Canadian Polar Commission
Regional Contaminants Forum
Kuujjuaq

Final Report

Prepared By:
Stephanie Irlbacher
Northern Science Officer
Yellowknife Office

I. Introduction

The Canadian Polar Commission (CPC) is Canada's national advisory agency on polar science. The CPC reports directly to Parliament through the Minister of Indian Affairs and Northern Development. The CPC's mandate includes examining issues of importance in the area of polar science toward recommending actions at the national level.

The CPC is convening a series of regional forums and a conference, For Generations to Come, examining the issue of arctic contaminants. The goal of this process is to highlight issues, identify research needs, and suggest policies and actions appropriate to mitigating both the sources and effects of contaminants. While participation in the forums is by invitation, the forums are also open to the public. The forums and conference will be held on the following dates:

Whitehorse, YT	September 12, 1996
Yellowknife, NT	September 17, 1996
Kuujjuaq, QC	September 27, 1996
Iqaluit, NT	October 8-10, 1996

This report has six sections following the introduction. The first section gives an overview of the Kuujjuaq forum. The following four sections contain detailed summaries of the discussion held for each agenda item. The last section lists the recommendations made by participants for consideration at the Iqaluit conference.

II. Kuujjuaq Forum - Overview

The third regional forum was held September 27, 1996 in Kuujjuaq, Nunavik (Northern Quebec). This document summarizes the participants' discussions and recommendations.

The Kuujjuaq forum had thirteen participants, including scientists, community representatives, representatives of Inuit and First Nations organizations, and federal, provincial, and regional government employees. A list of participants is attached as Appendix 1. The forum focused on contaminants issues of importance to people in Nunavik and Labrador. Discussion was guided by an agenda, attached as Appendix 2, which gave broad definition to how discussion of the issues would be approached.

Discussion of each agenda item lasted for approximately one hour. Agenda items included: Contaminants in Our Lives: Overcoming Uncertainty; Government/Citizen Management Initiatives; Northern Foods: Standards, Monitoring, and Consuming in Confidence; Communicating with Communities; and, Summary and Recommendations. At the beginning of each discussion section, individuals were asked to give short overviews of the current situation. Recommendations were made by participants during the discussion. At the end of the day, additional recommendations were made by the group.

At the Kuujjuaq forum, abandoned mining and military sites and their continuing legacies were of primary concern. Recent mining and exploration initiatives, such as the Voisey's Bay site and the Raglan mine, have led to increasing concern over the effects of mining methods and technologies on the land, water, fish and animals. At the same time, people are aware that airborne contamination is also significant. Concerns related to the effects of contaminants on human, animal, environmental, and ecosystem health were raised. The group made recommendations which emphasized the need for adequate resources for research, monitoring, and community action, and the need for coordination of pan-northern efforts on contaminants issues. In this regard, any future national program directed toward the Arctic environment should include Labrador and Arctic Quebec, consistent with the generally accepted definition of the Arctic. Political action at the national level to promote contaminant reduction and clean up initiatives was also recommended.

III. Contaminants in Our Lives: Overcoming Uncertainty

The discussion about the immediate effects of contaminants in people's everyday lives began with a challenge to the generally accepted definition of a contaminant. While environmental contaminants affect people's everyday lives, other kinds of contaminants, such as alcohol and drugs are contaminants which have had devastating effects in many communities throughout the north. By challenging the commonly accepted definition of contaminants, participants began the session with a sober reminder of the many important and pressing issues facing the leaders and people of northern communities. It underscored the fact that addressing any problem and resources expended on every problem, without having specific dedicated resources is done in direct competition with many other pressing concerns. In addition, in order to address issues adequately, a healthy population is necessary first.

In Labrador during the past couple of years, resources have been secured to begin basic research and tracking of people's lifestyles and their observances of changes which are taking place on the land and in the animals and fish. For example, the Labrador Inuit Association's environmental health study which was begun [DATES NEEDED] resulted in reports of Inuit seeing abnormalities in caribou, seal, and in one instance, a pink gull egg, which are usually green and spotted. The first eco research office in Labrador opened two years ago, funded by AES and provincial funding and is currently conducting a cord blood monitoring program testing for mercury, organochlorines, etc., along the same lines as similar studies being conducted in other parts of the north. One of the most serious shortcomings of the program has resulted in the lack of resources which can be used for communicating the result of research to the communities.

Unlike Labrador, in Nunavik there has been contaminants research for years and years. In the 1970's and 1980's, contaminants research resulted in situations where the information and results were released in such a way that resulted in scares occurring among the general population. Thus a committee was established involving the Department of Health and Social Services to handle the information. The eco research project came out of a need for establishing a capability which would look at human health affects and answer the questions people had in terms of how contaminants affected them in their daily lives. As a result of the work of the steering committee that was established, people know that the benefits of country foods far outweigh any risks associated with contaminants. The issue in Nunavik has now advanced to the stage where instead of just looking at contaminants in country foods, want to start putting the same emphasis on getting basic nutrition information across to people to help them be better informed about nutrition about all foods in general. The Nunavik Health and nutrition Committee is now working with the university of Waterloo risk research school to develop a communication strategy, which would provide information about nutrition, contaminants, and the benefits and risks involved in making food choices.

Often during discussions about contaminants people tend to focus on the effects of pollution from

l sources outside of the area. However, there are many sources of contaminants which Diesel generators, four wheelers, skidoos and cars - all of these contribute to pollution sources. Pollution produced within the area often stays in the area and is not sorted and ıroperly. Poor planning often leads to dumps and sewage disposal in areas close tot he affecting the environment and contaminants entering the ground water. Incineration of umps also results in smoke containing unknown substances.

IV. Government/Citizen Management Initiatives

Discussion during this session focused on experiences of the participants with different contaminant management initiatives. One example discussed was the James Bay Mercury Program. Extensive hydroelectric development took place in James Bay during the 1970's. The creation of hyydroelectric reservoirs intensified the methylation of the inorganic mercury into methylmercury. Once transformed, the methylmercuyry enters the food chain. In 1986, Hydro-Quebec and the Quebec government signed a Mercury Agreement, along with the nine Cree communities of the James Bay region. This resulted int he establishment of a committee . One of its projects was to monitor the methylmercury exposure of the Cree population. For the Cree, the only way to prevent high exposure to methylmercury was to decrease consumption of certain species of fish which are at the top of the food chain. As a result, the communications component was extremely important, in terms of providing general information and communicating monitoring results.

At the beginning, it was hard work to communicate the purpose of the program and establish its credibility in communities which was expected. Resources such as a video were produced, contact with individuals in communities, working with community health workers, and other initiatives were carried out during the life of the program. Often it was difficult to come up with measures to help people understand scientific terminology in everyday language. This was one of the biggest challenges of the program.

An evaluation of the program based on a questionnaire distributed to participants was completed which resulted int eh conclusion that many people had confidence in the program and its information, and that many people, who had once stopped eating fish with the 'fish sickness' had begun to eat fish again as a result of being able to make an informed choice. One of the greatest strengths of the program was that the researchers were very open and honest with the people from the beginning of the program. This assisted in establishing credibility. However, although the target population was a high risk one, efforts to educate students in the schools fell off and this area requires further attention.

Participants agreed that community involvement in all stages of the planning and research process is necessary. People need to know what to expect of the program in advance. When communicating information, scientists must relay the information in everyday language which people will be able to respond to. At the same time, different sectors of society should be targeted with relevant information which is relevant to their traditional and contemporary roles in the food procurement, preparation, and consumption process. For example, hunters, people who prepare and cook meat which are mostly women, and those at different stages in their life cycle consuming the food.

Mining activities are one area where there is much uncertainty and fear among many people. In the past, many mining initiatives and sites were left by companies without performing any rehabilitation on the sites. With Falconbridge's new mine, the proponent was required to undergo a monitoring program not only at the site but also the entire watershed area around it. Without such regulatory

requirements, mining companies have demonstrated in the past that the cheapest alternative for them is to forgo any significant mitigation beyond the requirements of regulation and lease conditions.

In order to perform adequate monitoring, baseline contaminant levels must be established prior to mining or exploration activity takes place. People want to know about the basic contaminant levels present in the animals and foods in Nunavik. This affects considerations relating to personal consumption, and alsocommercial uses. Thus monitoring is necessary to ensure potential economic development opportunities such as the commercial sale of country foods are not adversely affected.

V. Communicating With Communities

During discussion of each agenda item, the issue of communications was raised repeatedly. It quickly became clear that communications issue often shapes the research itself.

One of the difficulties with communicating results of research was that often people were concerned with receiving mixed messages. While researchers might tell people that there are contaminants present in certain types of food, at the same time people are encouraged to continue eating the foods. It takes a long time to establish trust and credibility in individual communities. Ongoing effort is required to create an awareness level within the community where people seek out information. Often there are little resources to ensure that different sectors of the community and general population are targeted with relevant information about the issue. For example, money is available through federal programs to educate mothers and pregnant women about nutrition and food choices, but there are no similar program for elders. What is needed is an overall system or capability to reach all sectors of the population by delivering relevant information in a sensitive and appropriate manner.

Information that flows from research projects must be presented in context. As there are generally no concrete answers to many of the questions associated with he contaminants issue, the best thing that can be done is to provide people with as much information as possible enabling them to make informed decisions.

Identifying target audiences and then developing resources and information appropriate to each group is another challenge. Using existing resources, incorporating new information into established programs, and identifying and working with a number of organizations to assist in making it happen are other challenges for monitoring programs.

Community health workers were frequently identified during discussions as main resource people in the communities for health issues. Many of these people are well known and trusted by the community and have already established consistent contact and trust with various sectors of the community. These people are a real resource for the issue and must be given training so that they can provide answers and direct people to the proper contact people should additional information be required.

VI. Northern Foods: Standards, Monitoring, and Consuming in Confidence

In Nunavik and Labrador, there is frustration over being shut out of the Arctic Environmental Strategy. Despite the lack of resources which can be accessed by organizations in the area, some clean up work has been done, and some money has been received which resulted in an extremely successful project. The projets not only result in removing waste and pollutants from the environment, but they also assist in building awareness and a capability in the community in the issues involved. There are also significant economic spinoffs, as the initial program resulted in over half of the funding going directly to local people in employment and services. The project is held up as an example of what the community can accomplish if it has initiative and access to adequate resources.

The Makivik Corporation has established a research Centre whose agenda is determined by the needs of the communities. Research at the Makivik research centre is done in response to what people ask. There is a Hunting Fishing and Trapping Association (HFTA) in each community which is responsible for issues which touch on these pursuits. The Centre works with he HFTA's to distribute information and communicate research results. The centre requires significant resources to communicate with people in the many communities across the region, since the most effective kind of communication is face to face contact.

Logistically, monitoring programs can be difficult to implement and expensive, but this is a challenge which often results in innovative methods which work best when he research is being undertaken in cooperation with the communities. For example, the Nunavik nutrition committee sent out some disposable cameras to hunters. The hunters were asked to take pictures of abnormalities they found in animals and to provide information about the animal such as the location, behaviour, and other details. This provided on site information crucial for accuracy. Monitoring is useful not only for recording the status of the animals but also for understanding how people handle the situation which is important. For example, in one incident, hunters caught a whale with sores all over it, and instead of using it, put it where it was not visible so other people wouldn't eat it. However, this is potentially dangerous as animals and other people may find the animal and use it as they may not be able to detect the abnormalities.

Good communication strategies depend largely on the involvement of the community in the research itself which requires time, resources, and mutual respect. Participants spoke of the need for research to start and end with the community, and for the necessity of local involvement to include exchange of information an the use of traditional knowledge in the research programs. As well, researchers must be conscious that they need to make a conscious effort to reach out to the whole community. Often information stays with the leadership in the community and does not get out to people. Researchers must make an effort to reach their target audience while still being respectful of communication channels, and leaders must appreciate and encourage this as well.

The future is of great concern to many people on this issue. People are worried that years from now, they will not be able to eat what they are eating now. They want to know if their children will still

be able to eat traditional foods, breastfeed, live traditional ways. In the future, the situation might change. Instead of encouraging people to continue eating country food, agencies' advice might be for people to stop eating traditional foods. Some participants felt that if there were contaminants in foods of the population in the south, something would be done. The view was also expressed that in the north, the government has not devoted the same kinds of resources to the issue that people could expect in the south.

Scientists are often afraid to say that they do not have the answers. The future cannot be predicted, and the situation is changing all the time - not just the state of contamination, but also the methods used to measure contaminants, and the levels and standards set determining what is acceptable and what is not. At the same time, when scientists do not have the answers, this often creates fear among the general public.

VII. Northern Foods: Standards, Monitoring, and Consuming in Confidence

While Agriculture Canada has a comprehensive system in place for testing for environmental contaminants and chemicals in southern foods there is no such system in place in the north. There are pros and cons associated with establishing such a system for the north.

Participants had a variety of perspectives on this issue. Some people believe that establishing a system would raise unnecessary concern. For others, any system would make no difference, since people like elders would continue eating traditional foods. At the same time it may prevent potential consumption among the younger generation. As well, any system would have to be seasonal. Unlike the south, foods are produced on a seasonal basis only. The cord blood study is an example of monitoring being done in humans to asses baseline contaminant levels; it was suggested that this type of monitoring might be done on animals as well. Another perspective is that if no monitoring system is put in place that sends a message saying that it is not worth doing.

Specific regulations are required to decrease or stop environmental pollution and contaminants. At the community level, environmental consciousness has been raised. People are beginning to practise environmentally sound practises. However, there are many sites in Nunavik which have not been cleaned up. In Labrador, waste disposal is a real issue with increased activity brought by mining and exploration. Currently in Nain, a committee of community leaders is being established to address the pressing environmental problems which are resulting from the largely unregulated mining and exploration activities.

In Nunavik and Labrador there are limited resources dedicated to environmental issues simply because the money is not available to support a comprehensive approach. Money is not received under the AES program. There are too few people to monitor, regulate and enforce restrictions at exploration, mining, and outfitting sites operating in Nunavik and Labrador.

Water quality standards, testing and monitoring and a very important program as well which impacts on the health of residents in Labrador. In Quebec water quality is generally good. But in Labrador, water supplies along the coasts are tested monthly and sent out to Environment Canada. The samples are tested for contaminants. In some regions, people are often told to boil water, for example in the Maccovik area and in Posvel, which is located near a old uranium mine. In that particular area, the last environmental assessment was done in 1991. According to the government, the are no contaminants but people are still concerned as the vegetation in the area has died and still has to come back. In addition to this, statistics have shown that almost one person in every household in Posvel has asthma In Rigolet, the water is brown and it smells, and people don't use it to bath in. Instead, they fetch water from local lakes. It seems that the pipe system might be the problem.

Local municipalities, and governments must take actions to deal with the more benign contaminants and irritants which affect human health directly. Proper piping system for drinking water, paved

roads to eliminate dust, and proper sewage treatment facilities are infrastructure which would ensure a basic standard of environmental health in every community.

VIII. Recommendations

1. Communications is the most important part of research. There must be resources earmarked specifically for communication in every research project.

2. Communication must be taken into the hands of the people who live in the area. They must have a significant role in defining and carrying out communications strategies.

3. Resources must be made available to communities and municipalities to undertake locally based recycling programs. Money must be available to build necessary infrastructure to deal with a range of wastes.

4. Any program such as the AES must be included to include the communities of northern Quebec and Labrador.

5. Resources must be available to make sure that money made available for cleanup efforts stays largely within the community and used to benefit the local economy.

6. Locally produced contamination should be monitored and assessed through local monitroing systems, to avoid build up of locally produced wastes.

7. Resources must be made available to translate scientific terms into plain language, and in turn to translate results and information into the local Aboriginal languages.

8. The federal government must undertake international efforts to reduce and eventually stop arctic pollution.

9. Corporations must be encouraged and possibly regulated to reduce unwanted pollution, such as excessive packaging, leaving waste behind at exploration sites, etc.

10. Large scale projects should be required to use local people in monitoring projects to involve the community and help to build a local capacity to deal with the contaminants issue.

11. Resources should be made available to increase awareness campaigns about contaminants in general and to provide information about recycling and re-using a range of everyday products.

13. All groups working on contaminants in the arctic should have some central coordinating function or agency to ensure there is minimal duplication of effort and maximum sharing of resources.

Appendix 1: Participants

1. Marc Adellard Tremblay, Board Member
2. Whit Fraser, Chairperson
3. Stephanie Irlbacher, Northern Science Officer
   Canadian Polar Commission
   #10, 4807 49 Street
   Yellowknife, NT
   X1A 3T5
   Tel. (403)920-7401
   Fax.(403)873-3654

4. Francine Noel
   Coordonnatrice Programme Mercure
   Conseil Cri de la Sante et des Services Sociaux de la Baie James
   1610 Ste Catherine Ouest
   Montreal, QC
   H3H 2S2
   Tel.(514)989-1831
   Fax.(514)989-7273

5. Daniel Leclair
   Wildlife Veterenarian
   Kuujjuaq Research Centre
   Makivik Corporation
   Box 179
   Kuujjuaq, QC
   J0M 1C0
   Tel.(819)964-2951
   Fax.(819)964-2230

6. Jacques Lacroix
   Commission de la qualite de l'environment Kativik
   C.P. 75
   Kuujjuaq, QC
   J0M 1C0
   Tel.(819)964-2681
   Fax.(819)964-2502

7. Martha Grieg
   Regional Field Coordinator
   Nunavik Regional Board of Health
   Box 900
   Kuujjuaq, QC
   J0M 1C0
   Tel.(819)964-2222
   Fax.(819)964-2888

8. Katie Harris
   Labrador Inuit Health Commission

Box 250
Nain, Labrador
A0P 1L0
Tel(709)922-1021
Fax.(709)922-1040

9. Joanna Lampe
Labrador Inuit Health Commission
Box 250
Nain, Labrador
A0P 1L0
Tel(709)922-1021
Fax.(709)922-1040

10. Mr. Micheal Barrett
Department of Renewable Resources
Kativik Regional Government
Box 9
Kuujjuaq, QC
J0M 1C0
Tel.(819)964-2961
Fax.(819)964-2956

11. Minnie Grey
Nunavik Regional Board of Health
Box 900
Kuujjuaq, QC
J0M 1C0
Tel. (819)964-2222
Fax.(819)964-2888

12. Jacob Partridge
Environmental Technicican
Environment Department
Kativik Regional Board of Health
Kuujjuaq, QC
J0M 1C0
Tel.(819)964-2961
Fax.(819)964-2956

13. Chesley Mesher
Kuujjuaq Research Centre
Makivik Corporation
P.O. Box 179
Kuujjuaq QC
A0P 1L0
Tel.(819)964-2951
Fax.(819)964-2230

Appendix 2

Canadian Polar Commission

Regional Contaminants Forum - Kuujjuaq
September 27, 1996
Kuujjuaq, Nunavik
Kativik Regional Government Offices, Kuujjuaq

The Canadian Polar Commission is pleased to present the first in a series of regional meetings on contaminants and their implications for human health and the environment in northern Canada. This event is being held in conjunction with the Commission's national conference, *For Generations to Come*, to be held in Iqaluit, N.W.T. October 7–10, 1996.

The growing body of evidence pointing to the presence of industrial contaminants in arctic ecosystems represents one of the most pressing concerns for northern Canadians. In sponsoring this session, the Commission hopes to hear from a wide cross-section of residents—those whose way of life is dependent on the land and its resources, aboriginal leaders and policy makers, those engaged in scientific research and health services, and those involved in education and communications.

The objective of the forum is to highlight issues, identify research needs and capabilities, and suggest policies and actions appropriate to mitigating both the sources and effects of contaminants. Participation in the forum is by invitation; however, this and all events will be informal and open to the public. While issues of common concern to northern Canada will form the basis for discussion, participants will be encouraged to examine topics of particular relevance to their region. Each forum will conclude with the development of recommendations to be carried forward to the Iqaluit conference.

Agenda

9:00 a.m.	**Introduction**
9:15 a.m.	**Contaminants in Our Lives: Overcoming Uncertainty**
10:15 a.m.	**Coffee**
10:30 a.m.	**Managing Northern Contaminants: Government/Citizen Initiatives**
11:30 a.m.	**Northern Foods: Standards, Monitoring, and Consuming in Confidence**
12:30 p.m.	**Lunch**
2:30 p.m.	**Communicating with Communities**
3:30 p.m.	**Summary and Recommendations to the Iqaluit Conference**
4:30 p.m.	**Closing Remarks**

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III. Contaminants in Our Lives: Overcoming Uncertainty

The discussion began with a challenge to the generally accepted definition of a contaminant. While environmental contaminants affect people's everyday lives, other kinds of contaminants, such as alcohol and drugs are contaminants having devastating effects in many communities. By challenging the commonly accepted definition of contaminants, participants began the session reminded of the many important and pressing issues facing the leaders and people of northern communities. Resources expended on every problem is done in direct competition with many other pressing concerns.And in order to address issues adequately, a healthy population is necessary first.

In Labrador, resources have been secured to begin basic research and tracking of people's lifestyles and their observances of changes in the land, animals, and fish. For example, the Labrador Inuit Association's environmental health study resulted in reports of abnormalities in caribou, seal, and in one instance, a pink gull egg, which are usually green and spotted. The first eco research office in Lábrador opened two years ago, funded by AES and provincial funding and is currently conducting a cord blood monitoring program testing for mercury, organochlorines, etc., along the same lines as similar studies being conducted in other parts of the north. One of the most serious shortcomings of the program is the lack of resources for communicating research results to the communities.

Contaminants research in Nunavik has taken place since the 1970's and 1980's. In the early days, contaminants information and results were not released sensitively, reulting in scares among the general population. A committee was established involving the Department of Health and Social Services to handle the information, the Nunavik Health and Nutrition Committee. As a result of the work of the committee established, people know that the benefits of country foods far outweigh any risks associated with contaminants. The issue in Nunavik has now advanced to the stage where instead of just looking at contaminants in country foods, people want to start putting the same emphasis on getting basic nutrition information across to people to help them keep better informed about nutrition in general. The Nunavik Health and nutrition Committee is now working with the University of Waterloo risk research school to develop a communication strategy, which will provide information about nutrition, contaminants, and the benefits and risks involved in making food choices.

Often during discussions about contaminants people tend to focus on the effects of pollution from the south and sources outside of the area. There are many local contaminants sources. Diesel generators, four wheelers, skidoos and cars - all of these contribute to pollution. Pollution produced within the area often stays in the area and is not sorted and disposed of properly. Poor planning leads to dumps and sewage disposal in areas close to communities, affecting the environment and ground water. Incineration of garbage at dumps also results in smoke containing unknown substances.

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Participants agreed that community involvement in all stages of the planning and research process is necessary. People need to know what to expect programs in advance. When communicating information, scientists must relay the information in everyday language which people will be able to respond to. At the same time, different sectors of society should be targeted with information relevant to their traditional and contemporary roles in the food procurement, preparation, and consumption process. For example, people such as hunters, those who prepare and cook meat which are mostly women, and those at different stages in their life cycle consuming the food.

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People are concerned about receiving mixed messages. While researchers say there are contaminants present in certain types of food, they also encourage people to continue eating the foods. It takes a long time to establish trust and credibility in individual communities. Ongoing effort is required to create an awareness level within the community where people seek out information. Often there are little resources to ensure that different sectors of the community and general population are targeted with relevant information about the issue. For example, money is available through federal programs to educate mothers and pregnant women about nutrition and food choices, but there are no similar program for elders. What is needed is an overall system or capability to reach all sectors of the population by delivering relevant information in a sensitive and appropriate manner.

