

Stratospheric Update

An Update on Ozone Protection Progress





International



science & Research



Education



Resources

1998 Scientific Assessment Reasserts That Montreal Protocol is Working

...But Worst Ozone Depletion Still Lies Ahead

igns of continuing success for the Montreal Protocol are evident in the atmosphere. This conclusion and others come from the 1998 Scientific Assessment of Ozone Depletion, the most recent of a series of comprehensive analyses published jointly by the World Meteorological Organization (WMO) and the United Nations Environment Programme (UNEP).

The report states that, "the total combined abundance of ozone-depleting compounds in the lower atmosphere peaked in about 1994 and is now slowly declining." Total concentrations of chlorine—the destructive atom released from chlorofluorocarbons (CFCs) in the atmosphere—are on the decline, but total bromine concentrations—the even more destructive atoms released from halons and methyl bromide—are still increasing.

There are delays, however, in the time it takes CFCs, halons, and other ozone-depleting substances to pass from the lower to the upper atmosphere (stratosphere). The combined abundance of stratospheric chlorine and bromine is expected to "peak before the year 2000," meaning we should expect the most severe rates of ozone depletion "to lie within the current decade or the next two decades," according to the report.

Sometime thereafter in the 21st century the ozone layer is expected to begin recovering, assuming, of course, continued compliance with the Montreal Protocol. The authors of the report say that, "unambiguous detection of the beginning of the recovery of the ozone layer is expected to be well after the maximum loading of ozone-depleting gases." This is because the fall-off in stratospheric chlorine and bromine abundance will be more gradual than the climb to peak levels. Furthermore, ongoing changes in our atmosphere brought about by increasing greenhouse gases, and the climatic changes that

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The UV Index A Shining Success

hen you watch your local weather forecast, does the meteorologist report the UV Index? If so, your city is one of the communities for which UV Index information is available. The UV Index measures the ultraviolet intensity at the earth's surface when the sun is highest in the sky. It indicates the degree of caution you should take when working, playing, or exercising outdoors. Alan Geller, of the Boston University Medical Center, agrees that "the UV Index is an easy-to-use reminder to help all Americans protect themselves from the sun."

To derive the index, the National Weather Service (NWS) looks at ozone data from satellite observations, atmospheric pressure and temperature forecasts, elevation, and expected cloudiness. NWS then computes a regional index with a range of 0 to 10+. Lower numbers indicate a minimal or low exposure level while higher numbers indicate a high exposure level. According to Craig Long of NWS, "the UV Index has been verified

for the summer months since its inception in 1994. Due to its accuracy, the UV Index should be considered a good forecasting tool."

EPA works cooperatively with NWS and the Centers for Disease Control and Prevention (CDC) on public outreach and education campaigns to encourage people to take note of the UV Index every day. As part of its outreach efforts, EPA is working with several major league baseball teams to promote the UV Index. During games, teams display the UV Index on their giant screens along with messages to help fans protect themselves from overexposure to the sun. EPA's SunWise School Program (see page 3) will also use the UV Index as a cornerstone of its efforts to educate young children about sun protection.

Studies show that the outreach efforts undertaken by EPA, NWS, and CDC enhance awareness of the effects of overexposure to the sun's ultraviolet rays, and provide the public with actions they can take to reduce the harmful effects of overexposure, which include sunburn, skin cancers, aging and wrinkling of the skin, ocular damage, cataracts, and immune suppression. According to Thomas F. Downham II, M.D., from the National Association of Physicians for the Evironment (NAPE), "daily awareness of the UV Index along with use of sunscreen (SPF 15 or greater), wearing a hat and shirt, and

avoidance of sunburn by seeking shade from 10 am to 4 pm will help prevent many of the harmful health effects from overexposure to sunlight. The daily UV Index is available from many local newspapers, TV weather reports, and Internet Web sites."

