



City of Cambridge

7.

IN CITY COUNCIL

December 18, 1989

COUNCILLOR WALTER J. SULLIVAN

ORDERED: That all items currently pending before the City Council with the exception of those items currently listed under "Unfinished Business" and not acted upon by the end of the 1989 legislative session be placed in the files of the City Clerk without prejudice, subject to recall by any member.

In City Council December 18, 1989.
Adopted by the affirmative vote of nine members.
Attest:- Joseph E. Connarton, City Clerk.

A true copy;

ATTEST:-

A handwritten signature in black ink that reads "Joseph E. Connarton".

Joseph E. Connarton, City Clerk.



City of Cambridge

23.

IN CITY COUNCIL

October 23, 1989

COUNCILLOR DUEHAY
MAYOR VELLUCCI
VICE-MAYOR WOLF
COUNCILLOR DAVID SULLIVAN
COUNCILLOR WALSH

ORDERED: That the attached amendment to the "Code of the City of Cambridge" entitled "To Protect the Stratospheric Ozone Layer by Restricting the Use and Emissions of Ozone - Depleting Chemicals" be referred to the Ordinance Committee for hearing and report.

In City Council October 23, 1989.
Adopted by the affirmative vote of nine members.
Attest:- Joseph E. Connarton, City Clerk.

A true copy;

ATTEST:-

A handwritten signature in cursive script that reads "Joseph E. Connarton".

Joseph E. Connarton, City Clerk.

An Ordinance To Protect the Stratospheric Ozone Layer By Restricting The Use and Emissions of Ozone-Depleting Chemicals

SECTION 1: Definitions

For the purposes of this Ordinance, the following words shall be defined as follows:

"Chlorofluorocarbon," a family of substances containing carbon, fluorine, and chlorine, having no hydrogen atoms and no double bonds.

"CFC," an abbreviation of the word chlorofluorocarbon.

"Commissioner of Health and Hospitals" is the Commissioner of Health and Hospitals for the City of Cambridge, Massachusetts.

"Manufactured substances," any organic or inorganic chemical substances of a particular molecular identity, or any mixture, that has been manufactured for commercial purposes.

"Ozone-depleting substances" are those manufactured substances thought to destroy ozone in the stratosphere.

"Person," any individual, corporation, government agency, partnership, firm, joint stock company, trust, association, or any other public or private entity engaged in business or in providing a service in the city of Cambridge, Massachusetts.

"Recovery," the process of employing available control technology designed to collect, capture, control, and store manufactured substances, including CFCs, which may cause or contribute to stratospheric ozone depletion.

SECTION 2: Periodic Review of this Ordinance

Many prevalent uses of ozone-depleting chemicals are not restricted by this ordinance because workable substitutes and technologies are not currently available. However, emerging technologies are quickly changing this situation. Therefore, this ordinance shall be reviewed by the Cambridge City Council first at two years and then at four years after its passage with the intention of strengthening this ordinance. Reviews shall include but not be limited to the following topics: strengthening current restrictions, identifying new restrictions, and developing a plan for the disposal of ozone-depleting substances.

SECTION 3: Reporting Requirements

Within ninety days after the passage of this ordinance, any person producing, selling, offering for sale, or using in manufacturing any of the substances listed in this section, shall file a report with the Commissioner of Health and Hospitals setting forth the amount, by weight, of any and all substances so listed, and any and all of said products which were produced, used in manufacturing, and sold by said person during the calendar year 1989. Not less than annually thereafter, said persons shall file a report with the Commissioner of Health and Hospitals setting forth the amount of any and all substances so listed, and any and all of said products, which were produced, used in manufacturing, and sold by said person during the twelve-month period since the filing date of the previous report, until said person ceases production, use, and sale of all substances so listed and all of said products. All such reports shall be signed and attested by a responsible corporate officer.

Substances subject to reporting requirements include: CFC-11, CFC-12, CFC-113, CFC-114, CFC-115, Halon-1211, Halon-1301, Halon-2402, Carbon tetrachloride, and Methyl Chloroform.

SECTION 4: Specific Restrictions on Uses of Ozone-depleting Substances

a) Restrictions on the use of CFCs in Mobile Air Conditioning Units

Effective January 1, 1991, no person shall perform repair service on automobile air conditioners unless such person uses equipment for recovery and recycling of CFC coolant.

Effective January 1, 1991, all persons retaining automobiles on their premises for the purpose of reselling said automobiles in parts shall use recovery and recycling equipment to recover CFC coolant from each automobile within three business days after said automobile arrives on the premises. Persons affected by this restriction shall not allow CFC coolant to be released into the atmosphere.

All equipment for recovery and recycling of CFC coolant required by this Ordinance shall be approved by Underwriters Laboratory or a similar institution.

b) Restrictions on the sale and use of CFC Refrigerants

Effective January 1, 1991, no person shall sell or offer for sale CFC coolant suitable for use in mobile air conditioners in quantities smaller than fifteen pounds or to persons not owning recycling or recovery equipment described in section 4a.

c) Restrictions on the use of CFCs in Repair of Refrigeration Units

Effective January 1, 1991, no person shall use CFCs during the servicing of commercial refrigeration units for the purpose of testing or flushing out refrigeration lines .

d) Restrictions on the use of CFCs in Miscellaneous Consumer Products

Effective at the passage of this ordinance, no person shall sell, offer for sale, or use CFC plastic party streamers, CFC propelled noise horns, or CFC cleaning solutions for consumer electronics and photographic equipment.

e) Phase out of CFC-113 and Methyl Chloroform

Effective January 1, 1992, no person shall produce, sell, offer for sale, or use in manufacturing, CFC-113 or Methyl Chloroform in annual quantities greater than fifty percent of the total amount of CFC-113 and Methyl Chloroform used during the calendar year 1989.

Effective January 1, 1994, no person shall offer for sale, or use in manufacturing, CFC-113 or Methyl Chloroform.

