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In this Issue:

- 1- Decisions of the 24th Meeting of the Parties to the Montreal Protocol, 12-16 November 2012, Geneva, Switzerland
- 2- NASA Drone to Probe Ozone Loss
- 3- Ghana Bans Second-hand Fridges
- 4- Gambia: NEA Intensifies Fight against Ozone Depletion
- 5- Soil Fumigant Phase 2 Labels Take Effect
- 6- Who Can Purchase Regulated Refrigerant(s) and A/C Equipment & Parts?
- 7- General Motors Sticks with New A/C Refrigerant
- 8- Chinese Refrigerant Counterfeiter Hit with Hefty Fine
- 9- Refrigeradoras mejorarán eficiencia
- 10- Pacific Islands Enforcement Training Peaks as Freeze Target Looms
- 11- Task Force to Assess Level of Compliance
- 12- Suspected R22 Smuggler Surrenders
- 13- Training Workshop for Customs Officers on Modern Equipment to Control Refrigerants
- 14- Hydrocarbon-Blown Fridges Are Hazardous Waste
- 15- More than 150 Tons of Gas R-22 Used by Fishing Boats Have Been Confiscated; About 100 People Arrested for Illegal Trading of Gases Harmful to the Ozone Layer

GLOBAL

1- Decisions of the 24th Meeting of the Parties to the Montreal Protocol, 12-16 November 2012, Geneva, Switzerland

Referring to the Twenty-fourth Meeting of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer that took place in Geneva, Switzerland from 12 to 16 November 2012. The meeting took several decisions that requested either the attention of or action by the Parties. Those decisions are contained in the report of that meeting, an advance copy of which has been posted on the Ozone Secretariat website at <http://montreal-protocol.org>

This letter is designed to highlight for your government's attention the provisions of the decisions that request specific action by all or large groups of the Parties thus may be generally applicable to your country as a Party to the Montreal Protocol. The relevant paragraphs of those decisions are described below and the decisions themselves have been extracted from the advance report and annexed herewith.

Decision XXIV/6: Feedstock uses: In paragraph 1, parties are encouraged to exchange information on known alternatives being applied to replace ozone-depleting substances in feedstock uses; in paragraph 2 parties with feedstock uses are also encouraged to exchange information on systems they have in place for qualifying a specific ozone depleting substance use as feedstock use and for identification and/ or monitoring of containers placed on the market and intended for feedstock uses, for example reporting or labeling requirements; and in paragraph 4, parties with vinyl chloride monomer production facilities in which carbon tetrachloride is used are requested to report information to the Panel in accordance with decision XXIII/7 if they have not yet done so, before 28 February 2013 to allow clarification by the Panel on whether the use in a particular facility is a feedstock use or process agent use.

Decision XXIV/7: Additional information on alternatives to ozone-depleting substances: In this decision the Technology and Economic Assessment Panel is requested to update information on alternatives and technologies in various sectors to prepare a draft report for the Open-ended Working Group meeting next year and a final report for the Twenty-Fifth Meeting of the Parties that would, by end-use: (a) describe all available alternatives to ozone depleting substances that are commercially available, technically proven, environmentally-sound, taking into account their efficacy, health, safety and environmental characteristics, cost-effectiveness, and their use including in high ambient temperatures and high urban density cities; (b) update information provided by previous Panel reports on alternatives under development; (c) identify barriers and restrictions to the adoption and commercial use of certain environmentally-sound alternatives to ozone-depleting substances; (d) estimate, if possible, the approximate amount of alternatives with negative environmental impacts that could be or could have been avoided or eliminated by both non-Article 5 and Article 5 parties in the process of phasing-out ozone-depleting substances; and (e) identify the opportunities for the selection of environmentally-sound alternatives to HCFCs in the future.

In preparing the report, the Panel is invited to take into account any information relevant for the report provided by the Parties to the Secretariat. I have the honour therefore to invite you to provide any relevant information that you may

have to the Secretariat as soon as possible, preferably early enough for the Panel's preparation of the draft report which will be mainly during February and March 2013.

