OzoNews
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GLOBAL

1- Growing Ozone Hole "Hangover"

Despite a worldwide phaseout of chlorofluorocarbons (CFCs) and hydrochlorofluorocarbons (HCFCs) under the 1987 Montreal Protocol, these ozone-depleting substances (ODSs) are still being emitted into the atmosphere at rates greater than anticipated, according to a new report by the UN Intergovernmental Panel on Climate Change (IPCC). Moreover, the ozone-friendly, fluorinated substitutes that replaced them, such as hydrofluorocarbons (HFCs), perfluorocarbons, and sulfur hexafluoride, are potent greenhouse gases (GHGs) whose emissions are likely to grow.

The problem stems from a gap between the Montreal Protocol and the 1997 Kyoto Protocol. Although the former regulates production and consumption of ODSs, which also contribute to climate change, it says nothing about emissions, explains Susan Solomon, a senior scientist with the U.S.

National Oceanic and Atmospheric Administration and one of the IPCC working group co-chairs who coordinated the report. Meanwhile, the Kyoto Protocol controls GHG emissions, including those from fluorinated gases, but not their production and consumption. Left unregulated are existing stocks or banks of ODSs. Consequently, a big chunk of the CFCs and HCFCs that still leak into the atmosphere now and will continue to do so over the next decades are uncontrolled releases coming from old equipment, mainly air conditioners, refrigerators, insulating foams in appliances, and building materials.

Overall, the report shows that the global warming impact of ODSs and their replacements has declined from about 32% of the total effect in 1990 to about 10% in 2000—a huge success for the Montreal Protocol. However, of that 10%, 65% still comes from CFCs, with HCFCs and HFCs contributing an estimated 20% and 15%, respectively.

"These are the ozone hole hangovers, [from which] we're seeing quite a few more emissions than we really ever imagined we would after so long," Solomon says. By 2015, CFC emissions are expected to decline to about 10% of the ODS contribution, according to the report. But under a business-as-usual scenario, the IPCC predicts that rising emissions from HFCs and HCFCs will offset these emission reductions.

Emissions of CFCs and their replacements could be cut in half by 2015, the IPCC maintains, if governments work to improve containment to prevent leaks, evaporation, and emissions of unintended

byproducts; reduce the amounts needed in equipment; promote more end-of-life recovery, recycling, and destruction of substances; use more ammonia and other alternative substances with a lower or negligible global warming potential; and promote emerging technologies that avoid gases that deplete ozone or contribute to climate change.

Industry groups representing HFC refrigerant manufacturers and fluorinated gas producers hailed the report's findings, calling them an endorsement of containment rather than a phaseout of HFCs. Environmentalists, on the other hand, say the report focuses too heavily on containment, neglecting the potential for replacing HFCs with non-GHG alternatives, such as hydrocarbons, CO_2, and water-vapor technology.

Some countries have already taken steps to mitigate end-of-life releases and restrict HFC use in applications for which greener alternatives exist.

In particular, the United States and several European countries require certified technicians to recover and recycle CFCs and their substitutes from refrigerators and air conditioners before disposal.

In addition, almost all domestic refrigerators sold in Europe are HFC-free and use hydrocarbons instead, notes Bert Metz, an IPCC working group co-chair and scientist with the National Institute for Public Health and Environmental Hygiene in The Netherlands. In the United States, HFCs are still used, but that is because of safety and liability considerations, Metz points out. The European Commission began developing a community-wide directive to regulate fluorinated gases in 2003 with proposals in line with the IPCC recommendations.

A policy makers' summary of the report was released in mid-April. The final report will be officially presented at the next meeting of the UN Framework Convention on Climate Change in Bonn, Germany, in mid-May. Safeguarding the Ozone Layer and the Global Climate System: Issues Related to Hydrofluorocarbons and Perfluorocarbons can be accessed at www.ipcc.ch
Source: Environmental Science and Technology Magazine, 18 May 2005, By: kris Christen
http://pubs.acs.org/subscribe/journals/esthag-w/2005/may/science/kc_ozone.html