Medical applications for which no safe non-ozone depleting alternatives are available shall be exempt from section 4e. When safe non-ozone depleting alternatives become available, all persons using CFC-113 or methyl chloroform under this exemption shall show good faith in converting to safe non-ozone depleting substances and products.

f) Restrictions on the use of Halons in Fire Extinguishers

Effective January 1, 1991, no person shall sell or offer for sale, fire extinguishers for consumer applications which contain halons or other ozone-depleting substances.

Effective January 1, 1991, no person shall use fire extinguishers that contain halons or other ozone-depleting substances for the purpose of testing or training except where required by law.

SECTION 5: Warning Labels Required

Effective January 1, 1991, no container in which CFCs, Halons, or other ozone-depleting substances are stored or transported, no product containing such substances, nor any product manufactured with a process that uses said substance shall be sold or offered for sale unless it bears a label stating the following:

"Contains (or manufactured with) [name of substance], a substance which harms public health and the environment by destroying ozone in the atmosphere."

Said label shall be permanently affixed on the face of said container or product, with the lettering and background in contrasting colors; and the letters themselves not less than one inch high, or twenty percent of the height of any product which is less than three feet in height.

SECTION 6: Enforcement

Enforcement of this ordinance shall be the responsibility of the Commissioner of Health and Hospitals. The Commissioner shall levy fines for violations of sections three or four of this ordinance at the rate of \$100 per violation per day. Fines collected under this ordinance shall be used to support the implementation of this ordinance.

SECTION 7: Technical Assistance

The City of Cambridge will produce, or commission to be produced, a document, available to all persons, for the purpose of assisting any persons affected by this ordinance. This document will be available within six months of the passage of this ordinance and will include, but not be limited to, information describing commercially available alternatives to ozone depleting substances and available technologies to assist in the implementation of such alternatives.



City of Cambridge

23.

IN CITY COUNCIL

October 23, 1989

COUNCILLOR DUEHAY
MAYOR VELLUCCI
VICE-MAYOR WOLF
COUNCILLOR DAVID SULLIVAN
COUNCILLOR WALSH

ORDERED: That the attached amendment to the "Code of the City of Cambridge" entitled "To Protect the Stratospheric Ozone Layer by Restricting the Use and Emissions of Ozone - Depleting Chemicals" be referred to the Ordinance Committee for hearing and report.

In City Council October 23, 1989.
Adopted by the affirmative vote of nine members.
Attest:- Joseph E. Connarton, City Clerk.

A true copy;

ATTEST:-

Joseph E. Connarton, City Clerk.

An Ordinance To Protect the Stratospheric Ozone Layer By Restricting The Use and Emissions of Ozone-Depleting Chemicals

SECTION 1: Definitions

For the purposes of this Ordinance, the following words shall be defined as follows:

"Chlorofluorocarbon," a family of substances containing carbon, fluorine, and chlorine, having no hydrogen atoms and no double bonds.

"CFC," an abbreviation of the word chlorofluorocarbon.

"Commissioner of Health and Hospitals" is the Commissioner of Health and Hospitals for the City of Cambridge, Massachusetts.

"Manufactured substances," any organic or inorganic chemical substances of a particular molecular identity, or any mixture, that has been manufactured for commercial purposes.

"Ozone-depleting substances" are those manufactured substances thought to destroy ozone in the stratosphere.

"Person," any individual, corporation, government agency, partnership, firm, joint stock company, trust, association, or any other public or private entity engaged in business or in providing a service in the city of Cambridge, Massachusetts.

"Recovery," the process of employing available control technology designed to collect, capture, control, and store manufactured substances, including CFCs, which may cause or contribute to stratospheric ozone depletion.

SECTION 2: Periodic Review of this Ordinance

Many prevalent uses of ozone-depleting chemicals are not restricted by this ordinance because workable substitutes and technologies are not currently available. However, emerging technologies are quickly changing this situation. Therefore, this ordinance shall be reviewed by the Cambridge City Council first at two years and then at four years after its passage with the intention of strengthening this ordinance. Reviews shall include but not be limited to the following topics: strengthening current restrictions, identifying new restrictions, and developing a plan for the disposal of ozone-depleting substances.

SECTION 3: Reporting Requirements

Within ninety days after the passage of this ordinance, any person producing, selling, offering for sale, or using in manufacturing any of the substances listed in this section, shall file a report with the Commissioner of Health and Hospitals setting forth the amount, by weight, of any and all substances so listed, and any and all of said products which were produced, used in manufacturing, and sold by said person during the calendar year 1989. Not less than annually thereafter, said persons shall file a report with the Commissioner of Health and Hospitals setting forth the amount of any and all substances so listed, and any and all of said products, which were produced, used in manufacturing, and sold by said person during the twelve-month period since the filing date of the previous report, until said person ceases production, use, and sale of all substances so listed and all of said products. All such reports shall be signed and attested by a responsible corporate officer.

Substances subject to reporting requirements include: CFC-11, CFC-12, CFC-113, CFC-114, CFC-115, Halon-1211, Halon-1301, Halon-2402, Carbon tetrachloride, and Methyl Chloroform.

SECTION 4: Specific Restrictions on Uses of Ozone-depleting Substances

a) Restrictions on the use of CFCs in Mobile Air Conditioning Units

Effective January 1, 1991, no person shall perform repair service on automobile air conditioners unless such person uses equipment for recovery and recycling of CFC coolant.

Effective January 1, 1991, all persons retaining automobiles on their premises for the purpose of reselling said automobiles in parts shall use recovery and recycling equipment to recover CFC coolant from each automobile within three business days after said automobile arrives on the premises. Persons affected by this restriction shall not allow CFC coolant to be released into the atmosphere.

