterson, Praznik, Storie,
Taylor

WITNESSES:

Mr. Bob Shaw, The Refrigeration and Air
Conditioning Contractors Association

Mr. John Bigelow, The Refrigeration and Air
Conditioning Contractors Association

Ms. Jan Lowe, The Refrigeration and Air
Conditioning Contractors Association

Mr. Bill Taylor, The Refrigeration and Air
Conditioning Contractors Association

Mr. Chris Kaufmann, City of Winnipeg, Task
Force on CFCs

MATTERS UNDER DISCUSSION:

Bill No. 83—The Ozone Depleting Substances
Act

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Mr. Chairman: The Committee on Law Amendments is called to order. When we last met, the committee agreed to hear presentations on Bill No. 83, The Ozone Depletion Substances Act.

I have a list of persons wishing to appear before this committee. I will read out the names at this time: Mr. Chris Kaufmann, Mr. Manson I. Coles, Mr. Bob Shaw, Ms. Jan Lowe, Mr. John Bigelow, Mr. Bill Taylor, Mr. David Brant, Mr. Charles E. Lamont.

If it is the will of the committee, I would like to suggest at this point in time—there were four names that I read out as third on your sheet of paper which you have before you, Mr. Bob Shaw, Ms. Jan Lowe, Mr. John Bigelow and Mr. Bill Taylor. If we would be able to take them first and then Mr. Chris Kaufmann, and then Mr. Manson I. Coles in that order, and then Mr. David Brant and Mr. Charles E. Lamont. Is that the will of the committee? Would you agree with that? Okay.

Then I would like to ask at this point in time if there is anybody else who would like to make any presentation toward Bill No. 83, and you are not on this list, would you please identify yourself at this time? If there is not, then I would like to ask the first presenter to come

forward, whoever it will be, in respect to Mr. Bob Shaw or Ms. Jan Lowe, Mr. John Bigelow or Mr. Bill Taylor. Do you have your written presentation distributed? Thank you. Would you please identify yourself?

Mr. Bob Shaw (The Refrigeration and Air Conditioning Contractors Association): My name is Bob Shaw. I am the spokesperson for my colleagues. I would like to thank the committee for the scheduling and allowing us to present.

This is to the Government of Manitoba, Standing Committee on Law Amendments, re Bill 83.

The Refrigeration and Air Conditioning Contractors Association, known as RACCA, represents 90 percent of the refrigeration industry in Manitoba. Our association, founded over 25 years ago, encourages high standards in the refrigeration industry. Our objective is to promote a qualified apprenticeship program in conjunction with the Manitoba Department of Labour.

RACCA understands and accepts the objectives of the Act known as Bill 83, that is "to reduce and eventually eliminate in Manitoba the release of ozone depleting substances into the atmosphere." We also recommend The Code of Good Practice for the Reduction of Chlorofluorocarbons Emissions in the Refrigeration and Air Conditioning Systems written by Environment Canada.

We have several concerns which are pertaining to Bill 83 at this time, as follows: Does the proposed Bill 83 fall within the guidelines set out in the Montreal Protocol? RACCA feels that it is imperative that the provincial legislation is enacted within the scope of federal legislation on this issue, so as to avoid the problems that occurred when the Province of Ontario legislated against transportation of used Freon. This legislation is impacting on Manitoba as we cannot transport reclaimed refrigerants back to the factory.

* (1005)

The phase-out process must be in conjunction with the development of replacement or drop-in refrigerants. As of today, there are no exact replacement refrigerants available. To prematurely ban CFCs in Manitoba ahead of federal regulations would have a disastrous effect on all citizens of Manitoba.

Some of the areas affected are: in the air conditioning—offices and businesses, schools and universities, hotels, hospitals and institutions, homes and automotive; in the refrigeration end—homes, supermarkets and grocery stores, warehousing, food manufacturing and processing plants, medical applications, recreational facilities, rinks and arenas, commercial fishing industry, mining industry, construction, i.e., the Conawapa electrical site.

It is imperative that all levels of Government work together to allow for a smooth and orderly transition

of the present refrigerants to environmentally friendly products. At present, there are no restrictions as to who may handle the CFCs. RACCA firmly believes that the only way to control the use of CFCs is to certify and license the people who handle the refrigerants.

Further to this end, we proposed six classifications or trade certification as follows: Class A, no restrictions, all chlorofluorocarbons, Class B, air conditioning up to and including four tons, Freon 22 only, Class C, domestic appliances, Class D, automotive and auto wrecking, Class E, manufacturing, all refrigerants, Class F, transportation and distribution of all refrigerants.

RACCA would be in favour of working on a pilot project demonstrating the recovery of chlorofluorocarbons (CFCs) for recycling purposes in conjunction with the provincial Government.

In closing, RACCA wishes to offer our training and expertise to work with the provincial Government to ensure a satisfactory implementation of the regulations governing Bill 83. Yours truly, Refrigeration and Air Conditioning Contractors Association, and my colleagues. Thank you.

Mr. Chairman: Thank you, Mr. Shaw. Are there any questions?

Mrs. Gwen Charles (Selkirk): You mention in your brief that there are no exact replacement refrigerants available. When you use the term exact, does that mean others would be available that perhaps would not be as appropriate but could be used?

Mr. Shaw: There is—

Mr. Chairman: Mr. Shaw.

Mr. Shaw: I am sorry—

Mr. Chairman: Go ahead, please. Just for everybody here, if you do not mind, as Chairman, I would like to recognize you before you speak out, so that Hansard can record who has been the spokesman. Thank you.

Mr. Shaw: Right now the chemical manufacturers such as Allied and Du Pont are working on some refrigerants that will be suitable as replacements. There is nothing right today that is a replacement refrigerant.

* (1010)

Mrs. Charles: In these lists of areas that would be affected under this legislation, are there any units or possibilities of other systems being used in that I am trying to find out if we could restrict the usage of refrigerants, of the CFCs in refrigerants, in that can we use different types of materials in air conditioning units on larger or smaller scales and other places?

Mr. Shaw: I just about did it again, I am sorry.

The one refrigerant, Freon-22, right now is recognized as being ozone friendly for a period of time, but eventually they want to get rid of it too. On new systems

going in at the present moment we are using mostly Freon-22 on new installations. What we are concerned with is if something happens to a store in 1991 or 1992 and someone says, no more Freon-12, there is nothing that is a drop-in right now to be used in its place.

Mrs. Charles: Therefore, you are saying that Freon-22 is a replacement but that in the usage right now mostly Freon-12 is being used. The cost of refinishing and retooling all these equipments would be probably impossible.

Mr. Shaw: Yes. It would be very expensive.

Mrs. Charles: But they could be replaced with Freon-22? Is that a phase-in program we could be using, to use the Freon-22, which is environmentally friendly, as the term goes?

Mr. Shaw: Yes.

Mrs. Charles: Could Mr. Shaw indicate how he became aware of this Bill and if he has had any input into the forming of it, or whether he just found out about it after it had been put together; and also, what the repercussions of the Bill would be as it is now, if we pass it completely as it is now? What type of implication would that have on the province and, in particular, his industry?

Mr. Shaw: The cost factor would depend on the size of the equipment that you wanted to replace. Some units, depending on their present application, are unusable as far as Freon-22 as a replacement goes. There would have to be a complete new system put in. In answer to your second question, I found out through our membership, we had no input into the Bill.

Mrs. Charles: When you speak about proposing that there will be classifications for certification to use CFCs, do you see this as an interim measure or would this be something that should stay within the regulations and Act? Obviously, if we do away with CFCs the classifications would not be there but are there other uses for these types of classifications and handling of refrigerants in the industry?

Mr. Shaw: We feel it should stay. With any refrigerant that is being developed, that is in the planning stages right now, one of the problems with it, it is a little more volatile than the present refrigerants that we have. I would suggest that once the licensing of people who are qualified to handle it, it should remain.

Mrs. Charles: I have one last question. When you speak of not being able to transfer certain components back to the company, can you tell me where CFCs are being disposed of in this province and how that is being done, or is there a problem in the collection of used CFCs, even those used in production of refrigerants and the equipment? What is in place now to collect them, to make sure what goes out comes back, and have some accountability of these chemicals?

Mr. Shaw: There is no problem now. We are storing them in tanks. Those who are removing them from

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systems that are not in use, there is no problem. There is no disposable action being taken right now, and there is not that much.

Mr. Jerry Storie (Flin Flon): First of all, Mr. Shaw, we are certainly glad that you did take time to appear before the committee. It is unfortunate that perhaps you were not consulted in the first place. Obviously, your association and your members are the ones who are going to have to deal with much of the impact of this legislation. I want to say—and I am glad you said in your presentation that you support in principle the direction that this Bill takes us as a province, and hopefully we will serve as an impetus for other jurisdictions to do likewise.

* (1015)

I want to cover two areas—and you will forgive my ignorance when it comes to the question of refrigeration. I would like to understand -(interjection)- the Minister says he already has, so this is excellent. I would like to understand a little bit better two questions. The replacement question, you are suggesting that there are no exact replacements. You suggest that Freon-22, which I am not certain but it may be the one the United States has approved, is suppose to have cut the harmful impacts of this particular ozone depleting substance by 95 percent. Is that the same ballpark? Is that what we are talking about? It is that significant in terms of the reduction of the impact.

Mr. Shaw: Yes, it is. The long-range program from the States is that by 1997, I believe, there is to be no more Freon-22.

Mr. Storie: Are there no other substances? I was always led to believe that prior to the formulation of Freon there were other substances that were used as coolants. They may not be as effective, but there are other substances available. Is that not correct?

Mr. Shaw: There is another refrigerant known as "ammonia," which is used in a lot of applications, mostly in industrial refrigeration. The problem with ammonia is that there is an odor and a hazard as far as health with the immediate presence of direct expansion use, which is a refrigeration term.

The example, if you have an arena the refrigeration plant is located outside the main building. It is what we call, used as indirect cooling. We will cool a glycol substance and circulate it through the floor area of the arena and have it back outside. We will pipe the glycol from this outdoor facility.

You have to appreciate the amount when you go to indirect cooling. If you take a supermarket like a SuperValu or a Safeway store you have the size of the piping. The configuration of piping for indirect cooling just is not there versus direct expansion that is used now.

Example, also it is not applicable to automotive cooling, et cetera, and similar applications.

Mr. Storie: My colleague from Selkirk raised the question of the cost of replacing the systems. Is it at

all feasible to require an early replacement of systems that use Freon, assuming that we could absorb the cost or that we could ask major industrial users to absorb the cost? Is it practical to do that?

Mr. Shaw: It is practical—to do it costly. The end result is that although this type of a changeover is implemented to a user the consumer would end up bearing the brunt of the cost as he always does.

Mr. Storie: The other area I wanted to pursue was the question of the recycling idea that you mentioned in your brief. You are suggesting that RACCA would like to be involved in a pilot project.

First of all, I am wondering if you could quantify for us the amount of Freon that is lost currently. What percentage of the Freon or whatever other refrigerants are in use escape into the atmosphere either because of faulty equipment, because they are simply disposed of incorrectly? What percentage of that material is currently going into the atmosphere from Manitoba vehicles, home air conditioners, et cetera?