Several EPA publications are available that provide more information about the UV Index. See "Resources" in this issue for a few of these

publications. Others are available by calling EPA's Stratospheric Ozone Information Hotline at 800 296-1996, or you can visit the UV Index Web site at <www.epa.gov/ozone/uvindex/uvover.html>... Medical and health organizations interested in the UV Index should contact NAPE at 301 571-9790, by E-mail at nape@napenet.org, or visit the NAPE Web site at <www.napenet.org>.

For more information about the UV Index, contact Kevin Rosseel of EPA at 202 564-9731.



SunWise Plans to Teach Sun Safety

ith one in five Americans developing skin cancer, childhood education about sun safety is a vital step toward reducing risk and improving public health. In response to this serious health issue, EPA and schools across the country are teaming up in the SunWise School Program. SunWise aims to teach children in elementary school and their caregivers how to protect themselves from overexposure to the sun.

Why teach children about sun protection?

Overexposure to the sun's ultraviolet (UV) rays damages human health. Besides the immediate effect of sunburn, over time excess UV radiation can cause skin cancer and other skin disorders, eye damage, and immune system suppression. Protecting children from UV overexposure is very important because 80 percent of lifetime sun exposure occurs before the age of 18. Just one or two blistering sunburns in childhood might double the risk of developing melanoma. Teaching children about sun safety is the key to reducing the risk of future health problems.

How can schools participate?

Participating schools will sponsor activities that raise children's awareness of the largely preventable health risks from UV radiation and teach simple steps to avoid overexposure. Such activities might include:

- Reporting the UV Index daily.
- Educating children about stratospheric ozone, ozone depletion, and UV radiation.
- Sponsoring 'Safe Fun in the Sun' days.
- Providing shade cover in outdoor areas.

Inviting health professionals, environmentalists, and meteorologists to speak with school children.

Participating schools will receive a program tool kit including activity guides, interactive games, science experiments, videos, and a UV Index database. Also, "train the trainer" sessions will be available to communities and schools. Participants can share their ideas for projects and check the progress

of others on the SunWise School home page. Beginning in 1998, pilot schools in Boston, San Francisco, and Phoenix will test these program materials and begin implementing sun protection practices. The pilot will be expanded to additional cities in 1999 in preparation for a national SunWise launch in 2000.

Who can get involved?

Teachers, parents, health professionals, environmental groups, educational organizations, and others can participate in SunWise by helping students learn about sun protection. SunWise Community Planning Teams have been established in each pilot community to aid in the design and development of this program. With everyone's help, sun safety can grow beyond school classrooms to help the entire community.

If you would like more information on Sun-Wise, call or e-mail Maura Cantor of EPA at 202 564-9096; <cantor.maura@epa.gov>. Also, visit our Web site at <www.epa.gov/sunwise>

or call the Stratospheric Ozone Information Hotline at 800 296-1996 for more information about SunWise or ozone protection.



The SunWise School Program is one of several EPA EMPACT projects. EMPACT, which stands for Environmental Monitoring for Public Access and Community Tracking, will bring to communities up-todate environmental information they can understand and use in day-to-day decisionmaking about their health and the environment. For more information about EMPACT, please visit the program's Web site at <wyw.epa.gov/empact/>.

SunWise Partners

As a voluntary partnership program, SunWise planners are working together with national organizations that provide valuable assistance and expertise in changing sun protection behaviors. Special thanks to the following:

- American Academy of Dermatology
- American Association of Health Education
 - American Cancer Society
 - Boston University Medical Center
- Centers for Disease Control and Prevention
 - Environmental Health Center
- National Association of Physicians for the Environment
 - National Safety Council
 - National Weather Service
 - Skin Cancer Foundation



