## **Problem Set 5**

## Problem 2

The United States of America under President Carter was the first country that banned the CFC's in the year 1978:

In 1978, the U.S. Environmental Protection Agency (EPA), the Food and Drug Administration and the Consumer Products Safety Commission jointly banned the use of *fully halogenated chlorofluorocarbons* (*CFCs*) as *propellants* in *nonessential aerosol products*. This action is commonly referred to as the "aerosol ban". However, the continued use of CFCs as propellants in certain "essential" (EPA) and "medical" (FDA) products was permitted.

In October, 1980 EPA released an Advanced Notice of Proposed Rulemaking (ANPR) in which the Administrator acknowledged the danger of chlorofluorocarbons and called for an immediate freeze on production (45 FR 66726, Oct. 7, 1980). 9 The ANPR, issued in the last days of the Carter administration, was one of a suite of actions called the 'midnight regulations' because of their proximity to the November election (Cagin and Dray, 1993, p. 243). Less than a month later Ronald Reagan was elected to office. He installed Anne Gorsuch, who was cool to further regulations of chlorofluorocarbons, as director of EPA.

## **Problem 4**

#### **Christmas Strawberries Expanding The Ozone Hole?**

Monday, 13 December 2004, 12:21 pm Press Release: Green Party 9 December 2004

Christmas strawberries expanding the ozone hole?

Green Party Health Spokesperson Sue Kedgley is shocked that the Government has broken its promise to stop use of ozone-depleting gas, methyl bromide for agricultural purposes by 1 January, 2005.

New Zealand sought and was granted, an exemption at the 16th Meeting of Parties to the Montreal Protocol in Prague on November 26, allowing strawberry growers to use 40.5 tonnes of methyl bromide for soil sterilisation during 2005 and 2006.

"This exemption will see the hole in the ozone layer increase by 8.1 square kilometres a year, severely increasing the risk of skin cancer among New Zealanders," said Ms Kedgley.

She is calling on consumers buying Christmas strawberries to ask their supermarkets to guarantee that they have not been grown or treated with one of the 'most highly toxic and ozone-depleting

gases in existence'.

"The public needs to understand that 40.5 tonnes of it will destroy 20.46 tonnes of ozone," Ms Kedgley.

"Put simply, that means strawberry growers using methyl bromide will increase the hole in the ozone layer by 8.1 sq kilometre a year. New Zealand made a commitment to stop using methyl bromide for agricultural purposes by January 2005 when it ratified the Montreal Protocol in 1988. It is shocking that the Government has quietly reneged on this commitment, given that there are perfectly acceptable and effective alternatives such as steam to sterilise soil.

"In addition to breaking their promise, the Government's exemption represents a 100% increase in the amount of methyl bromide that strawberries growers used last year. So much for a commitment to protect the ozone layer.

"New Zealand is particularly at risk because the ozone hole sits directly above us. For this reason, we should be leading the campaign internationally to get rid of methyl bromide."

Quelle: http://www.scoop.co.nz/stories/PA0412/S00309.htm

#### Aufgabe 3:

Suchen Sie im www unter "**christmas ozone layer**". Auf welche lustigen und weniger lustigen Zusammenhänge stossen Sie? Was haben Weihnachtserdbeeren hier zu suchen? Kommentieren Sie kurz die gefundenen Web-Stellen. (3P) *Trotz dieser gemischten Aussichten wünschen wir Ihnen* 

Thomas Peter und Thierry Corti Quelle: <u>http://www.iac.ethz.ch/people/thcorti/stratos/uebung\_9.pdf</u>

# **SCIENCE & SPACE**

#### Ozone layer making a recovery

#### Scientists caution it could take decades to restore

By Marsha Walton CNN

Friday, September 2, 2005; Posted: 4:58 p.m. EDT (20:58 GMT)

# ATLANTA, Georgia (CNN) -- Earth's ozone layer, which protects both humans and plant life from ultraviolet radiation from the sun, appears to be recovering.

A study just published by the Cooperative Institute for Research in Environmental Sciences shows declining ozone levels have leveled off from 1996 to 2002, and in some areas there even are small increases. [...]

Quelle: http://www.cnn.com/2005/TECH/science/09/02/ozonerecovery/index.html

FUNNY CARTOONS:



I'm not a Chelsea supporter, I'm a scientist. It stands for chloroflurocarbon."





### Faith fires hit ozone layer

HINDUS in India's West Bengal state began burning wood and herbs in more than 1,000 deep pits yesterday in a ceremony they said will heal the ozone layer and cure disease, drawing anger from green campaigners.

"Gentlemen, we have a dilemma. Pollution scientists say it'll destroy the ozone - however, Market Research predict it'll sell like hot cakes."

Billowing smoke from 1,008 fires, which will blaze for three days, will wipe out parasites which cause outbreaks of dengue fever and malaria, local religious leaders said, and help boost the earth's natural defences.

But environmentalists warned the smoke would only do more damage.

Quelle: http://news.scotsman.com/topics.cfm?tid=52&id=1708142006

#### Canadian satellite to study ozone layer

#### Last Updated: Saturday, February 6, 1999 | 8:48 AM ET

#### CBC News

A Canadian-made satellite could soon help researchers understand the problem of the thinning ozone layer.

A satellite called SCISAT-1, designed at the University of Waterloo will be sent into space in 2001. It'll measure depletion of ozone in the Arctic.

"Though Canada has contributed scientific instruments to many international projects, SCISAT-1 marks Canada's return to the business of building 100% Canadian science satellites," said John Manley, Minister of Industry Canada Friday. [...]

Quelle: http://www.cbc.ca/health/story/1999/02/06/ozone990206.html