Mr. Shaw: I am trying to figure how I can run around up there and count it. In all honesty, just bear with me a minute. Thank you for your time. Canada uses about 2 percent of the worlds CFCs; Manitoba uses about 1 percent. In Manitoba, if you want to put a poundage to it I could not do it, but we are not that heavy a user. The largest user of Freon-12 is the automobile industry.

* (1020)

Mr. Storie: My assumption would be that probably 25 percent, and again I have no scientific basis for suggesting that, but 25 percent of the Freon that is used, certainly in the automotive and the home coolant area, is lost over a period of time. I do not know anybody who has had an air conditioner, automobile or home air conditioner, who has not replaced the Freon. It happens. Perhaps you are a repair person, you maintain your equipment better than most, but it seems to me that we do lose a lot.

I am wondering if there is not room in this legislation to target more directly and more quickly the elimination of the use and abuse of coolants in what might be termed luxury situations and whether that would be seen as a realistic way of approaching the problem rather than a general phase-out without due regard to the implications for the consumer but also the difficulty in actually making the transition.

Mr. Shaw: Well, I guess again what we would like to see controlled are the people who are using this refrigerant. Right now there is nothing in place to stop anyone, anyone in this room, from going into a wholesaler or going into an automotive outlet, distributor, and buying refrigerant. You need no licence, you need no knowledge of anything. They say, here fellows, here is some refrigerant, away you go, thanks a lot for your money. Whether the man is qualified to put it in, if he goes to work on an automobile system that has no refrigerant in it, where did the gas go?—if it is leaking out of a hose, if it is leaking out of a

seal. Be it an installation of his, maybe he is kind of a handyman and maybe his brother has a unit somewhere, so he says, well I do not know where the gas went so let us just fill her up again and away it goes and it goes for another couple of years.

Our suggestion is much as you have in the gas fitting, much as you have in the electrical where you have to have a licence to handle electrical. The electrical inspector comes along and looks to see who did it. The gas inspector comes along and looks to see who installed the gas. Right? Everybody has got a number, everybody has got a ticket. We are suggesting here, rather than the luxury, a lot of these things are not luxuries, okay, if you do not mind me throwing that out. We are just saying that now that maybe if you had some means of controlling the people that were using the refrigerants, you would be way ahead of the game.

Mr. Storie: I would not want to get into a debate over what I might consider luxury. I certainly think using CFCs as propellants is a luxury. I believe that maybe using them in automobiles is a luxury if it means destroying the ozone layer. If it means destroying eventually our way of life, I think it may be considered a luxury. That may be putting too fine a point on it.

I guess my question was whether there was a way for the Government, the Legislature, through this piece of legislation to do something concrete and immediate in terms of part of the problem and then separate the other parts, the more difficult parts to deal with, under separate regulations, separate process.

Mr. Shaw: Sure.

* (1025)

Mr. Parker Burrell (Swan River): Mr. Shaw, what you said is true. I own refrigeration equipment myself, so I have a good idea, but anyone can go into Canadian Tire and get a kit to recharge their car and so on. There is no regulation on it.

How environmentally unfriendly is Freon-12? Is it very unfriendly environmentally? It is by far the safest gas, like the one you were referring to before -(interjection)-no, not 22, the other one altogether. It is lethal. If you have a leak in the plant you can kill someone with it -(interjection)- ammonia. That is why they went out of ammonia. How unfriendly is Freon-12?

Mr. Shaw: With the refrigerants, No. 1, I guess, is the Halons. Number 1, as far as the refrigerants go, is Freon-12, it is No. 1 on the hit list. On an ozone depletion rating, it is No. 1. Freon-22 is like .05, but Freon-12 is the one they want to hit on the head right away.

Mr. Burrell: How is the research coming to replace it? You mentioned in the United States that by 1997 they are going to try and eliminate Freon-22, which is more friendly? Are they working on anything to replace Freon-12?

Mr. Shaw: Yes, they are. They do not have a Freon that is capable of replacing it, not a drop in one right

now. They are close, but they do not think for another three or four years.

Mr. Burrell: In other words, you think the legislation is premature? We should wait until there is a replacement for it?

Mr. Shaw: Yes.

Mr. Burrell: I know Freon-12, a lot of it goes somewhere. I spend a hell of a lot of money on it every year, you know.

Mr. Chairman: Mr. Burrell, are you through with your questions?

Mr. Burrell: You are right, you know, in the commercial fishing industry we cannot get along without Freon-12. If we went back to ammonia, it is lethal. I know it can kill you if you develop a leak in the thing. Maybe we better have a good, soul-searching look at this. There is no way we can get along without ice and chilling of a food product, and it must be the same in the meat and packing industry. Thank you, Mr. Shaw.

Mr. Chairman: Mr. Shaw, do you want to make any comments?

Mr. Shaw: No, that is fine, thank you. The only thing I was going to say is, ask my colleagues here if I have missed anything and if anybody had anything to throw in then—

Mr. Chairman: Mr. Shaw, there are more questions—Mr. Harapiak.

Mr. Shaw: How about if I let—is it okay if I switch now? Maybe someone else can—I do not have a problem. I just want to give everybody a shot.

Mr. Chairman: Mr. Shaw, if you would like to you can ask your colleagues to come with you to the mike as long as they identify themselves before they speak; that we know who is putting it on the record.

Mr. Shaw: How about if I ask John Bigelow, Jan Lowe and Bill Taylor.

Mr. Chairman: Okay. Mr. Bigelow.

* (1030)

Mr. John Bigelow (The Refrigeration and Air Conditioning Contractors Association): Thank you, Mr. Chairman. I would like to comment that the principle that our group would like to establish here is that, since no immediate replacement refrigerants are available, there are ways of phasing in refrigerants that we now have, such as R-22, to reduce the ODP factors, in other words, it is not black and white.

There are things that can be done now. But I think Mr. Shaw alluded, and I want to stress this point, you have a far greater problem in Manitoba with negligent handling of any of them, than you do with the brand

or the type, whether it is 12 or otherwise. Those of you who are customers of people like ourselves presumably employ trained journeyman refrigeration people who we all hope are handling the product in the best possible way.

But there is no legislation in Manitoba to prevent anyone, as was mentioned earlier, from going to buy the product at any location where his cash is accepted. And this is ridiculous. We would ask that the legislation emphasize the control of the products that we now have, because we know how much a part of society they are used. While R-12, for instance, in our companies, generally speaking, in the last two years no one has installed an R-12 system unless they absolutely were forced to do it, sometimes by Government legislation, I might add. In other words, the Government has not changed all its own rules.

We are not doing it anymore, because we have known for some time that R12 is the primary offender. Now what we would like to see you do is to start the process where we stop blowing off refrigerants by law, where we start arranging with the companies and getting through the red tape that came up in Ontario to get refrigerant recycled, where we start reducing the potential ozone depletion factor of the whole chlorofluorocarbon group. And that can be done, but it cannot be done as long as the gentleman says that you can walk into an automotive accessory store and buy R-12 to dump in a system that is leaking and that is why it is gone in the first place.

We suggested not to eliminate the various groups that use the products; we suggested a) through f) as a means of control. The Class A licence would be the one handled by the journeyman refrigeration mechanic, of whom there are approximately 400 in Manitoba. So, please, when you look at this, we do not have immediate replacements, but we can do something about it now, and that is my point.

Mr. Chairman: Ms. Lowe.

Ms. Jan Lowe (The Refrigeration and Air Conditioning Contractors Association): Thank you. I think we do have some concerns. We support the Bill but I think our concerns have been covered. I would like an answer to the question, does Bill 83 fall within the guidelines of the Montreal Protocol? Nobody has answered that.

Mr. Chairman: Mr. Minister, are you prepared to make a comment.

Hon. Glen Cummings (Minister of Environment): It is the intent of the Bill to bring in the CFCs and Halons under restriction in line with the Montreal Protocol. If you are asking if it is an exact mirror of it, our approach—and I would discuss it before your presentation is over—is to work on a consultative manner in introduction of regulations with the industry, so that we do not do what has happened in the Ontario jurisdiction, and I would ask you some questions about that in a moment or two, where they may have inadvertently knee-capped a couple of industries without giving them an opportunity to change direction before regulations were put in place.

Ms. Lowe: I think, rather than looking at banning or trying to get away from using the products we have in existence now, that definitely has to be done, but our mandate is to see that the trade is certified, licensed, monitored, so that those people who are handling these dangerous goods are trained and qualified to do so. All the regulations that are put forward will have no effect if the people handling the goods are not monitored in some way.

Mr. Cummings: I would like to ask an opinion from the presenters about how quickly they would like to see licensing controls put in place.

Mr. Bill Taylor (The Refrigeration and Air Conditioning Contractors Association): I think it is something that would have to start. We have already had some consultations and we have talked about it in our own associations and with other associations that also involve refrigerants. That is why we have listed a series of classifications because we do not want to leave anybody out. We also do not want to cause hardship to groups that are already involved in it.

I would think that it would take at least a year to work out a suitable scheduling and timetable process to put this into place. But I think the sooner it starts, the sooner the discussions start, the sooner we will have something workable in place that can be enforced and is workable with both Government and industry.

Mr. Cummings: I will leave the balance of my questions to the end of the presentation. Other Members were on the speaking order.

Mr. Harry Harapiak (The Pas): Mr. Shaw had made the suggestion, and then you have followed it up by saying that there should be journeymen or qualified people handling the coolants. Do you have any other suggestions that we can be using at this time besides qualified people using? If you had been consulted with, what other recommendations would you have made dealing with this material?

Mr. Bill Taylor: We have been consulted. We did not have input into writing the Act. I think that is probably the answer. But we have been consulted and we are working with the Government to find a workable solution to the problem. So the Government has contacted us and been in meetings with us.

Mr. Harapiak: Are you aware if in the other jurisdictions that have passed legislation similar to this, in British Columbia and Nova Scotia and Ontario—do they restrict the average person from using it, or are journeymen required by law to deal with these coolants?

Mr. Bill Taylor: I can speak specifically about British Columbia. They have a relatively strict program in regard to refrigeration, and it has been in place for a number of years, allowing only qualified people to work on certain sized equipment. They are revising that in lieu of changes in the Acts and legislation and so forth. But they have already been there.

There are a number of other provinces that have certification for the refrigeration trade in place now.

This province does not. It would be 100 percent impossible to enforce, unless there was some form of certification to be able to directly go to the people who are involved and find out who is the cause of the problem. At the present time there are lots of problems out there. There are horror stories that I could tell you about lost refrigerant and people who are unqualified, who are simply involved in putting Freon in systems because they make a dollar for it.

We have a responsibility as an industry, but in order to carry that responsibility out we must have a little bit of teeth to our particular area so that we can say, this is the way it must be done. According to the code of practice that the federal Government with our parent organization, HRAI, has adopted is that there is a way to handle refrigeration product, there is a way to pipe in systems, there is a way to operate systems that are as safe as they can be.

If I, as a contractor, go out and say to you as a consumer, your evaporator coil is totally leaking and I cannot repair it, it is impossible to fix it, it will require gas every six months, the consumer then comes back to me and says, well, how much is it going to be to replace it? I can give him a price of \$800 or \$900, if it is a particular size. My other colleagues in the trade will be able to give him a more or lesser price within that range because they have to change the coil.