All equipment for recovery and recycling of CFC coolant required by this Ordinance shall be approved by Underwriters Laboratory or a similar institution.

b) Restrictions on the sale and use of CFC Refrigerants

Effective January 1, 1991, no person shall sell or offer for sale CFC coolant suitable for use in mobile air conditioners in quantities smaller than fifteen pounds or to persons not owning recycling or recovery equipment described in section 4a.

c) Restrictions on the use of CFCs in Repair of Refrigeration Units

Effective January 1, 1991, no person shall use CFCs during the servicing of commercial refrigeration units for the purpose of testing or flushing out refrigeration lines .

d) Restrictions on the use of CFCs in Miscellaneous Consumer Products

Effective at the passage of this ordinance, no person shall sell, offer for sale, or use CFC plastic party streamers, CFC propelled noise horns, or CFC cleaning solutions for consumer electronics and photographic equipment.

e) Phase out of CFC-113 and Methyl Chloroform

Effective January 1, 1992, no person shall produce, sell, offer for sale, or use in manufacturing, CFC-113 or Methyl Chloroform in annual quantities greater than fifty percent of the total amount of CFC-113 and Methyl Chloroform used during the calendar year 1989.

Effective January 1, 1994, no person shall offer for sale, or use in manufacturing, CFC-113 or Methyl Chloroform.

Medical applications for which no safe non-ozone depleting alternatives are available shall be exempt from section 4e. When safe non-ozone depleting alternatives become available, all persons using CFC-113 or methyl chloroform under this exemption shall show good faith in converting to safe non-ozone depleting substances and products.

f) Restrictions on the use of Halons in Fire Extinguishers

Effective January 1, 1991, no person shall sell or offer for sale, fire extinguishers for consumer applications which contain halons or other ozone-depleting substances.

Effective January 1, 1991, no person shall use fire extinguishers that contain halons or other ozone-depleting substances for the purpose of testing or training except where required by law.

SECTION 5: Warning Labels Required

Effective January 1, 1991, no container in which CFCs, Halons, or other ozone-depleting substances are stored or transported, no product containing such substances, nor any product manufactured with a process that uses said substance shall be sold or offered for sale unless it bears a label stating the following:

"Contains (or manufactured with) [name of substance], a substance which harms public health and the environment by destroying ozone in the atmosphere."

Said label shall be permanently affixed on the face of said container or product, with the lettering and background in contrasting colors; and the letters themselves not less than one inch high, or twenty percent of the height of any product which is less than three feet in height.

SECTION 6: Enforcement

Enforcement of this ordinance shall be the responsibility of the Commissioner of Health and Hospitals. The Commissioner shall levy fines for violations of sections three or four of this ordinance at the rate of \$100 per violation per day. Fines collected under this ordinance shall be used to support the implementation of this ordinance.

SECTION 7: Technical Assistance

The City of Cambridge will produce, or commission to be produced, a document, available to all persons, for the purpose of assisting any persons affected by this ordinance. This document will be available within six months of the passage of this ordinance and will include, but not be limited to, information describing commercially available alternatives to ozone depleting substances and available technologies to assist in the implementation of such alternatives.



City of Cambridge

23.

IN CITY COUNCIL

October 23, 1989

COUNCILLOR DUEHAY
MAYOR VELLUCCI
VICE-MAYOR WOLF
COUNCILLOR DAVID SULLIVAN
COUNCILLOR WALSH

ORDERED: That the attached amendment to the "Code of the City of Cambridge" entitled "To Protect the Stratospheric Ozone Layer by Restricting the Use and Emissions of Ozone - Depleting Chemicals" be referred to the Ordinance Committee for hearing and report.

In City Council October 23, 1989.
Adopted by the affirmative vote of nine members.
Attest:- Joseph E. Connarton, City Clerk.

A true copy;

A handwritten signature in cursive script that reads "Joseph E. Connarton".

ATTEST:-

Joseph E. Connarton, City Clerk.

An Ordinance To Protect the Stratospheric Ozone Layer By Restricting The Use and Emissions of Ozone-Depleting Chemicals

SECTION 1: Definitions

For the purposes of this Ordinance, the following words shall be defined as follows:

"Chlorofluorocarbon," a family of substances containing carbon, fluorine, and chlorine, having no hydrogen atoms and no double bonds.

"CFC," an abbreviation of the word chlorofluorocarbon.

"Commissioner of Health and Hospitals" is the Commissioner of Health and Hospitals for the City of Cambridge, Massachusetts.

"Manufactured substances," any organic or inorganic chemical substances of a particular molecular identity, or any mixture, that has been manufactured for commercial purposes.

"Ozone-depleting substances" are those manufactured substances thought to destroy ozone in the stratosphere.

"Person," any individual, corporation, government agency, partnership, firm, joint stock company, trust, association, or any other public or private entity engaged in business or in providing a service in the city of Cambridge, Massachusetts.

"Recovery," the process of employing available control technology designed to collect, capture, control, and store manufactured substances, including CFCs, which may cause or contribute to stratospheric ozone depletion.

SECTION 2: Periodic Review of this Ordinance

Many prevalent uses of ozone-depleting chemicals are not restricted by this ordinance because workable substitutes and technologies are not currently available. However, emerging technologies are quickly changing this situation. Therefore, this ordinance shall be reviewed by the Cambridge City Council first at two years and then at four years after its passage with the intention of strengthening this ordinance. Reviews shall include but not be limited to the following topics: strengthening current restrictions, identifying new restrictions, and developing a plan for the disposal of ozone-depleting substances.

SECTION 3: Reporting Requirements

Within ninety days after the passage of this ordinance, any person producing, selling, offering for sale, or using in manufacturing any of the substances listed in this section, shall file a report with the Commissioner of Health and Hospitals setting forth the amount, by weight, of any and all substances so listed, and any and all of said products which were produced, used in manufacturing, and sold by said person during the calendar year 1989. Not less than annually thereafter, said persons shall file a report with the Commissioner of Health and Hospitals setting forth the amount of any and all substances so listed, and any and all of said products, which were produced, used in manufacturing, and sold by said person during the twelve-month period since the filing date of the previous report, until said person ceases production, use, and sale of all substances so listed and all of said products. All such reports shall be signed and attested by a responsible corporate officer.