SNAP Update

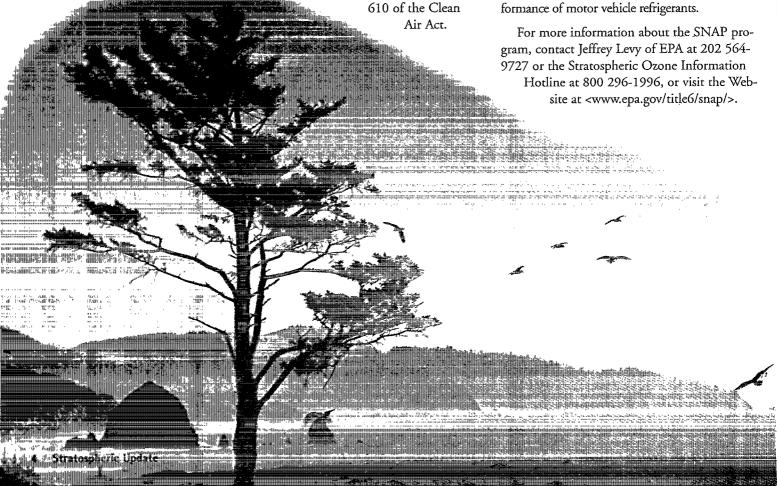
PA's Significant New Alternatives Policy (SNAP) program reviews alternatives for ozone-depleting substances. Since the last update in September 1997, the SNAP program has published several new decisions regarding acceptable and unacceptable alternatives. EPA has added all of these SNAP lists of acceptable and unacceptable alternatives to its ozone depletion Web site www.epa.gov/ozone/title6/snap/lists/>.

More environmentally-friendly products, such as water-based, soy-based, terpene, and semi-aqueous compounds, now account for the majority of the cleaning agents used in the solvents industry. However, the need for higher solubility and non-flammable solvents still exists. Accordingly, the Agency is presently reviewing proposals for listings of new substitutes, most notably n-propyl-bromide. As these new substitutes emerge, the suitability of maintaining current exemptions for HCFC-141b use in aerosols and pressurized dispensers is also being reviewed under a new pro-

Another major SNAP effort is the creation of an outreach report that reviews the many alternatives available for halons. The report, now being drafted, will discuss how to safely and responsibly make the shift to new fire protection technologies in the following four volumes:

- Corporate Structures in the Fire Protection Industry.
- Safety Guide for Decommissioning Halon Systems: Generic instructions for safe decommissioning and manufacturers' specifications for handling specific equipment.
- Fire Protection Options: Details the different types of alternatives, including information on use, toxicity, and environmental issues.
- Halon Recycling and Banking: Discusses issues related to the recovery, reclamation, storage, and reuse of halons, including different types of halon recycling schemes.

Finally, the SNAP program recently conducted thorough reviews of several issues, including ozone-depleting potential determinations for a number of new solvents and how fractionation affects the performance of motor vehicle refrigerants.



posed rule under Section

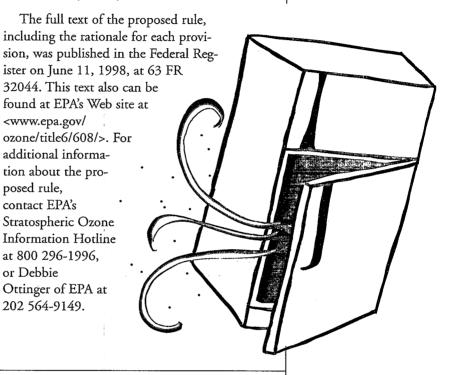
EPA Proposes Venting Regulation

Under Section 608 of the Clean Air Act (CAA), it is illegal to knowingly vent substitutes for chlorofluorocarbon (CFC) and hydrochlorofluorocarbon (HCFC) refrigerants during the maintenance, service, repair, or disposal of air-conditioning and refrigeration equipment. In June, EPA proposed a regulation to fully implement this venting prohibition. In brief, the proposed regulations would accomplish the following:

- Extend to hydrofluorocarbon (HFC) and perfluorocarbon (PFC) refrigerants the requirements currently in place for CFC and HCFC refrigerants. These requirements include: "required practices;" certification programs for recovery and recycling equipment, reclaimers, and technicians; leak repair requirements; safe disposal requirements; and a prohibition on the sale of refrigerant to anyone but certified technicians.
- Exempt certain substitute refrigerants from the venting prohibition, including water, carbon dioxide, nitrogen, hydrocarbons (in industrial process refrigeration only), ammonia (in absorption units and in commercial and industrial process refrigeration only), and chlorine (in industrial process refrigeration only).
- Make minor changes to required practices, recovery equipment standards, and refrig-

- erant purity standards for CFCs and HCFCs to accommodate the addition of the HFC and PFC refrigerants.
- Lower the maximum allowable leak rates for comfort cooling chillers, commercial refrigeration, and industrial process refrigeration.
 The new maximum allowable leak rates would apply to equipment containing CFCs, HCFCs, HFCs, and PFCs.





EPA Announces 1998 Stratospheric Ozone Protection and Climate Protection Award Winners

n 1998, EPA will present its annual Stratospheric Ozone Protection Awards to individuals, associations, and corporations that have demonstrated exceptional leadership, personal dedication, and technical achievements in protecting the stratospheric ozone layer. Since 1990, over 350 awards have been presented. Winners have come from 29 countries including Australia, Belgium, Brazil, Canada, Chile, China, Dominican Republic, France, Germany, Hungary, India, Ireland, Japan, Kenya, Malaysia, Malta, Mexico, The Netherlands, Norway, Poland, Singapore, Spain, Sweden, Switzerland, Taiwan, Thailand, United Kingdom, United States, and Venezuela.

This year, EPA also will honor contributions to

climate protection with a new award, the Climate Protection Awards. Winners of this award were selected on the basis of originality and public purpose; persuasive, moral, or organizational leadership; global perspective and implication; and significant reduction in greenhouse gas emissions.

Both awards will be presented at the upcoming Earth Technologies Forum in Washington, DC, on October 26 through 28, 1998. Award recipients will be honored at a dinner sponsored by the Alliance for Atmospheric Policy, on the evening of October 27, 1998.

For more information, contact Norma Hughes of EPA at 202 564-9091.





Partnering for a Smooth **MDI Transition**

n 1996, metered-dose inhalers (MDIs) were designated an "essential use" under the Montreal Protocol because of their importance in treating serious respiratory diseases and because chlorofluorocarbon (CFC)-free MDIs were not available. Recently, however, the first CFC-free MDI was introduced. All major pharmaceutical companies are now reformulating their MDIs to be CFC-free.

EPA and the Food and Drug

Administration (FDA) are work-

ing together to achieve a safe

and orderly transition

from the use of

MDIs that use

CFCs to those

that do

not.

FDA and EPA recognize that involving patients and health care professionals is critical to achieve a successful transition. Joint outreach efforts among industry, patient and health care professionals, and government agencies will help educate patients, dispel rumors, and minimize anxieties about the transition. To this end, FDA, EPA, and the

> National Institutes of Health, along with industry and several patient health

> > care organizations, have developed a brochure entitled "Your Metered Dose Inhaler Will Be Changing...

Here Are the Facts." Copies of the

brochure are available by call-

ing EPA's Stratospheric Ozone Information Hotline at 800 296-1996.

Most patients and health care providers recognize the importance of maintaining FDA's role in managing a smooth transition and of a partnership between FDA and EPA to facilitate that transition. Currently, FDA is reviewing public comments received in response to an Advance Notice of Proposed Rulemaking (ANPRM) published in March 1997. Based on the large number of public comments received, FDA estimates that it will publish a Notice of Proposed Rulemaking early in 1999.