Information that flows from research projects must be presented in context. There are no concrete answers to many questions associated with the contaminants issue. The best course of action is to provide people with as much information as possible enabling them to make informed decisions.

Identifying target audiences and then developing resources and information appropriate to each group is another challenge. Using existing resources, incorporating new information into established programs, and identifying and working with a number of organizations to assist in making it happen are other challenges for monitoring programs.

Community health workers were frequently identified as trusted resource people in the communities. They are well known and have established consistent contact and trust in the community. They are a valuable resource, and must be given training so that they can provide answers and information.

VI. Northern Foods: Standards, Monitoring, and Consuming in Confidence

In Nunavik and Labrador, there is frustration over being shut out of the Arctic Environmental Strategy. Despite the lack of resources which can be accessed by organizations in the area, some clean up work has been done, and some money has been received which resulted in an extremely successful project. The projects not only result in removing waste and pollutants from the environment, but they also assist in building awareness and a capability in the community in the issues involved. There are also significant economic spinoffs, as the initial program resulted in over half of the funding going directly to local people in employment and services.

The Makivik Corporation has established a research Centre whose agenda is determined by the needs of the communities. Research at the Makivik research centre is done in response to what people ask. There is a Hunting Fishing and Trapping Association (HFTA) in each community which is responsible for issues which touch on these pursuits. The Centre works with he HFTA's to distribute information and communicate research results. The centre requires significant resources to communicate with people in the many communities across the region, since the most effective kind of communication is face to face contact.

Logistically, monitoring programs can be difficult to implement, but this is a challenge which often results in innovative methods which work best when research is undertaken in cooperation with communities. For example, the Nunavik nutrition committee sent out disposable cameras to hunters. The hunters were asked to take pictures of abnormalities they found in animals and to provide information about the animal such as the location, behaviour, and other details. This provided on site information crucial for accuracy. Monitoring is useful not only for recording the status of the animals but also for understanding how people handle the situation which is important. For example, in one incident, hunters caught a whale with sores all over it, and instead of using it, put it where it was not visible so other people wouldn't eat it. However, this is potentially dangerous as animals and other people may find the animal and use it as they may not be able to detect the abnormalities.

Good communication strategies depend largely on the involvement of the community in the research itself which requires time, resources, and mutual respect. Participants spoke of the need for research to start and end with the community, and for the necessity of local involvement to include exchange of information an the use of traditional knowledge in the research programs. As well, researchers must be conscious that they need to make a conscious effort to reach out to the whole community. Often information stays with the leadership in the community and does not get out to people. Researchers must make an effort to reach their target audience while still being respectful of communication channels, and leaders must appreciate and encourage this as well.

The future is of great concern to many people. People are worried that years from now, they will not be able to eat what they are eating now. They want to know if their children will still be able to eat traditional foods, breastfeed, and live traditional ways. In the future, the situation might change. Instead of encouraging people to continue eating country food, agencies' advice might be for people

to stop eating traditional foods. Some participants felt that if there were contaminants in foods of the population in the south, something would be done. The view was also expressed that in the north, the government has not devoted the same kinds of resources to the issue that people could expect in the south.

Scientists are often afraid to say that they do not have the answers. The future cannot be predicted, and the situation is changing all the time - not just the state of contamination, but also the methods used to measure contaminants, and the levels and standards set determining what is acceptable and what is not. At the same time, when scientists do not have the answers, fear is created among the general public.

VII. Northern Foods: Standards, Monitoring, and Consuming in Confidence

While Agriculture Canada has a comprehensive system in place for testing for environmental contaminants and chemicals in southern foods there is no such system in place in the north. There are pros and cons associated with establishing such a system for the north.

Participants had a variety of perspectives on this issue. Some people believe that establishing a system would raise unnecessary concern. For others, any system would make no difference, since people like elders would continue eating traditional foods. At the same time it may prevent potential consumption among the younger generation. As well, any system would have to be seasonal. Unlike the south, foods are produced on a seasonal basis only. The cord blood study is an example of monitoring being done in humans to asses baseline contaminant levels; it was suggested that this type of monitoring might be done on animals as well. Another perspective is that if no monitoring system is put in place that sends a message saying that it is not worth doing.

Specific regulations are required to decrease or stop environmental pollution and contaminants. At the community level, environmental consciousness has been raised. People are beginning to practise environmentally sound practises. However, there are many sites in Nunavik which have not been cleaned up. In Labrador, waste disposal is a real issue with increased activity brought by mining and exploration. Currently in Nain, a committee of community leaders is being established to address the pressing environmental problems which are resulting from the largely unregulated mining and exploration activities.

In Nunavik and Labrador there are limited resources dedicated to environmental issues simply because the money is not available to support a comprehensive approach. Money is not received under the AES program. There are too few people to monitor, regulate and enforce restrictions at exploration, mining, and outfitting sites operating in Nunavik and Labrador.

Water quality standards, is an important issue impacting on the health of residents in Labrador. In Quebec water quality is generally good. But in Labrador, water supplies along the coasts are tested monthly. In some regions, people are often told to boil water, for example in the Maccovik area and in Postville, located near an old uranium mine. In that particular area, the last environmental assessment was done in 1991. According to the government, the are no contaminants but people are still concerned as there is no vegetation in the area. In addition to this, statistics have shown that almost one person in every household in Postville has asthma. In Rigolet, the water is brown and it smells, and people don't use it for bathing. Instead, they fetch water from local lakes. It seems that the pipe system might be the problem.

Municipalities must take action to deal with benign contaminants and irritants affecting human health. Proper piping system for drinking water, paved roads to eliminate dust, and sewage treatment facilities are infrastructure which would ensure environmental health in every community.

VIII. Recommendations

1. Communications is the most important part of research. There must be resources earmarked specifically for communication in every research project.

2. Communication must be taken into the hands of the people who live in the area. They must have a significant role in defining and carrying out communications strategies.

3. Resources must be made available to communities and municipalities to undertake locally based recycling programs. Money must be available to build necessary infrastructure to deal with a range of wastes.

4. Any program such as the AES must be included to include the communities of northern Quebec and Labrador.

5. Resources must be available to make sure that money made available for cleanup efforts stays largely within the community and used to benefit the local economy.

6. Locally produced contamination should be monitored and assessed through local monitroing systems, to avoid build up of locally produced wastes.

7. Resources must be made available to translate scientific terms into plain language, and in turn to translate results and information into the local Aboriginal languages.

8. The federal government must undertake international efforts to reduce and eventually stop arctic pollution.

9. Corporations must be encouraged and possibly regulated to reduce unwanted pollution, such as excessive packaging, leaving waste behind at exploration sites, etc.

10. Large scale projects should be required to use local people in monitoring projects to involve the community and help to build a local capacity to deal with the contaminants issue.

11. Resources should be made available to increase awareness campaigns about contaminants in general and to provide information about recycling and re-using a range of everyday products.

13. All groups working on contaminants in the arctic should have some central coordinating function or agency to ensure there is minimal duplication of effort and maximum sharing of resources.

Appendix 1: Participants

1. Marc Adellard Tremblay, Board Member
2. Whit Fraser, Chairperson
3. Stephanie Irlbacher, Northern Science Officer
   Canadian Polar Commission
   #10, 4807 49 Street
   Yellowknife, NT
   X1A 3T5
   Tel. (403)920-7401
   Fax.(403)873-3654

4. Francine Noel
   Coordonnatrice Programme Mercure
   Conseil Cri de la Sante et des Services Sociaux de la Baie James
   1610 Ste Catherine Ouest
   Montreal, QC
   H3H 2S2
   Tel.(514)989-1831
   Fax.(514)989-7273

5. Daniel Leclair
   Wildlife Veterenarian
   Kuujjuaq Research Centre
   Makivik Corporation
   Box 179
   Kuujjuaq, QC
   J0M 1C0
   Tel.(819)964-2951
   Fax.(819)964-2230

6. Jacques Lacroix
   Commission de la qualite de l'environment Kativik
   C.P. 75
   Kuujjuaq, QC
   J0M 1C0
   Tel.(819)964-2681
   Fax.(819)964-2502

7. Martha Grieg
   Regional Field Coordinator
   Nunavik Regional Board of Health
   Box 900
   Kuujjuaq, QC
   J0M 1C0
   Tel.(819)964-2222
   Fax.(819)964-2888

8. Katie Harris
   Labrador Inuit Health Commission

Box 250
Nain, Labrador
A0P 1L0
Tel(709)922-1021
Fax.(709)922-1040

9. Joanna Lampe
Labrador Inuit Health Commission
Box 250
Nain, Labrador
A0P 1L0
Tel(709)922-1021
Fax.(709)922-1040

10. Mr. Micheal Barrett
Department of Renewable Resources
Kativik Regional Government
Box 9
Kuujjuaq, PQ
J0M 1C0
Tel.(819)964-2961
Fax.(819)964-2956

11. Minnie Grey
Nunavik Regional Board of Health
Box 900
Kuujjuaq, PQ
J0M 1C0
Tel. (819)964-2222
Fax.(819)964-2888

12. Jacob Partridge
Environmental Technicican
Environment Department
Kativik Regional Board of Health
Kuujjuaq, PQ
J0M 1C0
Tel.(819)964-2961
Fax.(819)964-2956

13. Chesley Mesher
Kuujjuaq Research Centre
Makivik Corporation
P.O. Box 179
Kuujjuaq QC
A0P 1L0
Tel.(819)964-2951
Fax.(819)964-2230

Appendix 2

Canadian Polar Commission

Regional Contaminants Forum - Kuujjuaq
September 27, 1996
Kuujjuaq, Nunavik
Kativik Regional Government Offices, Kuujjuaq

The Canadian Polar Commission is pleased to present the first in a series of regional meetings on contaminants and their implications for human health and the environment in northern Canada. This event is being held in conjunction with the Commission's national conference, *For Generations to Come*, to be held in Iqaluit, N.W.T. October 7–10, 1996.

The growing body of evidence pointing to the presence of industrial contaminants in arctic ecosystems represents one of the most pressing concerns for northern Canadians. In sponsoring this session, the Commission hopes to hear from a wide cross-section of residents—those whose way of life is dependent on the land and its resources, aboriginal leaders and policy makers, those engaged in scientific research and health services, and those involved in education and communications.

The objective of the forum is to highlight issues, identify research needs and capabilities, and suggest policies and actions appropriate to mitigating both the sources and effects of contaminants. Participation in the forum is by invitation; however, this and all events will be informal and open to the public. While issues of common concern to northern Canada will form the basis for discussion, participants will be encouraged to examine topics of particular relevance to their region. Each forum will conclude with the development of recommendations to be carried forward to the Iqaluit conference.

Agenda

9:00 a.m.	**Introduction**
9:15 a.m.	**Contaminants in Our Lives: Overcoming Uncertainty**
10:15 a.m.	**Coffee**
10:30 a.m.	**Managing Northern Contaminants: Government/Citizen Initiatives**
11:30 a.m.	**Northern Foods: Standards, Monitoring, and Consuming in Confidence**
12:30 p.m.	**Lunch**
2:30 p.m.	**Communicating with Communities**
3:30 p.m.	**Summary and Recommendations to the Iqaluit Conference**
4:30 p.m.	**Closing Remarks**

Canadian Polar Commission
Regional Contaminants Forum
Whitehorse

Final Report

Prepared By:
Stephanie Irlbacher
Northern Science Officer
Yellowknife Office

I. Introduction

The Canadian Polar Commission (CPC) is Canada's national advisory agency on polar science. The CPC reports directly to Parliament through the Minister of Indian Affairs and Northern Development. The CPC's mandate includes examining issues of importance in the area of polar science toward recommending actions at the national level.

The CPC is convening a series of regional forums and a conference, For Generations to Come, examining the issue of arctic contaminants. The goal of this process is to highlight issues, identify research needs, and suggest policies and actions appropriate to mitigating both the sources and effects of contaminants. While participation in the forums is by invitation, the forums are also open to the public. The forums and conference will be held on the following dates:

Whitehorse, YT	September 12, 1996
Yellowknife, NT	September 17, 1996
Kuujjuaq, QC	September 27, 1996
Iqaluit, NT	October 8-10, 1996

This report has six sections following the introduction. The first section gives an overview of the Whitehorse forum. The following four sections contain detailed summaries of the discussion held for each agenda item. The last section lists the recommendations made by participants for consideration at the Iqaluit conference.

II. Whitehorse Forum - Overview

The first regional forum was held September 12, 1996 in Whitehorse, Yukon. This document summarizes the participants' discussions and recommendations.

The Whitehorse forum had twenty-two participants, including scientists, elders, community representatives, representatives of Aboriginal organizations, community health representatives, and federal and territorial government employees. A list of participants is attached as Appendix 1. The forum focused on contaminants issues of importance to Yukoners. Discussion was guided by an agenda, attached as Appendix 2, which gave broad definition to how discussion of the issues would be approached.

Discussion of each agenda item lasted for approximately eighty minutes. Agenda items included: Contaminants in Our Lives: Overcoming Uncertainty; Government/Citizen Management Initiatives; Northern Foods: Standards, Monitoring, and Consuming in Confidence; Communicating with Communities; and, Summary and Recommendations. At the beginning of each discussion section, individuals were asked to give short overviews of the current situation. Recommendations were made by participants during the discussion. At the end of the day, recommendations were synthesized and presented to the group.

At the Whitehorse Forum, abandoned mining and military sites and their continuing legacies were of primary concern. Recent mining initiatives have led to increasing concern over the effects of mining methods and technologies on the land, water, fish and animals. At the same time, Yukoners are aware that airborne contamination is also significant. Concerns related to the effects of contaminants on human, animal, environmental, and ecosystem health were raised. The group made recommendations which emphasized the need for continued support and resources for research, monitoring, and community action. First Nations must be in partnership with government to mount effective education, research, monitoring, and remediation programs. Political action at the national and international levels to promote contaminant reduction and clean up initiatives was also recommended.

III. Managing Northern Contaminants: Government Citizen Initiatives

A cooperative partnership of a variety of organizations has been central to the management of government/citizen initiatives in the Yukon, through the Yukon Contaminants Committee.

The Yukon Contaminants Committee is responsible for the coordination and implementation of the Arctic Environmental Strategy's Contaminants Program. The Committee is chaired and overseen by the program's coordinator, under the Department of Indian Affairs and Northern Development (DIAND). Since its beginnings in 1990, the committee has developed into a cooperative partnership of federal and territorial government, non-government, and First Nation organizations working together to develop an accessible and responsive system for dealing with contaminants issues in the communities.

The systems and processes developed in the Yukon have emphasized community involvement, for example, through workshops, involvement in contaminated site cleanups, and providing testing data and information, to communities. Resources and training materials have also been developed to educate and communicate information throughout the territory.

From the community perspective, community involvement in the research, communication, and remediation processes is necessary. Designing, planning, conducting research and communicating research results must take the needs of the community into account. Also, the community should be closely involved in research at all stages. At the time of release of research or testing results, benefit and risk factors should also be released to balance the information, so that people can make sense of it in terms of how it affects daily life.

Community representatives also emphasized the need to focus on the training and education of youth, who will inherit the responsibility of management in the future. Resources must be used to equip them with the knowledge and information necessary to addressing the issues.

Managing contaminants also requires a long term effort. Often short term solutions or gains are taken in favour of the long term. Underlying this attitude is a matrix of values which do not emphasize long term ecosystem health which will eventually have negative effects on animals, water, environment, and humans. In consideration of continued mining development, it is important that baseline information is gathered to accurately assess changes and their effects. The results of any research and testing should be done quickly and in plain language. Participants talked of the need for a holistic approach to research, through incorporating traditional knowledge, and looking at more than one aspect of a problem. An ecosystem approach to looking at the problem is necessary to provide an accurate picture of the situation. Communities and scientists must be realistic about the expectations they have of research, and through partnership, communities must be part of the process of raising questions for the research agenda.

There was also discussion about the structure of the AES program. One community representative expressed concern that the bulk of resources is not used directly by communities; instead money is filtered down through the administrative system. Communities are given money directly through specific programs on a year to year basis. Most of the rest of the money is put into activities and research and reports which come out in large volumes that most people in communities either do not or cannot read.

Participants agreed that much work remains to be done in the area of contaminants. The AES has succeeded in defining what the problems are, and has put in place basic infrastructure for research, community involvement in the process, and remediation. Maintaining established capabilities is necessary to ensure the issues will continue to be addressed. This is true not only for local source contaminants issues, but also airborne contaminants. At the same time, while research and 'new facts' are being gathered, and basic research is being followed up, new questions and issues are bound to arise which will require attention and resources.

IV. Contaminants in Our Lives: Overcoming Uncertainty

The issue of contaminants in the northern ecosystem has caused uncertainty for First Nations people. For some it has meant that they can no longer eat types of traditional food in certain areas, such as fish from Lake Laberge. As a result, a large part of overcoming the uncertainty has involved working with scientists to put a responsive sampling program in place by working with CINE, and by emphasizing education and the development of educational resources and communications. In the communities, there is also concern that cancer is increasing, and people wonder if this is related to the contaminants issue. In general, the benefits of eating traditional foods far outweigh any possible risks.

The majority of the session involved the screening of a video produced by Norma Kassi, titled: "Traditional Food - Is It Safe?" which will be used as a resource throughout the Yukon. The video focuses on the benefits and risks associated with contaminants and traditional foods for First Nations in the Yukon. The video provides basic facts about contaminants issues from the perspectives of scientists, hunters, leaders and community people. It explains the benefits and risks of eating traditional foods to assist people in making informed decisions. It also shows how traditional foods are tested for contaminants, what they are tested for, and what people can expect during the testing process. The video will be sent to First Nations, schools, CHR's and other organizations for use as a resource in communities. Participants encouraged a second video looking at the global situation. During the session, discussion also related to the need for a holistic approach to assessing standards and risks is also needed to prevent unnecessary worry and concern.

V. Northern Foods: Standards, Monitoring and Consuming in Confidence

Harriet Kuhnlein began the discussion by outlining some of the difficulties which arise in the process of setting standards for assessing the risks and benefits of traditional foods. There are many factors which have to be considered. These relate to types and amounts of contaminants in particular species, the unknown effects of combinations of contaminants, and lifecycle considerations. Communities prefer a holistic approach to assessing standards and assessing risk. Factors such as income and cultural practises must be considered, to avoid possible ill effects of a change in diet such as nutritional deficiencies.

The AES program has helped to give credibility to standard setting and risk assessment processes. However, in some areas work still needs to be done. For example, the risk assessment of several contaminants combined in some foods can't be assessed as the science is not yet available to do that. Consuming in confidence is something that requires a holistic approach. For First Nations in the Yukon, traditional foods are key to good health. Southern foods contribute to problems such as overweight and diabetes. At the same time, a tension arises over how to maintain confidence while at the same time prompting political action.

Standard setting is an area where more work needs to be done. From a community perspective, the lifestyles and eating habits of First Nations people must be considered to get an accurate picture of what kinds of standards are required. Standards are set by toxicology experts and are based on animal models with conservative approaches. Information on effects and based on information beyond laboratory models are necessary to creating more realistic standards: a holistic approach, and nutritional and socio-economic factors also must be taken into account when assessing standards.

Concern was expressed that often the standards are done on a per contaminant basis, without consideration of the effects of a variety of contaminants. Therefore all of the answers seem to continually raise questions. Assessments must also be returned to communities with additional information which will put the assessment into context, and enable people to relate it to their everyday lives.

Long term assessment of the information already gathered is required. Priorities for the future must include assessing affects for human health, animal health, and ecosystem health to have along term view. Cumulative effects over the long term is anther area which requires study.

The issue of health advisories was also raised; many participants felt that a more flexible approach needs to be taken to gain public confidence. Health advisories should be revisited to ensure their validity. In addition, risk and benefit information should also be provided. A system could be developed where standards are revisited and updated, and that this in turn must be tied in with long term monitoring and longitudinal studies.

The need for action on the issues is apparent. Some effort must focus on action and mitigating the problem. One method would be to adopt a precautionary management approach. To do this, a number of different interests must be reconciled.

VI. Communicating With Communities

Joanne Deneron opened the session by talking about some of the challenges of communicating effectively, and talking about the community perspective: effective and accessible communications methods are needed for communities to stay informed and aware of issues.

Both community and government participants agreed that scientific information must be communicated back to communities in plain language. The need to develop a common language between the two groups was emphasized.

The need for a credible messenger was also raised. Credibility is gained through building trust. Trust building should be part of any project being undertaken which affects the community. Both the message and the messenger must be trusted to be effective. Unfortunately, not every study can devote significant resources to consultation and trust building. However, the Yukon Contaminants committee has promoted communications and trust building between scientists and communities. It was also observed that implementation of land claims has resulted in consultation requirements for research, and also highlights the need for youth in the communities to become familiar with the issues at a young age to prepare them for their responsibilities in the future.

Communications methods and people's general capacity to use the information are important factors in finding effective communication. Partnerships between scientists and communities must also address this issue. Communities must be part of the process to determine what information is needed and how it is best communicated. It was suggested that First Nations be allocated resources to determine this for themselves.

An effective overall communications strategy is based on starting locally and working outwards. Issues have to be approached in terms of how local concerns fit with those of the area's First Nations, then at a regional, national, and international level. Once the problem is identified and understood, action can be taken. Effective action would include, for example, updating community health representatives (CHR's) on different issues so they could act as a resource in the communities. Information will assist people in making sense of what they have observed and in making their own decisions.

VII. Recommendations for Iqaluit Conference

The recommendations put forward to the Iqaluit conference in this document are the result of discussion during the Whitehorse Forum, and also specific recommendations made by individual representatives of organizations. These recommendations do not necessarily represent the views of individual participants or their organizations.

General

1. The promotion of contaminant reduction on an international level must be placed on the international agenda, pursued by organizations like the Arctic Council.

2. Regional concerns, such as cadmium found in the Porcupine Caribou Herd must be understood as having national significance; these are the signs of a growing problem.

3. First Nations must be enabled to take advantage of increasing authority, responsibility and involvement in research and studies as land claims are implemented.

4. Continue the AES program, or implement a similar program which will build on the information, partnerships, and systems which have been implemented under the program.

6. More research needs to be done to assess and monitor contaminants in the Arctic; Canada should take the lead in this area.

Managing Northern Contaminants: Government/Citizen Initiatives

7. Research capabilities in existing government departments must be maintained.

8. Addressing the issues requires an increased focus on local priorities. Action in this area must be done by local people, including education, providing information, conducting and designing research projects, remediation of contaminated sites. These actions must incorporate a holistic, community based approach to assessing health effects of contamination on country foods.

9. Education and training must be increased for people who are trusted by the community and who interact with the community on a regular basis, such as community health representatives.

10. Education and information must be brought by credible, local messengers. The credibility of the message is affected by the credibility of the messenger.

11. Researchers must be build partnerships with Aboriginal people for research, education, and preservation purposes.

12. There is a need to use traditional ecological knowledge in research studies.

Communicating With Communities

13. Communication of information about preventative measures must be emphasized.

14. Increase "on the ground" involvement in federally funded contaminant programs.

15. Elders must be part of decision making; they must be included in the education and communications process.

16. Communications must begin at the local level, First Nations, regional, national, and international levels, in concentric circles. This develops an effective 'upwards and outwards' communication strategy.

