

**Table 1
NATIONAL ACTION PLAN TASKS - 2001**

NO.	TITLE	SCHEDULE	RESPONSIBILITY
1998 NAP			
98-1	Implement recovery/recycling and emission control measures for HFCs	As soon as possible	Saskatchewan
98-2	Mandate use of refillable containers for all halocarbon refrigerants	As soon as possible	Saskatchewan
98-3	Prohibit the recharging of mobile air conditioning systems with CFCs	As soon as possible	Saskatchewan
Updated NAP			
01-1	(a) Encourage industry to develop EPR programs and participate in their development as appropriate (b) Develop and implement control measures needed to support the EPR programs and to ensure that a level playing field exists in all jurisdictions.	On-going As soon as possible	Environment Canada, Provinces/Territories Environment Canada, Provinces/Territories
01-2	Develop awareness programs to inform stakeholders of the Phase-out Strategy objectives and time lines	2001	Environment Canada, Provinces/Territories
01-3	Consult with other government departments and with stakeholders on economic incentives that would be appropriate to achieve the objectives of the Strategy, and how to implement these incentives	2002	Environment Canada, Provinces/Territories
01-4	Encourage manufacturers and distributors of alternatives to provide incentives or take other actions to accelerate the transition to alternatives	2002	Environment Canada, Provinces/Territories
01-5	Monitor the rates of equipment retrofits and replacements	On-going	Environment Canada, Provinces/Territories
01-6	Ensure that control measures developed to implement the Phase-out Strategy form a clear and comprehensive backdrop that is consistent among jurisdictions.	On-going	Environment Canada, Provinces/Territories
01-7	Implement the sector specific control measures and other activities identified in the Phase-out Strategy	As prescribed in Section 3.3 tasks	Environment Canada, Provinces/Territories



Discussion Paper - The Need for Changes to the Ozone-Depleting Substances Regulations

Background

In 1993, in response to Saskatchewan's commitment to the Geneva Convention and the Montreal Protocol, the province introduced the Ozone-Depleting Substances (ODS) Control Act and Regulations. This legislation was aimed at achieving Saskatchewan's commitment to control emissions of ozone-depleting substances. This was to be achieved primarily by controlling and educating industry on best management options for minimizing fugitive emissions from equipment while maintaining and repairing systems. The sale, management and use of ODS would be regulated by the province as well.

In order to avoid regulatory overlap and ensure continued protection of the stratospheric ozone layer, the provinces, territories and the federal government have formed the Federal-Provincial Working Group (FPWG) on Controls Harmonization for ODS. As a direct result of the formation of this group, Canada developed a National Action Plan (NAP), which outlines the specific activities that will be undertaken in order to protect the stratospheric ozone layer (See Table 1).

Since 1993 there have been amendments to the Montreal Protocol. As a result, there are new tasks to be undertaken and the NAP has been revised to reflect these new initiatives. Thus, there are new commitments the province must undertake. Specifically these new commitments are designed to remove the most damaging ODS and encourage the use of more ozone friendly alternatives. This should be viewed as an intermediate step, as industry is striving to develop alternatives that will replace the present substitutes. Many of the present alternatives contribute to climate change, because they have global warming potential. It is the ultimate objective to use substances that address the issues of human and environmental safety while performing the valuable operations of refrigeration, air conditioning and fire suppression.

Issues

There are new commitments that have arisen due to amendments to the Montreal Protocol. As Saskatchewan has agreed to harmonize its programs with the other provinces and territories, the province must determine the best mechanism for this harmonization.

There are several new tasks that the province must undertake. They include:

1. Expand the scope of the regulations to:
 - (a) Prohibit release, mandate recovery, limit dispersive uses of all Chlorofluorocarbons (CFCs), Hydrochlorofluorocarbons (HCFCs) and Hydrofluorocarbons (HFC's);
 - (b) Mandate leak testing and repair prior to top up of systems;
 - (c) Mandate use of refillable containers;
 - (d) Prohibit recharging mobile air conditioning systems with CFC's as recommended in the Code of Practice; and
 - (e) Implement the halon code of practice.
2. Promote prevention of emissions by phasing out it's use and promote use of alternatives to methyl bromide.
3. Develop and implement control measures needed to support an industry-developed extended producer responsibility program.

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Most of the tasks identified in this paper have already been initiated by industry to some extent and in an effort to level the playing field regulatory changes need to be made.

The program, initiated in 1993, has been successful in educating industry and the public about the environmental impacts of ozone-depleting substances. The next step is to continue the education process and expand the scope of the program to address impacts of the first generation of alternatives to the ODS.

As the Montreal Protocol is changed to address new threats to the environment there will be the need to update this program. The continual involvement and input from industry is vital to address the issues as they arise. The continued education of both the public and industry is crucial for the success of the program.