EPA and FDA recognize that the MDI transition will most probably proceed over a number of years. Both agencies are committed to working with pharmaceutical companies to ensure that adequate supplies of CFC-MDIs are available during the transition period. In addition, EPA will continue to work with patients, health care professionals, and makers of MDIs to develop additional outreach materials and to encourage a smooth transition for everyone involved.

For more information contact Chris O'Donnell of EPA at 202 564-9079.

Report on the Supply and Demand of CFC-12 Refrigerant in the United States

recent EPA report concludes that the total inventory of chlorofluorocarbon-12 (CFC-12) refrigerant in the United States at the beginning of this year was higher than estimated in 1997. The report, issued in June of this year, includes information on the projected supply and demand of CFC-12 in the United States between 1998 and 2002. EPA's report concludes that the total inventory of CFC-12 in the United States at the beginning of this year ranged between 40 million and 75 million pounds.

Other key findings of the report include the following:

- Chemical manufacturers, chemical packagers and reclaimers, original equipment manufacturers (automakers), automotive parts retailers and distributors, do-it-yourselfers, stationary and commercial air-conditioning and refrigeration distributors, and wholesale clubs hold most supplies of CFC-12.
- Based on information from industry sources, it is highly unlikely that spot shortages of CFC-12 will occur in 1998. In fact, the supply of CFC-12 is plentiful in 1998, and anyone in the country should be able to obtain it. Significant shortages also are unlikely in 1999.
- Reclamation of CFC-12 did not increase dramatically over the past year. Most recovered CFC-12 in the commercial and stationary sector is usually held by equipment owners that use the recovered CFC-12 to service other equipment, rather than send it to reclaimers. Supermarkets, for example, frequently retrofit equipment at individual stores and keep the recovered CFC-12 for units that still rely on it.

- Aggressive law enforcement and industry vigilance in reporting suspicious CFC supplies greatly hindered illegal imports of CFC-12. EPA estimates that the volume of illegal trade was less than 10 million pounds per year for 1996 and 1997.
- The national demand for CFC-12 in 1998 is estimated to be 27 million pounds, with motor vehicle air-conditioning repair accounting for 83 percent of the annual demand. Demand is expected to decline as market penetration of CFC-12 alternatives increases and existing CFC-12-based equipment stocks are retired. The estimated demand for 1998 is significantly lower than shown in the 1997 report because EPA revised some of the assumptions used in the modeling system that generates the demand figures.

To obtain a copy of the report, call EPA's Stratospheric Ozone Information Hotline at 800 296-1996.



On December 31, 1995, U.S. manufacturers stopped producing CFC-12, an ozone-depleting refrigerant also known as R-12. Use of CFC-12 from existing supplies, however, is not prohibited. Since the 1996 production phaseout of this widely used chemical, the national supply of CFC-12 has depended upon the quantity of CFC-12 contained in stockpiles at the beginning of 1996, and on the quantity of CFC-12 reclaimed from existing air-conditioning and refrigeration equipment. The demand for CFC-12 is determined by the number of air-conditioning and refrigeration systems that require refrigerant to replace CFC-12 lost through leakage and required upon servicing.



By 2001, industrialized nations must reduce methyl bromide production by 50 percent, and by 2005, it must be totally phased out. For developing countries, a complete phaseout of methyl bromide is scheduled for 2015. These guidelines are part of more stringent controls added to the Montreal Protocol at the Ninth Meeting of the Parties held in Montreal, Quebec, on September 17, 1997.

The complete global phaseout will require industrialized countries to reduce consumption by 25 percent in 1999, then 50 percent in 2001, 70 percent in 2003, and finally 100 percent in 2005. This action plan is based on 1991 consumption levels, which were frozen in 1995. For non-industrialized countries, there will be 20 percent reduction in 2005 and then 100 percent in 2015, based on an average of 1995-1998 consumption levels, which will be frozen in 2002.