17. A national communication strategy must be refined, to ensure that issues of importance in individual regions are known, and to maximize the effective use of resources.

Standards, Monitoring, and Consuming in Confidence

18. The cumulative effects of contaminants must be studied, along with effects of individual contaminants.

19. Standards and education about consumption of foods must be tied to local habits and culture, not southern based standards. A holistic approach must be taken.

20. Conduct research based on concerns that effect northerners, not based on southern assumptions, for example, there is concern with stomach cancer in Old Crow.

21. Continue necessary levels of funding for CINE or similar research and education centres which are controlled by and work closely with Aboriginal communities and people.

Appendix 1 : List of Participants

1. John Stager, Member, Canadian Polar Commission
2. Joanne Deneron, Vice Chairperson, Canadian Polar Commission
3. Stephanie Irlbacher, Northern Science Officer
   Canadian Polar Commission
   # 10, 4807 49 Street
   Yellowknife, NT X1A 3T5
   Tel. (403) 920-7401
   Fax.(403)873-3654

4. Charlie Furlong, Mayor of Aklavik
   Box 88
   Aklavik, NT X0E 0A0
   Tel.(403)978-2361
   Fax.(403)978-2937

5. Ted Lambert, Yukon College
   Box 2799
   Whitehorse, YT Y1A 5K4
   Tel.(403)668-6735
   Fax.(403)668-8734

6. Gerry Couture, Chairman
   Yukon Fish and Wildlife Management Board
   P.O. Box 5954
   Whitehorse, YT
   Y1A 5L7
   Tel. 403 667-3754
   Fax. 403 667-2099

7. Joan Eamer, Head, Ecosystem Health
   Environment Canada
   Whitehorse, YT
   Tel.(403)667-3949
   Fax.(403)667-7962

8. David Shearstone, AES Action on Water,
   DIAND
   Whitehorse, YT
   Tel.(403)667-3145
   Fax.(403)667-3195

9. Joe Tetlichi
   Chairman
   Porcupine Caribou Management Board
   61-13 Avenue
   Whitehorse, YT

Y1A 4K6
Tel. (403) 633-4780
Fax./Tel. (403) 966-3930

10. Harriet Kuhnlein
CINE, McGill University
McDonald Campus
21, 111 Lakeshore,
Ste-Anne-de-Bellevue, PQ H9X 3V9
Tel.(514)398-7544
Fax.(514)398-1020

11. Art Johns
Yukon Fish and Wildlife Management Board
P.O. Box 5954
Whitehorse, YT
Y1A 5L7
Tel. (403)667-3754
Fax.(403)667-2099

12. Clive Osborne
YTG Renewable Resources
Whitehorse, YT
Tel.(403)667-5683
Fax.(403)667-4727

13. Ron Pearson
Director, Health Programs
H-2, Health and Social Services
Government of Yukon
Box 2703
Whitehorse, YT Y1A 2C6
Tel.(403)667-5302
Fax.(403)668-3786
internet:rpearson@gov.yk.ca

14. Brett Hartshorne
Manager, AES Action on Waste
345, 300 Min Street
Whitehorse, YT Y1A 2B5
Tel.(403) 667-3270
Fax.(403)667-3206

16. Mary Gamberg
Box 747
Watson Lake, YT Y0A 1C0

17. Sara Brown,

DIAND Communications
Whitehorse, YT
Tel.(403)667-3221
Fax.(403)667-3196

18. Louis Schilder
Yukon College
P.O. Box 2799
Whitehorse, YT
Y1A 5K4
Tel. (403) 668-8800
Fax.(403) 668-8734

19. Ed Jack, Elder
Taku River T'lingit First Nation
PO Box 132
Atlin, B.C. V0W 1A0
Tel.(604)651-7615
Fax.(604)651-7714

20. Wanda Williams and Marty Tompkins
12 Gillis Place
Whitehorse, YT Y1A 5R2
Tel.(403)668-4879

21. Barb Eikland, CHR
Champagne/Aisihik First Nation
Box 5309
Haines Junction, YT Y0B 1L0

22. Norma Kassi
Council of Yukon First Nations
11 Nitsulin Drive
Whitehorse, YT
Tel.(403) 667-7631
Fax. (403) 668-6577

Appendix 2

Canadian Polar Commission

Regional Contaminants Forum—Whitehorse
September 12, 1996
Whitehorse, Yukon
MacBride Museum, Whitehorse

The Canadian Polar Commission is pleased to present the first in a series of regional meetings on contaminants and their implications for human health and the environment in northern Canada. This event is being held in conjunction with the Commission's national conference, *For Generations to Come*, to be held in Iqaluit, N.W.T. October 7–10, 1996.

The growing body of evidence pointing to the presence of industrial contaminants in arctic ecosystems represents one of the most pressing concerns for northern Canadians. In sponsoring this session, the Commission hopes to hear from a wide cross-section of residents—those whose way of life is dependent on the land and its resources, aboriginal leaders and policy makers, those engaged in scientific research and health services, and those involved in education and communications.

The objective of the forum is to highlight issues, identify research needs and capabilities, and suggest policies and actions appropriate to mitigating both the sources and effects of contaminants. Participation in the forum is by invitation; however, this and all events will be informal and open to the public. While issues of common concern to northern Canada will form the basis for discussion, participants will be encouraged to examine topics of particular relevance to their region. Each forum will conclude with the development of recommendations to be carried forward to the Iqaluit conference.

Agenda

9:00 a.m.	**Introduction**
9:15 a.m.	**Contaminants in Our Lives: Overcoming Uncertainty**
10:15 a.m.	**Coffee**
10:30 a.m.	**Managing Northern Contaminants: Government/Citizen Initiatives**
11:30 a.m.	**Northern Foods: Standards, Monitoring, and Consuming in Confidence**
12:30 p.m.	**Lunch**
2:30 p.m.	**Communicating with Communities**
3:30 p.m.	**Summary and Recommendations to the Iqaluit Conference**
4:30 p.m.	**Closing Remarks**

Canadian Polar Commission
Regional Contaminants Forum
Yellowknife

Final Report

Prepared By:
Stephanie Irlbacher
Northern Science Officer
Yellowknife Office

I. Introduction

The Canadian Polar Commission (CPC) is Canada's national advisory agency on polar science. The CPC reports directly to Parliament through the Minister of Indian Affairs and Northern Development. The CPC's mandate includes examining issues of importance in the area of polar science toward recommending actions at the national level.

The CPC is convening a series of regional forums and a conference, For Generations to Come, examining the issue of arctic contaminants. The goal of this process is to highlight issues, identify research needs, and suggest policies and actions appropriate to mitigating both the sources and effects of contaminants. While participation in the forums is by invitation, the forums are also open to the public. The forums and conference will be held on the following dates:

Whitehorse, YT	September 12, 1996
Yellowknife, NT	September 17, 1996
Kuujjuaq, PQ	September 27, 1996
Iqaluit, NT	October 8-10, 1996

This report has six sections following the introduction. The first section gives an overview of the Yellowknife forum. The following four sections contain detailed summaries of the discussion held for each agenda item. The last section lists the recommendations made by participants for consideration at the Iqaluit conference.

II. Yellowknife Forum - Overview

The second regional forum was held September 19, 1996 in Yellowknife, Northwest Territories. This document summarizes the participants' discussion of agenda items and their recommendations.

The Yellowknife forum had eighteen participants, including representatives of Aboriginal organizations, scientists, community representatives, and federal and territorial government employees. A list of participants is attached as Appendix 1. Discussion was guided by an agenda, attached as Appendix 2, which gave broad definition to how discussion of the issues would be approached.

Discussion of each agenda item lasted for approximately eighty minutes. Agenda items included: Contaminants in Our Lives: Overcoming Uncertainty; Government/Citizen Management Initiatives; Northern Foods: Standards, Monitoring, and Consuming in Confidence; Communicating with Communities; and, Summary and Recommendations. At the beginning of each discussion section, individuals were asked to give short overviews of the current situation. Recommendations were made by participants during the discussion. At the end of the day, recommendations were synthesized and presented to the group.

At the Yellowknife Forum, communications and education, and processes related to addressing the contaminants issue were of primary concern. Participants emphasized the need for continued partnerships based on the model developed cooperatively under the Arctic Environmental Strategy (AES). Concerns related to the effects of contaminants on human, animal, environmental, and ecosystem health are important to northerners, and participants emphasized the need for ongoing resources to address these issues. The group made recommendations which emphasized the need for continued support and resources for research, monitoring, and community action. First Nations must be in partnership with government to mount effective education, research, monitoring, and remediation programs. Political action at the national and international levels related to contaminants should involve northern organizations which do much of the 'on the ground' work.

III. Contaminants in Our Lives: Overcoming Uncertainty

In recent years, the presence of contaminants in the north has caused uncertainty. People see changes in the land, water, and animals, and want to know if animals and fish are safe to eat. The benefits of continuing to eat traditional foods far outweigh any known risks. Educating people about the benefits and risks, and making sure reliable, balanced information is important for providing answers, and to help people make informed choices.

The importance of communication issues and education was emphasized. One concern related to contaminant terminology. Many terms used when speaking about contaminants issues in English are not easily translated, or understood, in both a linguistic and conceptual sense. Finding everyday language to convey complex ideas is a challenge. The cultural context is extremely important to take into consideration. Finding a common language where people can understand each other also has to bridge cultural issues. Communication issues - such as finding a common language to discuss the issues - is most effectively accomplished through partnership with the communities and people who will receive the information.

Education is important for addressing situations identified by studies and research. It is one thing to provide people with information about what situation exists ; it is entirely another matter to start getting solutions in place. Development has resulted in a trend from traditional to 'western' lifestyles. This has also resulted in the land reflecting the change to a society which is not closely tied to the land: the refinery in Norman Wells brought money and jobs but also persistent 'arctic haze', a kind of northern smog. The same kinds of lifestyles also promote consumerism, resulting in far more waste than traditional lifestyles. While Elders may often wish for a return to the traditional lifestyle, some people are sceptical that this will occur on any significant scale. Therefore, education about how to put solutions in place is important, and partnerships in finding ways to educate people and communicate information is also critical to this. Such projects not only involve the community but also assist in the education process.

A number of methods have been used to educate people about contaminants issues. A cooperative partnership approach has been used under the AES which has assisted in developing research studies which involve the community and respond to community needs. The Metis Nation, for example, has chosen to focus education efforts through educational institutions, including elementary, high schools, an Arctic College. As a result the next generation is equipped to understand the language used and the issues involved. They have also gained an awareness of the issues and their role in relation to them. One area needing focus is the area of education.

Education of youth also involves the necessity to educate the educators. As well, they are currently testing a contaminants curriculum in use in schools throughout the NWT. The goal of this project is to build capacity of the youth to understand the concepts and the situation, and to implement a long term program which can be regularly updated to reflect the changing situation. To assist with this,

a database has also been developed which contains information about all contaminants research which has been conducted under the AES program. This tool allows people to access the information as the studies are completed. It also allows them to answer questions of communities in detail, enabling people to contact researchers and experts when they have specific questions.

For the Metis Nation, education has been a key component of overcoming uncertainty and giving people the information and knowledge necessary to understand and address the issues. More resources must be allocated for communication and education efforts. These resources must also be able to support an ongoing effort. Support is also required to build on the success of the past, and the capacity that has been built within the Aboriginal organizations. Ongoing monitoring programs should also be put in place to build on the basic research which has been completed, and to ensure resources and information are kept current.

IV. Managing Northern Contaminants

The NWT Technical Committee on Arctic Contaminants is a group which was set up in 1989 by the territorial government primarily to identify contaminants issues of priority for research, study, and information, and to take the lead role in developing information and communications in the NWT. Much of the funding for contaminants work done in the NWT comes from the Arctic Environmental Strategy (AES) contaminants program. All results of contaminants studies in the NWT must be released through this committee to ensure information is released in a responsible and balanced manner. The Committee partners have developed a variety of resource and educational tools to address contaminants issues. Tools used for education and information include regional contaminants workshops, videos, posters, and nutritional fact sheets for various regions of the NWT. The members of the committee include representatives of Aboriginal and federal and territorial government organizations with an interest in the contaminants issue.

In the NWT, gathering of baseline data to understand the relationship between contaminants and human health has been completed in the Kitikmeot and Mackenzie regions. Baseline information was gathered to asses exposure levels in populations of greatest risk, namely mothers and babies in these regions. Similar information is being gathered in the Keewatin and Baffin regions. This information will provide an estimate of the population's exposure to various types of contaminants. After this work has been completed, the task of interpreting the data - finding out what it means - will require study and research.

Communicating the results of studies and distributing information has been guided by a communications strategy designed by the committee. Part of this strategy is providing people with information about both the benefits and the risks they can consider when making nutritional and lifestyle choices. The partnership approach and balanced information approach means that information reaches many different groups in the NWT, and that the information received is consistent with what other groups are receiving. It also ensures that the information can be distributed without unnecessary delays.

One area of the communications which requires ongoing attention is translation. Translating terminology is a very resource intensive task: it takes significant time and money. But it is a very important part of communications. Due to cultural and language factors, it is sometimes difficult to find meaningful ways to translate terms into everyday concepts. For example, parts per billion, a measure used to describe contaminant levels, is described in everyday terms. One part per billion is described as one drop of water out of nine water trucks full of water. In the western arctic, the same concept would be talked about in terms of one or two caribou hairs out of all the hair on a caribou.

In terms of risks and benefits, presenting balanced information about clear risks and benefits allows people to make informed decisions. Where risks are considered to outweigh benefits, which has happened in some cases, that information is also made very clear. However, risk and benefit

assessment also requires that nutritional, economic, and cultural factors must also be taken into consideration. In general, at the present time, the benefits of consuming traditional foods outweigh the small known risks. While it is important to accurately measure and assess risks, these should not be overemphasized at the expense of the known benefits.

Health advisories taken alone do not always communicate an accurate situation. Often the standards used to assess risks are based on conservative risk factors, and do not take a holistic approach in assessing the situation. People coming from a variety of a perspectives bring different values to the risk assessment process, and outcomes of assessment often depend on which perspectives are weighted heavily in the process. Often, standards for risk assessment are arrived at through using an extremely conservative approach.

Giving people definite answers about the health risks of consuming pollutants is presently impossible because our knowledge about the combined effects of these chemical mixtures is currently very limited. There are different types of contaminants, and it is difficult to determine what effects the different types of contaminants have on humans and animals. Little research has been done in this area because it requires much time and resources.

It is also difficult to understand how both chemical contaminants and lifestyles of people affect their health. There are other types of contaminants and sources of contaminants beyond chemical contaminants that have to be considered, for example, alcohol, smoking, and drugs.

At the present time, the risk benefit analysis is that the benefits of consuming country foods outweigh any known risks. However, it also must be recognized that the situation is not static. It is well known that the Arctic acts as a sinkhole for contaminants. Also, there is more known about some types of contaminants than others. This situation suggests that further temporal studies need to be done, along with spatial studies. In this situation, long term studies are very important because they enable us to know if the amounts of chemicals coming to the Arctic are increasing or decreasing, and empower us with the information needed to lobby for any necessary reductions in the global use of pesticides. Therefore there needs to be ongoing monitoring along with education.

Studies suggest that contamination in the arctic tends to be about ten years behind the trends in the south. In some cases, contaminants coming into the arctic are decreasing, reflecting the cessation of use in the south. If global use of pesticides stopped, over time we would find less and less chemicals coming into the Arctic. It is unknown how long this takes. On the other hand, some contaminants such as mercury are being found in higher amounts in the Arctic atmosphere. This raises concerns because increases in atmospheric contamination will eventually be reflected in the fish and animals.

V. Northern Foods: Standards, Monitoring, and Consuming in Confidence

The AES program funding has resulted in the establishment of extensive monitoring programs in the north since the late 1980's. Lake fish and marine mammals are examples of some resources which have been targeted for testing due to their position at the top of the food chain, and their importance to communities. Concentrations of contaminants in fish and mammals can depend upon their age, size, feeding habits, and location. Comparisons with levels in the Great Lakes have shown that in general, contaminant levels in fish are lower in the northern lakes. Sampling programs look at spatial trends, temporal trends, and at particular lakes which introduce specific factors which must be considered. In the Yukon, communities set the agenda for the fish sampling which is done.

Responsiveness to community concerns is a challenge. In the NWT, although it would be ideal to respond to specific communities concerns, resource constraints mean that a regional approach is often taken instead.

When research is done in response to community concerns, it is often requested that results are returned in a way which answers questions the communities have, such as: how much trout per week can people eat? In addition, information should be delivered in a way that makes it clear that it is not the foods themselves which are bad, it is the contaminants. And contaminants sometimes only affect very specific parts of the animal. The media has an important role to play in ensuring the message is portrayed responsibly.

In addition to this, benefits of eating traditional foods must be communicated along with the risks. There are many benefits of eating traditional foods, and there are many factors which make traditional food consumption the more sensible choice, from a nutritional, cultural, and socio-economic standpoint. In many isolated communities, and even in communities on the road systems, alternatives to traditional foods are few due to income factors, and also due to the fact that southern foods are not necessarily healthy. Also, lack of information about nutrition can compound problems if people turn to southern foods, as a host of different kinds of health problems can occur if people do not eat a healthy diet.

While the messages must be clear, the same kinds of risk and benefit factors cannot be weighed the same for everyone. Some people are at stages in their life cycle where they require different kinds of foods more or less, or they may eat more or less traditional foods. It is also important to inform people that northern foods are in general are not under discussion; rather, concerns are in regards only to specific parts of specific animals or types of food. Along with health advisories, there should be a benefits and risk assessment provided to balance the information. Effects of contaminants that are communicated should be put in context with other lifestyle choices people make. For example, while there may be cadmium present in small quantities in the organs of a specific animal, there is definitely cadmium present in every cigarette that people smoke. It is important that any messages are not alarmist. At the same time, we cannot be complacent about the situation.

Any future funding for the programs should focus on building on organizations' present capacities, and on developing systems and processes for sharing resources and information freely to ensure there is no duplication of effort.

Professionals come to the communities and say that there are contaminants in the fish and animals but still encourage people to eat the animals, which is received as a mixed message. Unless people are playing close attention, there seem to be conflicting reports and advisories. Educational efforts such as those of the Metis Nation is very important for the young. The younger generation sees cleaning up the mess as a priority, and want to talk and learn about it more.

Trying to continue to consume and monitor in confidence implies that confidence has suffered. This is true, there is cynicism in the communities about the issue, and how people can address it. The perceived ambiguity of information at the community level contributes to the cynicism. One way to overcome the cynicism is to involve the community. For example, the burbot study in Fort Good Hope resulted from hunters' observations. Scientists came in to sample the fish , and the community learned from that experience. For example, there were differences in readings in lakes which very geographically close together.

In order to address the cynicism and to get people involved in the process, for one study the community met with the Department of Fisheries and put into motion a plan with extensive community involvement. The harvesters along with the scientists designed a research process as well as a process for the interpretation of the data. In this way information was oriented towards answering questions about how it would affect everyday life.

In order to gain confidence, it is critical to focus on the implications of the process and research results' interpretation, in terms of how everyday life will be affected. In Fort Good Hope, the community is encouraged by research done so far. People want more specific research done on the relationship between contaminants and human health. They want to know how this relationship affects the traditional lifestyle. Programs and studies must fit with the questions and concerns of the communities. There needs to be support for government departments to continue on with their research programs after the AES is over.

The issues will not end when funding runs out, and if communities start seeing patterns of behavioural or physical changes in animals, that warrants further investigation. Confidence in a system can only be created if that system is responsive. This is key to building confidence in the communities.

VI. Communicating With Communities

Different sectors of society must be educated and informed about the issue in a way which is meaningful and important to them. For example, the NWT Technical Committee held a workshop in Cambridge Bay for the delegates for the annual general meeting of Pauktuutit. Since women are the ones usually the ones to prepare and cook traditional foods, this was an important way to inform people about how the issues affect them, and to answer their questions about foods, as well as refute myths.

People want plain language reports which communicate the information in an accessible everyday language format. Workshops are a good way of reaching people; people can share information, ask questions, and talk to each other. There is also a record of the information which they can review again later. Radio and television can also be used to communicate with people.

How the information is perceived by the community is in some ways almost more important than the research itself. If all of the effort and resources spent on research don't result in informed decision making by the community, then the research itself is not worth anything to the community. The community has to take an active role in determining what they want to be taught. In a broader context, involvement in shaping these kinds of projects also embraces what happens internally to the community. The credibility of the person who is charged with communicating results also matters. How information is given to the community matters a great deal in terms of what will get on the agenda. Communities will believe people who they trust. Generally trust building takes a lot of time if it is people and agencies from outside the community.

Credibility of agencies delivering the message is very important. The process of developing and strengthening partnerships is the way to solve communications problems. If work is done outside of the community context, then it has legitimacy problems. Processes of collaboration may improve the communications process as it evolves. For example, under the AES, trust has been developed between the community of Fort Good Hope and CINE, Renewable Resources, and the Department of Fisheries, because of the community involvement in projects.

Developing trust takes a great deal of work, which is sometimes hampered when perceptions based on bad experiences tend to linger. The NWT Technical Committee was established after such an experience, and since then agencies have worked together in partnership which has built and in some cases, rebuilt trust. However, this is an ongoing process and requires ongoing effort.

VII. Recommendations

General

1. In partnership with Aboriginal and northern organizations, a long term federal commitment must be made to continue to address issues and concerns raised and addressed by the Arctic Environmental Strategy.

2. Funding renewal for continuation of research programs.

3. Northerners must be involved in supporting and encouraging international efforts on contaminant reduction.

Contaminants in Our Lives: Overcoming Uncertainty

4. Government departments must be allocated resources to maintain their research programs and capabilities, such as those within the Department of Fisheries and Oceans and Health Canada.

6. Allocation of resources are required to maintain and continue communication and educational activities and capabilities accessible to the general public.

5. Resources must be allocated to continue and maintain education efforts in the schools, and to ensure schools have the capacity to take advantage of the information available, for example through computers and Internet.

Managing Contaminants: Government Citizen Initiatives

7. Allocation of resources to organizations to build on the capabilities built by the AES, such as: cooperative partnerships, capacities within Aboriginal organizations, and research and monitoring projects.

Northern Foods: Standards, Monitoring, and Consuming in Confidence

8. Require long term monitoring which is necessary to gauge changes.

9. There is a need to interpret the data we have now, and move from monitoring exposure to assessing the effects of contaminants on humans and animals.

10. Risk assessment processes and health advisories must be presented along with balanced information about benefits. Information must be given in context.

Communicating With Communities

11. The effectiveness of communications depends on the trust built between organizations and between organizations and communities. It will be critical to maintain cooperative partnerships such as those established under the AES.