Substances subject to reporting requirements include: CFC-11, CFC-12, CFC-113, CFC-114, CFC-115, Halon-1211, Halon-1301, Halon-2402, Carbon tetrachloride, and Methyl Chloroform.

SECTION 4: Specific Restrictions on Uses of Ozone-depleting Substances

a) Restrictions on the use of CFCs in Mobile Air Conditioning Units

Effective January 1, 1991, no person shall perform repair service on automobile air conditioners unless such person uses equipment for recovery and recycling of CFC coolant.

Effective January 1, 1991, all persons retaining automobiles on their premises for the purpose of reselling said automobiles in parts shall use recovery and recycling equipment to recover CFC coolant from each automobile within three business days after said automobile arrives on the premises. Persons affected by this restriction shall not allow CFC coolant to be released into the atmosphere.

All equipment for recovery and recycling of CFC coolant required by this Ordinance shall be approved by Underwriters Laboratory or a similar institution.

b) Restrictions on the sale and use of CFC Refrigerants

Effective January 1, 1991, no person shall sell or offer for sale CFC coolant suitable for use in mobile air conditioners in quantities smaller than fifteen pounds or to persons not owning recycling or recovery equipment described in section 4a.

c) Restrictions on the use of CFCs in Repair of Refrigeration Units

Effective January 1, 1991, no person shall use CFCs during the servicing of commercial refrigeration units for the purpose of testing or flushing out refrigeration lines .

d) Restrictions on the use of CFCs in Miscellaneous Consumer Products

Effective at the passage of this ordinance, no person shall sell, offer for sale, or use CFC plastic party streamers, CFC propelled noise horns, or CFC cleaning solutions for consumer electronics and photographic equipment.

e) Phase out of CFC-113 and Methyl Chloroform

Effective January 1, 1992, no person shall produce, sell, offer for sale, or use in manufacturing, CFC-113 or Methyl Chloroform in annual quantities greater than fifty percent of the total amount of CFC-113 and Methyl Chloroform used during the calendar year 1989.

Effective January 1, 1994, no person shall offer for sale, or use in manufacturing, CFC-113 or Methyl Chloroform.

Medical applications for which no safe non-ozone depleting alternatives are available shall be exempt from section 4e. When safe non-ozone depleting alternatives become available, all persons using CFC-113 or methyl chloroform under this exemption shall show good faith in converting to safe non-ozone depleting substances and products.

f) Restrictions on the use of Halons in Fire Extinguishers

Effective January 1, 1991, no person shall sell or offer for sale, fire extinguishers for consumer applications which contain halons or other ozone-depleting substances.

Effective January 1, 1991, no person shall use fire extinguishers that contain halons or other ozone-depleting substances for the purpose of testing or training except where required by law.

SECTION 5: Warning Labels Required

Effective January 1, 1991, no container in which CFCs, Halons, or other ozone-depleting substances are stored or transported, no product containing such substances, nor any product manufactured with a process that uses said substance shall be sold or offered for sale unless it bears a label stating the following:

"Contains (or manufactured with) [name of substance], a substance which harms public health and the environment by destroying ozone in the atmosphere."

Said label shall be permanently affixed on the face of said container or product, with the lettering and background in contrasting colors; and the letters themselves not less than one inch high, or twenty percent of the height of any product which is less than three feet in height.

SECTION 6: Enforcement

Enforcement of this ordinance shall be the responsibility of the Commissioner of Health and Hospitals. The Commissioner shall levy fines for violations of sections three or four of this ordinance at the rate of \$100 per violation per day. Fines collected under this ordinance shall be used to support the implementation of this ordinance.

SECTION 7: Technical Assistance

The City of Cambridge will produce, or commission to be produced, a document available to all persons, for the purpose of assisting any persons affected by this ordinance. This document will be available within six months of the passage of this ordinance and will include, but not be limited to, information describing commercially available alternatives to ozone depleting substances and available technologies to assist in the implementation of such alternatives.



City of Cambridge

23.

IN CITY COUNCIL

October 23, 1989

COUNCILLOR DUEHAY
MAYOR VELLUCCI
VICE-MAYOR WOLF
COUNCILLOR DAVID SULLIVAN
COUNCILLOR WALSH

ORDERED: That the attached amendment to the "Code of the City of Cambridge" entitled "To Protect the Stratospheric Ozone Layer by Restricting the Use and Emissions of Ozone - Depleting Chemicals" be referred to the Ordinance Committee for hearing and report.

In City Council October 23, 1989.
Adopted by the affirmative vote of nine members.
Attest:- Joseph E. Connarton, City Clerk.

A true copy;

ATTEST:-

Joseph E. Connarton, City Clerk.

An Ordinance To Protect the Stratospheric Ozone Layer By Restricting The Use and Emissions of Ozone-Depleting Chemicals

SECTION 1: Definitions

For the purposes of this Ordinance, the following words shall be defined as follows:

"Chlorofluorocarbon," a family of substances containing carbon, fluorine, and chlorine, having no hydrogen atoms and no double bonds.

"CFC," an abbreviation of the word chlorofluorocarbon.

"Commissioner of Health and Hospitals" is the Commissioner of Health and Hospitals for the City of Cambridge, Massachusetts.

"Manufactured substances," any organic or inorganic chemical substances of a particular molecular identity, or any mixture, that has been manufactured for commercial purposes.

"Ozone-depleting substances" are those manufactured substances thought to destroy ozone in the stratosphere.

"Person," any individual, corporation, government agency, partnership, firm, joint stock company, trust, association, or any other public or private entity engaged in business or in providing a service in the city of Cambridge, Massachusetts.

"Recovery," the process of employing available control technology designed to collect, capture, control, and store manufactured substances, including CFCs, which may cause or contribute to stratospheric ozone depletion.