AFRICA

2- Namibia to Throw out CFCs by 2008

THE Ministry of Trade and Industry (MTI) has introduced an incentive scheme for the conversion of cooling installations from Chloroflourocarbons (CFCs) to non-CFCs based technology. CFCs are substances that drive or act as fuel for systems such as cooling installations, asthma pumps, deodorant spray cans and others. Countries worldwide, according to the Montreal Protocol, can only use CFCs which are Ozone Depleting Substances (ODS) until 2010, but Namibia wants to phase out their use in three years' time (2008). With financial assistance amounting to over N$1 million from the GTZ Proklima, the ministry through the ozone office will cover 60 percent of conversion costs of refrigeration and air-conditioning installations to non-CFC based technology. A random survey conducted in 2002 found that Namibia has a lot of cooling installations using CFCs in the public sector especially in schools, hospitals, tourist resorts and Ministry of Defense institutions. The private sector was also found to have a lot of the installations in shops and other places. Petrus Uugwanga, ozone project coordinator said through the project that will last until the end of 2007, the country is preparing the market for the 2010 deadline, when CFCs will not be available anymore. Apart from cooling installations, CFCs are also used in asthma pumps (inhalers), deodorant spray cans, dry cleaning and mattress making processes. But Uugwanga said the products in Namibia were not found to have CFCs, because, South Africa, Namibia's main trading partner, does not have CFC based production. The project is concentrating on air-conditioning and refrigeration installations because they have the greatest impact, said Uugwanga. In January this year, a law that requires all people importing CFCs to be registered with the MTI to get permits was put in place, while all equipment designed to use CFCs have already been banned to protect the market. To be

considered for the incentive scheme, the installation (cold room or freezer room) should meet two criteria, namely, it must have a charging capacity of 5kg and above CFC 12, 11 and 502 and it should not be older than 12 years.
Read the Article: http://allafrica.com/stories/200505100649.html
Source: All Africa, Quoting "New Era" (Windhoek), 10 May 2005

NORTH AMERICA

3- DuPont Agrees to Replace Ozone Depleting Refrigerant

NEW JOHNSONVILLE, Tennessee, May 11, 2005 (ENS) - Two federal agencies have reached a $2.5 million settlement with DuPont to resolve alleged Clean Air Act violations of the repair, testing, recordkeeping, and reporting regulations for appliances that use ozone depleting substances. The violations occurred at DuPont's titanium dioxide manufacturing facility located in New Johnsonville.

In the complaint filed simultaneously with the consent decree, the Justice Department and the Environmental Protection Agency (EPA) alleged that DuPont violated the Clean Air Act after its industrial process refrigeration equipment and comfort cooling appliances leaked more than four tons of the refrigerant hydrochloroflurocarbon-22 (HCFC-22) into the atmosphere.

DuPont failed to perform the required testing, reporting, recordkeeping, and repairs pursuant to enforcing recycling, emissions and reduction requirements involving ozone protection, the two agencies alleged.

The leaks result in the depletion of the stratospheric ozone layer which causes an increased exposure to the Sun's rays. The harmful ultraviolet rays can cause skin cancer and damage to wildlife.

The agreement filed May 2 in federal court in Nashville, Tennessee settles all federal claims set forth in the complaint, but the settlement will not be finalized until a 30 day public comment period is complete.

Under the proposed agreement, the Delaware-based DuPont will perform injunctive relief valued at $1.1 million, pay $250,000 in civil penalties, and perform a Supplemental Environmental Project (SEP) valued at $1.2 million.

At the New Johnsonville plant, DuPont manufactures titanium dioxide (TiO_2) that is used in paints, plastics, inks, paper, and toothpaste to make these materials opaque.

Four industrial process refrigerators, in the form of 1,700 ton chillers, are used in the oxidation process where titanium tetrachloride and superheated oxygen are mixed in a reactor to yield TiO_2.

Three of these chillers are currently charged with 5,300 pounds of HCFC-22 refrigerant and one chiller is charged with 4,500 pounds of HCFC-22 refrigerant. DuPont also maintains several comfort cooling appliances that are charged with HCFC-22 refrigerant.

DuPont has agreed to replace or retrofit each 1,700-ton chiller with chillers that use only non-ozone depleting refrigerant. This settlement will keep more than 10 tons of ozone depleting refrigerants out of the environment each year.

"The environmental threat from ozone depleting substances is serious and this action demonstrates EPA's continued commitment to enforcing the Stratospheric Ozone Protection program," said Jimmy Palmer for the EPA's Regional Administration in Atlanta.
Read the artcile http://www.ens-newswire.com/ens/may2005/2005-05-11-09.asp#anchor2
Source: Environment News Service (ENS), 11 May 2005

4- Coalition Warns against Hydrocarbon Refrigerants

WASHINGTON, (May 5, 2005) -- The U.S. Environmental Protection Agency, along with vehicle manufacturers, parts suppliers, and other organizations are warning car and truck owners to avoid the use of flammable hydrocarbon refrigerants.