12. Aboriginal language and terminology development of contaminants terms must continue.

Appendix 1: Participants

1. Micheal Kusugak, Board Member, Canadian Polar Commission
   Box 61
   Rankin Inlet, NT
   X0C 0G0
   Tel.(819)645-3447
   Fax.(819)645-3447

2. Whit Fraser, Chairman, Canadian Polar Commission
   1710, 360 Albert Street
   Ottawa, ON
   K1R 7X7
   Tel.(613)943-8605
   Fax.(613)943-8607

3. Stephanie Irlbacher, Northern Science Officer, Canadian Polar Commission
   #10, 4807 49 Street
   Yellowknife, NT
   X1A 3T5
   Tel.(403)920-7401
   Fax.(403)873-3654

4. Margaret Donovan, Councillor
   Gwicha Gwich'in Band
   General Delivery
   Tsiigehtchic, NT
   X0E 0B0
   Tel.(403)953-3201
   Fax.(403)953-3302

5. Barney Masazumi
   K'asho Got'ine Community Council
   General Delviery
   Fort Good Hope, NT
   X0E 0H0
   Tel.(403)598-2231
   Fax.(403)598-2024

6. Dr. Karen Kidd
   Freshwater Institute
   501 University Crescent
   Winnipeg, MB
   R3T 1L2
   Tel.(204)983-5226
   Fax.(204)984-2404

7. Bill Carpenter
   Environmental Director
   Metis Nation of the NWT
   Tel.(403)873-3505
   Fax.(403)873-3395

8. Michele Clusiau
Contaminants Project Officer
GNWT Health and Social Services
Box 1320
Yellowknife, NT
X1A 2L9
Tel.(403)
Fax.(403)873-7706

9. Jody Walker
Co-Chair, NWT Technical Committee on Arctic Contaminants
GNWT Department of Health and Social Services
Box 1320
Yellowknife, NT
X1A 2L9
(403)920-8868
(403)873-7706

10. Dr. Brett Elkin
Wildlife Disease Specialist
GNWT Resources, Wildlife, and Economic Development
600, 5102 50 Avenue
Yellowknife, NT
X1A 2L9
Tel.(403)873-7761
Fax.(403)873-0293

11. Jane McMullen
GNWT Resources, Wildlife, and Economic Development
5102 50 Avenue
Yellowknife, NT
X1A 2L9
Tel.(403)873-7086
Fax.(403)873-0254

12. Juanetta Peddle
DIAND Water Resources
Yellowknife, NT
Tel.(403)669-2663
Fax.(403)873-9318

13. Francis Jackson
DIAND Water Resources
Yellowknife, NT
Tel.(403)669-2666
Fax.(403)873-9318

14. Judy Farrow
Contaminants Education Coordinator
Metis Nation of the NWT
Tel.(403)873-3505
Fax.(403)873-3395

15. Monika Rohlman
Environmental Consultant
Tel.(403)873-3648
Internet:monikar@ssimicro.com

16. Elsie DeRoose
Nutrition Consultant
GNWT Health and Social Services
Box 1320
Yellowknife, NT
X1A 2L9
Tel.(403)
Fax.(403)873-7706

17. Jill Christensen
Regional Nutritonist
Mackenzie Regional Health Services
Tel.(403)920-6546
Fax.(403)920-4015

18. Doug Halliwell
Environment Canada
Yellowknife, NT
Tel.(403)920-6057
Fax.(403)873-6776

Appendix 2

Canadian Polar Commission

Regional Contaminants Forum - Yellowknife
September 17, 1996
Yellowknife, Northwest Territories
Prince of Wales Northern Heritage Centre, Yellowknife

The Canadian Polar Commission is pleased to present the first in a series of regional meetings on contaminants and their implications for human health and the environment in northern Canada. This event is being held in conjunction with the Commission's national conference, *For Generations to Come*, to be held in Iqaluit, N.W.T. October 7–10, 1996.

The growing body of evidence pointing to the presence of industrial contaminants in arctic ecosystems represents one of the most pressing concerns for northern Canadians. In sponsoring this session, the Commission hopes to hear from a wide cross-section of residents—those whose way of life is dependent on the land and its resources, aboriginal leaders and policy makers, those engaged in scientific research and health services, and those involved in education and communications.

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3:30 p.m.	**Summary and Recommendations to the Iqaluit Conference**
4:30 p.m.	**Closing Remarks**

Canadian Polar Commission
Commission canadienne des affaires polaires

October 30, 1996

DISTRIBUTION

RE: CPC Regional Contaminants Fora
Final Reports and Summary Report

Enclosed are final reports of the Canadian Polar Commission's three regional contaminants forums, along with a summary report drawing together common issues and recommendations. The regional forums were held during September 1996 in the Yukon, NWT, and Nunavik to determine regional concerns and recommendations for discussion at the Canadian Polar Commission conference on Arctic contaminants during October 1996. These reports were distributed to participants at the conference *For Generations to Come: A National Conference on Contaminants, the Environment, and Human Health in the Arctic*, held October 8 to 10, 1996 in Iqaluit.

A final document based on the regional forums and the Iqaluit conference will be completed during the coming months. A copy of this report will be sent to your organization. Should you have any comments or questions, I may be reached by telephone at (403)920-7401.

Sincerely,

Stephanie Irlbacher
Northern Science Officer

Enclosures (4)

Canada

1710-360 Albert Street, Ottawa, Ontario K1R 7X7
#10, 4807 49 Street, Yellowknife, Northwest Territories, X1A 3T5

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Dene Nation
Nunavut Tungavik Inc.
Nunavut Wildlife Management Board
Regional Inuit Associations
Regional Health Boards
Aurora Research Institute
Nunavut Research Institute

Nunavik/Labrador
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Canadian Arctic Resources Committee

Canadian Polar Commission

For Generations to Come:

A Canadian Conference on Contaminants, the Environment, and Human Health in the Arctic

Regional Contaminants Fora
Summary Recommendations for Discussion

October 1996

Introduction

The Canadian Polar Commission (CPC) is Canada's national advisory agency on polar science. The CPC reports directly to Parliament through the Minister of Indian Affairs and Northern Development. The CPC's mandate includes examining issues of importance in the area of polar science toward recommending actions at the national level.

For years, communities in different parts of the Yukon, Northwest Territories, Nunavut, Nunavik, and Labrador have noticed changes in the land, animals, water, and fish. While the concerns of communities reflect a range of unique circumstances, concern about contaminants has been consistent in all regions across the Canadian north. Aboriginal organizations, and federal and territorial governments have devoted significant resources to addressing this issue. Substantial awareness, research, and monitoring programs have been developed in some regions, while in others, only some issues have been addressed. Currently, funding and resources dedicated to this issue are in jeopardy, due to federal and territorial budget reductions and the ending of the Arctic Environmental Strategy (AES). At the same time, existing issues are further complicated by increased mineral exploration and development activities in many parts of the north.

The CPC held three regional contaminants forums during September 1996, prior to the conference, For Generations to Come, taking place in Iqaluit, NT during October 1996. The forums brought people together in each region to discuss issues, identify research needs, and suggest policies and actions appropriate to mitigating both the sources and effects of contaminants. In each region, participants were drawn from Aboriginal organizations, government, and non-government agencies. The forums were held on the following dates:

Whitehorse, YT	September 12, 1996
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Kuujjuaq, QC	September 27, 1996

Discussions during each forum covered four general areas. These included Contaminants in Our Lives - Overcoming Uncertainty; Managing Northern Contaminants: Government/Citizen Initiatives; Northern Foods: Standards, Monitoring, and Consuming in Confidence; and Communicating with Communities. After each forum, draft reports detailing forum discussions and recommendations were returned to participants for comment. The final reports for each forum provide the basis for this summary report.

The purpose of this document is to summarize the main issues and recommendations discussed during the regional forums. Section one reviews issues and concerns raised during the regional forums. Section two provides recommendations for discussion during the Iqaluit conference.

Section One: Overview of Regional Discussions

Discussion during each regional forum focused on four areas: Overcoming Uncertainty, Managing Contaminants, Standards and Monitoring, and Communications. Participants in each region were drawn from a variety of backgrounds and organizations. Regional discussions were shaped by the participant mix combined with each region's current social, political, environmental, and economic developments.

Despite regional differences, common themes were found across all three forums. These included: the need for ongoing resources to support communication, education, monitoring, testing, and research capabilities; that initiatives aimed at addressing the contaminants issue be done in partnership with Aboriginal organizations and communities; and that action be taken at the national and international level to reduce and eliminate arctic contaminants.

Resources

The AES program has contributed significantly to initiatives undertaken to address arctic waste and contamination. Overall, participants urged that a commitment of federal resources is necessary to continue the work begun under the AES program. Forum participants also identified priorities for resource allocation. Communications, education programs, long term monitoring programs, capacity building within communities, and research programs were areas identified as priority areas for the future. Also, capabilities which have been built up in many communities and organizations may be lost with the ending of the AES.

Aboriginal and Community Involvement

The involvement of Aboriginal organizations and communities was identified as critical to the success of testing, research, monitoring, education, and communications initiatives aimed at Aboriginal people and communities. Research and monitoring programs done in partnership with communities allow for trust building to take place, for expectations to be made clear to everyone, and help to avoid misunderstandings and lack of communication. Working together allows people to learn from each other and for communities to build capacities which are applicable in a range of areas, contributing to community development. Skill building, economic benefits, and increased awareness of issues were identified as some of the main benefits of partnerships between government, researchers, and communities.

National and International Contaminant Reduction

Participants in each regional forum recognized that sources of contamination are local, national, and international. The AES program contributes to clean up of local sites and ongoing monitoring, testing, education, and communication initiatives in most northern areas. These efforts must continue. At a national level, guidelines and standards must be put in place to reduce the use and emission of harmful substances. At the same time, producers of contaminants beyond Canada's borders must be lobbied to discontinue contaminant production. The federal government should take the lead role in spearheading contaminant reduction efforts in both the national and international arenas.

Section Two: Recommendations for Discussion

The following recommendations for discussion represent summary recommendations of the three regional fora. These recommendations bring together common elements of recommendations resulting from the discussions which took place in each region. Each recommendations is preceded by a short summary of forum participant's reasons for each recommendation.

1. The federal government has not made a long term commitment to addressing the issue of Arctic contaminants. As the AES program nears completion, it is evident that much remains to be done about concerns and issues raised by the AES.

   Recommendation:
   A long term federal commitment must be made to continue to address issues and concerns raised and addressed by the Arctic Environmental Strategy.

2. Much of the contaminants found in the north are produced elsewhere. The north acts as a sinkhole for contaminants produced elsewhere. As a result, local communities have no control over contamination sources which affect them directly.

   Recommendation:
   The promotion of contaminant reduction must be pursued on an international level.

3. The Arctic Environmental Strategy applies to the Arctic, which is defined as areas north of 60. As a result, Nunavik and Labrador have been excluded from the program. Nunavik and Labrador share many of the same concerns and issues raised in areas covered by the AES.

   Recommendation:
   Any renewed long term federal commitment to address the issues and concerns raised by the Arctic Environmental Strategy must also include Nunavik and Labrador.

4. Communications is one of the most important aspects of successful research and monitoring. Often resources are not available specifically for communication of results and promoting awareness of issues and research. Communications affects community support for and involvement in programs.

   Recommendation:
   Resources must be made available specifically for communications purposes, such as plain language reports, terminology development and translation into Aboriginal languages, and education and awareness programs.

5. Risk assessment processes have significant impacts in the lives of northerners. Risk assessment processes therefore must take a balanced, holistic approach to determining

standards and risks.

Recommendation:
Risk assessment processes and health advisories must be presented along with balanced information about benefits. Information must be given in context.

6. Under the AES program, basic research has been completed. However, the end of the program means that research programs may not enter the next phase, going beyond monitoring to assessing effects.

Recommendation:
There is a need to interpret the data we have now, and move from a monitoring exposure to assessing the effects of contaminants on humans and animals.

7. The AES program allowed for the development of a number of cooperative partnerships among northern and Aboriginal organizations. Current partnerships reflect six years of trust building, close cooperation, and capacity building within organizations.

Recommendation:
Allocation of resources to organizations to build on the capabilities built by he AES, such as cooperative partnerships, capacities within Aboriginal organizations, and research and monitoring projects.

8. Research capabilities within existing government departments have contributed to addressing contaminants issues. The future existence of research capabilities in government departments directly affects possibilities related to addressing arctic contaminants.

Recommendation:
Research capabilities in existing government departments must be maintained.

9. Communities want to be involved in identifying and resolving issues in their areas. Ideally, any program should contribute directly to community development, both economically and socially.

Recommendation:
Addressing the issues requires an increased focus on local priorities. Action in this area must be taken on by communities, in areas such as education, providing information, conducting and designing research projects, and remediation of contaminated sites. These actions should incorporate a holistic, community based approach to assessing health effects of contamination in traditional foods.

10. Communities are aware of immediate issues in their areas, yet often lack of resources prevents

action. In some communities, local sources of contaminants could be addressed if communities had access to resources to build local infrastructure to deal with the situation.

Recommendation:
Resources must be made available to communities and municipalities to undertake locally based monitoring, testing, and recycling programs. Money must be made available to build the necessary infrastructure to deal with a range of wastes.

11. In different parts of the north, different issues are of importance depending on the local situation. Without adequate resources for continual networking, it is difficult to keep track of developments in other areas.

Recommendation:
A national communications strategy or coordinating mechanism must be developed to ensure that issues of importance in individual regions are known, and to maximize the effective use of resources.

12. People who rely on traditional foods want basic questions answered: Is the food safe to eat? How much can I eat? What do the changes in the animals and fish mean? These questions should be answered as quickly as possible, and research into such questions should be done in cooperation with communities.

Recommendation:
Continue adequate levels of funding for CINE or similar research and education centres which are controlled by and work closely with Aboriginal communities and people.

Classement CCEK

Titre Règlement fédéral sur les halocarbures

Type Dossiers Environementaux

Date D'ouverture 2001

Notes

16 novembre 2001: Modifications proposées au Règlement fédéral sur les halocarbures, fiche résumant les amendements

Rapports de la Commission polaire canadienne sur les contaminants à Kuujjuaq, à Whitehorse et à Yellowknife (VA)

8 Février 2005: Lettre du Comité Consultatif de l'environnement Kativik; Application au nord du 55ème parallèle du Règlement sur les halocarbures

11 Mars 2005: Lettre du Ministère de l'Environnment; Une discution est souhaitable entre les membres de l'Administration régionale Kativik et le Ministère

27 janvier 2006: Lettre du Ministére du développement durable, de l'envionnement et des Parcs; Nouvelle réglementation Article 14

22 Février 2006: Lettre de l'administration Kativik; Recommandations du Ministère

28 Février 2006: Lettre de KEAC au maire de Kunqiqsualujjuaq L'informant sur le Régulation des Hydrocarbures

Kuujjuaq, February 28, 2006

Ms. Kitty Annanack
Mayor, Northern Village of Kangiqsualujjuaq
P.O. BOX 120
Kangiqsualujjuaq (QC.)
J0M 1N0

Ms. Mayor,

As it is part of the Kativik Environmental Advisory Committee's (KEAC) mandate, we wish to inform you that the *Regulation Respecting Halocarbons*, which has been in force since December 23, 2004, includes new municipal requirements that address the recovery of halocarbons from domestic refrigeration appliances.

The Minister of Sustainable Development, the Environment and Parks has recently brought to our attention a specific provision in paragraph 14 of the regulation which states that every municipality must recover any halocarbon contained in the cooling system of an appliance before disposing of that unit using appropriate equipment and have it confined within a container designed for that purpose. The municipality must also label all units that have been emptied as no longer containing halocarbons.

It is recommended by the Minister that domestic refrigeration units be collected separately on a special collection day, kept intact and taken to a fenced-in municipal site. Once enough units have been collected, halocarbons can then be safely removed with recovery equipment that complies with safety requirements. Collecting and transporting domestic appliances does not require special environmental qualifications; only the actual removal and handling of halocarbons do, which may be performed by the municipality or a company with employees who are qualified. A one-day course to provide this qualification is being developed and should be offered within a few months. The course will be given under the supervision of Emploi-Québec.

For more information on the subject, we have included with this letter a document published by Environment Canada, which may serve as a guide for your municipality to help implement a program to recover halocarbons from domestic units. Please do not hesitate to contact the KEAC if you have further questions.

Furthermore, Mrs. Maggie Emudluk, Chairperson of KRG, has asked the KEAC to meet with representatives of the Northern Stores, the FCNQ and the MDDEP/Environment Québec in order to better inform the local retailers of their obligations. According to the regulation, retailers must allow for the return of any appliances purchased at their store.

We thank you for your attention and will keep you informed of any developments in this matter.

Respectfully yours,

Michael Barrett

Michael Barrett
President, KEAC

KATIVIK

Administration régionale KATIVIK Regional Government
P.O. Box 9 KUUJJUAQ (QUÉBEC) CANADA J0M 1C0

Comité consultatif
de l'environnement Kativik
reçu le
Feb. 22/06

Kuujjuaq, February 22, 2006

Mr. Michael Barrett, President
Kativik Environmental Advisory Committee
P.O. Box 930
Kuujjuaq, Qc J0M 1C0

Michael,

It has been brought to my attention by the Minister of Sustainable Development, the Environment and Parks that the *Regulation Respecting Halocarbons*, in force since December 23, 2004, is indeed applicable here in Nunavik and that it includes new requirements that address the municipal partners concerning the recovery of halocarbons from domestic refrigeration appliances. In particular, a specific provision in paragraph 14 was provided and states:

> Every person or municipality that, in connection with a residual materials collection service, picks up a refrigeration or air conditioning unit must, before disposing of the unit for elimination, recover of have the halocarbon contained in the cooling system of the unit recovered using the appropriate equipment and have it confined within a container designed for that purpose.
>
> The person or municipality is also required to see that each unit so emptied bears a label stating that the unit does not contain halocarbons.

It is recommended by the Minister in his letter that domestic refrigeration units be collected separately on a special collection day, kept intact and taken to a fenced-in municipal site. Once enough units have been collected, halocarbons can then be safely removed with recovery equipment that complies with safety requirements. Collecting and transporting domestic appliances does not require special environmental qualifications; only the actual removal and handling of halocarbons do, which may be performed by the municipality or a company with employees who are qualified. A one-day course to provide this qualification is being developed and should be offered within a few months. The course will be given under the supervision of Emploi-Québec.

Because the Kativik Environmental Advisory Committee is the preferential and offical forum for the governments of Canada and Québec, the KRG and the Northern villages, I would ask that you inform each community of this regulation, its stipulations and the short-term solution provided by the Minister. Meeting with representatives of Northern stores, the FCNQ and the MDDEP would also prove useful, as the retailers are required by this Regulation to allow for the return of any appliances sold at their stores.

I thank you for the attention you have given this matter and would like to be notified of any further developments.

Yours truly,

Maggie Emudluk
Chairperson, KRG

Ministère du
Développement durable,
de l'Environnement
et des Parcs
Québec

Direction régionale de l'analyse et l'expertise
de l'Abitibi-Témiscamingue et du Nord-du-Québec

Le 27 janvier 2006

Administration régionale Kativik
Case postale 9
Kuujjuaq (Québec) J0M 1C0

Mesdames, Messieurs,

La présente est pour vous informer que le Règlement sur les halocarbures a été adopté et publié dans la Gazette officielle du Québec du 8 décembre 2004. Il est entré en vigueur le 23 décembre 2004.

Ce règlement remplace le Règlement sur les substances appauvrissant la couche d'ozone. Il contient notamment de nouvelles exigences concernant la récupération des halocarbures des appareils de réfrigération et de climatisation domestiques qui interpellent nos partenaires municipaux.

Le Ministère porte à votre attention une disposition particulière que l'on retrouve à l'article 14 dudit règlement. Cet article se lit comme suit :

> *« Toute personne ou municipalité qui, dans le cadre d'un service de collecte de matières résiduelles, ramasse un appareil de réfrigération ou de climatisation doit, avant d'en disposer pour élimination, récupérer ou faire récupérer, au moyen de l'équipement approprié, l'halocarbure contenu dans le circuit de réfrigération de l'appareil et le confiner dans un contenant conçu à cette fin.*
>
> *Elle est pareillement tenue de s'assurer que chacun des appareils ainsi vidangés porte une étiquette indiquant que l'appareil ne renferme pas d'halocarbure ».*

Cet article est donc en vigueur depuis le 23 décembre 2004. Dans ce contexte, il est important que les municipalités soient informées qu'en vertu de cet article 14, il n'est désormais plus acceptable que les appareils de réfrigération et de climatisation (réfrigérateurs, congélateurs, climatiseurs, etc.) des particuliers mis au rebut soient ramassés avec les autres matières résiduelles dans des camions dotés d'un mécanisme de compaction.

...2

180, boul. Rideau, local 1.04
Rouyn-Noranda (Québec) J9X 1N9
Téléphone : (819) 763-3333
Télécopieur : (819) 763-3202
Internet: http://www.mddep.gouv.qc.ca
Courriel: edith.vandewalle@mddep.gouv.qc.ca

Il est plutôt recommandé que les appareils domestiques de réfrigération ou de climatisation fassent l'objet d'une collecte spéciale avec un équipement qui préserve l'intégrité des appareils à ramasser jusqu'à leur vidange. Cela nous apparaît la méthode la plus simple à court terme.

Voici une suggestion quant au mode opérationnel qui respecterait l'article 14 : les municipalités font ramasser ces appareils lors d'une collecte dédiée et les rassemblent sur un site municipal sécurisé ou clôturé; une fois qu'un nombre suffisant d'appareils est entreposé sur le site, un contrat peut être octroyé à une entreprise de réparation d'électroménagers afin qu'ils soient vidangés en toute sécurité et à l'aide d'appareils de récupération conformes. Pour plus d'information à ce sujet, nous vous invitons à consulter un document publié par Environnement Canada, en 2004, qui se veut un Guide pour l'implantation d'un programme de récupération des halocarbures contenus dans les appareils domestiques auquel les municipalités peuvent se référer. Il est disponible par Internet à l'adresse suivante :

http://www.ec.gc.ca/ozone/DOCs/SandS/rac/mbrGuide04/FR/intro.cfm

De plus, nous tenons à vous préciser que la collecte et le transport des appareils ménagers contenant des halocarbures n'exige pas de qualification environnementale particulière. Ce sont uniquement les opérations reliées à la vidange des halocarbures et à leur gestion qui exigeront une telle qualification. Cela pourra être fait par une municipalité ou par une entreprise ayant à son emploi de la main-d'œuvre possédant cette qualification. Un cours d'une journée conduisant à cette qualification est en développement et devrait être offert dans les prochains mois. Ce cours sera donné sous la supervision d'Emploi-Québec.

Nous sollicitons donc votre collaboration dans l'application de ce règlement dont l'objectif général est d'assurer la protection de la couche d'ozone stratosphérique dans la foulée de la Stratégie québécoise de gestion des substances appauvrissant la couche d'ozone et de leurs produits de remplacement.

Pour tout renseignement additionnel, nous vous invitons à communiquer avec monsieur Jean-Noël Tourigny, poste 318.

Recevez, Mesdames, Messieurs, nos salutations les meilleures.

La directrice régionale,

ÉW/dd

Édith van de Walle

Ministère du
Développement durable,
de l'Environnement
et des Parcs
Québec

Direction régionale de l'analyse et l'expertise
de l'Abitibi-Témiscamingue et du Nord-du-Québec

TRANSLATION

January 27, 2006

Administration régionale Kativik
P.O. Box 9
Kuujjuaq (Québec) J0M 1C0

Dear Madam,
Dear, Sir,

We are writing to inform you that the *Regulation respecting halocarbons* was adopted, and published in the December 8, 2004, issue of the Gazette officielle du Québec. It came into force on December 23, 2004.