At the present time some less ethical operator who is not licensed, who has no trained staff, can go in and say, I can put gas in for you. I know it will only last six months, but it will only cost \$100.00. The consumer then will choose the \$100 route because it is cheaper, but it is not friendlier to the ozone.

He is going to have to have that system charged every six months. True, in four years, it is going to cost him the same amount of money. But he might as well have fixed it properly to begin with, and he might as well have had it done right. Then he will not lose Freon, and then we will not—I should not use the word Freon, I should use the word CFC. Freon is a trade name and represents a whole range of products made by one company. Some of them are friendly, and some of them are not.

* (1040)

Mr. Harapiak: Mr. Taylor, you are in the refrigeration business. We have heard some of those horror stories. Can you tell us, when you go to replace the coil, do you recycle the CFCs that are in the system now? We have heard stories of where some unethical operators, as you call them, would just walk in and just release all of the Freon that is in the system, or the CFCs, and then not bother recycling at all. Do the responsible operators recycle the CFCs that are in the system now?

Mr. Bill Taylor: Yes, that is starting. I must say that five and ten years ago we all were of the belief, as the whole industry and the world was, that Freon was a very stable, safe product. That is the reason it became used so widely. It is also the reason it is causing problems in the ozone layer. Because it is so stable, it does not break down. It stays as a product and

eventually, after forty years, makes it up into the ozone layer and is causing problems in that area.

Now our staff are expected to reclaim or pump down systems. When we install new systems now, we put in a number of more valves so that we can isolate components within the system. If we come to a system that has 10 pounds of CFC in it, we do not have to blow it out into the atmosphere. We are able to pump it down within itself, change the component and then put the system back into operation. We are starting to bring into the marketplace recyclers and pump-out units. We have had some pump-out units that we will go out to a job—for the Government, for example, we had a large job that had about 1,000 pounds of CFC in it.

Four valves on the receiver system had to be replaced. We went out with supplementary tanks and pumped out all of the refrigerant, replaced the defective valves and then returned all of the CFC to the system. A number of years ago that may have simply been blown off, because it was more cost effective to do it that way. It is more costly to reclaim. That is the other reason why we need to have certification, because the people who want to work with the Government and with the whole CFC issue have to be able to spend the extra money. Therefore the service is going to be slightly more expensive as well.

There is going to be a saving in one area, that is that we have reclaimed refrigerant. Therefore we can put it back in so that the customer will not have to rebuy the refrigerant. If he is talking of a system that only holds two or three pounds, the cost of doing the extra labour might not be cost effective. But it will be friendly to the environment.

Mr. Harapiak: Mr. Taylor, in the automobile industry, in the wrecking, is there an effort made now to reclaim whatever CFCs are in the unit that is in the vehicle?

Mr. Bill Taylor: To my knowledge, there is no such program in place, and cars that are ripped apart in the auto wrecking facility simply lose their charge into the atmosphere, and that is one of the reasons why we put that on the list with the automotive industry, because there are a lot of garages out there that are re-charging systems with people who have absolutely no training other than they have the \$300 that it takes to go buy a set of gauges and a tank of CFC.

Mr. Harapiak: The R-22 that is available now, how friendly is it to put it into the present system now or is it already being used?

Mr. Bill Taylor: The answer is that HCFC-22 cannot be used as a replacement for CFC-12. It is not a compatible product, it cannot be used in the same environment. For example, the largest area where people think it might be useful is in the automotive system. The automotive system uses rubber hoses and a number of seals and so on. R-22 runs at far higher pressures and temperatures than R-12, and it simply would not work in that environment. R-22 is now being used in most central air-conditioning systems in homes, however.

Mr. Harapiak: If the Government was not proponent to be moving industries away from using CFCs, do you think it would happen, or does it have to be legislated, as in—previously there was a decision made to not use CFC for hair spray and items of that sort, there was an alternate found. I guess Du Pont and some other firms are doing a lot of research into finding alternative materials that can be used, but if there was no initiative by the Government, do you think that this would happen as quickly as we are told it needs to be done in order for us to protect the ozone to preserve life on earth as we know it now.

Mr. Bill Taylor: The industry is already working diligently at finding alternatives to the problem, and I think the industry is just as concerned about the situation. In fact at a recent seminar with Du Pont, the original plan was to be down to 40 percent production of CFC by the turn of the century. Du Pont themselves would like to see 100 percent by the end of the century. So Du Pont has completely turned around from their opinion of maybe five years ago and is working extremely hard; they have developed a number of products that may be replacements.

There are problems with them at this point, they are still testing. The environmental tests on one particular product that could be a replacement to R-12 will not be in until '93, and they are presently manufacturing some small quantities of another product which is out in test in certain locations to find a replacement for R-11, and there is another product that is out for a test on domestic refrigeration with some appliance manufacturers. These are small quantities, they are test situations, they are still waiting for a lot of tests to be done, millions of dollars to be spent on environmental studies because we do not want to jump out of the frying pan into the fire, and that is a risk. Whatever you do you have to make sure that we do not end up with the same situation.

Ms. Lowe: Right now as it stands, this is being left in the hands of the contractors. We have to go to our customer and say, you cannot release the CFCs into the atmosphere. We as contractors have to use a reclaimer, which we have just purchased, and it is a very costly piece of equipment. We have to pass that cost on to the consumer, the grocery store owner, for example. The labour is more intensive. If we change over to a different CFC, you are looking at additional cost in equipment changes to accommodate the ozone-friendly CFC. Right now, as it stands, it is our responsibility to convince our customer to incur these costs. There is nothing saying to this customer that he has to incur these costs.

At this time he can say, release the CFCs, I do not have the money to put into these kinds of repairs right now. I do not think it is right that it be our responsibility. We have to have some back-up for this.

Mr. Harapiak: What type of incentive would your RACCA membership need in order to—you seem to be probably better informed than most people on the dangers of the ozone depletion. What type of incentive would be needed in order to go more seriously into

recycling and using some of the material that would now be wasted in automobiles or refrigerators or whatever—the equipment that is being disposed of.

Mr. Bill Taylor: One of the things, of course, is market pressure and price. I was just taking inventory the last two days, and I noticed for the first time that CFC-12 has now become more expensive than R-22, which has been the other way around for all of the years the other way around, maybe even at half. The industry itself has a level they can produce. Du Pont cannot produce more CFC today than they were in 1986. They have a quota, and they are going to reduce that number as the years go on. They are just going to make less of it. That falls under the Montreal Protocol by the legislation through the federal Government.

They will be restricting the amount of CFC that is available on the marketplace. The marketplace pressures will have the bearing there. We simply cannot throw it out any more. The fear we have is that if RACCA and other contractors that have qualified people begin to become responsible in making sure that unauthorized emissions do not occur, there are going to be leaks that are going to be caused by no one's fault.

* (1050)

The equipment is properly maintained so that these will be minimized. If we are going to do that, then we cannot have somebody working like Midnight Auto, who will come to a customer and say, well, I realize you have a leak. I realize you want to recycle, but I can do it much cheaper simply by throwing the gas out and putting some more in, or simply recharging it and not fixing your system. There is no way at the moment to legislate that.

If you control who has access to the refrigerant, you make the people who are involved with it known. You now know who has access to the gas. You can then pinpoint those particular operations and find out whether they are doing things appropriately or not. That deals with regulation, and there are a lot of things that are involved in that, that have to be worked with the industry to make it workable. Our concern—and I have mentioned this before—is that Manitoba should not be inventing the wheel but should be in line and in place with what is going on in Canada.

If we as a province say, you cannot sell another product with CFC in it, or you have to take them all off the market, then you are going to discover that most of the fishing industry is going to have to shut down, most of the ice cream industry is going to have to shut down, most of the grocery store business is going to have to shut down. We are going to have to take refrigerators out of houses. There is no replacement at the moment. There is a responsible control available to us. If today this Legislature were to say, no more CFCs in Manitoba as of such and such a date, the industry could not change the system over fast enough.

There are not the compressors available in Canada to change to an alternate whose life is numbered as well. If you change from R-12 to R-22, you may not

be ultimately solving the problem. We may be back at this table in another five years, figuring out what we are going to do with R-22. We have to stay in step with the industry that is spending millions of dollars, Du Pont and the other chemical companies, trying to find a solution to the problem. They are aware of it, and they are working very, very hard at it. They are coming up with answers.

There is no problem that cannot be solved if you throw enough money at it, and they are throwing a lot of money at it.

Hon. Edward Connery (Minister of Co-operative, Consumer and Corporate Affairs): Mr. Chairman, of course, when we assumed office, there had been absolutely no research put into the ozone layer and dealing with the very important issue. When we took office, I was, of course, the Environment Minister, and it was the No. 1 concern that we had as far as the environment was concerned. The ozone is the most significant problem we have in this country. We can ameliorate a lot of other concerns but the ozone layer is something we cannot replace. This was a paramount concern for us.

In fact, I think it was about a year ago, staff could verify that, that I asked our department to put the ozone layer back on our CCREM meeting, which is the environment national meeting in Ottawa. That was before the CBC had a documentary outlining the continuing problems of the ozone layer. Then the Johnnies-come-lately jumped on the bandwagon.—(interjection)— Now they start to crow, but they did not crow when they should have, when it was time to do it. They start to crow after.

What percentage of units would have Freon-12 in them now? I am talking about commercial units, stores, restaurants, all of the commercial units excluding the homes.

Mr. Bill Taylor: Probably 90 percent of walk-in coolers and reach-in coolers have R-12 in them; probably 75 percent of ice cream machines; maybe in the area of 60 to 65 percent of ice machines. They are starting to convert new models now to R-502. But R-502 is only at one-third of the one ratio. It eventually is on the hit list as well, but there is no alternative at the moment.

We either do not make them, we just quit the industry, or we find alternatives. They are stepping things down. They are saying now we can convert to 502 on new pieces of equipment, which is one-third of the problem, while we are in search of a product that will eliminate the problem. That is not available yet, but it will be.

Mr. Connery: What about the commercial, not walk-in coolers, but the commercial units in stores, the ice creams, all of the dairy products and so forth? Would they be mostly Freon-12?

Mr. Bill Taylor: Most of the older stores, your smaller stores, your "Ma and Pa" and things like that—a good deal of them are still R-12, with some R-22 smattered in, and a few freezers that are on 502. Your new grocery stores that are being built today, I believe, are mostly R-502.

Mr. Connery: You talk about older units, and of course then we can take a look at our hospitals, at our senior homes that have been built for some time. What would be mostly in those? Would that be Freon-12?

Mr. Bill Taylor: Most of them are CFC-12.

Mr. Connery: What kind of life expectancy would you feel this equipment could still have if properly maintained?

Mr. Bill Taylor: Twenty years, maybe 30.

Mr. Connery: Keeping in mind that the safety of the ozone is paramount but looking at the abhorrent cost if we just took every unit with CFC-12 and CFC-11, excluding all of those ones on this list out of operation, if it was done, as you have suggested, by responsible licensed people, journeymen, what amount of this Freon would ever escape into the atmosphere in these commercial units?