Decision XXIV/9: Controlled substances used on ships; In paragraph 2, parties are invited to encourage relevant stakeholders to minimize the use of controlled substances in newly built ships and to consider environmentally benign and energy-efficient alternatives wherever they are available;

Decision XXIV/10: Review by the Scientific Assessment Panel of RC-316c; In paragraph 1, parties in a position to do so are invited to provide environmental assessments of RC-316c (1,2-dichloro-1,2,3,3,4,4-hexafluorocyclobutane, CAS 356-18-3), a chlorofluorocarbon not controlled by the Montreal Protocol, and any guidance on practices that can reduce intentional releases of the substance.

In addition to the generally applicable decisions noted above, the Parties also took decisions highlighting the obligations of specific Parties. If any of those latter decisions are directly related to your country, you will receive further communication from the Secretariat shortly.

Concluding the letter Mr. Gonzalez assured of the readiness by the Ozone Secretariat to assist Government's efforts to follow through on these and all other decisions of the Parties and provisions of the Montreal Protocol.

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Letter from Marco Gonzalez, Executive Secretary, Ozone Secretariat on Decisions of the 24th Meeting of the Parties to the Montreal Protocol, Ref: [Oz.Sec/24MOP/Decisions, 21 December 2012]



2- NASA Drone to Probe Ozone Loss

NASA Global Hawk being loaded with monitoring equipment for the ATTREX mission. CREDIT: J. Zavaleta/NASA
Water may play a critical role in controlling the ozone gas high up in Earth's atmosphere that can act as a greenhouse gas or protect living things on the surface below from the sun's harmful ultraviolet rays, depending on where in the atmosphere it is found.

To better understand how water vapor and ozone interact, NASA plans to send a remote-controlled plane laden with monitoring equipment into the stratosphere — the layer of the atmosphere where protective ozone is found — above the tropics.

The drone will crisscross the tropopause, the boundary between the troposphere (the layer of the atmosphere we breathe and where most weather occurs), and the stratosphere. The boundary is a fluid layer whose thickness can change and depends on the latitude it is located over but that is generally found some 8 to 11 miles (5 to 7 kilometers) above Earth's surface.

In the middle reaches of the troposphere, ozone is a greenhouse gas, trapping heat and contributing to smog. But high in the troposphere and the stratosphere, the familiar ozone layer protects the planet from harmful UV radiation. When storms punch water vapor through the tropopause, into the stratosphere, scientists suspect chemical reactions between water and free radicals such as chlorine may zap and destroy the protective ozone. The NASA experiment will sample this layer near the equator off the coast of Central America where tall thunderstorms often occur.

The flights, which start this month, are the first of a multiyear campaign to study how changes in water vapor in the stratosphere can affect global climate. The Airborne Tropical Tropopause Experiment (ATTREX) relies on a Global Hawk drone, which can cruise for 30 hours from its home at Edwards Air Force Base in California. The aircraft are also used by the U.S. Air Force and Navy.

Predictions of stratospheric humidity changes are uncertain because of gaps in the understanding of the physical processes occurring in the tropical tropopause layer, NASA said in a statement.

"The ATTREX payload will provide unprecedented measurements of the tropical tropopause," Eric Jensen, ATTREX principal investigator, said in a statement. "This is our first opportunity to sample the tropopause region during winter in the Northern Hemisphere when it is coldest and extremely dry air enters the stratosphere."

SOURCE: OurAmazingPlanet, 10 January 2013, By: Becky Oskin, Staff Writer, <http://bit.ly/V3GbIM>

AFRICA

3- Ghana Bans Second-hand Fridges

A ban on the import of second-hand refrigerators is coming into force in Ghana to reduce energy consumption and harm to the environment.

Many old fridges contain chemicals called Chlorofluorocarbons (CFCs) which damage the Earth's ozone layer.

Although these are already banned or being phased out, they are thought to be commonly used in Africa. The head of Ghana's energy commission told the BBC the ban made Ghana "a pioneer in West Africa". The ban was first introduced in 2008 but was extended to give dealers time to adjust.

However, some Ghanaian traders have criticised the ban, saying thousands of jobs will be lost. Energy commission head Alfred Oforu-Ahenkora says the second-hand refrigerators are harming the country as they were not built for use in Africa and so consume too much electricity.



The commission says some two million used fridges have been imported to Ghana, mainly from the European Union. Fridge factory CFCs are banned under the Montreal Protocol on Substances that Deplete the Ozone Layer. To discourage their use, Ghana has introduced a rebate scheme to encourage people to surrender their used refrigerators for a new one.