This regulation, which replaces the *Regulation respecting ozone-depleting substances*, includes new requirements that address our municipal partners for the recovery of halocarbons from domestic refrigeration and air conditioning appliances.

The Ministère wishes to bring your attention to a specific provision in paragraph 14 of the regulation, which stipulates the following:

> Every person or municipality that, in connection with a residual materials collection service, picks up a refrigeration or air conditioning unit must, before disposing of the unit for elimination, recover or have the halocarbon contained in the cooling system of the unit recovered using the appropriate equipment and have it confined within a container designed for that purpose.
>
> The person or municipality is also required to see that each unit so emptied bears a label stating that the unit does not contain halocarbons

This paragraph has therefore been in force since December 23, 2004. Accordingly, it is important for municipalities to know that, under paragraph 14, refrigeration or air conditioning units (refrigerators, freezers, air conditioners, etc.) disposed of by individuals can no longer be collected with other residual materials by trucks equipped with a compacter.

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180, boul. Rideau, local 1.04
Rouyn-Noranda (Québec) J9X 1N9
Téléphone : (819) 763-3333
Télécopieur : (819) 763-3202
Internet: http://www.mddep.gouv.qc.ca
Courriel: edith.vandewalle@mddep.gouv.qc.ca

It is recommended instead that domestic refrigeration or air conditioning units be collected separately with equipment that keeps the units intact until they have been emptied. This appears to us to be the simplest solution in the short term.

Our suggestion for an approach that would respect the requirements of paragraph 14 is that municipalities pick up the units on a special collection day and take them to a secure, fenced-in municipal site. Once there are a sufficient number of units collected at the site, a contract could be given to an appliance repair company that could safely empty the units with recovery equipment that complies with safety requirements. For more information on the subject, there is a document published by Environment Canada, which may serve as a guide for municipalities to use to implement a program to recover halocarbons from domestic units. It is available on the internet at the following address:

http//www.ec.gc.ca/ozone/DOCs/SandS/rac/mbrGuide04/EN/intro.cfm

Also, we would like to specify that collecting and transporting domestic appliances that contain halocarbons does not require special environmental qualifications; only the activities involved in removing and handling the halocarbons do. They may be performed by the municipality or a company with employees who are qualified. A one-day course to provide this qualification is being developed and should be offered within a few months. The course will be given under the supervision of Emploi-Québec.

We are asking for your cooperation in applying the regulation, whose general objective is to ensure the protection of the stratospheric ozone layer as part of Québec's strategy for the management of ozone-depleting substances and their replacements.

For any additional information, please contact Mr. Jean-Noël Tourigny, ext. 318.

Yours truly,

ÉW/dd

Édith van de Walle
Regional Manager

Ministère
de l'Environnement
Québec

Bureau de la sous-ministre

Comité consultatif
de l'environnement Kativik
reçu le
22 mars 2005

Le 11 mars 2005

Monsieur Jean Couture
Président
Comité consultatif de l'environnement Kativik
Case postale 930
Kuujjuaq (Québec) J0M 1C0

Monsieur le Président,

J'ai pris connaissance de votre lettre du 14 février dernier au sujet de l'application du *Règlement sur les halocarbures* au nord du 55e parallèle et d'entrée de jeu, je vous confirme que ce règlement s'applique à l'ensemble du Québec et donc au territoire situé au nord du 55e parallèle.

Par ailleurs, vous vous interrogez quant à l'aide que les communautés nordiques vivant sur ce territoire pourraient recevoir du Ministère afin de leur permettre de se conformer audit règlement. Afin d'être en mesure de répondre adéquatement à votre questionnement, il m'apparaît souhaitable qu'une discussion ait lieu entre des représentants de l'Administration régionale Kativik (ARK) et ceux du Ministère. Cela permettrait, d'abord, d'avoir un aperçu de la situation engendrée par ce règlement sur le territoire en question et, ensuite, de dégager des façons de faire qui soient pratiques, conformes à la réglementation et respectueuses de l'environnement. Le support que pourrait offrir le Ministère aux communautés nordiques dans la gestion de ce dossier pourra de plus être abordé.

À cette fin, je vous invite à contacter M. Raynald Brulotte, chef du Service de la qualité de l'atmosphère, au numéro (418) 521-3813, poste 4992.

Je vous prie d'agréer, Monsieur le Président, l'expression de mes sentiments les meilleurs.

La sous-ministre,

Madeleine Paulin

Madeleine Paulin

Édifice Marie-Guyart, 30e étage
675, boulevard René-Lévesque Est
Québec (Québec) G1R 5V7
Téléphone : (418) 521-3860
Télécopieur : (418) 643-3619
Courriel : madeleine.paulin@menv.gouv.qc.ca
Internet : http://www.menv.gouv.qc.ca

ᑲᑎᕕᒃ ᓄᓇᒧᑦ ᐃᓱᒪᓕᕆᔨᒃᑯᑦ ᑲᑎᒪᔨᖏᑦ
COMITÉ CONSULTATIF DE L'ENVIRONNEMENT KATIVIK
KATIVIK ENVIRONMENTAL ADVISORY COMMITTEE

Kuujjuaq, le 8 février 2005

Madame Madeleine Paulin
Sous-ministre de l'Environnement
675, boulevard René-Lévesque Est
Édifice Marie-Guyart, 30e étage
Québec, QC G1R 5V7

Objet : Application au nord du 55e parallèle du *Règlement sur les halocarbures*

Madame,

Lors de leur réunion à Québec les 19 et 20 janvier 2005, les membres du Comité consultatif de l'environnement Kativik ont pris connaissance de l'adoption par le gouvernement du Québec du nouveau *Règlement sur les halocarbures*, lequel est destiné à renforcer l'action du Québec pour la préservation de la couche d'ozone en évitant que des gaz nocifs provenant en particulier des systèmes de réfrigération et de climatisation ne se répandent dans l'atmosphère.

L'application de ce Règlement dans les communautés nordiques du Nunavik a tout de suite apparu comme difficile à réaliser dans les conditions présentes. Elle fait en quelque sorte partie de la problématique liée à la gestion de l'ensemble des matières résiduelles sur ce territoire. Présentement, aucun plan concerté n'a été mis en place et les déchets comme les vieilles pièces de véhicules et celles provenant des systèmes de réfrigération ou de climatisation ne sont que déposés en vrac avec tous les autres déchets dans les sites prévus à cette fin.

La récupération des halocarbures requière tout d'abord un tri, la manutention de ces substances par une main d'œuvre qualifiée et la possibilité de les retourner par voie maritime ou aérienne aux distributeurs et aux fabricants. Chaque étape de ce processus exigera une expertise et des fonds additionnels.

Pour ce motif, nous aimerions savoir si ce nouveau Règlement est effectivement en vigueur, et si c'est le cas, s'il doit être considéré comme applicable à l'ensemble des

communautés nordiques dans un proche avenir. Avant de faire connaître le nouveau règlement aux autorités des villages nordiques, il faudrait en effet prévoir certains outils de mise en œuvre, tels une documentation ou un guide traduits en langue anglaise et éventuellement en inuktitut. Il faudrait aussi examiner la façon dont une formation pourrait être donnée et la capacité des villages à superviser le retour au sud des pièces qui contiennent des halocarbures.

Au nom du Comité, je vous remercie de votre attention.

Veuillez agréer, Madame, l'expression de mes sentiments distingués.

Originale signé et envoyé la semaine du
Enquête demandement de QC pour Jean.

Jean Couture
Président

Environment Canada Environnement Canada
Ottawa, Ontario
K1A 0H3

NOV 16 2001

Madame/Monsieur :

Objet : Modifications proposées au Règlement fédéral sur les halocarbures

Vous trouverez ci-joint une fiche d'information résumant les amendements proposées au *Règlement fédéral sur les halocarbures* ainsi qu'un document relatif aux discussions sur le projet d'amendements du Règlement. Depuis, la mise en vigueur, en juillet 1999 du *Règlement fédéral sur les halocarbures,* il y a eu de nouvelles initiatives sous le programme canadien de protection de la couche d'ozone.

Le but des amendements proposés est de tenir compte de la *Stratégie canadienne pour accélérer l'élimination progressive des utilisations de CFC et de halons et pour éliminer les stocks excédentaires* et de soulever certaines questions administratives. Les documents ci-joints présentent et expliquent les principales modifications du Règlement.

Veuillez faire parvenir vos commentaires à l'adresse suivante **avant le 4 janvier 2002 :**

Greg Carreau
Section des programmes de la protection de l'ozone
Division du contrôle des produits chimiques
Direction de l'évaluation des produits chimiques commerciaux
Ottawa (Ontario), K1A 0H3

Téléphone : (819) 953-6072
Télécopieur : (819) 994-0007
Courriel : greg.carreau@ec.gc.ca

Vos commentaires seront pris en considération dans le développement du projet de Règlement qui devrait être publié dans la Partie I de la *Gazette du Canada* cet printemps.

Une réunion de consultation sur les amendements proposés au *Règlement fédéral sur les halocarbures* est prévue pour janvier 2002. Veuillez répondre par écrit à la personne susnommé si vous désirez y participer ou si vous désirez ne plus recevoir d'information à ce sujet.

Pour de plus amples renseignements sur la *Stratégie canadienne pour accélérer l'élimination progressive des utilisations de CFC et de Halons et pour éliminer les stocks excédentaires* ou sur le Règlement fédéral sur les halocarbures, consultez notre site Web à l'adresse www.ec.gc.ca/ozone.

Veuillez agréer, mes sincères salutations.

Alex Cavadias
Chef intérimaire
Section des programmes de protection de l'ozone
Division du contrôle des produits chimiques

Canada

Environment Canada | Environnement Canada
Ottawa, Ontario
K1A 0H3

NOV 16 2001

Dear Madame/Sir:

Re: Proposed Amendments to the Federal Halocarbon Regulations

Please find attached for your information, a fact sheet on the proposed amendments to the *Federal Halocarbon Regulations* and the discussion paper detailing the draft amendments to the Regulations. Since the publication of the *Federal Halocarbon Regulations* in 1999, there have been new initiatives under Canada's Ozone Layer Protection Program.

The purpose of the proposed amendments is to reflect *Canada's Strategy to Accelerate the Phase-Out of CFC and Halon Uses and to Dispose of the Surplus Stocks* and address administrative issues. The attached documents present and explain the main proposed changes to the Regulations.

I would appreciate if you could send your comments to the following address **before January 4, 2002:**

Greg Carreau
Ozone Protection Programs Section
Chemicals Control Division
National Office of Pollution Prevention
Ottawa, ON K1A 0H3

Telephone: (819) 953-6072
Fax machine: (819) 994-0007
Email: greg.carreau@ec.gc.ca

Your comments will be considered in the further development of the proposed Regulations. The current plan is to have the Regulations published in Part I of the *Canadian Gazette* this spring.

A consultation meeting for the proposed amendments to the *Federal Halocarbon Regulations* is planned for January 2002. Please indicate, in writing, to the contact information referenced above, if you would be interesting in attending or if you do not want to receive further information regarding the proposed amendments.

For more information on *Canada's Strategy to Accelerate the Phase-Out of CFC and Halon Uses and to Dispose of the Surplus Stocks* or the Federal Halocarbon Regulations please consult our Web site at www.ec.gc.ca/ozone.

Sincerely yours,

Alex Cavadias
A/ Section Head
Ozone Protection Programs
Chemical Control Division

Canada

Environment Canada Environnement Canada
Ottawa, Ontario
K1A 0H3

NOV 16 2001

Dear Madame/Sir:

Re: Proposed Amendments to the Federal Halocarbon Regulations

Please find attached for your information, a fact sheet on the proposed amendments to the *Federal Halocarbon Regulations* and the discussion paper detailing the draft amendments to the Regulations. Since the publication of the *Federal Halocarbon Regulations* in 1999, there have been new initiatives under Canada's Ozone Layer Protection Program.

The purpose of the proposed amendments is to reflect *Canada's Strategy to Accelerate the Phase-Out of CFC and Halon Uses and to Dispose of the Surplus Stocks* and address administrative issues. The attached documents present and explain the main proposed changes to the Regulations.

I would appreciate if you could send your comments to the following address **before January 4, 2002:**

Greg Carreau
Ozone Protection Programs Section
Chemicals Control Division
National Office of Pollution Prevention
Ottawa, ON K1A 0H3

Telephone: (819) 953-6072
Fax machine: (819) 994-0007
Email: greg.carreau@ec.gc.ca

Your comments will be considered in the further development of the proposed Regulations. The current plan is to have the Regulations published in Part I of the *Canadian Gazette* this spring.

A consultation meeting for the proposed amendments to the *Federal Halocarbon Regulations* is planned for January 2002. Please indicate, in writing, to the contact information referenced above, if you would be interesting in attending or if you do not want to receive further information regarding the proposed amendments.

For more information on *Canada's Strategy to Accelerate the Phase-Out of CFC and Halon Uses and to Dispose of the Surplus Stocks* or the Federal Halocarbon Regulations please consult our Web site at www.ec.gc.ca/ozone.

Sincerely yours,

Alex Cavadias
A/ Section Head
Ozone Protection Programs
Chemical Control Division

Canada

Environment Canada Environnement Canada
Ottawa, Ontario
K1A 0H3

NOV 16 2001

Madame/Monsieur :

Objet : Modifications proposées au Règlement fédéral sur les halocarbures

Vous trouverez ci-joint une fiche d'information résumant les amendements proposées au *Règlement fédéral sur les halocarbures* ainsi qu'un document relatif aux discussions sur le projet d'amendements du Règlement. Depuis, la mise en vigueur, en juillet 1999 du *Règlement fédéral sur les halocarbures*, il y a eu de nouvelles initiatives sous le programme canadien de protection de la couche d'ozone.

Le but des amendements proposés est de tenir compte de la *Stratégie canadienne pour accélérer l'élimination progressive des utilisations de CFC et de halons et pour éliminer les stocks excédentaires* et de soulever certaines questions administratives. Les documents ci-joints présentent et expliquent les principales modifications du Règlement.

Veuillez faire parvenir vos commentaires à l'adresse suivante **avant le 4 janvier 2002 :**

Greg Carreau
Section des programmes de la protection de l'ozone
Division du contrôle des produits chimiques
Direction de l'évaluation des produits chimiques commerciaux
Ottawa (Ontario), K1A 0H3

Téléphone : (819) 953-6072
Télécopieur : (819) 994-0007
Courriel : greg.carreau@ec.gc.ca

Vos commentaires seront pris en considération dans le développement du projet de Règlement qui devrait être publié dans la Partie I de la *Gazette du Canada* cet printemps.

Une réunion de consultation sur les amendements proposés au *Règlement fédéral sur les halocarbures* est prévue pour janvier 2002. Veuillez répondre par écrit à la personne susnommé si vous désirez y participer ou si vous désirez ne plus recevoir d'information à ce sujet.

Pour de plus amples renseignements sur la *Stratégie canadienne pour accélérer l'élimination progressive des utilisations de CFC et de Halons et pour éliminer les stocks excédentaires* ou sur le Règlement fédéral sur les halocarbures, consultez notre site Web à l'adresse www.ec.gc.ca/ozone.

Veuillez agréer, mes sincères salutations.

Alex Cavadias
Chef intérimaire
Section des programmes de protection de l'ozone
Division du contrôle des produits chimiques

Canada

Environment Canada Environnement Canada

FICHE D'INFORMATION
AMENDEMENTS PROPOSÉS AU RÈGLEMENT FÉDÉRAL SUR LES HALOCARBURES

HISTORIQUE

En juillet 1999, Environnement Canada a publié le *Règlement fédéral sur les halocarbures* (RFH) en vertu de la *Loi canadienne sur la protection de l'environnement*. Le but de ce Règlement est de réduire et de prévenir les émissions de substances qui appauvrissent la couche d'ozone et de leurs halocarbures de remplacement provenant des activités fédérales, des terres autochtones et domaniales, des ministères fédéraux, des sociétés d'État, des organismes, ouvrages et entreprises fédérales.

AMENDEMENTS PROPOSÉS

Les modifications proposées au *Règlement fédéral sur les halocarbures* visent à résoudre des problèmes administratifs et à mettre en application les exigences de la *Stratégie canadienne pour accélérer l'élimination progressive des utilisations de CFC et de halons et éliminer les stocks excédentaires.*

Les points saillants des modifications proposées sont les suivants :

- interdiction de charger les systèmes de réfrigération mobiles avec des CFC à partir du 1er janvier 2003;
- interdiction de charger es systèmes de réfrigération avec des CFC à partir du 1er janvier 2004;
- interdiction de charger les systèmes de climatisation avec des CFC à partir du 1er janvier 2004;
- à partir du 1er janvier 2005, les refroidisseurs contenant des CFC devront être convertis ou remplacés à la première entretien majeure. Interdiction de charger les refroidisseurs avec des CFC à partir de 2015;
- interdiction de charger les systèmes d'extinction d'incendie fixes avec des Halons à partir du 1er janvier 2005. Une exemption autorisée par un permis délivré par le ministre pourrait être accordée à condition que le système soit remplacé par un système de remplacement en moins d'une année à compter de la date de délivrance du permis. Les utilisations critiques pourraient être exemptées. Après le 1er janvier 2010, ces permis seront expirer et ne seront pas disponibles.

- modification de la section Application du règlement afin de respecter la Partie 9 de la *Loi canadienne sur la protection de l'environnement (1999)*;

- obligation de signaler au ministre toutes les sources de rejet de plus de 10 kg et de moins de 100 kg; et

- ajout du bromochlorométhane (Halon 1011) à la liste des substances réglementées conformément aux engagements internationaux du Canada

ÉTAPES SUIVANTES

Les amendements proposés au Règlement Fédéral sur les Halocarbures devraient être publiés dans la Gazette du Canada, Partie I, au printemps 2002 et seront alors disponibles.

RENSEIGNEMENTS SUPPLÉMENTAIRES

Pour tout commentaire ou renseignements supplémentaires, Veuillez vous adressez à :

Greg Carreau
Section des programmes de la protection de l'ozone
Division du contrôle des produits chimiques
Direction de l'évaluation des produits chimiques commerciaux
Ottawa (Ontario), K1A 0H3
Téléphone : (819) 953-6072
Télécopieur : (819) 994-0007
Courriel : greg.carreau@ec.gc.ca

Pour de plus amples renseignements sur la *Stratégie canadienne pour accélérer l'élimination progressive des utilisations de CFC et de halons et éliminer les stocks excédentaires* ou sur le Règlement fédéral sur les halocarbures, consultez notre site Web à l'adresse www.ec.gc.ca/ozone.

Environment Canada Environnement Canada

FACT SHEET
PROPOSED AMENDMENTS TO THE FEDERAL HALOCARBON REGULATIONS

BACKGROUND

In 1999, Environment Canada published the *Federal Halocarbon Regulations* (FHR) under the authority *of Canadian Environmental Protection Act*. The purpose of the Regulations is to reduce and prevent emissions of ozone-depleting substances and of their halocarbon alternatives from federal and aboriginal lands, federal departments, crown corporations, agencies and federal works and undertakings.

PROPOSED AMENDMENTS

The proposed amendments to the *Federal Halocarbon Regulations* consist of addressing administrative issues and implementing the requirements of *Canada's Strategy to Accelerate the Phase-Out of CFC and Halon Uses and to Dispose of the Surplus Stocks*.

The proposed amendments include the following highlights:

- Prohibit charging mobile refrigeration systems with CFCs effective January 1, 2003;
- Prohibit charging refrigeration systems with CFCs effective January 1, 2004;
- Prohibit charging air conditioning systems with CFCs effective January 1, 2004;
- Effective January 1, 2005, require the conversion or replacement of chillers containing CFCs at next major overhaul. Prohibit charging chillers with CFCs effective 2015;
- Prohibit charging fixed fire extinguishing systems with Halons effective January 1, 2005. A refill permit could be granted by the Minister on the condition that the system is replaced with an alternative within a year of the refill. This provision would expire December 31, 2009. Effective January 1, 2010, refills would be prohibited. This prohibition would also be subject to critical uses exemptions;
- Amend the application section to reflect Part 9 under the *Canadian Environmental Protection Act 1999;*

- Require all sources to of releases between 10 and 100 kg to be reported to the Minister;

- Add bromochloromethane (Halon 1011) to the list of controlled substances as per Canada's international commitments.

NEXT STEPS

The proposed amendments to the *Federal Halocarbon Regulations* are expected to be published in Canada Gazette Part I in the spring of 2002 and will then be made available.

FURTHER INFORMATION

Comments and request for further information can be forwarded to the following:

Greg Carreau
Ozone Protection Programs Section
Chemicals Control Division
National Office of Pollution Prevention
Ottawa, ON K1A 0H3
Telephone: (819) 953-6072
Fax machine: (819) 994-0007
Email: greg.carreau@ec.gc.ca

Further information on *Canada's Strategy to Accelerate the Phase-Out of CFC and Halon Uses and to Dispose of the Surplus Stocks* and the *Federal Halocarbon Regulations* is available on our Web site at www.ec.gc.ca/ozone.

Draft Amendments to the Federal Halocarbon Regulations

This document presents draft amendments to the *Federal Halocarbon Regulations*, published in July 1999. The rationale for the changes to the existing Regulations is briefly outlined.

INTERPRETATION

1. The definitions in this section apply in these Regulations.

"Act" means the *Canadian Environmental Protection Act, 1999*. (*Loi*)

"air conditioning system" means an air conditioning system, as well as any associated equipment, that contains or is designed to contain a halocarbon refrigerant. (*système de climatisation*)

"appropriate container" means a container that is designed and manufactured to be refilled and to contain a specific type of halocarbon. (*contenant approprié*)

"bromofluorocarbon" means a fully halogenated bromofluorocarbon each molecule of which contains one, two or three carbon atoms and at least one atom each of bromine and fluorine. (*bromofluorocarbure*)

"certificate" means a certificate indicating successful completion of an environmental awareness course in recycling, recovery and handling procedures of halocarbon refrigerants as outlined in the Refrigerant Code of Practice and accepted in three or more provinces and in the province in which the work is being done. (*certificat*)

Note: This requires the certificate to be valid in the province in which the work is being done and to be recognized in three or more provinces to ensure consistency with provincial/territorial requirements.

"certified person", in respect of a refrigeration system or an air conditioning system, means a service technician who holds a certificate. (*personne accréditée*)

"charging" means to add a halocarbon to a system. (*charger*)

"chiller" means an air conditioning system having a compressor, an evaporator, a secondary refrigerant cooled condenser and having a refrigeration capacity of more 350 kW as rated by the manufacturer. *(refroidisseur)*

Note: This definition was added to identify additional requirements for a type of equipment currently regulated.