SECTION 2: Periodic Review of this Ordinance

Many prevalent uses of ozone-depleting chemicals are not restricted by this ordinance because workable substitutes and technologies are not currently available. However, emerging technologies are quickly changing this situation. Therefore, this ordinance shall be reviewed by the Cambridge City Council first at two years and then at four years after its passage with the intention of strengthening this ordinance. Reviews shall include but not be limited to the following topics: strengthening current restrictions, identifying new restrictions, and developing a plan for the disposal of ozone-depleting substances.

SECTION 3: Reporting Requirements

Within ninety days after the passage of this ordinance, any person producing, selling, offering for sale, or using in manufacturing any of the substances listed in this section, shall file a report with the Commissioner of Health and Hospitals setting forth the amount, by weight, of any and all substances so listed, and any and all of said products which were produced, used in manufacturing, and sold by said person during the calendar year 1989. Not less than annually thereafter, said persons shall file a report with the Commissioner of Health and Hospitals setting forth the amount of any and all substances so listed, and any and all of said products, which were produced, used in manufacturing, and sold by said person during the twelve-month period since the filing date of the previous report, until said person ceases production, use, and sale of all substances so listed and all of said products. All such reports shall be signed and attested by a responsible corporate officer.

Substances subject to reporting requirements include: CFC-11, CFC-12, CFC-113, CFC-114, CFC-115, Halon-1211, Halon-1301, Halon-2402, Carbon tetrachloride, and Methyl Chloroform.

SECTION 4: Specific Restrictions on Uses of Ozone-depleting Substances

a) Restrictions on the use of CFCs in Mobile Air Conditioning Units

Effective January 1, 1991, no person shall perform repair service on automobile air conditioners unless such person uses equipment for recovery and recycling of CFC coolant.

Effective January 1, 1991, all persons retaining automobiles on their premises for the purpose of reselling said automobiles in parts shall use recovery and recycling equipment to recover CFC coolant from each automobile within three business days after said automobile arrives on the premises. Persons affected by this restriction shall not allow CFC coolant to be released into the atmosphere.

All equipment for recovery and recycling of CFC coolant required by this Ordinance shall be approved by Underwriters Laboratory or a similar institution.

b) Restrictions on the sale and use of CFC Refrigerants

Effective January 1, 1991, no person shall sell or offer for sale CFC coolant suitable for use in mobile air conditioners in quantities smaller than fifteen pounds or to persons not owning recycling or recovery equipment described in section 4a.

c) Restrictions on the use of CFCs in Repair of Refrigeration Units

Effective January 1, 1991, no person shall use CFCs during the servicing of commercial refrigeration units for the purpose of testing or flushing out refrigeration lines .

d) Restrictions on the use of CFCs in Miscellaneous Consumer Products

Effective at the passage of this ordinance, no person shall sell, offer for sale, or use CFC plastic party streamers, CFC propelled noise horns, or CFC cleaning solutions for consumer electronics and photographic equipment.

e) Phase out of CFC-113 and Methyl Chloroform

Effective January 1, 1992, no person shall produce, sell, offer for sale, or use in manufacturing, CFC-113 or Methyl Chloroform in annual quantities greater than fifty percent of the total amount of CFC-113 and Methyl Chloroform used during the calendar year 1989.

Effective January 1, 1994, no person shall offer for sale, or use in manufacturing, CFC-113 or Methyl Chloroform.

Medical applications for which no safe non-ozone depleting alternatives are available shall be exempt from section 4e. When safe non-ozone depleting alternatives become available, all persons using CFC-113 or methyl chloroform under this exemption shall show good faith in converting to safe non-ozone depleting substances and products.

f) Restrictions on the use of Halons in Fire Extinguishers

Effective January 1, 1991, no person shall sell or offer for sale, fire extinguishers for consumer applications which contain halons or other ozone-depleting substances.

Effective January 1, 1991, no person shall use fire extinguishers that contain halons or other ozone-depleting substances for the purpose of testing or training except where required by law.

SECTION 5: Warning Labels Required

Effective January 1, 1991, no container in which CFCs, Halons, or other ozone-depleting substances are stored or transported, no product containing such substances, nor any product manufactured with a process that uses said substance shall be sold or offered for sale unless it bears a label stating the following:

"Contains (or manufactured with) [name of substance], a substance which harms public health and the environment by destroying ozone in the atmosphere."

Said label shall be permanently affixed on the face of said container or product, with the lettering and background in contrasting colors; and the letters themselves not less than one inch high, or twenty percent of the height of any product which is less than three feet in height.

SECTION 6: Enforcement

Enforcement of this ordinance shall be the responsibility of the Commissioner of Health and Hospitals. The Commissioner shall levy fines for violations of sections three or four of this ordinance at the rate of \$100 per violation per day. Fines collected under this ordinance shall be used to support the implementation of this ordinance.

SECTION 7: Technical Assistance

The City of Cambridge will produce, or commission to be produced, a document, available to all persons, for the purpose of assisting any persons affected by this ordinance. This document will be available within six months of the passage of this ordinance and will include, but not be limited to, information describing commercially available alternatives to ozone depleting substances and available technologies to assist in the implementation of such alternatives.

C. Walsh
Mayor
D. J. May
C. D. Sullivan

**Statement of Cambridge City Councillor Francis H. Duehay
in Introducing**

**An Ordinance To Protect the Stratospheric Ozone Layer By Restricting the Use and
Emissions of Ozone-Depleting Chemicals**

The Problem: *Ozone Depletion*

Ozone is a special type of oxygen. In the stratosphere it blocks harmful ultraviolet radiation from reaching the earth. This radiation, known as UV-B, causes sunburn in normal doses. In above normal doses, this radiation causes skin cancer, eye damage, weakens the immune system, and harms crops, plants, and sea life.