The BBC's Sammy Darko in Accra says not everyone can afford a new refrigerator, so the used ones are still in demand at the second hand shops that litter the streets of the capital's suburbs. "We will lose our jobs next year - this is what takes care of us and our family," said salesman Albert Kwasi Breku. But Mr Ofosu-Ahenkora says the solution is to manufacture fridges locally. "It is not a matter of stopping some business but encouraging manufacturing. I think manufacturing will create more jobs than importation of second refrigerators." Since CFCs were banned, many fridge manufacturers have replaced them with Hydrofluorocarbons (HFCs). But last year a UN report warned that HFCs are a greenhouse gas which is 20% more potent than CO₂ and so their use could hamper efforts to tackle climate change.

Ghana is also a common destination for "e-waste" - used computers and televisions from the West, which often contain toxic material.

SOURCE: Sudan Vision Daily, 10 January 2013, <http://bit.ly/13uLpNY>

4- Gambia: NEA Intensifies Fight against Ozone Depletion

As the Gambia government is committed to phasing out the importation and consumption of Ozone Depleting Substances (ODS) as enshrined in the Montreal Protocol and the Vienna Convention, the National Environment Agency (NEA) is continuously intensifying its training for refrigeration technicians across the country as part of efforts in the fight against Ozone depleting.

A regional training that took place recently in Pakalinding in Jarra West District of the Lower River Region, which attracted over 25 participants drawn from the regions, is among series of its kind conducted and organised by the NEA for refrigeration technicians throughout the country.

In his opening remark, the director of Technical Services Network, Alhaji Momodou B. Kanteh, said the Ozone layer is the primary protection the earth has from the harmful ultra-violet radiation from the sun that has adverse effects on human and animal health, marine and terrestrial eco-systems.

Kanteh warned that the continuous emission of ChloroFluoroCarbons (CFCs), Halons and Methyl Bromide would deplete the ozone layer and would result to more severe environmental and health problems. He also told the gathering that the Government of The Gambia, recognising the vulnerability of human kind, Flora and Fauna to ODS, has over the years taken giant steps towards the reduction and ultimate elimination of ODS through a number of measures.

Samba Bajjie, NEA's ODS Programme officer, explained that the training aims at strengthening the capacities of refrigeration technicians to enhance detection and retrofitting of ODS. He further explained that ozone layer is a natural gas layer that is providing a protective shield for plant and animal life from the ultra-violet radiation of the sun that can be particularly harmful to all living organisms. According to him, these harmful effects include increase in skin cancer, eye cataracts and blindness; suppression of the human immune system, damage of natural ecosystems and on climate change.

Stressing on The Gambia government's political commitment in phasing-out CFCs, Badjie revealed that the Gambia has joined the international community and ratified the Copenhagen and London Amendments to the Montreal Protocol in 1992 and 1995 respectively. He urged participants to take the training seriously and disseminate their knowledge and skills to others. The Gambia over the years, he said, had taken giant steps towards the reduction and ultimate elimination of ODS through a number of measures including the training of technicians.

Momodou Mendy, senior lecturer at the GTTI, who facilitated the training, noted that by the end of the training participants are expected to clearly understand what ozone and ozone depletion is all about and would understand the reason why they as technicians must join the rest of the world to protect the ozone layer by phasing out CFCs. Calling on technicians and non-technicians alike to take up this noble profession seriously and adhere to its ethics, Sheikh Alkinky Sanyang, the Environmental Education and Communication Officer at the NEA, appealed to participants to use environmentally-friendly activities and devices to make the planet earth the only suitable and a lasting home for generations not yet born. Sanyang averred that to avoid nature being plunged into conflict with mankind there should be a holistic move against ozone depletion by people from all walks of life.

SOURCE: AllAfrica, 22 December 2012, <http://bit.ly/W3pHfd>

NORTH AMERICA



5- Soil Fumigant Phase 2 Labels Take Effect

As of December 1, 2012, a final set of soil fumigant product label changes went into effect, fully implementing important new protections for workers and bystanders. The amended product labels incorporate the second and final phase of mitigation measures required by the EPA's 2009 Reregistration Eligibility Decisions (REDs) for the soil fumigants methyl bromide, chloropicrin, metam sodium/metam potassium, and dazomet. Fully implementing the new risk mitigation measures represents a sea change in worker and public protection. These

measures will help protect workers, handlers and bystanders from exposure to potentially harmful airborne concentrations of the fumigant pesticides.