Mr. Bill Taylor: I do not have a specific scientific answer for that, but I believe that simply by handling it correctly, by not blowing it off, we could probably save 50 percent of what has been going into the atmosphere by servicing techniques over the last few years. That would probably be saved immediately. You are not going to save the accidental leak, or something that absolutely ruptures or breaks and that causes a leak. However, if there are maintenance schedules of equipment, or if we are empowered when a system is in bad shape and needs repairing to be able to say, either we have to shut it down or we have to repair it, we could probably save a good deal there. I do not know what the numbers are, and I do not know if anybody has those numbers, but the industry working with the federal Government through HRAI does know that if we adopt a code of good practice we will save a considerable amount of loss.

The other thing is that the industry is looking for a replacement refrigerant for R-12 that will be able to be installed in existing systems with a minimum amount of retrofit. They are thinking now that there will be some retrofit needed regardless, but that when this product is available, it will be able to go into systems that exist now and work where R-12 was working in the past. We will probably have to change the oil. We will probably have to change possibly the expansion valve and the dryer and make some other modifications, but, generally speaking, 90 percent of the system can be salvaged.

Mr. Connery: In our existing hospitals, excluding the municipal hospitals that are really quite old, but looking at the Health Sciences, St. Boniface, Grace Hospital, which is in the in-between stage, maybe Seven Oaks, what type of coolant would be in those units?

Mr. Bill Taylor: Ninety percent of it would still be 12.

Mr. Connery: If the air-conditioning unit, say, in Grace Hospital or Health Science had to be replaced today, what would it cost?

* (1100)

Mr. Bill Taylor: Those hospitals have centrifugal air conditioners in them which use CFC-11, which is a factor of one, the same as CFC-12. They have now an experimental gas available for those; it is on test in a couple of Government installations down east in Canada. There are still a couple of years away before they get an environmentally safe ticket on it. In fact, the Du Pont plant in Canada is the only one capable of producing that product now, and some of it will be starting to be produced this fall. So they are already working on a replacement for the CFC-11 of something that they think is going to be compatible. But to change those systems you are probably looking at \$100,000 per unit, and a hospital like the Health Sciences Centre would have many of those units.

Mr. Connery: You say many. How many?

Mr. Bill Taylor: The Health Sciences Centre would have about 50 of them.

Mr. Connery: Fifty?

Mr. Bill Taylor: Fifty.

Mr. Connery: At how much cost per unit?

Mr. Bill Taylor: Approximately \$100,000 per unit.

Mr. Connery: So you would be looking at \$5 million to redo the Health Science today.

Mr. Bill Taylor: That is an off-the-cuff estimate.

Mr. Connery: The reason for the questioning is so that Members of the committee realize when they make decisions, the magnitude of those decisions. When we are looking at health care, we are looking at a lot of costs. We need more beds; we need a whole lot of other things. Keeping in mind that we do not want to do any damage to the ozone layer—and that is why some of the questions that I have asked—if these units are maintained on a regular basis, very carefully, there would be an insignificant loss of Freon-11 or -12 into the atmosphere.

Mr. Bill Taylor: That is correct. The better the maintenance, the less you are going to lose, because we are going to catch it. We will catch a small leak and repair it before it becomes a big leak.

Mr. Chairman: Any more questions, Mr. Connery?

Mr. Connery: Home refrigerators all have Freon-12 in them at this point?

Mr. Bill Taylor: They all have Freon-12 in them, with the exception of some extremely old ones that had a product called 500 and a few other things, but that is so insignificant an amount. R-12 is primarily the refrigerant. It is in small quantities, but there are a lot of them out there. So the volume adds up to quite a bit, and under present practice I would think there is

not any recycling going on in that section of the industry at all.

Mr. Connery: Just a couple of questions, Mr. Chairman. In the health industry alone, in the hospitals, without going into senior homes and all of the other hundreds of places around, we would be looking in the many tens of millions of dollars just in the health care industry to replace these units.

Mr. Bill Taylor: That would be an underestimation of the cost.

Mr. Connery: Then, if today—I think today is February 1st, if my calendar is right, or if I am watching the calendar right—what if today, as of today, all CFCs—I should not say that, we could still have Freon 22—but all other CFCs were banned as of today, what impact would this have on our society today? I think you answered part of that in the sense that most of our grocery stores would have to shut down or all of our dairy products would be no good, food products, meat, fish would all be gone. People would not have any home refrigerators; they would not be able to use that. Is that the sort of scenario that would have happened?

Mr. Bill Taylor: That is the scenario. Our society, as we know it today, would stop. It would come to an end. We could not live the way we live. We could not live in the large cities we live in. We would have to change—it would be like if you turned the hydro off, because if you turned the hydro off all of these systems would not work. If you think everything you do—you get up in the morning, you go for a glass of milk, you get the milk out of the refrigerator, you go to your bathroom, you get a product that you use in the morning that is made by some refrigeration process, somewhere along the line.

You get into your car, and if your car does not have an air conditioner in it you may not use CFC there, but somewhere along the line in the process, in the manufacture of that vehicle, CFC is used. So they would not be able to make the plastics and the material they use today because there is not any alternative to it.

You could not have breakfast—well, you might have breakfast, you could have some dry cereal and we could keep the milk between the doors, as they used to—but when you go to the grocery store, all of the range of products that we have would not be there. We would have to go back a hundred years. We would have to start having ice carts on the street. We would have to start harvesting natural ice out of the lakes and putting them in big warehouses, because we could not produce it.

There is no way that you can simply say, no more today. But there is an orderly phase-out and phase-in as new products become available. That requires national co-operation. One province cannot legislate something that is going to affect all of Canada. We can legislate the wasteful use of CFCs. We can legislate that here because we have power to control that. We have power to control that the people who work with it are qualified.

The provincial Government and the federal Government in Manitoba are spending millions of dollars with an apprenticeship and a journeyman program in the refrigeration industry today, training people how to handle this stuff. We train them; we give them a ticket; we send them out onto the street. But then we allow other people who have no training, no expertise, and no concern possibly, other than making a dollar, to come in the back door and waste refrigerant. That has to stop. That is where we as a province can help. We cannot help with the design of the new refrigerants. There are other people and other areas and levels that are doing that, and they are working hard at it. There is not a day that does not go by that they do not spend thousands and thousands of dollars on research. We cannot manufacture the right product. That is a national concern as well.

Mr. Connery: You verified, Mr. Taylor, and I thank you and your group. The very fact that, if we acted irresponsibly in this issue, really modern-day society, as we see it today, would be in absolute chaos. I think it is very fortunate that we have a very understanding Minister who is working with the industry and is cognizant of all of the concerns we have in dealing with the ozone layer.

When we came into office, there was absolutely no concern for the ozone layer. There had been no initiatives taken. The Minister, I think, should be complimented for the responsible way that he has dealt with it, and the responsible position that you as an industry are prepared to approach to present it. If I look back to a news release that was put out a year ago by the Member for The Pas (Mr. Harapiak), representing the New Democratic Party, it said that all CFCs should be banned within one year.

That is typical of a Government that, when they were in Government, took no action and all of a sudden, being in Opposition, running around and acting very irresponsibly. I guess that, as a Member of this Government, I am very appreciative of the Minister we have in the Department and the industry that is working for the best interests of Manitobans. Thank you.

* (1110)

Mr. Harapiak: It is good to see that the former Environment Minister has recognized that the hole is big enough now that we should be doing something about it. When he was Minister, he said that the hole was not big enough; we did not have to be concerned. I think it should be put on the record as well that, when we were the Government, at the Montreal Protocol our Minister responsible did raise this issue. He is the Johnny-come-lately who is on the scene.

The question I wanted to ask the presenters, is there sufficient equipment now, if you were to move into recycling to a full capacity, including refrigerators, the open refrigerators in stores, and refrigerators in cars and homes, is there equipment available to totally capture all of the CFCs?

Mr. Bill Taylor: The answer is that there is equipment that is being manufactured that can do it. The second

answer is that not all of the places, even if they placed orders today, would be able to receive a more sophisticated model that is now available within six months. There is a waiting list for them. There are some now available. There are pump-out systems that can take the gas out of the system and put it into a tank. Those are available now, and most people have differing types of those.

We can see a combination of pump-out and recycle, possibly more portable pump-out units that can go into the field easily and up to a roof easier and pump it out into a reusable tank and then brought back to the shop and recycled through a more expensive cyclor, and then put back into systems. We do have a problem though with contaminated refrigerants. At the present time we have no way of getting them back to the Freon or the Du Pont plant in Ontario because of the Ontario legislation.- (interjection)- Did you have that? - (interjection)- Jan has a comment on that.

Ms. Lowe: There is, as I mentioned earlier, equipment available, but there is nothing saying that the store owner has to use it. That is the whole point. The industry is investing thousands and thousands of dollars to purchase this equipment, but there is no legislation, regulations, nothing in effect that says it has to be used. There is very little incentive to us as contractors to purchase this equipment when the costs cannot be passed on.

Mr. Cummings: Mr. Chairman, I do not intend to delay the presenters much longer. Your attendance here and your information is very well received. Just a couple of things. I asked earlier about your interest and time frame that you would be considering for licensing. I presume, and I do not want to put words in your mouth, but would you also be pushing and encouraging us to push for licensing on the national level so that we do not have the transprovincial problem?

Mr. Bill Taylor: There are a number of provinces, of course, that already have certification of the trade. We do not have it at the present time. There should be a uniform code across Canada, as far as the Code of Good Practice and the federal Government is working on something to that degree. However, control of journeymen within the province is a responsibility of the province. We do have a journeyman apprenticeship program in place and when those people pass their exam at Red River College or other institutions, they receive what they call an interprovincial ticket.

That interprovincial ticket is recognized across Canada, so that a refrigeration can go from one area to another. The problem is that it is not a licence to practise the trade, it is a certificate of qualification that you are able to handle the product and you have had a five-year training program, both through classroom education, shop education and on-the-job training. It is an all-encompassing program.

Mr. Cummings: You referenced the fact that on some tenders Governments were part of the problem. Were you referring to the fact the Government was a problem by regulation or by specs that may be still be issued in tenders? I presume it is the latter.

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Mr. Bill Taylor: There are specifications that are still coming out, both from a federal and provincial point, that are not looking at the alternatives that are presently available.

Mr. Cummings: The type of refrigeration unit is being specified in those tenders?

Mr. Bill Taylor: That is correct. We did a job about a year ago, where the specifications specifically said that the system must be R-12 or R-502, that R-22 must not be used. It should have been the other way around.

Mr. Cummings: I presume another problem that goes with this is that as this field evolves—and it is probably going to evolve very quickly, given the amount of research effort that is being put into this area. Probably the time lag on these tenders is a problem as well. Is that correct? Sometimes a tender—not a tender specifically but the specifications—for a building would be issued some considerable time before tenders closed or the building was actually built.

Mr. Bill Taylor: The one I was referring to specifically, the tender had been written two years before it actually went out to tender.

Mr. Chairman: Mr. Minister, any more questions?