In 1985, scientific evidence was presented that verified the magnitude and severity of ozone depletion¹. Since the early 1970s, scientists have linked ozone depletion with the emissions of a class of manufactured substances known as chlorofluorocarbons (CFCs)².

First created fifty years ago, CFCs have been embraced by many industries around the world as non-toxic, non-flammable wonder chemicals. The most frequent uses are as coolants in air conditioners and refrigerators, solvents and degreasers, rigid and flexible foam insulation, and as propellants in fire extinguishers.

A special property of CFCs that make them such a devastating health risk is that not only do they destroy the protective ozone layer when they are released into the atmosphere, many types of CFCs continue to destroy the ozone layer for up to 75 years after they are emitted. *Even if CFCs were banned immediately the environmental damage caused by CFCs would continue to affect future generations.*

Not only do CFCs destroy the protective ozone layer, they are a major contributor to the greenhouse effect. Though carbon dioxide is the chemical most responsible for the greenhouse effect because it is emitted in such large quantities, a CFC molecule is far more dangerous: it has the same greenhouse effect as 15,000 carbon dioxide molecules³.

The Solution: *Restrict Uses and Emissions of Ozone Depleting Chemicals*

This proposed Ordinance would ban some uses and emissions of CFCs and other ozone-depleting chemicals for which safer substitutes are available today. Because advances are made daily in the area of substitutes to CFCs, a provision would require that this ordinance be reviewed first at two and then at four years with the intent of further restricting the use and emissions of these harmful chemicals.

The largest single contributor to ozone depletion is car air conditioners. This ordinance would require that service stations recover and recycle coolant instead of the usual practice of draining the system which releases harmful CFCs into the atmosphere. Salvage yards would be required to recover CFCs from automobiles they purchase to prevent CFC emissions from discarded air conditioners. Similar recovery restrictions would be enacted in the repair of refrigeration units.

Halons, a family of chemicals even more damaging than CFCs, are used in some fire extinguishers. This ordinance would ban the use of halons in consumer fire extinguishers and ban their use in testing and training except where required by law.

C. Duehay

Referred to Ordinance
Committee.

VIV
9

Massachusetts ranked third in the nation in the emission of CFC-113 in 1987⁴. This chemical is used heavily in the electronics industry. Blue-chip companies such as IBM, Digital, and AT&T have voluntarily implemented programs to reduce their use of this dangerous chemical which is classified as toxic by the EPA. This ordinance would phase out the use of CFC-113 and a similar ozone-depleting chemical, methyl chloroform, over four years.

To gather data for future reference and to monitor the use of ozone-depleting substances in the City of Cambridge, this ordinance would require companies using these substances to file annual usage reports. Additionally, containers in which ozone-depleting substances are contained or transported would be required to carry a warning label stating its hazard to public health through ozone depletion.

Passage of this ordinance will cut uses and emissions of ozone-depleting chemicals for a city of 90,000 people. Though Cambridge is not a major contributor to global ozone-depletion, passage of this ordinance will send a clear message to state and federal officials that the City of Cambridge wishes to be a part of the solution, not the problem, of ozone depletion and the greenhouse effect.

1. Farman, Gardiner, Shanklin, "Large Losses of Total Ozone in Antarctica Reveal Seasonal ClO_2/NO_x Interaction," *Nature*, Vol 315:207-10, 1985.
2. Rowland and Molina, "Stratospheric Sink for Chlorofluoromethanes: Chlorine Atom-catalyzed Destruction of Ozone," *Nature*, Vol 249:810-12, 1974.
3. Cogan, Stones in a Glass House: CFCs and Ozone Depletion, p. 39, IRRC, Washington D.C., 1988. This book is the current authority on ozone depletion.
4. Gray, Global Error, Local Terror, p. i, MASSPIRG, Boston, 1989.

An Ordinance To Protect the Stratospheric Ozone Layer By Restricting The Use and Emissions of Ozone-Depleting Chemicals

SECTION 1: Definitions

For the purposes of this Ordinance, the following words shall be defined as follows:

"Chlorofluorocarbon," a family of substances containing carbon, fluorine, and chlorine, having no hydrogen atoms and no double bonds.

"CFC," an abbreviation of the word chlorofluorocarbon.

"Commissioner of Health and Hospitals" is the Commissioner of Health and Hospitals for the City of Cambridge, Massachusetts.

"Manufactured substances," any organic or inorganic chemical substances of a particular molecular identity, or any mixture, that has been manufactured for commercial purposes.

"Ozone-depleting substances" are those manufactured substances thought to destroy ozone in the stratosphere.

"Person," any individual, corporation, government agency, partnership, firm, joint stock company, trust, association, or any other public or private entity engaged in business or in providing a service in the city of Cambridge, Massachusetts.

"Recovery," the process of employing available control technology designed to collect, capture, control, and store manufactured substances, including CFCs, which may cause or contribute to stratospheric ozone depletion.

SECTION 2: Periodic Review of this Ordinance

Many prevalent uses of ozone-depleting chemicals are not restricted by this ordinance because workable substitutes and technologies are not currently available. However, emerging technologies are quickly changing this situation. Therefore, this ordinance shall be reviewed by the Cambridge City Council first at two years and then at four years after its passage with the intention of strengthening this ordinance. Reviews shall include but not be limited to the following topics: strengthening current restrictions, identifying new restrictions, and developing a plan for the disposal of ozone-depleting substances.

SECTION 3: Reporting Requirements

Within ninety days after the passage of this ordinance, any person producing, selling, offering for sale, or using in manufacturing any of the substances listed in this section, shall file a report with the Commissioner of Health and Hospitals setting forth the amount, by weight, of any and all substances so listed, and any and all of said products which were produced, used in manufacturing, and sold by said person during the calendar year 1989. Not less than annually thereafter, said persons shall file a report with the Commissioner of Health and Hospitals setting forth the amount of any and all substances so listed, and any and all of said products, which were produced, used in manufacturing, and sold by said person during the twelve-month period since the filing date of the previous report, until said person ceases production, use, and sale of all substances so listed and all of said products. All such reports shall be signed and attested by a responsible corporate officer.