"chlorofluorocarbon" or "CFC" means a fully halogenated chlorofluorocarbon each molecule of which contains one, two or three carbon atoms and at least one atom each of chlorine and fluorine. (*chlorofluorocarbure ou CFC*)

"fire extinguishing system" means fire extinguishing or fire suppression equipment including portable or fixed equipment, that contains or is designed to contain a halocarbon fire extinguishing agent. (*système d'extinction d'incendie*)

"halocarbon" means a substance set out in Schedule 1, whether existing alone or in a mixture, and includes isomers of any such substance. (*halocarbure*)

"hydrobromofluorocarbon" or "HBFC" means a hydrobromofluorocarbon each molecule of which contains one, two or three carbon atoms and at least one atom each of hydrogen, bromine and fluorine. (*hydrobromofluorocarbure ou HBFC*)

"hydrochlorofluorocarbon" or "HCFC" means a hydrochlorofluorocarbon each molecule of which contains one, two or three carbon atoms and at least one atom each of hydrogen, chlorine and fluorine. (*hydrochlorofluorocarbure ou HCFC*)

"hydrofluorocarbon" or "HFC" means a hydrofluorocarbon each molecule of which contains only carbon, hydrogen and fluorine atoms. (*hydrofluorocarbure ou HFC*)

"install", in respect to a system, means to place in a position ready for use at a premise in which it did not belong before. *(installer)*

Note: This definition was added to identify a specific action that is currently regulated.

"leak" means a release of a halocarbon from a system. (*fuite*)

"major overhaul", in respect to a chiller, means
(a) the required internal inspection based on manufacturer's recommendations;
(b) the procedure or repair which requires the replacement or modification of any internal sealing devices or any internal mechanical parts; or
(c) the procedure or repair required to fix an evaporator or condenser heat exchanger tube failure. *(entretien majeur)*

Note: This definition was added to identify a specific action being added to the Regulations.

"military vehicle" means a vehicle that is used in combat, or in a combat support role, but does not include an administrative vehicle. (*véhicule militaire*)

"mobile refrigeration system" means a refrigeration system that is installed in, normally operates in, on or in conjuction with or is attached to a means of transportation. *(système de réfrigération mobile)*

Note: This definition was added to identify additional requirements for a type of equipment currently regulated.

~~"owner", in respect of a system that is located in Canada, means the department, board or agency of the Government of Canada, the person or the Indian Band that~~
~~(a) carries on any federal work or undertaking where they are the holder of a right in or have possession, control or custody of, or care for, operate, administer or may dispose of a system that is part of the federal work or undertaking;~~
~~(b) is the holder of a right in or has possession, control or custody of, or cares for, operates, administers or may dispose of a system that is the property of Her Majesty in right of Canada and or that is on or in federal land or aboriginal land. (propriétaire)~~

"owner", in respect of a system that is located in Canada, means the person that is the holder of a right in or has possession, control or custody of, or cares for, operates, administers or may dispose of a system. (*propriétaire*)

Note: The definition of "owner" was confusing because of the reference to the scope application of the Regulations. The application section of the Regulations outlined in section 2 has been modified to reflect subsection 207(1) of the new Canadian Environmental Protection Act, 1999. The application of the Regulations is clearly specified in section 2 so there is no benefit to make reference to it in the owner definition. Thus reference has been eliminated to

simplify the definition and to clarify the intent of the Regulations.

"perfluorocarbon" or "PFC" means a fully fluorinated fluorocarbon each molecule of which contains only carbon and fluorine atoms. (*perfluorocarbure ou PFC*)

"portable fire extinguisher" means a cylinder or cartridge containing a halocarbon that is used for extinguishing or suppressing fires, that weighs no more than 25 kg and that can be carried or wheeled to the site of a fire. (*extincteur portatif*)

"purge system", in respect of a purge unit on a low-pressure refrigeration system or air conditioning system, means the actual unit, including any associated exhaust recovery equipment. (*système à vidange*)

"reclaimed", in respect of a halocarbon, means recovered, re-processed and upgraded through processes such as filtering, drying, distilling and treating chemically in order to restore the halocarbon to industry-accepted re-use standards that have been verified by chemical analysis. (*régénéré*)

"recovered", in respect of a halocarbon, means

(*a*) collected after it has been used; or

(*b*) collected from machinery, equipment, a system or a container during servicing or before dismantling, disposal of or decommissioning the machinery, equipment, system or container. (*récupéré*)

"recycled", in respect of a halocarbon, means recovered and, if needed, cleaned by a process such as filtering or drying, and re-used to recharge systems. (*recyclé*)

"Refrigerant Code of Practice" means the *Environmental Code of Practice for Elimination of Fluorocarbon Emissions from Refrigeration and Air Conditioning Systems*, as amended from time to time, made under paragraph 8(1)(*d*) of the Act and published by the Department of the Environment. (*Code de pratique en réfrigération*)

"refrigeration system" means a refrigeration system, as well as any associated equipment, that contains or is designed to contain a halocarbon refrigerant. (*système de réfrigération*)

"release" has the same meaning as in subsection 3(1) of the Act except that it does not include, in respect of a fire extinguishing system, a release for the purpose of fighting a fire not caused for training purposes. (*rejet*)

"service", in respect of a system, includes any modification, topping-up, maintenance, repair, moving, dismantling, decommissioning, disposal, start-up and testing of the system, but does not include testing related to the manufacture and production of the system. (~~*service*~~ *entretien*)

Note: This definition is modified in the French version of the Regulations to eliminate the discrepancy with the use of the expressions "service" and "entretien".

"ship" has the same meaning as in subsection ~~66(1)~~ 122(1) of the Act. (*navire*)

Note: This definition is modified to reflect the new Canadian Environmental Protection Act, 1999.

"small air conditioning system" means an air conditioning system that is not contained in a vehicle and that has a refrigeration capacity of less than 19 kW as rated by the manufacturer. (*petit système de climatisation*)

"small refrigeration system" means a refrigeration system that is not contained in a vehicle and that has a refrigeration capacity of less than 19 kW as rated by the manufacturer. (*petit système de réfrigération*)

"solvent system" means an application or system that employs halocarbons as solvents, including cleaning applications and associated equipment containing or designed to contain a halocarbon solvent. It does not include halocarbons used in a laboratory as analytical standards or laboratory reagents or halocarbons in a process in which they are being converted to another substance or are generated but are ultimately converted to a different substance. (*système de solvants*)

"system", unless the context requires otherwise, means an air conditioning system, a fire extinguishing system, a refrigeration system or a solvent system. (*système*)

APPLICATION

~~2. (1) These Regulations apply to federal lands and federal works and undertakings under the authority of the ministers of the Crown who, under subsection 54(1) of the Act, have concurred in the making of the Regulations.~~

~~(2) The Ministers of the Crown who have concurred are set out in Schedule 2.~~

2. These Regulations apply to

(*a*) departments, boards and agencies of the Government of Canada;

(*b*) federal works and undertakings;

(*c*) aboriginal lands, federal lands, persons on that land an other persons in so far as their activities involve that land; and

(*d*) Crown corporations, as defined in subsection 83(1) of the *Financial Administration Act.*

Note: The application section has been modified to ensure that the existing Regulation promulgated under subsection 54(1) of the former Canadian Environmental Protection Act is consistent with subsection 207(1) of the new Act.

PROHIBITIONS

3. Subject to subsection 7(2) and section ~~16~~ 20, no person shall release or allow or cause the release of a halocarbon that is contained in

(*a*) a refrigeration system or any associated container or device;

(*b*) an air conditioning system or any associated container or device;

(*c*) a fire extinguishing system or any associated container or device, except to fight a fire that is not a fire caused for training purposes; or

(*d*) a container or equipment used in the re-use, recycling, reclamation or storage of a halocarbon.

4. (1) Subject to section ~~28~~ 34, ~~effective six months after the coming into force of these Regulations,~~ no person shall install a system that operates or is intended to operate with halocarbons listed in any of items 1 to ~~8~~ 9 of Schedule 1.

Note: This eliminates a reference to a date which has lapsed.

(2) Subject to section ~~28~~ 34, effective January 1, 2005, no person shall install a system that operates or is intended to operate with a halocarbon listed in item ~~10~~ 11 or ~~11~~ 12 of Schedule 1 as a solvent in a solvent system.

5. (1) ~~Effective six months after the coming into force of these Regulations,~~ No person shall use a halocarbon listed in any of items 1 to ~~8~~ 9 of Schedule 1 as a solvent in a solvent system.

Note: This eliminates a reference to a date which has lapsed.

(2) Subject to section ~~29~~ 34, effective January 1, 2005, no person shall use a halocarbon listed in item ~~10~~ 11 or ~~11~~ 12 of Schedule 1 as a solvent in a solvent system.

6. (1) No person shall ~~store, transport or purchase~~ be in possession or control of a halocarbon unless it is in an appropriate container.

Note: The modification to this subsection replaces the restrictive list of activities when halocarbons must be in an appropriate container with a more inclusive expression.

(2) Subsection (1) does not apply in respect of halocarbons used in a laboratory as analytical standards or laboratory reagents.

RECOVERY

7. (1) Subject to subsection (2), a person that installs, services, leak tests or charges a halocarbon to a refrigeration system, an air conditioning system or a fire extinguishing system, or that does any other work on any of those systems that may result in the release of a halocarbon, shall recover, into an appropriate container, any halocarbon that would otherwise be released during those procedures.

(2) A person that recovers halocarbons from a fire extinguishing system shall use recovery equipment with a transfer efficiency of at least 99% as defined in section 6.3 of the publication ULC/ORD-C1058.5-1993, entitled *Halon Recovery and Reconditioning Equipment*.

8. (1) Before dismantling, disposing of or decommissioning any system, a person shall recover halocarbons into an appropriate container.

(2) A person that disposes of or decommissions a system that contains a halocarbon shall ~~place~~ affix a notice on the system containing the information set out in item 1 of Schedule ~~3~~ 2.

Note: The expression "place" is replaced with "affix" to clarify the intent of the Regulations.

(3) No person shall remove a notice referred to in subsection (2) except to replace it with another such notice.

(4) In case of the dismantling, disposing of or decommissioning of any system, the owner shall keep a record of the information contained in the notice referred to in subsection (2).

INSTALLATION, SERVICING, LEAK TESTING AND CHARGING

Refrigeration Systems and Air Conditioning Systems

9. (1) Only a certified person may install, service, leak test or charge a halocarbon to a refrigeration system or an air conditioning system or do any other work on the system that may result in the release of a halocarbon.

(2) A person who does any of the work referred to in subsection (1) shall do it in accordance with the Refrigerant Code of Practice.

(3) Except when recommended in the Refrigerant Code of Practice, no person shall charge a refrigeration system or an air conditioning system with a halocarbon listed in any of items 1 to ~~8~~ 9 of Schedule 1 for the purpose of leak testing the system.

10. (1) A certified person who conducts a leak test on a refrigeration system or an air conditioning system shall ~~place~~ affix a notice on the system containing the information set out in item 2 of Schedule ~~3~~ 2.

Note: This section has been amended in English only. The expression "place" is replaced with "affix" to clarify the intent of the Regulations.

(2) No person shall remove a notice referred to in subsection (1) except to replace it with another such notice.

(3) The owner shall keep a record of the information contained in the notice referred to in subsection (1).

11. (1) Subject to subsection (2), the owner shall conduct a leak test, at least once every 12 months, of all of the components of a refrigeration system or an air conditioning system that come into contact with a halocarbon.

Note: This subsection has been amended in French only to eliminate a discrepancy between the English and the French versions.

(2) Subsection (1) does not apply to small refrigeration systems and small air conditioning systems, or to air conditioning systems that are designed for passengers in motor vehicles.

12. Subject to section 14, no person shall charge a refrigeration system or an air conditioning system unless
(*a*) the system has been leak tested before charging; and
(*b*) if a leak was found, the certified person notifies the owner and the owner repairs the leak.

13. Subject to section 14, the owner shall, in respect of a refrigeration system or an air conditioning system, as soon as possible in the circumstances within seven days after the day on which a leak from the system is detected,
(*a*) repair the leak;
(*b*) isolate the leaking portion of the system and recover the halocarbon from that portion; or
(*c*) recover the halocarbon from the system pending repair of the leak.

Note: The intent of the Regulations is to ensure leaks to air conditioning and refrigeration systems are repaired as soon as practically possible. The modification to this section reflects this intent and ensures leaks are repaired without delay.

14. (1) If it is necessary to continue operating the system to prevent an immediate danger to human life or health, sections 12 and 13 do not apply during the period in which the danger persists, up to a maximum of seven days after the day on which the danger was identified by the owner.

(2) In the situation referred to in subsection (1), the following conditions apply:
(*a*) the person who charged the refrigeration system or air conditioning system shall notify the owner immediately; and
(*b*) the owner shall, within ~~14~~ 7 days after receiving notice under paragraph (*a*), submit a written record to the Minister describing

(i) the circumstances leading up to the immediate danger to human life or health and the nature of the danger,
(ii) the amount of halocarbon charged to the system, and
(iii) the expected date of repair of the leak or recovery of the remaining halocarbon from the system.

Note: This modification shortens the time period, from 14 days to 7 days, that the written report must be submitted to the Minister. This provides a better opportunity, if necessary, for Environment Canada to respond to the incident and it was felt that 7 days is sufficient given the content of the report is clearly specified.

15. ~~After January 1, 2000,~~ No person shall charge an air conditioning system that is designed for passengers in motor vehicles with a halocarbon listed in any of items 1 to ~~8~~ 9 of Schedule 1.

Note: This eliminates a reference to a date which has lapsed.

16. After January 1, 2003, no person shall charge a mobile refrigeration system with a halocarbon listed in any of items 1 to 9 of Schedule 1.

17. (1) Subject to subsection (2), after January 1, 2004, no person shall charge a refrigeration system with a halocarbon listed in any of items 1 to 9 of Schedule 1.

(2) Subsection (1) does not apply to small refrigeration systems for personal use.

18. (1) Subject to subsection (2), after January 1, 2004, no person shall charge an air conditioning system with a halocarbon listed in any of items 1 to 9 of Schedule 1.

(2) Subsection (1) does not apply to chillers or small air conditioning systems for personal use.

19. (1) Effective January 1, 2005, after the next major overhaul of a chiller no person shall charge that chiller with a halocarbon listed in any of items 1 to 9 of Schedule 1.

(2) After January 1, 2015, no person shall charge a chiller with a halocarbon listed to any of items 1 to 9 of Schedule 1.

Note: Sections 16 through to 19 reflect the requirements of Canada's Strategy to Accelerate the Phase-Out of CFCs and Halons and to Dispose of the Surplus Stocks.

~~16~~ 20. ~~Effective one year after the coming into force of these Regulations,~~ No person shall install or operate or permit the operation of a purge system unless it does not emit more than 0.1 kg of halocarbons per kilogram of air purged to the environment.

Note: This eliminates a reference to a date which has lapsed.

Fire Extinguishing Systems

~~17~~ 21. No person shall install, service, leak test or charge a halocarbon to a fire extinguishing system or do any other work on the system that may result in the release of a halocarbon, except in accordance with the requirements of the publication ULC/ORD-C1058.18-1993, entitled *The Servicing of Halon Extinguishing Systems*.

~~18~~ 22. No person shall charge a fire extinguishing system with a halocarbon listed in any of items 1 to ~~8~~ 9 of Schedule 1 for the purpose of leak testing the system.

~~19~~ 23. (1) Subject to subsection (2), the owner shall leak test all fire extinguishing systems at least once every 12 months in accordance with the requirements of the publication referred to in section ~~17~~ 21.

Note: This subsection has been amended in French only to eliminate a discrepancy between the English and the French versions.

(2) Subsection (1) does not apply to portable fire extinguishers.

~~20~~ 24. Subject to section ~~23~~ 27, no person shall charge a fire extinguishing system unless

(*a*) the system has been leak tested before charging; and

(*b*) if a leak was found, the person notifies the owner and the owner repairs the leak.

~~21~~ 25. (1) Subject to subsection (2) and section ~~23~~ 27, no person shall service a fire extinguishing system without first

(*a*) notifying the owner of the intended service; and

(*b*) ~~placing~~ affixing a notice on the control panel of the system to indicate that it is out of operation during the period of service.

Note: This section has been amended in English only. The expression "place" is replaced with "affix" to clarify the intent of the Regulations.

(2) Paragraph (1)(*b*) does not apply to portable fire extinguishers.

~~22~~ 26. Subject to section ~~23~~ 27, the owner shall, in respect of a fire extinguishing system, as soon as possible in the circumstances within seven days after the day on which a leak from the system is detected,

(*a*) repair the leak;

(*b*) isolate the leaking portion of the system and recover the halocarbon from that portion; or

(*c*) recover the halocarbon from the system pending repair of the leak.

Note: The intent of the Regulations is to ensure leaks to fire extinguishing systems are repaired as soon as practically possible. The modification to this section reflects this intent and ensures leaks are repaired without delay.

~~23~~ 27. (1) If it is necessary to continue operating the system to prevent an immediate danger to human life or health, sections ~~20~~ 24 to 26 ~~22~~ do not apply during the period in which the danger persists, up to a maximum of seven days after the day on which the danger was identified by the owner.

(2) In the situation referred to in subsection (1), the following conditions apply:

(*a*) the person who charged the fire extinguishing system shall notify the owner immediately; and

(*b*) the owner shall, within ~~14~~ 7 days after receiving notice under paragraph (*a*), submit a written record to the Minister describing

(i) the circumstances leading up to the immediate danger to human life or health and the nature of the danger,

(ii) the amount of halocarbon charged to the system, and

(iii) the expected date of repair of the leak or recovery of the remaining halocarbon from the system.

Note: This modification shortens the time period, from 14 days to 7 days, that the written report must be submitted to the Minister. This provides a better opportunity, if necessary, for Environment Canada to respond to the incident and it was felt that 7 days is sufficient given the content of the report is clearly specified.

~~24~~ 28. Subject to section ~~29~~ 34, no person shall charge a portable fire extinguisher with a halocarbon listed in any of items 1 to ~~8~~ 9 of Schedule 1, except for use on aircraft, a military vehicle or a military ship.

29. (1) Subject to section 33 or 34, effective January 1, 2005 no person shall charge a fixed fire extinguishing system with a halocarbon listed in any of items 1 to 9 of Schedule 1, except for use on an aircraft, a military vehicle or a military ship.

Note: This reflects the requirements of Canada's Strategy to Accelerate the Phase-Out of CFCs and Halons and to Dispose of the Surplus Stocks. A refill exemption, by issuance of a permit by the Minister, could be granted on the condition that the system is replaced with an alternative within a year of the refill, as outlined in section 33.

SERVICE LOGS

~~25~~ 30. (1) ~~Effective six months after the coming into force of these Regulations,~~ The owner of a refrigeration system, an air conditioning system or a fire extinguishing system shall maintain a written record, or a record in electronic format acceptable to the Minister, in which the information set out in item 3 or 4, as the case may be, of Schedule ~~3~~ 2 is entered whenever the system is installed, serviced, leak tested or charged or if any other work is done on it that may result in the release of a halocarbon.

Note: This eliminates a reference to a date which has lapsed.

(2) ~~Effective six months after the coming into force of these Regulations,~~ The owner of a solvent system shall maintain a written record, or a record in electronic format acceptable to the Minister, in which the information set out in item 5 of Schedule ~~3~~ 2 is entered whenever the system is charged with more than 10 kg of a halocarbon.

Note: This eliminates a reference to a date which has lapsed.

(3) Subsection (1) does not apply to small refrigeration systems and small air conditioning systems for personal use.

RELEASE REPORTS

~~26~~ 31. In the event of a release of 100 kg or more of a halocarbon, the owner shall submit the following reports to the Minister:

(*a*) within 24 hours after the day on which the release is detected, a verbal or written report, or an electronic report in a format acceptable to the Minister, that indicates the type of halocarbon released and the type of system from which it was released; and

(*b*) within 14 days after the day on which the release is detected, a written report, or an electronic report in a format acceptable to the Minister, that indicates the information set out in item 6 of Schedule ~~3~~ 2.

~~27~~ 32. (1) Subject to subsection (2), in the event of a release of ~~if~~ more than 10 kg but less than 100 kg of a halocarbon ~~is released from a system~~, the owner shall submit to the Minister a report, in written format or in an electronic format that is acceptable to the Minister, that contains the information set out in item 6 of Schedule ~~3~~ 2.

Note: This clarifies the intent of the Regulations and makes reporting requirements consistent with section 31 to require the reporting of halocarbon releases from any source, not only from systems.

(2) The owner shall submit the release report required by subsection (1) for each calendar half-year, not later than 30 days after the day on which the half-year ends.

PERMITS

33. (1) An owner shall submit to the Minister an application for a permit on a form that the Minister provides, which contains the information set out in item 7 of Schedule 2, if the owner proposes to charge a fixed fire extinguishing system with a halocarbon listed in any of items 1 to 9 of Schedule 1.

(2) The Minister shall issue the permit on the condition that the system for which the permit is being requested is replaced with a system operating with a substance other than those listed in any of items 1 to 9 of Schedule 1 within a year from the date of issuance of the permit.

(3) Effective January 1, 2010, permits under this section will expire and no longer be available.

Note: This section has been added to provide permits to recharge fixed fire extinguishing systems to reflect the prohibition added in section 29. A system for which a permit has been granted under this section must be converted to alternative within a year of the date of issue of the permit to reflect Canada's Strategy to Accelerate the Phase-Out of CFCs and Halons and to Dispose of the Surplus Stocks.

Sections 28 and 29 have been replaced by the following section:

34. (1) An owner shall submit to the Minister an application for a permit on a form that the Minister provides, which contains the information set out in item ~~7~~ 8 or 9, as the case may be, of Schedule ~~3~~ 2, if the owner proposes to ~~charge~~

(*a*) install a fire extinguishing system that operates or is intended to operate with a halocarbon listed in any of items 1 to ~~8~~ 9 of Schedule 1 as a fire extinguishing agent;

(*b*) charge a fire extinguishing system ~~portable fire extinguisher~~ that is not to be used on an aircraft, military ship or military vehicle with a halocarbon listed in any of items 1 to ~~8~~ 9 of Schedule 1;

(*c*) install a solvent system that operates or is intended to operate with a halocarbon listed in item ~~10~~ 11 or ~~11~~ 12 of Schedule 1 as a solvent; or

(*d*) charge a solvent system with a halocarbon listed in item ~~10~~ 11 or ~~11~~ 12 of Schedule 1

Note: This section has been modified to provide permits for the recharge of fixed fire extinguishing systems for the circumstances where there is no technically or financially feasible alternative. This provision reflects the prohibition outlined in section 29.

(2) Subject to subsection (3) and section ~~31~~ 35, the Minister shall issue the permit, valid for one ~~five~~ year~~s~~ beginning on the date of issuance, if the owner, on the form

~~(a)~~ declares with explanation that no technically and financially feasible alternative exists that could have a relatively lower environmental and health impact compared to the system for which the permit is being requested~~; and~~

Note: The modification to this subsection includes amending the time period for which permit are valid and requiring the applicant for a permit to provide an explanation as to why alternatives were not selected. The existing Regulations allow for permits to be valid for five years. This would shorten the time period for which permits are valid to one year to allow both the applicant and Environment Canada to revisit the issue and assess whether the need for the permit still exists. The

proposed amendment to this section also requires that an applicant for a permit to provide an explanation as to why an alternative was not selected to clarify the intent of this section.

~~(b) describes the steps that will be taken to minimize emissions of the halocarbon from the system if the total capacity incorporates more than 10 kg of the halocarbon.~~

Note: It was determined that the information required for permit applications outlined in subsection (b) was not useful in assessing permit applications and therefore this subsection has been eliminated.