Mr. Cummings: One final question. Mr. Shaw had answered it earlier, and I presume it was a matter of how the question was asked. The Member for Selkirk (Mrs. Charles) had asked it. It is my understanding that the department has met a number of times over the last year with your organization to discuss legislation and regulation. While I appreciate you did not actually write the Bill, you did in fact have discussions with the department prior to this Bill coming forward, did you not? Did someone within your organization have that opportunity to discuss?

Mr. Bill Taylor: We did not have direct input in the Bill, that is, the enabling legislation Bill, but we have had discussions with the Government for some time on our need for some form of control, probably more to do with regulation than with the actual enabling legislation. If we had written the legislation, I am sure we would not have put the fines as high as they are, nor would we allow the possibility of lawsuits by third or fourth parties over environmental problems to creep in.

Those are very large concerns that we have as an industry. If we trying to do our best and there is a problem, we do not need somebody sitting over our back who is ready to put us all out of business.

Mr. Cummings: Just on the aspect of the regulation and the eventual elimination of the CFCs, I presume that you support in principle the elimination of these. You are making a very strong case that it be done in a practical and reasoned matter. Is that a correct summation of your position?

Mr. Bill Taylor: Absolutely. If we in Manitoba were to do something that did not fit in with the overall flow

of the Canadian program, we would be detrimentally affecting our citizens by putting undue financial hardship and things on them, especially now with products that are not even available. We would simply say, I am sorry, Madam, but you cannot open an ice cream parlour because there is no equipment available that does not contain some form of CFC in the manufacturing process.

So, therefore, we in Manitoba will be saying, there will no longer be any new ice cream parlours for another five or six years until a replacement product is available.

Mr. Cummings: I like ice cream.

Mrs. Charles: It is my understanding that CFCs are regularly used in solvents. I was wondering if any of this group here, and we certainly do appreciate your presentation, can indicate to what degrees we would find the quantity of CFCs in solvent use in the province of Manitoba.

* (1120)

Mr. Bill Taylor: The CFCs that are used in solvents are not your R-11 and R-12. However, R-11 has been used for a solvent in cleaning solution. A number of years ago it probably was an alternate to flushing systems and that is not done anymore. We just do not do that any more. The electronic industry, and there is not a large sector of that in Manitoba, and I do not know that even in Manitoba they use it because this is talking about large scale plants, used CFC for a cleaning solvent and there is no solution to that problem at the moment. It impacts on large industrial electronic centres more than it does here. It would impact very heavily on Japan where a large percentage of their CFC use is in the solvent area. However, the very technology that we are using today to broadcast our sound in the room, any of your electronic circuit boards that operate your cars, your televisions, your stereos, satellite communications, you name it, rely on those solvents. They are working on solutions for that. They are trying to find an alternative to that, but it does not really impact on the refrigeration industry.

Mr. Chairman: Thank you, very good. Any more questions? Mr. Harold Taylor.

Mr. Harold Taylor (Wolesey): I am very pleased to see some expertise come out of the industry and present themselves here at this committee this morning. I am a little surprised that there was not a consultation process also involved prior to the drafting of this legislation.

I would like to ask the delegation for comments about the different types of equipment that they service and if they have a comment about the age of those various types of equipment in this province as compared to the situation in other provinces? Do we have generally equipment that is a little bit older, a lot older, average age here, average age in British Columbia, average age in Quebec? Would it be about the same, or do we have an older inventory of various types of equipment that would use CFCs and Halons?

Ms. Lowe: We deal with grocery store equipment. We purchase a lot of freezers and coolers, the type that

you would see when you go grocery shopping, from the United States. We buy used equipment, we refurbish it and we sell it. The equipment that is turned over in the United States, some of it is five years old and they are turning it over. The equipment in Canada will turn over maybe 20, 25, some of it 30 years. People will be holding on to equipment for that long, if that helps you in any way.

Mr. Harold Taylor: Mr. Chairperson, yes I am aware that in grocery stores there is equipment, both on the store floor and in the storage areas, that can be fairly old. Would you have any rough feel as to what the average age might be of the equipment you service and potentially give us some examples of open coolers that would be for meats and then open freezers that would be for frozen vegetables and ice cream and that as a comparison, and then maybe standing coolers with doors on it, ice cream making equipment, that sort of thing. Give us a little bit of a range of different types of equipment and say, if you can, what you think the average age might be in Manitoba.

Mr. Bill Taylor: The average age would probably be around 10 years. We are probably no different than any other province in Canada. I have travelled in all of them with the exception of Newfoundland. Depending on where you are, the new stores, the new supermarkets, and that is what Jan would maybe allude to, would cycle their equipment a little more often. They have got the big dollars, the big volume. They will renovate a store and put in new equipment a little bit more frequently.

When you get into the country, you get into the smaller centres, there just are not the dollars, there is not the volume, there is not the turnover that can keep these stores alive. When you are talking about equipment that is in the hundreds of thousands of dollars for a small grocery store, they just cannot afford to turn it over on a five-year or a 10-year cycle even. They would keep equipment as long as that equipment has life and can be serviced and repaired.

Mr. Chairman: Mr. Shaw, did you want to respond to that?

Mr. Shaw: I was just going to say, I have a few whiskers in the game and we take serial numbers on the equipment we work on. The other day I was working, doing some work orders, and the serial numbers were 60 and 64, and the equipment is running. There is nothing wrong with it, the compressors are running, the coils are good, good solid equipment and there is no reason to expect it to pack up. The equipment is well-maintained and looked after and as long as it is in that area, it should be fine.

Mr. Harold Taylor: If I could follow on a series of questions to Mr. Shaw, then. If he is dealing with a piece of equipment of that nature, the equipment is running properly, it is efficient, it is not breaking down with any frequency, can he in any way as a service person ensure that older piece, for example, a 1960 or '64 freezer or cooler unit, ensure that there will be no leaking of these materials in any way, or that the

discharge could be guaranteed to be recycled into the system? How do you deal with these types of concerns that we are dealing with here today?

Mr. Shaw: I guess there is no guarantee. There is no guarantee on new equipment. There is a warranty program that you buy with new equipment, and that is why you buy it, it is an insurance policy. Working on this unit that was 1964 and saying, hey, it is as good as the day I put it in, tomorrow if it packs up, I cannot—you know, it is the same as your automobile.

Mr. Harold Taylor: I should clarify it to Mr. Shaw. I did not mean guarantee in the sense of warranty on the work carried out, or the parts in the sense of in a normal business transaction and therefore the owner would have a comeback. What I was talking about guarantee, was guarantee the aspect of no leakage, or guarantee the capability of the machine that when it went into discharge or overflow, whatever the terminology you are talking about, for whatever reason, that the recycling capability of that machine, and I am talking about the heavier machinery now, because most of it will have that feature on it, that it is functioning and we are not getting leakage, seepage, whatever of any form of CFC or Halon product out of this older equipment. What I want to know is, how sure are we that we are not getting loss of a refrigerant material?

Mr. Shaw: Very comfortable. I feel very comfortable with the practice of what is being done. The systems are leak tested periodically on a maintenance program. There are leak detectors available. I feel very comfortable with the method of installing this equipment, the copper tubing, the welded joints, the mechanical fittings on the units. Alarm systems are available and I think the reason I feel so comfortable personally with it is my staff is trained and qualified, and I feel comfortable that way. I do not have any misapprehension of a unit that is 1964 any more than I do if a unit is 1984.

Mr. Harold Taylor: Again to Mr. Shaw: he mentioned two things; one was periodic inspections and the other was alarm systems. The alarm systems that you mentioned would only be installed if there was an initiative by the owner, I assume, of the equipment. It is not a requirement at this stage. The other part I would ask on is the periodic inspection and testing for leaks on various parts of the systems of a piece of equipment. It would seem to me that they are probably only happening if there was a maintenance contract in place and it is not something that is obligatory as I understand it at this time. Only those customers that would have a contract in place is where you would come out, one of your firms come out on a regular basis and do it. Is that the situation?

Mr. Shaw: Yes.

* (1130)

Mr. Harold Taylor: Further to the delegation, Mr. Chairperson. What encouragements do you as an industry give to clients that you deal with to put on

alarm systems to avail themselves of regular inspections, partly just for general maintenance to keep the equipment up, but also on the other aspect to get the leak testing done?

Mr. Shaw: At the sale of equipment, this is all put forth in a brochure to the customer.

Mr. Harold Taylor: If you are called out to a new customer you had never dealt with before as having problems with their refrigeration equipment, would you make a sales pitch for any of these features? Would that be a normal part of how you conduct yourselves?

Mr. Shaw: Absolutely.

Mr. Chairman: Mr. Shaw.

Mr. Shaw: I should go out and come in again. I am sorry.

Mr. Chairman: You are doing great, Mr. Shaw.

Mr. Shaw: Absolutely, we recommend maintenance of all equipment.

Mr. Harold Taylor: To any or all of the delegation, are you familiar with a product called CFC-134a, a hydrocarbon-based product that does not use chlorine? Have you used it yet? It is a brand new product. Can you get it at this time in any volume?

Mr. Shaw: No, you cannot get it.

Mr. Harold Taylor: Do you have any bulletins from chemical manufacturers or the manufacturers of the equipment saying when you might get it and how you might use it in the sense of substitution for existing CFC products?

Mr. Shaw: We have been in touch with them and they are talking approximately 1993. It is still under test. It is not available. There are problems with it right now.

Mr. Harold Taylor: Yes, to the delegation, I was aware that it was in its developmental stage. It does seem to hold some promise, from the little I have heard so far. I want to know what you people in the industry have heard as to the beneficial properties of it and the potential for it to become a wide-scale substitution for some of these other products we would like to see gone?

Mr. Bill Taylor: Just last week, we had a meeting with Du Pont and they told us the latest development stages of it. They know how to manufacture it. There are problems in the large-scale manufacturing. It has not been approved yet. It does not have environmental approval. If it goes ahead and they find the problems that they are having—at the present time they are having a problem with an oil compatibility problem. Refrigerant systems need oil in them and they do not have the right oil. There are a number of companies including oil companies that are working on the problem to find a compatible product that will fit with it.

It is a trade-off. It is not a drop-in. It will work generally under the characteristics of R-12, but there will be required some retrofit to the system. Right now the industry has their hopes pinned on it as being the answer. It will be more toxic. It will not be as stable. That is a trade-off. If we want a product that will not be damaging to the ozone layer, we cannot use a CFC, and this is an HCFC.

It by nature has to break down faster if released and therefore is more toxic. The toxicity tests are not in yet. They do not even know what number to give it. Freon is extremely safe, or R-12 is extremely safe, in comparison.

Mr. Harold Taylor: Mr. Chairperson, could the delegation explain one more time this element of toxicity? When he first mentioned it I thought he meant in the sense of the service people and the risk to them actually using it. From what I am hearing you saying, I would like if I could to get a fuller understanding as a layperson trying to understand a rather complex subject. I think I hear the delegation saying the toxicity he refers to is impact on the atmosphere, and if so, you are not referring though specifically to the ozone layer, you are referring to the general air around if there was a release, or what did you mean exactly?

Mr. Bill Taylor: We are talking about people, citizens.

Mr. Harold Taylor: Okay.