Substances subject to reporting requirements include: CFC-11, CFC-12, CFC-113, CFC-114, CFC-115, Halon-1211, Halon-1301, Halon-2402, Carbon tetrachloride, and Methyl Chloroform.

SECTION 4: Specific Restrictions on Uses of Ozone-depleting Substances

a) Restrictions on the use of CFCs in Mobile Air Conditioning Units

Effective January 1, 1991, no person shall perform repair service on automobile air conditioners unless such person uses equipment for recovery and recycling of CFC coolant.

Effective January 1, 1991, all persons retaining automobiles on their premises for the purpose of reselling said automobiles in parts shall use recovery and recycling equipment to recover CFC coolant from each automobile within three business days after said automobile arrives on the premises. Persons affected by this restriction shall not allow CFC coolant to be released into the atmosphere.

All equipment for recovery and recycling of CFC coolant required by this Ordinance shall be approved by Underwriters Laboratory or a similar institution.

b) Restrictions on the sale and use of CFC Refrigerants

Effective January 1, 1991, no person shall sell or offer for sale CFC coolant suitable for use in mobile air conditioners in quantities smaller than fifteen pounds or to persons not owning recycling or recovery equipment described in section 4a.

c) Restrictions on the use of CFCs in Repair of Refrigeration Units

Effective January 1, 1991, no person shall use CFCs during the servicing of commercial refrigeration units for the purpose of testing or flushing out refrigeration lines .

d) Restrictions on the use of CFCs in Miscellaneous Consumer Products

Effective at the passage of this ordinance, no person shall sell, offer for sale, or use CFC plastic party streamers, CFC propelled noise horns, or CFC cleaning solutions for consumer electronics and photographic equipment.

e) Phase out of CFC-113 and Methyl Chloroform

Effective January 1, 1992, no person shall produce, sell, offer for sale, or use in manufacturing, CFC-113 or Methyl Chloroform in annual quantities greater than fifty percent of the total amount of CFC-113 and Methyl Chloroform used during the calendar year 1989.

Effective January 1, 1994, no person shall offer for sale, or use in manufacturing, CFC-113 or Methyl Chloroform.

Medical applications for which no safe non-ozone depleting alternatives are available shall be exempt from section 4e. When safe non-ozone depleting alternatives become available, all persons using CFC-113 or methyl chloroform under this exemption shall show good faith in converting to safe non-ozone depleting substances and products.

f) Restrictions on the use of Halons in Fire Extinguishers

Effective January 1, 1991, no person shall sell or offer for sale, fire extinguishers for consumer applications which contain halons or other ozone-depleting substances.

Effective January 1, 1991, no person shall use fire extinguishers that contain halons or other ozone-depleting substances for the purpose of testing or training except where required by law.

SECTION 5: Warning Labels Required

Effective January 1, 1991, no container in which CFCs, Halons, or other ozone-depleting substances are stored or transported, no product containing such substances, nor any product manufactured with a process that uses said substance shall be sold or offered for sale unless it bears a label stating the following:

"Contains (or manufactured with) [name of substance], a substance which harms public health and the environment by destroying ozone in the atmosphere."

Said label shall be permanently affixed on the face of said container or product, with the lettering and background in contrasting colors; and the letters themselves not less than one inch high, or twenty percent of the height of any product which is less than three feet in height.

SECTION 6: Enforcement

Enforcement of this ordinance shall be the responsibility of the Commissioner of Health and Hospitals. The Commissioner shall levy fines for violations of sections three or four of this ordinance at the rate of \$100 per violation per day. Fines collected under this ordinance shall be used to support the implementation of this ordinance.

SECTION 7: Technical Assistance

The City of Cambridge will produce, or commission to be produced, a document, available to all persons, for the purpose of assisting any persons affected by this ordinance. This document will be available within six months of the passage of this ordinance and will include, but not be limited to, information describing commercially available alternatives to ozone depleting substances and available technologies to assist in the implementation of such alternatives.



City of Cambridge

23.

IN CITY COUNCIL

October 23, 1989

COUNCILLOR DUEHAY
MAYOR VELLUCCI
VICE-MAYOR WOLF
COUNCILLOR DAVID SULLIVAN
COUNCILLOR WALSH

ORDERED: That the attached amendment to the "Code of the City of Cambridge" entitled "To Protect the Stratospheric Ozone Layer by Restricting the Use and Emissions of Ozone - Depleting Chemicals" be referred to the Ordinance Committee for hearing and report.

In City Council October 23, 1989.
Adopted by the affirmative vote of nine members.
Attest:- Joseph E. Connarton, City Clerk.

A true copy;

ATTEST:-

A handwritten signature in cursive script that reads "Joseph E. Connarton".

Joseph E. Connarton, City Clerk.

An Ordinance To Protect the Stratospheric Ozone Layer By Restricting The Use and Emissions of Ozone-Depleting Chemicals

SECTION 1: Definitions

For the purposes of this Ordinance, the following words shall be defined as follows:

"Chlorofluorocarbon," a family of substances containing carbon, fluorine, and chlorine, having no hydrogen atoms and no double bonds.

"CFC," an abbreviation of the word chlorofluorocarbon.

"Commissioner of Health and Hospitals" is the Commissioner of Health and Hospitals for the City of Cambridge, Massachusetts.

"Manufactured substances," any organic or inorganic chemical substances of a particular molecular identity, or any mixture, that has been manufactured for commercial purposes.

"Ozone-depleting substances" are those manufactured substances thought to destroy ozone in the stratosphere.

"Person," any individual, corporation, government agency, partnership, firm, joint stock company, trust, association, or any other public or private entity engaged in business or in providing a service in the city of Cambridge, Massachusetts.