Methyl Bromide Update

ethyl bromide is a pesticide used to control insects, nematodes, weeds, pathogens, and rodents in soil, buildings and other structures, and for commodity and quarantine treatment. Each year in the United States, about 27,000 tons of methyl bromide are used in agriculture, while about 76,000 tons are used globally. Unfortunately, methyl bromide is toxic not only to the pests it targets, but also to other organisms. Human exposure to methyl bromide can result in central nervous system and respiratory system failure and can damage the lungs, eyes, and skin. Several deaths have occurred due to methyl bromide exposure.

Methyl bromide is also a significant ozone-depleting substance. On a per molecule basis, the bromine from methyl bromide is 50 times more damaging to ozone than the chlorine from CFCs. Regulations that were put in place in 1993 will phase out the production and import of methyl bromide after January 1, 2001. In addition, EPA froze U.S. production in 1994 at 1991 levels. (See sidebar at left).

The viability of alternatives to methyl bromide depends on the specific crop and target pest where the alternative is used—each crop has a different range of pests. While methyl bromide kills everything, alternatives target a very specific range of pests such as insects or plant diseases. Consequently, the grower using alternatives must have a good understanding of not only the type and population of the pests, but also the most effective measures of control and the best times to use them.

Viable alternatives must effectively and economically manage the same pests as methyl bromide. There are good technical alternatives for about 90 percent of methyl bromide uses, but currently not all of these alternatives are financially attractive to farmers. As methyl bromide is phased out, it is expected that alternatives will become more commercially viable. Research being conducted by the USDA and other agencies on additional alternatives is underway and will likely increase the available options.

Thomas of EPA at 202 564-9179 or

Athomas william@epa.gov>. Also, visit our

Web site at <www.epa.gov/ozone> or call the

Stratospheric Ozone Information Hotline at

800 296-1996 for more information on

methyl bromide.

Global Warming May Interfere with Ozone Layer Recovery

According to a recent study, increasing levels of greenhouse gases (GHGs)—those that can cause global warming by trapping the earth's heat in the atmosphere—may thwart recovery of the ozone layer.

The connection between GHGs and ozone depletion lies in the fact that GHGs, which can warm the lower atmosphere, actually cool the upper atmosphere, or stratosphere. The chemistry that leads to ozone depletion is highly sensitive to temperature. Extremely cold temperatures over the polar regions create conditions that facilitate rapid ozone depletion.

In a model simulation by scientists at NASA's Goddard Institute for Space Studies, elevated levels of carbon dioxide (CO2)-the primary GHG of concern-caused ozone depletion to continue well after the abundance of chlorine (released from CFCs) had declined. Without such interference from CO2, ozone loss would likely parallel more closely the rise and fall of stratospheric chlorine levels. In the NASA model, Arctic ozone loss was most severe between the years 2010 and 2019, roughly a decade after stratospheric chlorine levels had peaked.

1998 Scientific Assessment Reasserts That Montreal Protocol is Working

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might result, complicate the picture of how quickly the ozone layer will recover.

Atmospheric measurements also show an increase in the abundance of CFC substitutes, another sign that the Montreal Protocol is working. This observation would be expected given the policy direction taken by most nations to replace CFCs with hydrochlorofluorocarbons (HCFCs) (which have a lower ozone depletion potential than CFCs) and hydrofluorocarbons (HFCs) (which have no ozone depletion potential). In the United States, EPA's Stratospheric Protection Division has approved the use of HCFCs and HFCs as CFC substitutes in numerous applications.

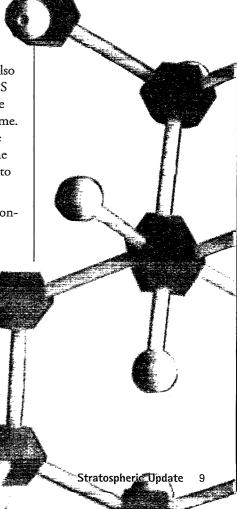
Severe ozone loss over the Antarctic during springtime in the southern hemisphere continues unabated. Because of unusually cold winters in the Arctic, stratospheric ozone levels have been extremely low in recent years.