Mr. Bill Taylor: The unfortunate thing at the moment, I cannot tell you that the toxicity rate is 1,000, as it is with CFC or with R-12. It may come in at 800, 700, 600, we do not know, they are testing that now and those tests will not be complete until '93, that is why we keep using this number of '93, because that is the number the industry has given us, the earliest they will know. That is assuming that the problems they have got will be solved, and that is the reason why we are saying, and we said earlier, that if certification is set up it should not be something just temporarily for the present time, because whatever we get that replaces what we have is going to be a little more toxic.

We are not saying it is going to kill anybody, but we are saying that the people who handle it should know what they are doing, they should be qualified. The small quantities in a house for example are eight ounces, but the gas that they are testing for home domestic refrigeration right now is explosive. The new one that they are testing for that marketplace is actually being tested by some OEM manufacturers in small quantities. It is not licensed for production in large scale yet. Now they are looking at the fact that it is explosive, but there is only an eight ounce charge so it is not a real big problem. Propane is explosive and we use it in our homes. Natural gas is explosive and we use it in our homes.

They are looking at that product now for the petroleum industry who use CFC presently in their industry, to switch to that product because they are already used to using explosive products in their piping of the refineries and so on and so forth, so it is just

one more chemical that they are using that they have to be careful with, R-12 they did not.

Mr. Harold Taylor: Could you tell us what that product is? Does it have a generic name now, or has a number already been assigned to it, what would that product be called?

Mr. Bigelow: We do not know the number for that particular product, Mr. Taylor, but there are so many products being tested. The two major chemical companies in North America in this field, Allied and Du Pont, are actually in co-operation with three other worldwide manufacturers. I would like to expand the problem, it is not just a national problem, it is an international, it is a worldwide problem. I think we have all read that.

I would like to comment on Mr. Taylor's comments for a moment. This committee and the legislation or regulation has the power to do something about this problem now, and I am feeling a small sense of frustration, because we seem to be talking about the future, things that neither you nor I nor anybody that I know of in the Province of Manitoba and maybe in all of Canada can do much about, and that is the future.

The past problems that we are acknowledging are the situation that Mr. Taylor referred to some moments ago, where he is on a call and the system is leaking or has lost all of its R-12, and he has no authority to protect the public. He is going to lose a customer because he is going to tell the gentleman, unless the gentleman is a good sensible businessman, or the lady, pardon me, at Ms. Lowe's recommendation here, that this thing is contaminated, it is rotten, it cannot be repaired. Everytime you touch it with a torch the hole gets bigger, it does not get smaller, it is rotten.

* (1140)

There is no method we have now of protecting the public or people from that contamination, because the next fellow in the phone book or wherever he comes from has Freon-12 in his truck or whatever or in his station wagon or at his service station or on the automotive shelf says, I can fix that for you. He puts in enough refrigerant that the cooler comes down in temperature and the problem is gone.

Therefore, we are asking and strongly recommending, as we have to Mr. Spiegel and his group, that you get at the immediate problem now. You people have the authority, hence our interest, to say, look, let us stop making the problem worse and worse. Let us get on the right road. You are at a fork in the road, and you have the opportunity. I am sure others, no matter what point they are coming from, will all agree that we want to reduce the existing losses of refrigerant. We want to start more reclaiming.

You have the power, but our hands are totally tied. We cannot do a thing unless the customer says to us, yes, I believe it is in my best interest to correct that problem the proper way, and I will give you the \$800 for that work. I do not want to oversimplify it, because it seems the world does not work that way. That is the

immediate possibility that this committee can establish, is to put forward on behalf of Manitoba, control on the handling and the usage of this product in all aspects.

Somebody mentioned auto air conditioners. I know there are 100 auto wrecking yards in Manitoba. The only way that Freon is released is with an axe. When somebody goes to buy a used compressor for his car or truck, it has been taken out, unbolted from its frame and the lines have been chopped with an axe, a hacksaw or a pair of cutters, and two or three pounds of R-12, if it was there, has gone into the atmosphere.

Somebody has mentioned, let us not reinvent the wheel. There is tremendous political and public pressure to find a correction to the overall problem, but if Manitoba led the way in establishing the fact that these products could only be handled in the best available way, we could reduce losses in this province and therefore to the world, I suppose, dramatically.

Mr. Harold Taylor: Yes, Mr. Chairperson, to Mr. Bigelow, you bring out a very interesting point. I assume that your group or your delegation has reviewed Bill 83 and seen the detailed provisions in it, because it is exactly the Bill that was printed that we will be debating here in the next few days. What is your reaction specifically to the Bill, in the orientation? Do you see anything there that is very much the now situation that you just espoused, or is it, in your view, in entirely the future context only? What is your general reaction?

Mr. Bigelow: If I could just get a Member to hand me the Bill, I have outlined a couple of sections and I think others have. There are some six paragraphs I believe we have specific concerns with or at least questions of.

I will say on one in particular, which appears at the latter section of the Bill, and I guess this refers to what I have just said. Under Regulations, page 6, Regulations 9, item (f), it is in there, respecting the certification. This industry has asked for some method of control. I think when you find private business asking for some member of Government control, you know we are desperate, because we do not need any more paper. We do not need many more monkeys on our back, but we have one now. We had it before CFCs, but this is just bringing it even more to the head.

Paragraph (f) covers only in one sentence what we are looking for in certification, and I believe that came on the recommendation of our committee to Mr. Spiegel's group, if not from other sources as well.

We have, and I think you would agree, legitimate concerns on the amount of the penalties. If Item (f) does not occur, then our liability insurance is going to go right out of sight if this were to be implemented.

Mr. Harold Taylor: Section 9 of this Bill, of course, talks about the regulations that will be. It does not give the regulations themselves. This is saying these are the subject matters that will be developed in the regulations which will be brought forward more likely—instead of through accompanying the legislation and being brought forward in a vote fashion through the

Legislature in a process like we are here today—through Order-in-Council, which is Cabinet approval.

Unfortunately, modern Government uses that method more often than not to develop regulations. So regulations become a fait accompli for all legislators outside of the Government, in fact, outside of the Cabinet and for the general citizenry in the industry that it will impact. The fact of the matter is, there will not be a chance to review the regulations in the same fashion that the Bill itself is being reviewed, and that is the point I make.

Were there any detailed consultations with your organizations with the Government officials, with the politicians on the Government side, to actually talk about how those regulations might be constructed to go along with this Bill? Are you aware of any of that work at all or are you totally lacking in knowledge?

Mr. Bigelow: Speaking on behalf of our association—

Mr. Chairman: Excuse me. I would like to just ask the committee for some guidance in this respect. We have two other presenters that we mentioned we would possibly be able to take this morning, which I believe, if the line of questions will continue, we will not be able to handle this morning. In all fairness to them, could you, Mr. Taylor, indicate about how many questions you have left or whatever you feel that—

Mr. Harold Taylor: I would imagine, Mr. Chairperson, that I will take at least another quarter of an hour here, another fifteen minutes. Now whether that is going to allow sufficient time before we end this morning I am not sure.

Mr. Chairman: Okay, then the next person who would be presenting after this would be Mr. Kaufmann. In all fairness to you, Mr. Coles, there is a good possibility you will not get on this morning.

Mr. Manson Coles (Private Citizen): I have lots of time, I am a pensioner.

Mr. Chairman: Very good. Thank you very much. Then we will carry on. Okay, Mr. Bigelow.

Mr. Coles: Will you have another sitting?

Mr. Chairman: Yes, we will.

Mr. Coles: I can take the bus and come back again.

Mr. Chairman: Very good. Thank you.

Mr. Coles: It is very interesting. They are right in my field. I was the inventor of the . . . frozen food, the open shelving frozen foods. They hit the nail right on the head.

Mr. Bigelow: If I can remember the question, Sir. In terms of communication, we have invited—and our invitation was accepted on, I believe, three or maybe four occasions—Mr. Spiegel and his staff to meet with us at our regular meetings to discuss—long before Bill

83 existed as far as we knew it, going back approximately a year.

Secondly, we have corresponded with Mr. Spiegel and his department at various times. The letter of January 5, which you do not have, indicates that we have reviewed the proposed Bill 83 and that we have concerns in seven sections, 4(1), 4(2), 4(3) and so on. That was an immediate response, because of the fact that we knew the Bill was coming forward.

We asked for and expect that we will be given the opportunity to explain our concerns. We were not sure whether that would happen here today. I guess I have not specifically answered your question, but there has been no direct communication with the Members of the Party in power other than the request, who should we speak to, because we know that the Government employs people who are working on these programs.

Mr. Harold Taylor: Yes, Mr. Chairperson, so to understand Mr. Bigelow, speaking on behalf of the group, is that there has not been detailed consultation on the development of a set of accompanying regulations, would be the first part of my question. The second part would be, if Mr. Bigelow could reiterate those concern sections again—three or four of them.

Mr. Bigelow: The answer to your first question is, no, there has not been up to present time, although it is expected. The answer to the second question, we can give you copies of our letter of January 5. Paragraph 4(1), 4(2), 4(3), 5(2)(b), 8(1), 8(2) and 8(3) are specific areas where we have concerns as an industry, and as I mentioned, we cannot overemphasize 9(f).

Mr. Harold Taylor: Thank you, Mr. Chairperson, and you would be able to provide us with this January 5 letter then for our perusal?

Mr. Chairman: Give it to the Clerk.

Mr. Bigelow: I understand that Mr. Shaw has copies here with him and we can hand them out right now.

Mr. Harold Taylor: Thank you. One of the questions that I have was a follow-on of an earlier question that Mr. Bill Taylor dealt with, and that was when I introduced the matter of CFC-134a. I just want to get a confirmation that it is viewed as a replacement substance for your most common CFC now in use, No. 12. Is that correct?

* (1150)

Mr. Bigelow: I will answer that. Bill may answer it as well. It is proposed, but it is not by any means a guarantee. It is the direction that the manufacturers feel that formulation of refrigerant is best suited on what has come out of the laboratory to the present time. Du Pont issues a pamphlet on a regular basis, and this particular one is entitled: Alternative Refrigerants. It is listed as the best available replacement in the laboratory for CFC-12. I should point out that it is called an HFC, because it is a different family, it is called an HFC-134a. That is its correct laboratory title.

Mr. Harold Taylor: I appreciate that point, too, on the correction of the title. You mention this newsletter that comes out. Are you aware of the other people, other than industry people, could they get that same newsletter?

Mr. Bigelow: This is available to the public. It is normally circulated through the industry. It is available on counter tops in the industry by suppliers of refrigerant. We are on, I think, Mr. Spiegel's mailing list. When a bulletin or a press release occurs, we get it as an association. I hope we get it all. We certainly solicit it all. There are numerous sources of this data.

Mr. Harold Taylor: Possibly one of the members of the delegation could give us the mailing address so that we could also write away to be put on the mailing list for that bulletin. The other thing I want to ask, is the HFC-134a contemplated as, assuming it is proven out in its developmental stage and I understand there still are some technical problems, if it is proven out, is it assumed that it will be a substitute for any other current CFC or Halon product?

Mr. Bigelow: The answer, just based on the chart that Du Pont has here, it is only considered as a replacement for R-12.

Mr. Harold Taylor: Are there any other substitute products that you are aware of in the development stage other than the two that have come up this morning in discussion?