~~FALSE OR MISLEADING INFORMATION~~

~~31~~ **35.** (1) The Minister may refuse to issue or may cancel a permit issued under subsection ~~28~~ 33(2) or ~~29~~ 34(2) if

(a) any false or misleading information has been submitted in support of the application for the permit; or

(b) the explanation for not selecting an alternative cannot be verified or is not reasonable.

Note: This allows a permit to be refused or cancelled if the reasoning for not selecting an alternative is not sufficient.

(2) The Minister shall not cancel a permit unless the Minister

(*a*) has provided the person with written reasons for the cancellation; and

(*b*) has given the person an opportunity to be heard, either by written or oral representations in respect of the cancellation.

RECORDS, REPORTS AND NOTICES

~~32~~ **36.** (1) The owner shall keep all records, reports and notices required by these Regulations in Canada for a period of at least five years beginning on the date of their issuance.

(2) The owner shall make available to the Minister all records, reports and notices required by these Regulations within any reasonable time that is established in the request. The Minister shall use such documents only to assess the effectiveness of these Regulations.

(3) Subject to subsections (4) and (5), the owner shall keep a copy of all records, reports and notices required by these

Regulations with respect to a system at the premises or site at which the system is located.

(4) In the case of a system at an unoccupied premises or site, the owner shall keep a copy of all records, reports and notices required by these Regulations with respect to that system at a single location occupied by the owner.

(5) In the case of a system used on a means of transport, the owner shall keep a copy of all records, reports and notices required by these Regulations with respect to that system at a single location occupied by the owner.

COMING INTO FORCE

~~33~~ 37. These Regulations come into force on ~~July 1, 1999~~.

SCHEDULE 1

(Sections 1, 4, 5, 9, 15, 16, 17, 18, 19, 22, ~~24,~~ 28, ~~and~~ 29, 33 and 34)

LIST OF HALOCARBONS

Item	Halocarbon
1.	Tetrachloromethane (carbon tetrachloride)
2.	1,1,1-trichloroethane (methyl chloroform), not including 1,1,2-trichloroethane
3.	Chlorofluorocarbons (CFC)
4.	Bromochlorodifluoromethane (Halon 1211)
5.	Bromotrifluoromethane (Halon 1301)
6.	Dibromotetrafluoroethane (Halon 2402)
7.	Bromofluorocarbons other than those set out in items 4 to 6
8.	Bromochloromethane (Halon 1011)
~~8~~ 9.	Hydrobromofluorocarbons (HBFC)
~~9~~ 10.	Hydrochlorofluorocarbons (HCFC)
~~10~~ 11.	Hydrofluorocarbons (HFC)
~~11~~ 12.	Perfluorocarbons (PFC)

Note: This adds bromochloromethane (Halon 1011) to the list of controlled substances to reflect the Beijing amendments to the Montreal Protocol at the 11th meeting of the Parties.

SCHEDULE ~~3~~ 2

(Subsections 8(2) and (4) and 10(1) and sections ~~25~~ 30 to ~~29~~ 34)

INFORMATION TO BE CONTAINED IN FORMS

Item	Column 1 Provision of Regulations	Column 2 Type of Form	Column 3 Information to be Contained on Form
1.	8(2)	Disposal or Decommissioning Notice for a System	(*a*) name and address of owner (*b*) name of operator (*c*) location of the system (*d*) name of service technician (*e*) certificate number (if applicable) (*f*) service company name (if applicable) (*g*) type and quantity of halocarbon and date recovered (*h*) type and capacity of system (*i*) final destination of system
2.	10(1)	Leak Test Notice for Refrigeration System and Air Conditioning System	(*a*) name and address of owner (*b*) name of operator (*c*) location of the system (*d*) name of certified person (*e*) certificate number (*f*) service company name (if applicable) (*g*) type of halocarbon contained in system (*h*) dated list of leak tests, leaks detected and leak repairs

3.	~~25~~ 30(1)	Refrigeration System or Air Conditioning System Service Log	(*a*) name and address of owner (*b*) name of operator (*c*) location of the system (*d*) name of certified person (*e*) certificate number (*f*) service company name (if applicable) (*g*) description of equipment (*h*) dated list of leak tests, leaks detected and leak repairs (*i*) type and quantity of halocarbon and date recovered (*j*) type and capacity of system
4.	~~25~~ 30(1)	Fire Extinguishing System Service Log	(*a*) name and address of owner (*b*) name of operator (*c*) location of the system (*d*) name of service technician (*e*) certificate number (if applicable) (*f*) service company name (if applicable) (*g*) extinguisher location, serial number and weight (*h*) dated list of leak tests, leaks detected and leak repairs (*i*) type and quantity of halocarbon and date recovered (*j*) type and capacity of system

5.	~~25~~ 30(2)	Solvent System Service Log	(*a*) name and address of owner (*b*) name of operator (*c*) location of the system (*d*) name of service technician (*e*) certificate number (if applicable) (*f*) service company name (if applicable) (*g*) type and quantity of halocarbon and date added to the system (*h*) type and capacity of system
6.	~~26~~ 31(*b*) and ~~27~~ 32	Halocarbon Release Report	(*a*) name and address of owner (*b*) type and quantity of halocarbon released (*c*) date of release (*d*) type of system and equipment data (*e*) circumstances leading to the release, corrective action and actions to prevent subsequent releases
7.	33(1)	Request for a Permit to Charge a Fire Extinguishing System with a Halocarbon	(*a*) name and address of applicant (*b*) type and weight of halocarbon (*c*) system capacity (*d*) request for confidentiality under section~~s~~ 313(1) of the Act (*e*) agreement to condition referred to in subsection 33(2).

~~7~~ 8.	~~28~~ 34(1)	Request for a Permit to Install a Fire Extinguishing System or Solvent System	(*a*) name and address of applicant (*b*) type and weight of halocarbon (*c*) system capacity (*d*) request for confidentiality under section~~s 19 to 22~~ 313(1) of the Act (*e*) the declaration referred to in subsection ~~28~~ 34(2) and explanation as to why alternatives were not selected
~~8~~ 9.	~~29~~ 34(1)	Request for a Permit to Charge a ~~Portable~~ Fire Extinguishing System or Solvent System with a Halocarbon	(*a*) name and address of applicant (*b*) type and weight of halocarbon (*c*) request for confidentiality under section~~s 19 to 22~~ 313(1) of the Act (*d*) the declaration referred to in subsection ~~29~~ 34(2) and explanation as to why alternatives were not selected

Note: The modifications to Schedule 2 include adding item 7 to outline the information to be contained in the application for a permit under section 33 of the Regulations, updating references to section of the Regulations that have been renumbered and to reflect references to the new Canadian Environmental Protection Act, 1999.

~~8~~ 8.	~~29~~ 34(1)	Demande de permis pour charger un halocarbure dans ~~un extincteur d'incendie portatif~~ un système d'extinction, ou un système de solvant	*a)* nom et coordonnées du demandeur *b)* type et poids d'halocarbure *c)* capacité du système *d)* demande de confidentialité prévue à l'article 313(1) ~~19 à 22~~ de la Loi *e)* déclaration visée à l'article ~~29~~ 34(2) et raisons pour lesquelles d'autres solutions n'ont pas été choisies

Note: La modification à l'Annexe 2 comprend l'ajout de l'article 7 pour décrire les renseignements à l'inclure dans la demande d'un permis selon l'article 33 du Règlement. Une mise à jour de la numérotation des articles du Règlement a été réalisée afin de rencontrer la nouvelle Loi canadienne sur la protection de l'environnement (1999).

6.	~~26~~ 31b) et ~~27~~ 32	Rapport sur les rejets d'halocarbures	*a)* nom et coordonnées du propriétaire *b)* type et quantité d'halocarbure rejeté *c)* date de rejet *d)* circonstances ayant mené au rejet, mesures correctives et mesures préventives
7.	33(1)	Demande de permis pour charger un halocarbure dans un système d'extinction d'incendie fixe	*a)* nom et coordonnées du demandeur *b)* type et poids d'halocarbure *c)* capacité du système *d)* demande de confidentialité prévue à l'article 313(1) de la Loi e) accord à la condition visée à l'article 33(2).
~~7~~ 8.	~~28~~ 34(1)	Demande de permis pour installer un système d'extinction ou un système de solvants	*a)* nom et coordonnées du demandeur *b)* type et poids d'halocarbure *c)* capacité du système *d)* demande de confidentialité prévue à l'article 313(1) ~~19 à 22~~ de la Loi *e)* déclaration visée à l'article ~~28~~ 34(2) et raisons pour lesquelles d'autres solutions n'ont pas été choisies

4.	~~25~~ 30(1)	Registre d'entretien d'un système d'extinction d'incendie	*a)* nom et coordonnées du propriétaire *b)* nom de l'opérateur *c)* emplacement du système *d)* nom de technicien de services *e)* numéro de certificat (s'il y a lieu) *f)* nom de l'entreprise contractante (s'il y a lieu) *g)* emplacement, numéro de série et poids de l'extincteur *h)* liste datée des essais de détection, des fuites détectées et de leur réparation *i)* type et quantité d'halocarbure, et date où celui-ci est récupéré *j)* type de système et sa capacité
5.	~~25~~ 30(2)	Registre d'entretien d'un système de solvants	*a)* nom et coordonnées du propriétaire *b)* nom de l'opérateur *c)* emplacement du système *d)* nom de technicien de services *e)* numéro de certificat (s'il y a lieu) *f)* nom de l'entreprise contractante (s'il y a lieu) *g)* type et quantité d'halocarbure, et date où celui-ci est chargé dans le système *h)* type de système et sa capacité

2.	10(1)	Avis d'essais de détection des fuites pour les systèmes de réfrigération et de climatisation	*a)* nom et coordonnées du propriétaire *b)* nom de l'opérateur *c)* emplacement du système *d)* nom de la personne accréditée *e)* numéro de la personne accréditée *f)* nom de l'entreprise contractante (s'il y a lieu) *g)* type d'halocarbure contenu dans le système *h)* liste datée des essais de détection, des fuites détectées et de leur réparation
3.	~~25~~ 30(1)	Registre d'entretien d'un système de réfrigération ou de climatisation	*a)* nom et coordonnées du propriétaire *b)* nom de l'opérateur *c)* emplacement du système *d)* nom de la personne accréditée *e)* numéro de certificat *f)* nom de l'entreprise contractante (s'il y a lieu) *g)* description du matériel *h)* liste datée des essais de détection, des fuites détectées et de leur réparation *i)* type et quantité d'halocarbure, et date où celui-ci est récupéré *j)* type de système et sa capacité

ANNEXE ~~3~~ 2

(paragraphes 8(2) et (4), 10(1) et articles ~~25~~ 30 à ~~29~~ 34)

RENSEIGNEMENTS QUI DOIVENT FIGURER SUR LES FORMULAIRES

Article	Colonne 1 Disposition du règlement	Colonne 2 Nature du formulaire	Colonne 3 Renseignements à fournir
1.	8(2)	Avis d'aliénation ou de désaffectation d'un système	*a)* nom et coordonnées du propriétaire *b)* nom de l'opérateur *c)* emplacement du système *d)* nom du technicien de service *e)* numéro de certificat (s'il y a lieu) *f)* nom de l'entreprise contractante (s'il y a lieu) *g)* type and quantité d'halocarbure, et date où celui-ci est récupéré *h)* type de système et sa capacité *i)* destination finale du système

ANNEXE 1

(articles 1, 4, 5, 9, 15, 16, 17, 18, 19, 22, ~~24,~~ 28, ~~et~~ 29, 33 et 34)

LISTE DES HALOCARBURES

Article	Halocarbure
1.	Tétrachlorométhane (tétrachlorure de carbone)
2.	1,1,1-trichloroéthane (méthylchloroforme), sauf le 1,1,2-trichloroéthane
3.	Chlorofluorocarbures (CFC)
4.	Bromochlorodifluorométhane (Halon 1211)
5.	Bromotrifluorométhane (Halon 1301)
6.	Dibromotétrafluoroéthane (Halon 2402)
7.	Bromofluorocarbures autres que ceux prévus aux articles 4 à 6
8.	Bromochlorométhane (Halon 1011)
~~8~~ 9.	Hydrobromofluorocarbures (HBFC)
~~9~~ 10.	Hydrochlorofluorocarbures (HCFC)
~~10~~ 11.	Hydrofluorocarbures (HFC)
~~11~~ 12.	Perfluorocarbures (PFC)

Note: Ajout du bromochlorométhane (Halon 1011) à la liste des substances contrôlées tel que convenu dans les amendements de Beijing au Protocole de Montréal lors de la 11 ième rencontre des parties.

(2) Le propriétaire met à la disposition du ministre, dans le délai raisonnable qui lui est imparti, les enregistrements, dossiers, rapports et avis exigés par le présent règlement. Le ministre ne peut utiliser ces documents que pour évaluer l'efficacité du présent règlement.

(3) Sous réserve des paragraphes (4) et (5), ces documents sont conservés dans le local ou au lieu où se trouve le système visé.

(4) Pour tout système situé dans un local ou un lieu inoccupé, les documents afférents sont conservés dans un même et unique lieu occupé par le propriétaire.

(5) Pour tout système utilisé dans un moyen de transport, les documents afférents sont conservés dans un même et unique lieu occupé par le propriétaire.

ENTRÉE EN VIGUEUR

~~33~~ 37. Le présent règlement entre en vigueur le ~~1er juillet 1999~~.

requérant d'un permis à expliquer pourquoi il n'a pas choisi une solution de recharge. Le Règlement actuel valide les permis pour cinq ans. La modification ramène la période de validité des permis à un an, ce qui permettra tant au requérant qu'à Environnement Canada de revoir la question et d'évaluer la pertinence du permis. La modification proposée a cet article exige également que toute personne demandant un permis explique pourquoi une solution de recharge n'a pas été choisie.

~~b) indique quelles mesures seront prises pour minimiser les émissions d'halocarbure du système si sa capacité totale est de plus de 10 kg d'halocarbure.~~

Note: L'évaluations des demandes des permis n'exige plus les renseignements décrits au paragraphe (b). Ce paragraphe a donc été éliminé.

~~RENSEIGNEMENTS FAUX OU TROMPEURS~~

~~31~~ 35. (1) Le ministre peut refuser de délivrer un permis en vertu des paragraphes ~~28~~ 33(2) ou ~~29~~ 34(2) ou peut annuler un tel permis lorsque

a) des renseignements faux ou trompeurs ont été donnés à l'appui de la demande de permis; ou

b) les raisons pour lesquelles d'autres solutions n'ont pas été choisies ne peuvent être vérifiées ou ne sont pas valables.

Note : Ceci permet de refuser la délivrance d'un un permis ou l'annulation d'un permis lorsque les raisons pour lesquelles d'autres solutions n'ont pas été choisies ne sont pas suffisantes.

(2) Le permis ne peut être annulé que si le ministre :

a) a avisé par écrit la personne des motifs de l'annulation;

b) a donné à la personne la possibilité de formuler, oralement ou par écrit, des observations à l'égard de l'annulation.

ENREGISTREMENTS, DOSSIERS, RAPPORTS ET AVIS

~~32~~ 36. (1) Le propriétaire conserve au Canada, pendant au moins cinq ans à compter de la date de leur délivrance, les enregistrements, dossiers, rapports et avis exigés par le présent règlement.

(3) Après le 1er janvier 2010, les permis en vertu du présent article seront expirés et ne seront plus disponibles.

Note: Ces modifications comprennent la délivrance de permis pour recharger les systèmes fixes d'extinction d'incendie pour refléter l'interdiction ajoutée à l'article 29. Un système, pour lequel cet article délivre un permis, devra être converti à une solution de recharge en moins d'une année à compter de la date de délivrance du permis. Ceci reflète les exigences proposées par la Stratégie canadienne pour accélérer l'élimination progressive des utilisations de CFC et de halons et pour éliminer les stocks excédentaires.

L'articles 28 et 29 sont remplacés par ce qui suit :

34. (1) Le propriétaire présente au ministre, sur un formulaire fourni par celui-ci, une demande de permis comportant les renseignements prévus à l'article ~~7~~ 8 ou 9, selon le cas, de l'annexe 3 2, s'il prévoit ~~charger un halocarbure mentionné~~ :

a) installer un système d'extinction d'incendie fonctionnant - ou conçu pour fonctionner - avec un halocarbure mentionné à l'un des articles 1 à ~~8~~ 9 de l'annexe 1 comme agent extincteur;

b) charger un halocarbure mentionné à l'un des articles 1 à ~~8~~ 9 de l'annexe 1 dans un ~~extincteur portatif~~ système d'extinction d'incendie, sauf celui utilisé dans un navire ou un véhicule militaires ou un aéronef;

c) installer un système de solvants fonctionnant – ou conçu pour fonctionner – avec un halocarbure mentionné aux articles ~~10~~ 11 ou ~~11~~ 12 de l'annexe 1 comme solvant;

d) charger un halocarbure mentionné à l'article ~~10~~ 11 ou ~~11~~ 12 de l'annexe 1 dans un système de solvants.

Note: Cette modification permet de délivrer des permis pour recharger des systèmes fixes d'extinction des incendies dans les circonstances où il n'y a pas de solution de recharge possible techniquement ou financièrement. On y trouve l'interdiction décrite à l'article 29.

(2) Sous réserve du paragraphe (3) et l'article ~~31~~ 35, le ministre délivre le permis, pour une durée ~~de cinq ans~~ d'un an à compter de la date de délivrance, si le propriétaire, sur le formulaire,

~~a)~~ déclare et explique qu'il n'existe aucune autre solution sur les plans technique et financier qui pourrait avoir, sur l'environnement et la santé, un impact relativement plus faible que le système visé par le permis~~; et~~

Note: Cette modification inclut une modification à la période de validité de permis, une exigence de la part du

Note : Ceci élimine toute référence à une date passée.

(3) Le paragraphe (1) ne s'applique pas aux petits systèmes de réfrigération ou de climatisation pour usage personnel.

RAPPORT SUR LE REJET

~~26~~ 31. En cas de rejet de 100 kg ou plus d'halocarbures, le propriétaire présente au ministre les rapports suivants :

a) dans les vingt-quatre heures suivant la date de détection du rejet, un rapport verbal ou écrit, ou un rapport électronique sur un support jugé acceptable par le ministre, indiquant le type d'halocarbure rejeté ainsi que le type de système duquel il a été rejeté;

b) dans les quatorze jours suivant la date de détection du rejet, un rapport écrit ou un rapport électronique sur un support jugé acceptable par le ministre, qui comporte les renseignements prévus à l'article 6 de l'annexe ~~3~~ 2.

~~27~~ 32. (1) Sous réserve du paragraphe (2), dans le cas d'un rejet de plus de 10 kg et de moins de 100 kg d'halocarbure ~~d'un système~~, le propriétaire présente au ministre un rapport écrit ou un rapport électronique sur un support jugé acceptable par le ministre, qui comporte les renseignements prévus à l'article 6 de l'annexe ~~3~~ 2.

Note : Ceci clarifie le but du Règlement et harmonise les exigences de déclaration avec l'article 31 qui exige de déclarer les rejets d'halocarbure provenant d'une source quelconque, non seulement d'un système.

(2) Le rapport visé au paragraphe (1) doit être présenté pour chaque demi-année civile, au plus tard le trentième jour suivant l'expiration de la demi-année.

PERMIS

33. (1) Le propriétaire présente au ministre, sur un formulaire fourni par celui-ci, une demande de permis comportant les renseignements prévus à l'article 7 de l'annexe 2, s'il prévoit charger un halocarbure mentionné à l'un des articles 1 à 9 de l'annexe 1 dans un système d'extinction d'incendie fixe.

(2) Le ministre délivre le permis à la condition que le système pour lequel le permis est demandé soit chargé avec une substance autre que celle mentionnée à l'un des articles 1 à 9 de l'annexe 1 moins d'un an après la date de délivrance du permis.

français seulement pour éliminer la différence entre les versions française et anglaise.

~~24~~ 28. Sous réserve de l'article ~~29~~ 34, il est interdit de charger un halocarbure mentionné à l'un des articles 1 à ~~8~~ 9 de l'annexe 1 dans un extincteur portatif, sauf l'extincteur utilisé dans un navire ou un véhicule militaires ou un aéronef.

29. (1) Sous réserve de paragraphe 33 ou 34, après le 1er janvier 2005, il est interdit de charger un halocarbure mentionné à l'un des articles 1 à 9 de l'annexe 1 dans un système d'extinction d'incendie, sauf les systèmes utilisés dans un navire ou un véhicule militaires ou un aéronef.

(2) Après le 1er janvier 2010, il est interdit de charger un halocarbure mentionné à l'un des articles 1 à 9 de l'annexe 1 dans un système d'extinction d'incendie, sauf les systèmes utilisés dans un navire ou un véhicule militaires ou un aéronef.

Note : Ceci reflète les exigences de la Stratégie proposée par la Stratégie canadienne pour accélérer l'élimination progressive des utilisations de CFC et de halons et pour éliminer les stocks excédentaires. Une exemption de recharge, sous la forme d'un permis délivré par le ministre, pourrait être accordée à la condition que le système soit remplacé moins d'un an après la recharge. Les exigences pour l'obtention des permis sont exposées à l'article 33.

REGISTRE D'ENTRETIEN

~~25~~ 30. (1) ~~Six mois après l'entrée en vigueur du présent règlement,~~ Le propriétaire d'un système de réfrigération, de climatisation ou d'extinction d'incendie enregistre, sur un support papier ou électronique jugé acceptable par le ministre, les renseignements prévus aux articles 3 ou 4, selon le cas, de l'annexe ~~3~~ 2, tout travail – installation, entretien, charge, essai ~~test~~ de détection des fuites ou autre – pouvant entraîner le rejet d'un halocarbure des systèmes.

Note : Cette section est modifiée afin d'assurer la conformité de l'expression "essai de détection" dans le règlement et élimine toute référence à une date passée.

(2) ~~Six mois après l'entrée en vigueur du présent règlement,~~ Le propriétaire d'un système de solvants enregistre, sur un support papier ou électronique jugé acceptable par le ministre, les renseignements prévus à l'article 5 de l'annexe ~~3~~ 2 chaque fois que le système est chargé de plus de 10 kg d'halocarbure.

a) avisé le propriétaire de l'entretien prévu;
b) apposé un avis sur le panneau de commande du système pour indiquer qu'il est hors service pendant la période d'entretien.

Note: Cette article est modifiée en anglais seulement

(2) L'alinéa (1)*b*) ne s'applique pas aux extincteurs portatifs.

~~22~~ 26. Sous réserve de l'article ~~23~~ 27, le propriétaire doit, dans les meilleurs délais possible dans les sept jours suivant la date de détection d'une fuite provenant d'un système d'extinction d'incendie :
a) réparer la fuite;
b) isoler la partie du système qui fuit et récupérer l'halocarbure qui en provient;
c) récupérer l'halocarbure provenant du système tant que la fuite n'est pas réparée.

Note: Le Règlement vise à assurer que les fuites sur les systèmes d'extinction d'incendie seront réparées dans les meilleurs délais possibles. Cette modification assure que les fuites seront réparées rapidement.

~~23~~ 27. (1) S'il s'avère nécessaire de continuer de faire fonctionner un système afin de prévenir un danger immédiat pour la vie ou la santé humaines, les articles ~~20, 21 et 22~~ 24, 25 et 26 ne s'appliquent pas tant que le danger persiste, pour une période maximale de sept jours suivant la date où le propriétaire constate le danger.