All told, the 1998 assessment illustrates the effectiveness of the global transition away from ozone-depleting substances thus far, yet it also reminds us that our commitments to reduce ODS emissions cannot produce changes overnight—we will face a depleted ozone layer for decades to come. The report further reinforces the need to stay the course in ensuring continued compliance with the Montreal Protocol if ozone layer recovery is ever to be achieved.

For more information about the assessment, contact Ben DeAngelo of EPA at 202 564-9295 or <deangelo.ben@epa.gov>.



Science & Research





Cracking Down on Violations

n 1990, Title VI of the Clean Air Act (CAA) authorized EPA to restrict the use, import, and disposal of ozone-depleting substances. Today, the Agency is upholding those regulations through education and enforcement efforts.

By law, businesses that repair, service, or scrap air-conditioning systems and appliances, which can

release large amounts of chlorofluorocarbons

(CFCs) or hydrochlorofluorocarbons (HCFCs), must certify to EPA that they use federally approved procedures in recovering and recycling or saiming these chemicals. The

Crimination Division of each EPA region phone relations in their individual geographic regions of the regions, often conducted in configurations of the EPA region phone relations, often conducted in configuration of the Pederal Bureau of Investigation in the U.S. Custo and the U.S. Custo resulted in increasing numbers of the EPA region phone region region phone

In Philadelphia, Pennsylvania, ne spinal office has been extremely successful has been extremely

enforcement efforts. Since November 1997, this office has named 30 parties in illegal CFC actions, resulting in settlements totaling \$81,213. In one recent case, a facility allegedly employed an uncertified technician who did not use required CFC recovery and recycling equipment to service air conditioners and water coolers. EPA is seeking a \$129,400 fine in this case.

EPA cracked down in other parts of the country as well, often with even more serious consequences. In March 1998, the U.S. Attorney for the Northern District of Ohio sentenced Herman Brodzenski to 12 months in a federal prison for illegally certifying 100 refrigerant technicians.

EPA's success in enforcing Title VI regulations is expected to increase in the future. According to Dawn Banks, of EPA's Office of Compliance, "Now that the Title VI rules have been out there for a few years, and we have made extensive, repeated efforts to educate the public about the regulations, there is really no excuse for noncompliance. Today, we are less and less likely to be lenient when pursuing penalties."

For more information on Title VI regulations or EPA's enforcement activites, contact Dawn Banks of EPA at 202 564-7034. You also can visit our Web site at <www.epa.gov/ozone/enforce/enforce.html>.

EPA Prepares for the Year 2000

t seems that every day, newspapers, magazines, and TV stations report new challenges presented by the Year2000 computer issue. To promote a better understanding of the potential effects of "Y2K" computer problems on environmental protection issues, EPA has launched a dialogue with its partners and customers.

Until the end of 1999, EPA and other federal agencies will be working with industry, state and local governments, organizations, and private citizens to address Y2K challenges. Because many aspects of environmental protection rely on automated reporting and record keeping, EPA is taking a lead in fostering Y2K information

exchange, so that no one is taken by surprise as the new millennium begins.

EPA is interested in learning about its customers' concerns, experiences, or innovative approaches to dealing with Y2K. For more information about Y2K and what EPA is doing to plan for a smooth transition or to share your stories, consult EPA's Year 2000 homepage at <www.epa.gov/y2k/>, or contact EPA's Dwayne Aydlett at <aydlett.dwayne@epa.gov>. Stay tuned for more information from the Stratospheric Protection Division and other parts of EPA about the Year 2000 issue.