4. Implement sector specific phase-out strategy objectives and time-lines:
 - (a) Prohibit refilling with CFCs in the mobile refrigeration sector;
 - (b) Prohibit conversion of household appliances to use CFCs (i.e., R-12) if there is evidence that such conversion is occurring or likely to occur;
 - (c) Implement a staged refill ban for commercial refrigeration and air conditioning equipment, effective by year:
 - *Small commercial units (<5HP) by 2004*
 - *Medium units (5-30HP) by 2005*
 - *Large industrial units (>30HP) by 2006;*
 - (d) Require conversion or replacement of CFC-containing chillers at next overhaul, effective 2005;
 - (e) Limit releases of CFCs from low-pressure chiller purges to less than 0.1 kg/kg of air; and
 - (f) Prohibit refilling of portable Halon-containing fire extinguishers, except for critical uses.
5. Tighten reporting requirements for releases of ODS.
6. Implement designated fittings to prevent cross-contamination of systems.

Discussion

As Saskatchewan has been an active member of the FPWG on Controls Harmonization we have committed to implement these tasks.

Several of these tasks will require legislative changes. While the changes are necessary to harmonize with the other provinces and territories, these changes will have little effect on the air conditioning and refrigeration industry in Saskatchewan. This is due to the fact that Saskatchewan has imported all of these substances and there are no known stockpiles of the proposed prohibited substances. An inventory investigation conducted in 1998 confirms this.

One may argue that if there are no stockpiles of these prohibited substances that legislative changes are unnecessary, however it should be noted that these substances are still in use and stockpiles will be created as they are taken out of service. The prohibition will ensure that the substances are not reused but are disposed of properly.

Once these stockpiles are created, there will be a need to dispose of these substances. The FPWG on Controls Harmonization has been working with industry representatives to establish an Extended Producer Responsibility (EPR) program to handle the expected stockpile. While this measure is being instituted by industry on a voluntary basis, the legislative changes will ensure that the program is a success. Only with complete participation will the stockpiles be created and disposed of properly.

Industry has voluntarily led many of the initiatives that have been mentioned. In telephone conversations with department staff, industry representatives have suggested more changes in order to clarify industry requirements and prevent potentially hazardous conditions for technicians. These include requiring designated fittings for specific gases and the prevention of mixing or blending different gases.

Previous consultation has revealed the following recommendations for changes to the regulations:

- **Implement recovery/recycling and emission control measures for HFCs.** HFCs were not previously covered in the regulations, as they do not contribute to ozone depletion. They do contribute to global warming however, and for that reason they are now being controlled. These changes are reflected as well in the new name of the regulation. The name focuses on the chemical structure as opposed to a specific environmental impact.

- **Mandate leak testing and repair prior to recharge, the regulations need to be tightened.** New wording will replace the older ambiguous clause.

- **Promote prevention of emissions and use of alternatives to methyl bromide.** Methyl bromide was mainly used as a fumigant and is no longer available. The regulations will phase out its use.

- **Mandate use of refillable containers for all halocarbon containers.** Industry has already done this and we will be closing a loophole to prevent fugitive emissions from single use containers.

- **Prohibit the recharging of mobile air conditioning/ refrigeration systems with CFCs.** In order to have effective enforcement of this existing clause, there is a need to tighten the wording in the regulations to level the playing field for all mobile repair and recharging facilities. The question to be addressed is how do we define 'mobile'? Should it include all systems on any means of transport (airplanes, trucks, trains, ships, agriculture implements)? In order to prevent the release of material to the atmosphere, all systems should be treated the same.

- **Implement halon code of practice.** This has been voluntarily implemented by most of industry. In order to ensure economic fairness and provide equal protection for the environment, the code needs to be identified and enforceable under the regulation.

- **Develop and implement control measures to support EPR programs.** A voluntary program has been developed by the refrigeration industry. In order to ensure complete participation in the system, a regulatory requirement must be established.

- **Implement Phase-out Strategy and increase awareness of strategy.** This is necessary to bring the province in line with work being done at the federal level. There is a need for co-operation between the different regulatory levels, as one jurisdiction does not have complete authority to complete the objective alone. The objective of this requirement is to ensure that effective alternatives are developed and in place at an agreed upon rate and certain materials are phased out across the country. Saskatchewan is really a following jurisdiction in this regard, as production of the original materials and their alternatives does not occur here.

- **Reporting requirements for releases of halocarbon gases.** While the regulations prohibit the release of any amount of these materials, there is no mechanism outside the requirements of the Spill Control Regulations to require the reporting of releases of halocarbon gases.

- **Implement a requirement for designated fittings to air conditioning and refrigeration systems.** In order to prevent cross contamination of systems containing halocarbons, a requirement for designated fittings will help industry identify the carrier gases used in the systems.

Comments regarding these proposed regulatory amendments should be directed to:

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