The refrigerants are being marketed on the Internet, at flea markets and swap meets, and in some service shops, but are not authorized for this use. In the U.S., it is illegal to use hydrocarbon refrigerants to replace CFC-12 used in cars manufactured before 1994. Hydrocarbon refrigerants used in newer vehicles designed for refrigerant HFC-134a will void the air conditioner warranty and may endanger service technicians. Leaking air conditioning systems charged with hydrocarbons pose serious risks of fire or explosion under the hood or inside the passenger compartment.

“The U.S. EPA urges vehicle owners to do their part to protect the environment and to ensure their own safety by properly servicing air conditioners with refrigerants listed by EPA and recommended by vehicle manufacturers,” said Drusilla Hufford, Director of EPA's Stratospheric Protection Division. “Professional service includes electronic refrigerant identification, leak testing, leak repair, defective parts replacement, and recovery and recycling of refrigerant.”

The Environmental Protection Agency, the Society of Automotive Engineers, the Mobile Air Conditioning Society Worldwide, the vehicle manufacturers, automotive organizations and suppliers listed below agree that hydrocarbons are unsafe as refrigerants in vehicle mobile air conditioning systems designed for CFC-12 and HFC-134a.

"Existing mobile air conditioning systems are not designed to use a hydrocarbon refrigerant that is highly flammable and similar to what supplies the fire in your back yard barbeque," said Ward Atkinson, Chair of the SAE Interior Climate Control Standards Committee. The motor vehicle service community and environmental authorities are working to phase out the use of CFC-12 refrigerants that deplete the stratospheric ozone layer and to reduce the emissions of HFC-134a, a greenhouse gas. EPA has found no persuasive evidence that hydrocarbons are safe to use as refrigerants in vehicles designed for non-flammable refrigerants such as CFC-12 or HFC-134a. EPA banned the use of hydrocarbon refrigerants as a replacement for CFC-12 under the authority granted by the Clean Air Act and has authority to take enforcement action to protect the public against companies violating the law.

No vehicle manufacturer has endorsed or authorized the use of hydrocarbon refrigerants in current production mobile air conditioning systems and no professional or technical association has approved the use of hydrocarbon refrigerants. Vehicle warranties are voided for any air conditioning system that has been charged with hydrocarbons. Vehicle manufacturers only recognize HFC-134a as acceptable for use in their current mobile air conditioning systems.

Easy identification by service technicians using sophisticated refrigerant identifiers will help avoid the risk of explosion and guard against the contamination of equipment when refrigerant is recovered and recycled.

Source: Truckinginfo.com http://www.todaystrucking.com/displayarticle.cfm?ID=3998
Related Web Links: Environmental Protection Agency http://www.epa.gov/ Society of Automotive Engineers http://www.sae.org

WEST ASIA

5- Green Customs Training Workshop, Damascus, Syria

Under the Green Customs initiative and in cooperation with the Division of Environmental Policy Implementation (DEPI) and Division of Technology, Industry & Economy (DTIE), Compliance Assistance Programme (CAP) organized a regional training workshop on Green Customs in parallel with the Regional Workshop on Compliance with and Enforcement of Multilateral Environmental Agreements

(MEAs) in Syria, 2-5 May 2005. Representatives of customs authorities in West Asia countries, as well as representatives of free zones in the region, attended the Workshop, to discuss compliance with MEAs and combating illegal trade of ODSs and other environmentally sensitive commodities controlled or banned by MEAs.

Participants of the two meetings joined some plenary sessions for better synergy between implementing authorities, policy makers and customs authorities. The discussions highlighted lack of cooperation and coordination between the key enforcement authorities, as well as lack of training customs officers serving on the borders. It was recommended (amongst other constructive proposals) to establish a National Coordination Committee relevant to MEAs in every member state, which must include customs authorities. Additionally, it was also recommended to conduct more national & regional training to promote the Green Customs Initiative in West Asia Region.
Contact: Dr. Abdulelah Al Wadaee, ODS Regional Network Coordinator UNEP/ROWA, Bahrain
E-mail: abdulelah.alwadaee@unep.org.bh