Going to the Source EPA Petition Process Curbs Illegal Imports

etween January and June, EPA responded to 93 petitions from companies seeking to import previously used ozone-depleting substances (ODS) into the United States from other countries. Although the Clean Air Act (CAA) Amendments of 1990 ban the import of the ODSs most destructive to the ozone layer, such as chlorofluorocarbons (CFCs) and halons, certain exemptions exist for chemicals that have been used and removed from operating equipment. Allowing the import of these used substances helps optimize the use of existing supplies, discourages the production of virgin material, discourages venting of the substance to the atmosphere, and prevents shortages in sectors that still rely on these substances.

EPA set up the petition process so the Agency could independently verify that substances a person wishes to import have, in fact, been previously used. Companies that want to import used substances submit their request to EPA. The

requests must detail the original source facility where the substance was used. EPA works closely with U.S. Customs, the Department of Justice, and other relevant agencies to minimize illegal imports of ODSs and to ensure those who do import illegally are caught and convicted.

The number of petitions submitted to EPA has increased every year since the phaseout dates for ODSs were established under the CAA. In the last 6 months of 1995, EPA received 31 petitions; in 1996, EPA received 73 petitions, and in 1997, the number of petitions submitted climbed to 182.

For more information about EPA's petition process, or if you suspect someone is attempting to illegally import ODSs, contact Ben DeAngelo of EPA at 202 564-9295 or <deangelo.ben@epa.gov>. You also can call the Stratospheric Ozone Information Hotline at 800 296-1996. Please see page 12 for information about EPA's new fact sheet on Black Market CFCs.





For Weathercasters

How can the UV Index help protect you from overexposure to the sun? Find out in Stay Healthy in the Sun: Information About UV Radiation for Meteorologists. (EPA430-K-98-004) This booklet

is designed to help broadcast meteorologists when they report on the UV Index, but it is useful to anyone who wants to avoid overexposure to the sun. It contains information about the health risks

posed by UV radiation and describes steps people can take to protect themselves from overexposure. General sun safety tips, as well as specitic health advisories for each UV Index level, are included. For more informarion contact EPA's Stratospheric Ozone Information Hotline at 800 296-1996 or visit the UV Index Web site at en ww.epa.gov/ozone/uvindex/uvover.html>.

Schools Learn Sun Safety

EPA's SunWise School Program aims to teach elementary school children and their caregivers about the health risks of overexposure to the sun and about smart sun protection behaviors. To learn how schools and other groups can participate in this multiyear partnership, check out Be Safe in the Sun! The SunWise School Program.

(EPA430-F-98-009) This brochure gives a brief overview of the program and provides points of contact. Call the Stratospheric Ozone Information Hotline at 800 296-1996 or visit the SunWise Web site at <www.epa.gov/sunwise/> for more information.

Champions Update

EPA recently updated a document that highlights the varied accomplishments of the individuals, associations, and corporations that have received EPA's Stratospheric Ozone Protection Award from 1990 to 1996. Newest Champions of the World profiles the 1997 winners of this prestigious award. The 1997 winners were selected because their accomplishments

resulted in significant environmental improvements through leadership, motivation, and technical innovation. The awards were presented during the 1997 International Conference on Ozone Layer Protection Technologies in Baltimore, Maryland, on November 13, 1997. To request a copy of the Newest Champions of the World (EPA430-K-98-003), contact the Stratospheric Ozone Information Hotline at 800 296-1996.

Black Market CFCs

A new EPA fact sheet informs wholesalers, distributors, and retailers of the consequences of buying or possessing illegal CFCs. The fact sheet, Black Market CFCs and You-A Criminal Combination (EPA305-F-98-001), describes potential penalties for purchasing or possessing CFCs illegally smuggled into the country, provides tips on how you can ensure the CFCs you buy are legal, and includes examples of what has happened

to people who have been convicted of buying or smuggling CFCs. To request a copy of Black Market CFCs and You-A Criminal Combination (EPA305-F-98-001), call the Stratospheric Ozone Information Hotline at 800 296-1996.



SEPA

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Official Business Penalty for Private Use \$300