

BACKGROUND DOCUMENT

Manitoba's Ozone Depleting Substances (ODS) Management Program Proposed Amendments to Manitoba Regulation 103/94 for the Protection of the Earth's Stratospheric Ozone Layer

Introduction

Manitoba is proposing to enhance its Ozone Depleting Substances (ODS) Management Program by implementing new control measures as outlined in Canada's *National Action Plan (NAP) for the Environmental Control of Ozone Depleting Substances and their Halocarbon Alternatives*. The NAP was endorsed by the Canadian Council of Ministers of the Environment (CCME) to fulfill Canada's ODS obligations stemming from an international multilateral environmental agreement, the Montreal Protocol. Manitoba's *Ozone Depleting Substances Regulation* (MR 103/94) provides a framework for phasing-out the use of ODS - chlorofluorocarbons (CFCs), hydrochlorofluorocarbons (HCFCs), halons and other halocarbons. New measures proposed will implement industry wide CFC and halon refill bans and regulate ODS replacement products, such as hydrofluorocarbons (HFCs). Comments on proposed amendments will be accepted up to June 30, 2005.

Stratospheric Ozone Depletion

The depletion of the earth's stratospheric ozone layer by ozone depleting substances means more harmful ultraviolet rays are penetrating the atmosphere. Ultraviolet radiation rays are known to have detrimental effects on humans resulting in sunburn, skin cancer and cataracts, as well as having impacts on plants and animals. Chemical substances that destroy ozone molecules contain either chlorine or bromine and are collectively referred to as ozone-depleting substances (ODS), and include: chlorofluorocarbons (CFCs), hydrochlorofluorocarbons (HCFCs), halons, and other halocarbons. These substances are used in refrigeration, air conditioning, and fire extinguishing equipment, as well as in solvents and sterilants.

Scientific research has discovered that a single chlorine atom can destroy 100,000 ozone molecules. Halons are potentially 10 times more destructive. Canada and the rest of the international community determined that the severity of this issue required collective action to protect the ozone layer from being completely destroyed. In 1987, Canada was one of the nations that signed the Montreal Protocol, which now has over 180 signatories. The intent of this international agreement is to gradually phase-out and eliminate the use of ODS worldwide.

Canada's ODS Management Framework: 2001 National Action Plan

To fulfil obligations of the Montreal Protocol, the federal, provincial and territorial governments have been co-ordinating efforts to ensure a clear and consistent regulatory framework is developed and implemented across Canada to protect the stratospheric ozone layer. To harmonize Canada's approach to preventing the release into the atmosphere and eliminating the use of Ozone Depleting Substances (ODS), the Federal-Provincial Working Group (FPWG) on Ozone Depleting Substances and Halocarbon Alternatives was established in 1989. The FPWG is responsible for developing Canada's National Action Plan (NAP) which outlines how ODS will be controlled, reduced and eliminated in Canada.

In 1992, the NAP was officially implemented after it was endorsed by the Canadian Council of Ministers of the Environment (CCME). In 1998 and 2001, the CCME approved revisions to the NAP. The 2001 update to the NAP included the Strategy to *Accelerate the Phase-Out of CFCs and Halon Uses and to Dispose of Surplus Stocks*.

The proposed changes to Manitoba's ODS Management Program, arise from the 2001 amendments made to the NAP concerning Canada's commitment to phase-out the use of CFC's and halons. These amendments have the specific purpose of assisting us in our efforts to meet our objectives in protecting the ozone layer.

Manitoba's ODS Management Program - Proposed Regulatory Amendments

To comply with the environmental objectives of the National Action Plan (NAP), Manitoba's Ozone Depleting Substances (ODS) Management Program was established in 1992 with the enactment of the *Ozone Depleting Substances Act and Regulation*. Two years later, Manitoba enacted a revised ODS Regulation (M.R. 103/94) with enhanced ODS controls. In 1999, the ODS Act was amended to accommodate the requirements of the 1998 NAP by including other halocarbons, such as hydrofluorocarbons (HFCs), which are used as replacement products for ozone depleting substances.