Mr. Bigelow: Yes, there are numerous gases. You may or not be familiar with the code that was applied to the ODP levels. A numerical system was put together by industry and probably by legislators indicating that everything would be related to R-12, CFC-12. Its ozone depleting potential is considered to be 1.0. Other refrigerants that have been mentioned here like 22—

Mr. Harold Taylor: Excuse me a moment, Mr. Chairman, I am having just a little bit of trouble hearing here.

Mr. Chairman: Okay, very good. Carry on, Mr. Bigelow.

Mr. Bigelow: Other refrigerants such as 502 and 11 and 22 and 500, which are used in various applications in our industry and outside our industry also are on that list at varying levels of ODP. The reason R-22 has a shining star beside it in the short-term is because against the 1.0 of 12, it is 0.05, it is one-twentieth the potential for harm to the atmosphere, and it does have some overlapping applications. It is our interim, I am not going to use the word saviour, but it is our interim alternate on certain applications in our field and in others. It is not considered, as was mentioned by Mr. Shaw earlier, by 1997 its industries hope that it too will be gone, because they are looking for 0.00.

Mr. Harold Taylor: I believe one of the other members of the delegation, I am not sure who, mentioned that CFC-22 though is not practical to use for substitution for CFC-12 without some problems, I understood, not, pardon me—

Mr. Chairman: Mr. Bigelow.

Mr. Bigelow: It is not a universal replacement, correct.

Mr. Harold Taylor: The question I would like to follow on with is, can it be used as a replacement with some technical changes to existing older equipment, or is that not practical from a cost viewpoint, or is it just impractical technically?

Mr. Bigelow: A combination of both, Mr. Taylor. It is impractical from a cost point of view and it is impractical from an application point of view in almost all systems. I should point out that the industry, our group in particular, by unanimous, but voluntary approval has said when we are called upon to install or replace a system that is R-12 now, we will ask the customer to use R-22 if it is suited in that application. That is a voluntary agreement that took place in our membership over two years ago. That is a stepping stone I might say.

In other words, I would say, in our personal corporate experience, that 99 times out of 100 we have succeeded where a new system went in to use R-22 where it was a replacement component. I would say approximately maybe 70 percent or 80 percent of the time we have shown the customer the long-term value of changing at that point in time.

Mr. Harold Taylor: Mr. Bigelow, when you have shown that to the customers, what is your success rate in clients buying into substitution? You are saying they are convinced, but have they gone for the dollars and said, yes, we will go for this, or do you get situations where they say well, I see what you are saying, but they are not prepared to actually make the commitment in dollars. That is what I was not quite sure what you were saying there.

* (1200)

Mr. Bigelow: I think that, again, it always depends on the individual circumstances. I mentioned 99 percent in new systems, because if you are starting off from scratch the cost implication is very minimal. If however you have a compressor failure and you are saying to the customer, now is your time, because this compressor is no longer the type that is friendly to the atmosphere or maybe friendly to your pocketbook down the road, we recommend you change it, but along with that compressor you have to change certain valves, maybe certain piping, certain other components. In the former case, I would say we are 99 percent successful. In the latter case, as a company, I would expect we are somewhere around 70 percent or 75 percent successful.

Mr. Harold Taylor: Thank you. The reason I wanted that clarification is I dealt with a number of grocers over the last year that were having some problems with older equipment. We got into the discussion about the impacts of the materials that are inside the cooling systems and the freezer systems. The rationale was put on the table, we went around on the argument, and they accepted the rationale that we should not be

using products that are going to diminish the ozone layer, but when it came to the economic decision, they did not buy it.

They said, I will keep going as long as I can. Maybe it is not the best thing, but that is what I am going to do. I found that rather disappointing, to tell you the truth, that they could accept the rationale, but they would not make that economic decision. It was not a case that would bankrupt the firm or anything as serious as that, but they just said, no, I will get by for another couple of years somehow. It was that sort of thing. I just was curious as to what you had encountered, so I appreciate your bringing that out.

I wanted to ask some further questions about the Montreal Protocol of CFC reduction as it relates to other initiatives that maybe Canada could take. I wondered if you were familiar with the fact that Ontario has gone beyond the Montreal Protocol and said that it expects within its jurisdiction to by '98-99 have accomplished even more. Have you talked with your industry colleagues in Ontario as to what they are doing, the impacts they have felt? Have you heard any of that thing? Have you had any discussions in conventions or in any other way?

Mr. Bigelow: Yes, I can answer that in perhaps two ways. I was chosen as RACCA's delegate to the national conference, which is held in British Columbia in September, where this subject was obviously a headliner. We are in consultation. I would call it a system of communication rather than a meeting every second week whereby written and other information is passed forth between parties.

To comment about Ontario, we made a reference to that earlier, that there have been a couple of things done in Ontario which have totally thrown the whole program of recycling into chaos by somebody jumping the gun far too quickly. We are very concerned that not happen here. I believe one of the other speakers has alluded to that.

They have just totally frustrated the industry by one law that they passed provincially which now as the industry has found out is very difficult to unravel. The last word as of last Tuesday evening, when the Du Pont representative was at our meeting, he said it looked like there was progress, but he said it just is almost impossible. They have decided to take other steps rather than try and do what they originally anticipated to do since their plant is in the Province of Ontario.

Mr. Chairman: Mr. Taylor, any more questions?

Mr. Harold Taylor: Yes, the Ontario goal of ban the use of CFCs, and this is a statement I have from the Ontario Government forum I am reading out of, it says July 1, 1998. This is its point form goal, ban the use of CFCs in refrigerators, air conditioners and coolers. That in effect says 100 percent. I understand that is not really what they are saying. The translation would probably be an 80 percent. That is different from the Montreal Protocol that talks about a 50 percent reduction. I wonder if you have any comments on that from your group.

Mr. Bigelow: I am not an expert on the changes. This is a rapidly changing legislative field, but the Montreal Protocol I understand has been modified to some extent. Also, as we have said earlier, it is all very well to pass that legislation saying they will be gone, but what are you going to replace it with? Do not assume because HFC-134a looks promising that it is going to be on the market. We can do the world and the population of Manitoba a whole lot more good, and this is the third time I have said it, by acting on the immediate reduction, emissions and control of use and handling of these materials. We have millions of toxic and other kinds of substances that are handled under control.

It has never been of any understanding to us why if you want to change a fixture on your gas furnace, which frankly is not a terribly difficult job, you must have a permit and it must be inspected. When we handle gases that operate up to 400 PSI that now have a whole new problem which we did not even know about a few years ago, and anybody—and I do not wish to cast any aspersions, but our industry is known for its population of off-duty firemen who are in this field—we would ask that you please do something about the immediate problem, the other one you will bring into legislation as the products become available, and we will support you.

Mr. Chairman: Any more questions? Mr. Harold Taylor.

Mr. Harold Taylor: I just have two more and I know my confrere across the table will have a number here. The listing in your letter of January 31 shows that you are looking at classifications (a) to (f) and I have a couple of quick questions on this Class C, domestic appliances. Your association, to what degree are you handling domestic appliances as opposed to other people such as the department stores and their servicing agencies? What is the market split as to who is doing what in the domestic field?

Mr. Bigelow: I will make one quick comment. RACCA represents commercial industrial contractors only and therefore we separated those classifications—and Mr. Taylor will speak to this immediately, it is his program—we separated those classifications because we cannot control those other five groups.

Mr. Bill Taylor: Presently there is no control in the domestic appliance field as well, but there is formal training available in that field. There are people that are qualified to work within that range. At the present time there is some overlap in the country and that may be necessary. Our firm does do occasionally a domestic so we have the expertise, but there are people with a little less training who can handle the smaller quantities, but they also have to be licensed because if you are going to get into reclaim, as far as the domestic field is concerned, you have to have some control there as well. We divided it up among those particular groups because we felt that allowed for inclusion of all of the various groups that exist now. The program then will be to sit down with the Government people and work with the regulations and the requirements and the amount of education and training that is required for

the various levels, and that process will take some time, but we are willing to work with the Government in consultation with that and with some other groups that are involved in that area.

Mr. Harold Taylor: Mr. Chairperson, the last area that I wish to touch on has to do with transportation, but not transportation of the product per se, but we talked earlier about the air conditioning systems in automobiles and what happens when those automobiles reach the end of their useful lives. They go to the wrecking yard. Unfortunately, there is no recycling. The ax hits the unit and its piping and everything else and off goes this stuff into the atmosphere.

I want to ask a question related to the servicing of those air conditioning units, but I want to expand it beyond automobiles, and I want to talk about automobiles first and then talk about cooling and freezing units on trucks, refrigeration equipment on trains, refrigeration equipment on aircraft, and cooling systems on buses, intercity buses, that whole area.

Does your association have a knowledge of what happens for cooling and freezing units that are involved in the transportation industry?

* (1210)

Mr. Bill Taylor: I have personally worked in all of the areas, but not extensively. There is a refrigeration service section that does do those areas. When you are talking about railroads, they have their own staff that handle that product. We are suggesting that they be licensed as well, those who are knowledgeable and trained, and they have training for those programs, because the equipment is expensive and sophisticated and they have proper maintenance people to look after it.

There are firms that do the interprovincial trucking lines that require air conditioning; the airlines have people. There are approximately 400 journeymen in the Province of Manitoba who are qualified to handle the various CFCs and who work in the industry. Probably only half of them work in the service sector as we know it. The other half are now attached to hospitals and other manufacturing plants as maintenance people, so they have qualified themselves. It is a good job to go and work for the Health Sciences Centre when you have got to be 45 or 50 and cannot climb up and down a ladder onto a roof out in the marketplace because you are working in a closed environment, but they still have qualified people.

Mr. Harold Taylor: The reason I asked that question is I wanted to know what your feeling as an association was in regard to qualifications of the people who do servicing in that transportation sector. Many of those people who are doing the servicing, my understanding is they are journeymen mechanics, they are not specialists. You people tend mostly I understand to be specialists and maybe have some other qualifications.

What is your feeling at this state of the art of where we are today with the very serious concerns about Freon unnecessarily getting into the atmosphere. Do those

people who are in many cases trained mechanics, do they have the qualifications you feel to deal with the trains, the buses, the highway trucks, I am talking semis and that that have units, the delivery trucks that have units on them in the city and the airplanes that have units in them?

Mr. Bill Taylor: With the exception of individual cases where there are qualified people in a large quantity of the area, especially in the automobile sections but also in trucking, the people who are doing the service are not qualified. I am sure that there are a lot of them that do not know what the word "reclaim" means.

Mr. Harapiak: Mr. Chairman, if the regulations were passed tomorrow to make sure everybody was certified and had a licence, would there be sufficient people in the whole province, never mind the City of Winnipeg, but in the Province of Manitoba to look after the needs that exist in the industry?

Mr. Bill Taylor: We proposed a phase-in period where the regulations would be written and worked with in concert with industry and then work toward a goal of providing proper levels of certification and proper levels of education to the various sectors of the licensing area that we are discussing. There are enough people in the industry to handle the commercial load now. There is ongoing training at Red River Community College presently. There is a waiting list to get in. There has been some funding cutbacks in that educational process and that is another matter not on discussion now but it could be looked at. We have been concerned with that issue over the last couple of years. There is an ongoing training program in place.