"Recovery," the process of employing available control technology designed to collect, capture, control, and store manufactured substances, including CFCs, which may cause or contribute to stratospheric ozone depletion.

SECTION 2: Periodic Review of this Ordinance

Many prevalent uses of ozone-depleting chemicals are not restricted by this ordinance because workable substitutes and technologies are not currently available. However, emerging technologies are quickly changing this situation. Therefore, this ordinance shall be reviewed by the Cambridge City Council first at two years and then at four years after its passage with the intention of strengthening this ordinance. Reviews shall include but not be limited to the following topics: strengthening current restrictions, identifying new restrictions, and developing a plan for the disposal of ozone-depleting substances.

SECTION 3: Reporting Requirements

Within ninety days after the passage of this ordinance, any person producing, selling, offering for sale, or using in manufacturing any of the substances listed in this section, shall file a report with the Commissioner of Health and Hospitals setting forth the amount, by weight, of any and all substances so listed, and any and all of said products which were produced, used in manufacturing, and sold by said person during the calendar year 1989. Not less than annually thereafter, said persons shall file a report with the Commissioner of Health and Hospitals setting forth the amount of any and all substances so listed, and any and all of said products, which were produced, used in manufacturing, and sold by said person during the twelve-month period since the filing date of the previous report, until said person ceases production, use, and sale of all substances so listed and all of said products. All such reports shall be signed and attested by a responsible corporate officer.

Substances subject to reporting requirements include: CFC-11, CFC-12, CFC-113, CFC-114, CFC-115, Halon-1211, Halon-1301, Halon-2402, Carbon tetrachloride, and Methyl Chloroform.

SECTION 4: Specific Restrictions on Uses of Ozone-depleting Substances

a) Restrictions on the use of CFCs in Mobile Air Conditioning Units

Effective January 1, 1991, no person shall perform repair service on automobile air conditioners unless such person uses equipment for recovery and recycling of CFC coolant.

Effective January 1, 1991, all persons retaining automobiles on their premises for the purpose of reselling said automobiles in parts shall use recovery and recycling equipment to recover CFC coolant from each automobile within three business days after said automobile arrives on the premises. Persons affected by this restriction shall not allow CFC coolant to be released into the atmosphere.

All equipment for recovery and recycling of CFC coolant required by this Ordinance shall be approved by Underwriters Laboratory or a similar institution.

b) Restrictions on the sale and use of CFC Refrigerants

Effective January 1, 1991, no person shall sell or offer for sale CFC coolant suitable for use in mobile air conditioners in quantities smaller than fifteen pounds or to persons not owning recycling or recovery equipment described in section 4a.

c) Restrictions on the use of CFCs in Repair of Refrigeration Units

Effective January 1, 1991, no person shall use CFCs during the servicing of commercial refrigeration units for the purpose of testing or flushing out refrigeration lines .

d) Restrictions on the use of CFCs in Miscellaneous Consumer Products

Effective at the passage of this ordinance, no person shall sell, offer for sale, or use CFC plastic party streamers, CFC propelled noise horns, or CFC cleaning solutions for consumer electronics and photographic equipment.

e) Phase out of CFC-113 and Methyl Chloroform

Effective January 1, 1992, no person shall produce, sell, offer for sale, or use in manufacturing, CFC-113 or Methyl Chloroform in annual quantities greater than fifty percent of the total amount of CFC-113 and Methyl Chloroform used during the calendar year 1989.

Effective January 1, 1994, no person shall offer for sale, or use in manufacturing, CFC-113 or Methyl Chloroform.

Medical applications for which no safe non-ozone depleting alternatives are available shall be exempt from section 4e. When safe non-ozone depleting alternatives become available, all persons using CFC-113 or methyl chloroform under this exemption shall show good faith in converting to safe non-ozone depleting substances and products.

f) Restrictions on the use of Halons in Fire Extinguishers

Effective January 1, 1991, no person shall sell or offer for sale, fire extinguishers for consumer applications which contain halons or other ozone-depleting substances.

Effective January 1, 1991, no person shall use fire extinguishers that contain halons or other ozone-depleting substances for the purpose of testing or training except where required by law.

SECTION 5: Warning Labels Required

Effective January 1, 1991, no container in which CFCs, Halons, or other ozone-depleting substances are stored or transported, no product containing such substances, nor any product manufactured with a process that uses said substance shall be sold or offered for sale unless it bears a label stating the following:

"Contains (or manufactured with) [name of substance], a substance which harms public health and the environment by destroying ozone in the atmosphere."

Said label shall be permanently affixed on the face of said container or product, with the lettering and background in contrasting colors; and the letters themselves not less than one inch high, or twenty percent of the height of any product which is less than three feet in height.

SECTION 6: Enforcement

Enforcement of this ordinance shall be the responsibility of the Commissioner of Health and Hospitals. The Commissioner shall levy fines for violations of sections three or four of this ordinance at the rate of \$100 per violation per day. Fines collected under this ordinance shall be used to support the implementation of this ordinance.

SECTION 7: Technical Assistance

The City of Cambridge will produce, or commission to be produced, a document, available to all persons, for the purpose of assisting any persons affected by this ordinance. This document will be available within six months of the passage of this ordinance and will include, but not be limited to, information describing commercially available alternatives to ozone depleting substances and available technologies to assist in the implementation of such alternatives.

Order # 23

0-145

Councillor Duehay, Mayor Vellucci, Vice-Mayor Wolf, David Sullivan and Walsh re: proposed amendment TO PROTECT THE STRATOSPHERIC OZONE LAYER BY RESTRICTING THE USE AND EMISSIONS OF OZONE - DEPLETING CHEMICAL.

*12/28/89 - Placed on file
without prejudice*

In City Council,

October 23, 1989

ORDER ADOPTED BY 9 MEMBERS.

REFERRED TO THE COMMITTEE ON ORDINANCES
FOR HEARING AND REPORT.

*Copy sent to Ord. Committee
10/25/89 @*