(2) Dans la situation visée au paragraphe (1), les conditions suivantes s'appliquent :
a) la personne qui a chargé le système d'extinction d'incendie en avise le propriétaire sans délai;
b) dans les sept ~~quatorze~~ jours suivant la réception de l'avis, le propriétaire présente au ministre un compte rendu écrit indiquant :
(i) les circonstances à l'origine du danger immédiat pour la vie ou la santé humaines et la nature de celui-ci,
(ii) la quantité d'halocarbure chargée dans le système,
(iii) la date prévue pour la réparation de la fuite ou la récupération de l'halocarbure restant dans le système.

Note: Cette modification raccourcit la période (de 14 jours à 7 jours) pour soumettre un rapport écrit au Ministre. Environnement Canada y trouvera, au besoin, une meilleure occasion de répondre à un incident. La période de 7 jours était perçue comme trop courte puisque le contenu du rapport est clairement spécifié. La sous-alinéa (i) est modifié en

Note : Les articles 16 à 19 reflètent les exigences de la Stratégie canadienne pour accélérer l'élimination progressive des utilisations de CFC et de halons et pour éliminer les stocks excédentaires.

~~16~~ 20. ~~Un an après l'entrée en vigueur du présent règlement,~~ Il est interdit d'installer ou de faire fonctionner un système à vidange, ou d'en permettre le fonctionnement, à moins qu'il n'émette au plus 0,1 kg d'halocarbure par kilogramme d'air vidangé dans l'environnement.

Note : Ceci élimine toute référence à une date passée.

Système d'extinction d'incendie

~~17~~ 21. Toute personne qui installe ou entretient un système d'extinction d'incendie, effectue des essais de détection des fuites, charge un halocarbure ou exécute tout autre travail pouvant entraîner le rejet d'un halocarbure doit se conformer aux normes prévues dans la publication ULC/ORD-C1058.18-1993 intitulée *The Servicing of Halon Extinguishing Systems* .

~~18~~ 22. Il est interdit de charger un halocarbure mentionné à l'un des articles 1 à ~~8~~ 9 de l'annexe 1 dans un système d'extinction d'incendie pour effectuer des essais de détection des fuites.

~~19~~ 23. (1) Sous réserve du paragraphe (2), le propriétaire effectue, au moins une fois à chaque douze mois ~~une fois l'an~~, un essai de détection des fuites sur tout système d'extinction d'incendie conformément aux normes prévues dans la publication visée à l'article ~~17~~ 21.

Note: Cette article est modifiée en français seulement pour éliminer la différence entre les versions française et anglaise.

(2) Le paragraphe (1) ne s'applique pas aux extincteurs portatifs.

~~20~~ 24. Sous réserve de l'article ~~23~~ 27, il est interdit de charger un système d'extinction d'incendie à moins que :

a) le système n'ait été préalablement soumis à un essai de détection des fuites;

b) s'il existe une fuite, la personne n'en avise le propriétaire et que celui-ci ne la répare.

~~21~~ 25. (1) Sous réserve du paragraphe (2) et de l'article ~~23~~ 27, il est interdit d'entretenir un système d'extinction d'incendie sans avoir au préalable :

(i) les circonstances à l'origine du danger immédiat pour la vie ou la santé humaines et la nature de celui-ci,
(ii) la quantité d'halocarbure chargée dans le système,
(iii) la date prévue pour la réparation de la fuite ou la récupération de l'halocarbure restant dans le système.

Note: Cette modification raccourcit la période (de 14 jours à 7 jours) pour soumettre un rapport écrit au Ministre. Environnement Canada y trouvera, au besoin, une meilleure occasion de répondre à un incident. La période de 7 jours était perçue comme trop courte puisque le contenu du rapport est clairement spécifié. La sous-alinéa (i) est modifié en français seulement pour éliminer la différence entre les versions française et anglaise.

15. ~~Après le 1er janvier 2000,~~ Il est interdit de charger un halocarbure mentionné à l'un des articles 1 à ~~8~~ 9 de l'annexe 1 dans un système de climatisation conçu pour les passagers d'un véhicule automobile.

Note : Ceci élimine toute référence à une date passée.

16. Après le 1er janvier 2003, il est interdit de charger un halocarbure mentionné à l'un des articles 1 à 9 de l'annexe 1 dans un système de réfrigération mobile.

17. (1) Sous réserve de paragraphe (2), après le 1er janvier 2004, il est interdit de charger un halocarbure mentionné à l'un des articles 1 à 9 de l'annexe 1 dans un système de réfrigération.

(2) Le paragraphe (1) ne s'applique pas aux petits systèmes de réfrigération pour usage personnel.

18. (1) Sous réserve du paragraphe (2), après le 1er janvier 2004, il est interdit de charger un halocarbure mentionné à l'un des articles 1 à 9 de l'annexe 1 dans un système de climatisation.

(2) Le paragraphe (1) ne s'applique pas aux refroidisseurs et aux petits systèmes de climatisation pour usage personnel.

19. (1) À partir du 1er janvier 2005, à la suite d'un entretien majeur d'un refroidisseur, il sera interdit de charger ce refroidisseur avec un halocarbure mentionné à l'un des articles 1 à 9 de l'annexe 1.

(2) Après le 1er janvier 2015, il est interdit de charger un halocarbure mentionné à l'un des articles 1 à 9 de l'annexe 1 dans un refroidisseur.

11. (1) Sous réserve du paragraphe (2), le propriétaire effectue, au moins une fois à chaque douze mois ~~une fois l'an~~, un essai de détection des fuites de toute composante du système de réfrigération ou de climatisation qui entre en contact avec un halocarbure.

Note: Cette article est modifié en français seulement pour éliminer la différence entre les versions française et anglaise.

(2) Le paragraphe (1) ne s'applique pas aux petits systèmes de réfrigération ou de climatisation, ni aux systèmes de climatisation conçus pour les passagers d'un véhicule automobile.

12. Sous réserve de l'article 14, il est interdit de charger un système de réfrigération ou de climatisation à moins que :

a) le système n'ait été préalablement soumis à un essai de détection des fuites;

b) s'il existe une fuite, la personne accréditée n'en avise le propriétaire et que celui-ci ne la répare.

13. Sous réserve de l'article 14, le propriétaire doit, dans les meilleurs délais possible dans les sept jours suivant la date de détection d'une fuite provenant d'un système de réfrigération ou de climatisation :

a) réparer la fuite;

b) isoler la partie du système qui fuit et récupérer l'halocarbure qui en provient;

c) récupérer l'halocarbure provenant du système tant que la fuite n'est pas réparée.

Note: Le Règlement vise à assurer que les fuites sur les systèmes de climatisation et réfrigération seront réparées dans les meilleurs délais possibles. Cette modification assure que les fuites seront réparées rapidement.

14. (1) S'il s'avère nécessaire de continuer de faire fonctionner un système afin de prévenir un danger immédiat pour la vie ou la santé humaines, les articles 12 et 13 ne s'appliquent pas tant que le danger persiste, pour une période maximale de sept jours suivant la date où le propriétaire constate le danger.

(2) Dans la situation visée au paragraphe (1), les conditions suivantes s'appliquent :

a) la personne qui a chargé le système de réfrigération ou de climatisation en avise le propriétaire sans délai;

b) dans les sept ~~quatorze~~ jours suivant la réception de l'avis, le propriétaire présente au ministre un compte rendu écrit indiquant :

(2) Toute personne qui se propose d'aliéner ou de désaffecter un système, doit au préalable y ~~placer~~ apposer un avis comportant les renseignements prévus à l'article 1 de l'annexe ~~3~~ 2.

Note: Le terme "placer" est remplacé par "apposer" pour clarifier le but du Règlement.

(3) Il est interdit d'enlever l'avis mentionné au paragraphe (2) à moins de le remplacer par un nouvel avis.

(4) En cas de destruction, d'aliénation ou de désaffectation d'un système, le propriétaire enregistre les renseignements contenus dans l'avis mentionné au paragraphe (2).

INSTALLATION, ENTRETIEN, DÉTECTION DES FUITES ET CHARGE

Systèmes de réfrigération et de climatisation

9. (1) Seule une personne accréditée peut installer ou entretenir un système de réfrigération ou de climatisation, effectuer des essais de détection des fuites, charger un halocarbure ou exécuter tout autre travail pouvant entraîner le rejet d'un halocarbure.

(2) La personne qui exécute une opération mentionnée au paragraphe (1) doit se conformer au Code de pratique en réfrigération.

(3) Il est interdit de charger un halocarbure mentionné aux articles 1 à ~~8~~ 9 de l'annexe 1 dans un système de réfrigération ou de climatisation pour effectuer des essais de détection des fuites, à moins que le Code de pratique en réfrigération ne le recommande.

10. (1) Toute personne accréditée qui effectue des essais de détection des fuites sur un système de réfrigération ou de climatisation y appose un avis comportant les renseignements prévus à l'article 2 de l'annexe ~~3~~ 2.

Note: Cette article est modifiée en anglais seulement.

(2) Il est interdit d'enlever l'avis mentionné au paragraphe (1) à moins de le remplacer par un nouvel avis.

(3) Le propriétaire enregistre les renseignements contenus dans l'avis mentionné au paragraphe (1).

(2) Sous réserve de l'article ~~28~~ 34, il est interdit d'installer, à compter du 1er janvier 2005, un système fonctionnant ou conçu pour fonctionner avec un halocarbure mentionné aux articles ~~10~~ 11 ou ~~11~~ 12 de l'annexe 1 comme solvant dans un système de solvants.

5. (1) ~~Six mois après l'entrée en vigueur du présent règlement,~~ Il est interdit d'utiliser un halocarbure mentionné à l'un des articles 1 à ~~8~~ 9 de l'annexe 1 comme solvant dans un système de solvants.

Note : Ceci élimine toute référence à une date passée.

(2) Sous réserve de l'article ~~29~~ 34, il est interdit d'utiliser, à compter du 1er janvier 2005, un halocarbure mentionné aux articles ~~10~~ 11 ou ~~11~~ 12 de l'annexe 1 comme solvant dans un système de solvants.

6. (1) Il est interdit d'avoir en sa possession ou sous son contrôle ~~d'entreposer, de transporter ou d'acheter~~ un halocarbure à moins d'utiliser un contenant approprié.

Note: Cette modification à l'article remplace la liste d'activités où un halocarbure doit être dans un contenant appropriée par une expression plus inclusive.

(2) Le paragraphe (1) ne s'applique pas aux halocarbures utilisés comme étalons d'analyse ou réactifs de laboratoire.

RÉCUPÉRATION

7. (1) Sous réserve du paragraphe (2), doivent être récupérés dans un contenant approprié les halocarbures rejetés pendant l'installation, l'entretien, les essais de détection des fuites ou la charge d'un halocarbure dans un système de réfrigération, de climatisation ou d'extinction d'incendie, ou lors de l'exécution sur ces systèmes de travaux pouvant entraîner le rejet d'un halocarbure.

(2) Un matériel de récupération ayant une efficacité de transfert d'au moins 99 %, comme le définit l'article 6.3 de la publication ULC/ORD-C1058.5-1993 intitulée *Halon Recovery and Reconditioning Equipment*, doit être utilisé pour récupérer un halocarbure d'un système d'extinction d'incendie.

8. (1) Toute personne qui se propose de détruire, d'aliéner ou de désaffecter un système, doit au préalable en récupérer les halocarbures dans un contenant approprié.

APPLICATION

~~2. (1) Le présent règlement s'applique au territoire domanial et aux entreprises fédérales relevant des ministres qui, aux termes du paragraphe 54(1) de la Loi, ont donné leur assentiment à la prise du présent règlement.~~

~~(2) La liste des ministres ayant donné leur assentiment figure à l'annexe 2.~~

2. Le présent règlement s'applique aux
a) ministères, commissions et organismes fédéraux;
b) entreprises fédérales;
c) terres autochtones et territoire domanial, aux personnes qui s'y trouvent ou dont les activités s'y rapportent; et
d) sociétés d'État au sens du paragraphe 83(1) de la *Loi sur la gestion des finances publiques.*

Note : La section sur l'application a été modifiée afin d'assurer la conformité du Règlement actuel pris sous le régime [paragraphe 54(1)] de la Loi canadienne sur la protection de l'environnement avec la nouvelle Loi canadienne sur la protection de l'environnement (1999) [paragraphe 207(1)].

INTERDICTIONS

3. Sous réserve du paragraphe 7(2) et de l'article 16, il est interdit de rejeter un halocarbure – ou d'en permettre ou d'en causer le rejet – contenu, selon le cas :
a) dans un système de réfrigération ou tout contenant ou dispositif connexe;
b) dans un système de climatisation ou tout contenant ou dispositif connexe;
c) dans un système d'extinction d'incendie ou tout contenant ou dispositif connexe, sauf pour lutter contre un incendie qui n'est pas allumé à des fins de formation;
d) dans un contenant ou matériel utilisé dans la réutilisation, le recyclage, la régénération ou l'entreposage d'un halocarbure.

4. (1) Sous réserve de l'article ~~28~~ 34, il est interdit d'installer~~, six mois après l'entrée en vigueur du présent règlement,~~ un système fonctionnant ou conçu pour fonctionner avec un halocarbure mentionné à l'un des articles 1 à ~~8~~ 9 de l'annexe 1.

Note : Ceci élimine toute référence à une date passée.

« système » Sauf indication contraire du contexte, s'entend du système de climatisation, du système d'extinction d'incendie, du système de réfrigération ou du système de solvants. (*system*)

« système à vidange » Unité de vidange d'un système de réfrigération ou de climatisation à basse pression, y compris tout matériel de récupération connexe. (*purge system*)

« système de climatisation » Système de climatisation, y compris le matériel connexe, contenant ou conçu pour contenir un frigorigène aux halocarbures. (*air conditioning system*)

« système de réfrigération » Système de réfrigération, y compris le matériel connexe, contenant ou conçu pour contenir un frigorigène aux halocarbures. (*refrigeration system*)

« système de réfrigération mobile » Système de réfrigération qui est installé sur, qui est normalement, qui est utilisé avec ou qui est fixé à un moyen de transport. *(mobile refrigeration system)*

Note : Cette définition a été ajoutée pour désigner un type d'équipement particulier ajouté au Règlement.

« système de solvants » Application ou système utilisant des halocarbures comme solvants, y compris les applications de nettoyage et le matériel connexe, contenant ou conçu pour contenir des solvants aux halocarbures, à l'exception des halocarbures utilisés comme étalons d'analyse ou réactifs de laboratoire et des halocarbures utilisés dans un procédé par lequel ils sont convertis en une autre substance ou sont générés mais sont en fin de compte convertis en une substance différente. (*solvent system*)

« système d'extinction d'incendie » Matériel pour l'extinction d'incendie et la lutte contre l'incendie, y compris le matériel portatif ou fixe, contenant ou conçu pour contenir un agent extincteur aux halocarbures. (*fire extinguishing system*)

« véhicule militaire » Tout véhicule utilisé aux fins de combat. La présente définition ne vise pas les véhicules administratifs. (*military vehicle*)

l'Environnement (1999). Comme la section 2 spécifie clairement l'application du Règlement, il n'y a aucun avantage à y référer dans la définition de propriétaire. Aussi, la référence a été annulée pour simplifier la définition et pour clarifier l'esprit du Règlement.

« récupéré » Qualifie l'halocarbure qui est, selon le cas :
a) recueilli après son utilisation;
b) extrait de machines, d'équipements, de systèmes ou de contenants pendant leur entretien ou avant leur destruction, aliénation ou désaffectation. (*recovered*)

« recyclé » Qualifie l'halocarbure qui est récupéré et, au besoin, nettoyé au moyen d'opérations telles que le filtrage ou le séchage et réutilisé pour recharger des systèmes. (*recycled*)

« refroidisseur » Système de climatisation comportant un compresseur, un évaporateur, un condenseur refroidi avec une frigorigène secondaire et d'une puissance frigorifique de plus de 350 kW selon le fabriquant. *(chiller)*

Note : Cette définition a été ajoutée pour désigner un type d'équipement particulier ajouté au Règlement.

« régénéré » Qualifie l'halocarbure qui est récupéré, retraité et amélioré au moyen d'opérations telles que le filtrage, le séchage, la distillation et le traitement chimique afin qu'il puisse correspondre aux normes de réutilisation acceptées dans l'industrie, celles-ci ayant été vérifiées par analyse chimique. (*reclaimed*)

« rejet » S'entend au sens du paragraphe 3(1) de la Loi. La définition ne comprend pas, dans le cas d'un système d'extinction d'incendie, le rejet dans le but de combattre un incendie qui n'est pas allumé à des fins de formation. (*release*)

« ~~service~~ entretien » Dans le cas d'un système, vise notamment la modification, la charge ~~le remplissage~~, la maintenance, ~~l'entretien,~~ la réparation, le déménagement, la destruction, la désaffectation, l'aliénation, la mise en service et l'essai. Sont exclus de la définition les essais relatifs à la fabrication et à la production du système. (*service*)

Note: Cette définition est modifiée afin d'assurer la conformité de l'usage de l'expression "charge" dans le règlement et d'éliminer la différence entre l'application des termes "service" et "entretien" dans la version française du règlement.

« navire » S'entend au sens du paragraphe ~~66(1)~~ 122(1) de la Loi. (*ship*)

Note: Cette définition est modifiée afin de refléter la nouvelle Loi canadienne sur la protection de l'environnement (1999).

« perfluorocarbure » ou « PFC » Fluorocarbure entièrement fluoré dont chaque molécule contient seulement des atomes de carbone et de fluor. (*perfluorocarbon or PFC*)

« personne accréditée » Dans le cas d'un système de réfrigération ou de climatisation, technicien de services titulaire du certificat. (*certified person*)

« petit système de climatisation » Système de climatisation qui n'est pas contenu dans un véhicule et qui a une puissance frigorifique de moins de 19 kW selon le fabriquant. (*small air conditioning system*)

« petit système de réfrigération » Système de réfrigération qui n'est pas contenu dans un véhicule et qui a une puissance frigorifique de moins de 19 kW selon le fabriquant. (*small refrigeration system*)

~~« propriétaire » Dans le cas d'un système situé au Canada, le ministère ou l'organisme fédéral, la personne ou la bande indienne qui, selon le cas :~~

~~a) exploite une entreprise fédérale dans le cadre de laquelle il détient un droit dans le système faisant partie de l'entreprise, a la possession, la responsabilité ou la garde du système, est chargé de son entretien, de son exploitation ou de sa gestion, ou a le pouvoir de l'aliéner;~~

~~b) détient un droit dans un système appartenant à Sa Majesté du chef du Canada qui est situé sur le territoire domanial, ou sur les terres autochtones, a la possession, la responsabilité ou la garde du système, est chargé de son entretien, son exploitation ou sa gestion, ou a le pouvoir de l'aliéner. (owner)~~

« propriétaire » Dans le cas d'un système situé au Canada, la personne qui détient un droit, a la possession, la responsabilité ou la garde du système, est chargé de son entretien, son exploitation ou sa gestion, ou a le pouvoir de l'aliéner. (*owner*)

Note: La définition de « propriétaire » portait à confusion à cause de la référence à l'application de la partie du Règlement. La section application du Règlement décrite dans la section 2 a subi des modifications pour refléter l'alinéa 207(1) de la nouvelle Loi canadienne sur la protection de

« entretien majeur » En rapport avec un refroidisseur, un entretien majeur est constitué

a) de l'inspection interne requise d'après les recommandations du fabriquant;

b) de la procédure ou de la réparation nécessitant le remplacement ou la modification d'un dispositif d'étanchéité interne quelconque ou d'une pièce mécanique interne quelconque; ou

c) de la procédure ou de la réparation nécessaire pour corriger une défaillance dans un serpentin d'évaporateur ou de condenseur d'échangeur de chaleur. *(major overhaul)*

Note : Cette définition a été ajoutée pour désigner une opération particulière ajoutée au Règlement.

« extincteur portatif » Bonbonne ou cartouche, contenant un halocarbure, qui est utilisée pour éteindre les incendies, qui ne pèse pas plus de 25 kg et qui peut être portée ou roulée sur le lieu de l'incendie. (*portable fire extinguisher*)

« fuite » Rejet d'un halocarbure d'un système. (*leak*)

« halocarbure » Substance visée à l'annexe 1, utilisée seule ou dans un mélange, y compris ses isomères. (*halocarbon*)

« hydrobromofluorocarbure » ou « HBFC » Hydrobromofluorocarbure dont chaque molécule contient un, deux ou trois atomes de carbone et au moins un atome d'hydrogène, un atome de brome et un atome de fluor. (*hydrobromofluorocarbon or HBFC*)

« hydrochlorofluorocarbure » ou « HCFC » Hydrochlorofluorocarbure dont chaque molécule contient un, deux ou trois atomes de carbone et au moins un atome d'hydrogène, un atome de chlore et un atome de fluor. (*hydrochlorofluorocarbon or HCFC*)

« hydrofluorocarbure » ou « HFC » Hydrofluorocarbure dont chaque molécule ne contient que des atomes de carbone, d'hydrogène et de fluor. (*hydrofluorocarbon or HFC*)

« installer » En rapport avec un système, placer en position prêt à utiliser dans un emplacement où le système n'y était pas. (*install*)

Note: Cette définition vise à identifier une action spécifique actuellement réglementée .

« Loi » La *Loi canadienne sur la protection de l'environnement (1999)*. (*Act*)

Ébauche des amendements au Règlement fédéral sur les halocarbures

Ce document présente une ébauche des amendements au *Règlement fédéral sur les halocarbures*, qui a été publié en juillet 1999. La justification des modifications est décrite brièvement.

DÉFINITIONS

1. Les définitions qui suivent s'appliquent au présent règlement.

« bromofluorocarbure » Bromofluorocarbure entièrement halogéné dont chaque molécule contient un, deux ou trois atomes de carbone et au moins un atome de brome et un atome de fluor. (*bromofluorocarbon*)

« certificat » Certificat établissant que le titulaire a terminé avec succès un cours de sensibilisation environnementale portant sur le recyclage, la récupération et la manutention de frigorigènes aux halocarbures comme le prévoit le Code de pratique en réfrigération et accepté dans au moins trois provinces et dans la province où le travail est effectué. (*certificate*)

Note : Cette disposition exige que le certificat soit valide dans la province où le travail est effectué en plus d'être reconnu dans au moins trois provinces afin d'harmoniser le Règlement avec les mesures de contrôle provinciaux et territoriaux.

« charger » Ajouter un halocarbure à un système. (*charging*)

« chlorofluorocarbure » ou « CFC » Chlorofluorocarbure entièrement halogéné dont chaque molécule contient un, deux ou trois atomes de carbone et au moins un atome de chlore et un atome de fluor. (*chlorofluorocarbon or CFC*)

« Code de pratique en réfrigération » Le *Code de pratiques environnementales pour l'élimination des rejets dans l'atmosphère de fluorocarbures provenant des systèmes de réfrigération et de conditionnement d'air*, établi en vertu de l'alinéa 8(1)*d*) de la Loi et publié par le ministère de l'Environnement, avec ses modifications successives. (*Refrigerant Code of Practice*)

« contenant approprié » Contenant conçu et fabriqué pour être réutilisé et pour contenir un type spécifique d'halocarbure. (*appropriate container*)