We would have to sit down and pinpoint each industrial area case by case and say, now how do we attack this particular area, how do we bring up the standard? In the appliance field, probably half of the appliance people out there have some training on refrigeration and the other half do not, they are good on stoves and this sort of thing, and that may have to be divided. A company that has seven employees may say, well, these three are the ones that have the expertise to work on refrigeration. Unless the other four wish to go and get some training they are not able to work on refrigeration.

Mr. Harapiak: Thank you very much for coming out and sharing your knowledge with us. It was very informative and it will be very helpful.

Mr. Cummings: You indicated in your presentation, in answer to questions, about your desire to be involved in discussions on the development of regulations. This fact sheet went out with the Bill. I see some of you are nodding that you saw this fact sheet when it went out with the Bill. It is dated November 22.

In terms of implementation we have pledged ourselves in this fact sheet that over the next few months the Department of Environment will be developing regulations which will address labelling requirements, certification, consumer recourse, recycling and collection. In early 1990, the department will begin

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public consultation on the Act and the principles of the draft regulations. Does that meet with your concerns to have opportunity to have input into the regulations that will ultimately be put in place for your industry?

Mr. Bill Taylor: Yes, we were happy that we were included in the proposed consultation.

Mr. Cummings: Okay, I will assure you that those consultations will take place.

Mr. Allan Patterson (Radisson): Mr. Chairperson, I do not have a question. I just wanted to commend the group on the very high quality of its presentation and the discussions.

Mr. Chairman: Thank you, Mr. Patterson. We want to thank your members for your presentation here and so then, if there are no more questions then we will go to the next presenter. We will ask Mr. Chris Kaufmann to come forward please. I would like to ask the committee whether it is still the will of the committee to adjourn at 12:30. It is. Mr. Kaufmann, I—Mr. Minister.

Mr. Cummings: In deference to Mr. Kaufmann, if he is within a minute or a few minutes of being finished at 12:30, I would encourage the committee to allow him to finish and let us not be too rigid on the 12:30.

Mr. Chairman: Agreed? Committee agreed? Very good. Mr. Kaufmann. If I may just at this point—your presentation has been distributed? Do you all have copies of it? Very good. Thank you. Mr. Kaufmann go ahead.

Mr. Chris Kaufmann (City of Winnipeg, Task Force on CFCs): Thank you for the opportunity of appearing before this committee. First of all, I would like to introduce myself. I am Chris Kaufmann. I am an employee of the City of Winnipeg, Environmental Planning Department. I am the city's industrial planning officer. I am also a member of the Environmental Council of Manitoba.

Today, I speak more on behalf of the City of Winnipeg, because I do not want to preclude that the Environmental Council may wish to bring up points that I cannot make now, because there was no time for prior consultation.

I am a member of the City of Winnipeg's task force on chlorofluorocarbons and Halons. As you may know, the city appointed such a task force pursuant to a resolution by Executive Policy Committee. The task force mandate was to explore and investigate and report back to council, where in the city's own operation, reduction or elimination of ozone depleting substances can be achieved.

The task force reported first to the board of commissioners in July of 1989. The report was forwarded to Executive Policy Committee and approved. On December 20, 1989, city council adopted the report which was entitled, Review of the City of Winnipeg Facilities and Operations to Determine Where Reduction and Elimination of CFCs and Halons Can Be Made. I

think you all have copies of the report. It is not really intended to go through it clause by clause today, it is for your use, but I will be very happy to answer any questions you may have.

Our submission, regarding Bill No. 88, concerns only a few minor points and I think should be reasonably brief. We have some questions on the wording in the Bill and some suggestions for the committee's consideration. First of all, I would like to say we think it is a good Bill. We have been anxiously waiting for it. I am talking on behalf of the committee I represent. It is a very timely Bill.

We feel legislation is required and believe the previous presenters made this point very clear, because many products and repair procedures in future will become far more complex and expensive. Legislation will be required to avoid unscrupulous operators to take shortcuts, which may be harmful to the environment.

* (1220)

I would like to go right into Bill No. 88. Some clauses we have some questions about. Right in the beginning, in the definitions of paragraph 2, make use, the definition of make use means to manufacture, offer for sale, make, use, transfer, display, transport, store, recycle or dispose of. We have some question as to the word "dispose of." Does that also include sell, or once the product has been sold, return it to the original vendor, or does it refer to dumping it, discharging it into the atmosphere?

If you read later in paragraph 4(1), (2) and (3), where it says the sale of CFC products is void or can be voided, the purchaser does not have to pay. What happens in case the original vendor does not want the product back? They might just say, well, I will give you the money back, but get rid of it, I do not need it back, save us the transport costs. That the Act addresses very carefully, the question of refund of money of products, but it does not deal with an alternate, acceptable disposal method for CFC products. For example, what happens to the shelves and shelves of one-litre CFC canisters that are stored in automotive stores, hardware stores, et cetera?

The next point is a suggestion under 3(2) Application. We feel very strongly that methyl chloroform and carbon tetrachloride should be included. Methyl chloroform has an ozone depletion potential of 0.11. It is therefore not very harmful, but its wide use makes it a substance that should be considered and regulated. Carbon tetrachloride has a very high ozone depletion potential of 1.11. Both these substances were not included in the Montreal Protocol. With carbon tetrachloride, it was on the erroneous assumption that carbon tetrachloride is only used in the manufacture of CFCs and thereby destroyed in the process of manufacturing.

Recent measurements in the atmosphere have made it clear there is a far greater use of carbon tetrachloride worldwide. The uses are not limited only to the manufacture of CFCs. We are quite certain that further regulations complementing the Montreal Protocol will include the two substances. It seems that if Manitoba passes a Bill now which is enabling legislation, it should

include those two substances so that we are not caught off guard when federal regulations or world bodies suggest that they should be included.

For example, the U.S. Environmental Protection Agency has estimated that these two substances are major contributors to the buildup of chlorine in the atmosphere and are considering their phase-out right now. I do not know whether I should go into the various uses of the two products, but they are: carbon tetrachloride was a very popular cleaning fluid that you could buy over the counter anywhere. It was primarily abandoned for other substances because of its high toxicity. It is also a suspect in causing cancer. However, it is widely used in the manufacture of pesticides, herbicides, grain fumigation and other processes that may take place in Manitoba.

On Paragraph 4(2) the purchaser is not liable if a product is returned. I think I went into this already. What happens with the product? Particularly as we have the situation with products that may have been purchased by the original vendor from outside the province or outside the country. He is stuck with it; what does he do with it?

I would also like to echo some of the suggestions that were made earlier regarding Paragraph 9, Regulations. The regulations talk about respecting the certification of persons qualified to maintain, service, or repair equipment or machinery that contain, use or emit ozone-depleting substances. I think it is not enough that the people are certified, I think they should also be advised of what they have to do. We suggest the insertion of a paragraph respecting the maintaining, servicing, repairing, modifying, decommissioning or destruction of equipment or machinery that contains, uses or emits ozone-depleting substances. This otherwise also told the certified people what they have to do and what they are not allowed to do.

We have one further suggestion. That is that Bill 83 should include a timetable for the phase-out of certain CFC products and technologies to give advance notice and provide guidance to industries and trades, purchasing agents, and end users. While it is recognized that certain products and processes and technologies can only be phased out once alternates are available, in some cases these alternates are available. For example, we have already alternates for CFC propellants in spray cans. As a matter of fact, these products are being phased out. We have alternate methods for maintaining and repairing refrigeration equipment, not to vent into the atmosphere but recapture.

I believe a timetable would be advantageous to fortify the intent of the legislation and also give advance warning to the industries. As industrial planning officer, I have worked very closely with many industries, and I found on the whole that they are more than willing to comply with regulations vis-a-vis the environment as long as they know what the regulations are. In many cases, they are in fact ahead of local regulations, because they also work in other jurisdictions where stronger requirements are enacted or have been enacted earlier.

For the industry in general, it is an advantage if they know the intent ahead of time. I know the Ozone

Depleting Substances Act Fact Sheet has a timetable on it, and we are wondering whether it would be not appropriate to include something of that nature also in the Act. I think that concludes my few points that I had to make, and I am willing to answer any questions that I am able to answer.

Mr. Chairman: Very good, Mr. Kaufmann. Any questions to Mr. Kaufmann?

Mr. Harapiak: Mr. Kaufmann, I may have missed it in your comments, but was there consultation with the city of the committee that you represent, the city, and the Minister when this legislation was being developed?

Mr. Kaufmann: Yes, there was, with ongoing consultation with Mr. Jerry Spiegel of the Environment Department

Mr. Harapiak: Mr. Kaufmann, I may have missed it in your comments, but was there consultation with the committee that you represent, the city, and the Minister when this legislation was being developed?

Mr. Kaufmann: Yes, there was, with ongoing consultation with Mr. Jerry Spiegel of the Environment Department.

Mr. Harapiak: In your view dealing with the regulations, if that regulation was passed to certify and license all people, as you heard during the previous administration, would there be sufficient people in the City of Winnipeg to handle all of the needs in the industry?

Mr. Kaufmann: I am afraid I cannot answer this question, whether we have enough qualified people on hand now. I think, with all these things, a certain lead time is required; a lead time to enable the school system to prepare people or the industry themselves train people in in-house training. Also, I would think that there are various steps of qualification. I think to repair a refrigerator is maybe a different story than to wreck an automobile.

I give you a good example of this. About a year ago or so, I was at a Clean Environment Commission hearing regarding General Car Shredder. One of the problems there was that every so often in their shredding process there was an explosion taking place. The owner of General Car Shredder said, well, this is sort of an industrial accident that happens every so often when one of the tanks in the car is not slit open beforehand, and we advise all our suppliers to have both the gas tanks and air conditioning tanks destroyed or opened up before. That is to protect their own industry that they have not got an explosion in their machinery when a tank suddenly gets compressed. We are talking there about an industry of the car wrecking business for example, which is a substantial proportion of the CFC dispersers into the atmosphere really, who have neither the education nor the requirements to do anything about their practice.

I do not think that these people have to go to Red River Community College for six months, or something like this, to learn how to dispose of the material properly.

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I think a simple regulation will do that for them, and the need to buy some equipment to do it with. That of course brings up one other thing that everything will become more expensive in future. The methods that we have been using in the past, and our lifestyle that developed from that, was really based on borrowing from the future. Now we are trying to catch up.

Mr. Harapiak: In those discussions with that industry with the Environmental Council, was there concern raised, or an attempt made, to educate the people to what damage they were doing to the ozone layer?

Mr. Kaufmann: We are talking about a joint project between the city and the province. This is on the administrative level and the talking stage, and will probably come forward as a proposal sooner or later.

One of the joint projects would be a public education process that I think has to come first.

Mr. Chairman: Any more questions? Okay, I want to thank you, Mr. Kaufmann, for making a presentation.

Mr. Cummings: Only to thank you for your presentation, and I hope we are able to continue working together.

Mr. Kaufmann: Thank you.

Mr. Chairman: The time being 12:30, is it the will of the committee to rise?

Committee rise.

COMMITTEE ROSE AT: 12:31 p.m.