



Agriculture and  
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Food Production  
and Inspection Branch

Direction générale,  
Production et inspection des aliments

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Plant Industry Directorate

Direction de l'industrie des produits végétaux

## Regulatory Directive

### Chlorofluorocarbons in Pesticide Products

The purpose of this document is to inform pesticide registrants and other interested groups and agencies about the current regulatory status of chlorofluorocarbons (CFC's) under the authority of the *Pest Control Products Act*.

This Regulatory Directive replaces Trade Memorandum T-1-257 dated January 20, 1989.

*(publié aussi en français)*

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There is scientific evidence and widespread concern that CFC's reach the upper layers of the earth's atmosphere and destroy the ozone layer. The ozone layer protects us by absorbing much of the sun's ultraviolet radiation which may cause skin cancer, reduce crop yields and damage aquatic life.

In 1980, Canada established regulations under the *Environmental Contaminants Act* to prohibit the use of CFC's in aerosols for products such as hairsprays, antiperspirants, and deodorants. Recognizing that ozone depletion is a global problem requiring a worldwide solution, Canada, along with many other nations, in 1988 signed and ratified the Montreal Protocol for the protection of the ozone layer. The Protocol set out a schedule to control ozone-depleting substances including CFC's and halons.

CFC's were previously used as propellants in pressurized pesticide sprays. For protection of the environment, it was decided that, effective April 1, 1989, the following ozone-depleting CFC's were no longer to be permitted for use in pesticide formulations:

CFC-11	(trichloromonofluoromethane)
CFC-12	(dichlorodifluoromethane)
CFC-113	(trichlorotrifluoroethane)
CFC-114	(dichlorotetrafluoroethane)
CFC-115	(chloropentafluoroethane)

Registration for all CFC-containing products was not renewed during the 1990 renewal process. Pesticide registrants who used CFC's were urged to modify their formulations to use environmentally acceptable substitutes. All of the currently registered pesticides that previously contained CFC's have had their formulations modified and the CFC's have been replaced by acceptable substitutes. These CFC-free products were allowed to carry an "Ozone Friendly - No CFC's" label on the container to indicate that CFC's had been removed from the product formulation.

The scope of the Montreal Protocol was recently expanded by international agreement to include other ozone-depleting chemicals including hydrochlorofluorocarbons (HCFC's) for example, chlorodifluoromethane. The Montreal Protocol parties have agreed to freeze consumption of HCFC's as of 1 January, 1996. Unfortunately, HCFC's have been used as substitutes for CFC's. Through discussions with the pesticide industry in 1990, it was agreed that the use of HCFC's in pesticide formulations would be allowed to continue until further restrictions are implemented under the PCP Act or the Canadian Environmental Protection Act. Registrants are encouraged to use more environmentally friendly alternatives whenever possible. The "Ozone Friendly - No CFC's" symbol, however, is no longer acceptable for use on labels of pest control products containing these substances. Existing product labels are required to be amended to delete this symbol at the next printing, and the amendment must be completed by 1995.

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