In 1994, the Manitoba Ozone Protection Industry Association (MOPIA) was established. This industry stakeholder association works in partnership with the Province of Manitoba to protect the stratospheric ozone layer by providing atmospheric protection information and technical service resources. MOPIA, through an Annual Appointment Agreement with Manitoba Conservation provides environmental awareness training and manages the certification and permit renewal process for over 5,000 trained service technicians and secondary distributor permits. Over the last decade, MOPIA has provided technical information and increased public awareness on ODS issues.

Manitoba's Regulatory Framework

Manitoba's regulatory framework is designed to minimize and avoid the ultimate release of ODS and replacement products into the environment. CFC and Halon refill bans are proposed for air-conditioning equipment in vehicles that are older than 1995 and for all other equipment manufactured prior to 1999. With the world-wide phase-out of ODS, equipment manufactured after these dates are using HCFCs or other halocarbon alternatives. Although halocarbon alternatives, such as HFCs and perfluorocarbons (PFCs), do not deplete the ozone layer, they are greenhouse gases and have a high potential of contributing to global warming. To ensure that one environmental concern is not exchanged for another, a comprehensive management approach has been developed incorporating these substances into the new regulatory framework. To reflect the inclusion of new control measures for ODS replacement products the name of the regulation is being changed to the *Ozone Depleting Substances and Other Halocarbon Regulation*.

Proposed Regulatory Amendments

Proposed amendments to the Manitoba ODS Regulation establish specific refill-bans for industry sectors to encourage the orderly transition of ODS to alternative substances and technologies while ensuring the safe disposal of surplus stocks. These amendments are consistent with the 1998 and 2001 NAP recommendations and will enhance Manitoba's ODS Management Program and climate change initiatives.

To ensure ODS and replacement products are safely collected and properly disposed in Manitoba, a seller take-back requirement will be established. Manitoba Conservation will work with the refrigeration, air conditioning and fire protection industries to implement a comprehensive halocarbon stewardship program. Appropriate regulations will be developed as needed.

In addition to an industry wide refill ban for equipment containing CFCs and halons, other amendments to Manitoba's ODS Regulation include new reporting requirements for owners/operators of ODS containing equipment, as well as, new permitting measures and fees for the continued operation of CFC chillers and fixed fire extinguishing equipment.

These amendments are proposed to ensure an orderly phase-out transition within these sectors, to enhance the accountability of business owners/operators, and to provide a mechanism to evaluate Manitoba's ODS Management Program in phasing out CFCs, HCFCs, halons and other designated halocarbons over the next decade. It is further proposed that MOPIA will continue its role as a service provider in issuing permits and collecting fees.

Proposed Measures by Sector

Mobile Refrigeration and Air Conditioning Equipment

- Prohibit the refilling of mobile (vehicle) air conditioning equipment with CFCs and HCFCs.
- Prohibit the refilling of mobile refrigeration equipment with CFCs.
- Refill ban for mobile refrigeration and air conditioning equipment, effective 30 days after the regulation comes into force.

Commercial Refrigeration and Air Conditioning Equipment

- CFC refill ban for refrigeration and air conditioning equipment, excluding white goods, starting January 1, 2006.
- Prohibit the installation of air conditioning and refrigeration equipment that requires CFCs.
- Prohibit the modification of air conditioning and refrigeration equipment or a white good to use CFCs.

Fixed Fire Extinguishing Equipment

- Halon use prohibited in fixed fire extinguishing equipment unless a valid Class 1 Permit has been granted. A valid permit is required 90 days after the regulation comes into force.
- Between January 1, 2006 to December 31, 2009, only one halon refill will be permitted with a valid Class 1 Halon Refill Permit. Halon use prohibited January 1, 2010.
- Following expiration of Class 1 Halon Permits, special circumstances must be proven for continued use and a new valid Class 1 Permit has been granted.
- Prohibit the installation or modification of fire extinguishing equipment to use halons.
- New reporting requirements for owners/operators when halon containing equipment has been decommissioned, replaced or converted.

Chillers

- Use of CFCs prohibited in chillers unless a valid Class 1 Permit has been granted. A valid permit is required 90 days after the regulation comes into force.
- Starting January 1, 2006, require conversion or replacement of CFC-containing chillers at the next major overhaul. Prohibit CFC use in chillers January 1, 2015.
- Between January 1, 2006 and December 31, 2014, CFC refill may be permitted on the condition that the chiller's failure is an immediate threat to human life or health.
- Prohibit the installation or modification of any chiller to use CFCs.
- New reporting requirements for owners/operators when CFC and HCFC chillers are decommissioned, replaced or converted.
- Releases from purge systems limited to 0.1 kg/kg air, effective 90 days after the regulation comes into force.

Service and Repair

- No servicing of CFC chillers or fixed fire extinguishing equipment unless a Class 1 Chiller Permit has been issued.
- Recovery of ODS from equipment in accordance with industry standards.
- New annual certification renewal date for trained service technicians: June 1.
- Containers for ODS or replacement products that are purchased, sold, or transferred must be designed and manufactured to be refillable, effective 120 days after the regulation comes into force.

Effective Refill Ban Dates

<u>Sector</u>	<u>Key Date</u>
• Mobile (Vehicle) Air Conditioning & Refrigeration	30 days after regulation in force
• Commercial Refrigeration & Air-Conditioning	January 1, 2006
• Chillers	January 1, 2006
• Fixed Fire Extinguishing Equipment	January 1, 2006
• White Goods or Domestic Household Appliances	Exempt

New Permits and Fees

- MOPIA to continue its role as a service provider in issuing permits and collecting applicable fees.
- Annual renewal fee for trained service technician certification increased by \$5.

<u>Permit</u>	<u>Fee</u>	<u>Description</u>
• Chiller Class 1 Permit	\$50	Expires one year from the date the equipment is recharged or when the chiller requires a major overhaul. Permit becomes invalid and expires January 1, 2015.
• Fixed Fire Extinguishing Class 1 Permit	\$50	Expires one year from the date the equipment is recharged, decommissioned or converted. Permit becomes invalid and expires January 1, 2010.
• Fixed Fire Extinguishing Class 1 Recharging Permit	\$50	Expires on the day the equipment is recharged. Permit becomes invalid January 1, 2010.
• Fixed Fire Extinguishing Irreplaceable Equipment Permit	\$50	Expires annually or when equipment is decommissioned or converted to not use halons.

Comments on proposed changes to Manitoba's ODS Management Program may be submitted up to **June 30, 2005**. You may download the Background Document and review the Draft Regulation Amendments on-line at www.gov.mb.ca/conservation/pollutionprevention/ods. Comments on the proposed regulatory amendments may be submitted to Manitoba Conservation, Pollution Prevention Branch by:

E-Mail at ods@gov.mb.ca

Fax (204) 945-1211

Or by completing the comment form and mailing to:

Manitoba ODS Management Program
Pollution Prevention Branch
Manitoba Conservation
123 Main Street, Suite 160
Winnipeg MB R3C 1A5

Contact Manitoba Conservation, Pollution Prevention Branch at (204) 945-3554 or toll-free at 1-800-282-8068, ext. 3554, for information on Manitoba's ODS Management Program.

COMMENT FORM

MANITOBA ODS REGULATION PROPOSED AMENDMENTS

Name:
Affiliation:
Date:

Clause No. or Subclause No. (e.g. 3.1)	Type Of Comment ¹	Comment (justification for change) by the Commenter	Proposed Change by the Commenter

1 Type of comment: **ge** = general; **te** = technical; **ed** = editorial

COMMENTS MAY BE SUBMITTED UP TO JUNE 30, 2005 TO:

**Manitoba ODS Management Program
Pollution Prevention Branch
Manitoba Conservation
123 Main Street, Suite 160
Winnipeg MB R3C 1A5**

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