The new measures appearing on soil fumigant Phase 2 labels include buffer zones and posting, emergency preparedness and response measures, training for certified applicators supervising applications, Fumigant Management Plans, and notice to State Lead Agencies who wish to be informed of applications in their states. Measures added to labels in the first phase of implementation included Phase 1 Fumigant Management Plans, good agricultural practice requirements, and new worker protection measures among other things. Phase 1 labels were approved in 2010.

After December 1, 2012, only soil fumigant products bearing the Phase 2 measures may be sold and distributed by registrants. Distributors and retailers who are not registrants may sell and distribute existing stocks of products bearing Phase 1 labels until their supplies are exhausted. Likewise, growers and applicators may apply products bearing old labels until those supplies have been exhausted.

The newly approved labels are available through the Pesticide Product Label System (PPLS) at www.epa.gov/pesticides/ppls Visit the Office of Pesticide Programs' Soil Fumigant Toolbox at www.epa.gov/pesticides/reregistration/soil_fumigants/ for more information about soil fumigants and new requirements for their safe use.

SOURCE: US EPA, December 2012, <http://1.usa.gov/W3pLM6>

See also >

Apple Exporters Take on Indian Tariffs, Methyl Bromide Proposals, article in [FreshFruitPortal](#)

6- Who Can Purchase Regulated Refrigerant(s) and A/C Equipment & Parts?

Under the Manitoba Ozone Depleting Substances and Other Halocarbons Regulation 103/94, only companies who have a Secondary Distributor permit and/or individuals who are recognized as Manitoba ODS Certified Technicians may acquire, purchase or import regulated product(s) into (or within) Manitoba.

It is a violation to sell any regulated product to a person or company who does not have a SD permit number or to a person who is not Minister of Conservation (MOPIA) certified in the Province of Manitoba. If you are a seller of regulated product, you are responsible to verify and document the SD permit or certification number. Significant penalties exist for those who contravene this regulatory compliance responsibility! These include fines up to \$100,000 for persons, plus jail time and up to \$1 million for corporations and restitution, compensation and other fines as the judge warrants. Compliance enforcement does happen across Manitoba. More Information: <http://bit.ly/Sy3qtY>

SOURCE: MOPIA, Regulated Products Bulletin MR 103/94

7- General Motors Sticks with New A/C Refrigerant

General Motors is sticking with its decision to introduce a new, more environmentally safe air conditioning refrigerant in its vehicles despite claims by Daimler AG that it may cause fires in an accident.

A GM executive said GM conducted additional crash tests plus computer simulations after the German automaker raised questions about the refrigerant, named HFO-1234yf.

In August, Daimler engineers simulated a crash test and found that a mix of refrigerant and oil from the air conditioning compressor could be ignited by the hot surface of the engine, creating a toxic gas. But Curt Vincent, GM's engineering manager for new refrigerants, disputes Daimler's claims. "We did crash tests, computer simulations and thermal analysis and did not observe any safety problems at all," Vincent told Automotive News in a phone interview. "Many [researchers] have tried to repeat Daimler's findings, but no one has come forward with anything that would indicate any concern." Vincent made his remarks even as Daimler and Volkswagen AG postponed their use of the refrigerant. Daimler is recalling Mercedes-Benz vehicles that contain the product, while a Volkswagen spokeswoman says the company won't use it "until further notice," Bloomberg News reports.

GM's Vincent and Honeywell Vice President Terrence Hahn both noted that a research consortium of 13 automakers has reaffirmed its earlier findings that HFO-1234yf poses no safety hazards. The consortium re-examined its findings after Daimler raised its concerns. "We tested it ourselves," Hahn noted. "We're not going to sell this product if it's not safe. We are absolutely convinced that the material is safe to use."

GM already uses the chemical in the Cadillac XTS and in the European version of the Chevrolet Malibu. Over the next five years or so, GM will convert most of its models sold in North America to the new refrigerant, Vincent said. It will cost GM about \$75 per vehicle to switch to the new refrigerant and install redesigned air conditioners.

HFO-1234yf is considered more benign than other refrigerants because it is less likely to deplete the ozone if it leaks into the atmosphere.

According to the EPA, HFO-1234yf has a global warming potential that is 99.7 percent less than HFC-134a, which is used in most air conditioners. The EPA doesn't mandate use of HFO-1234yf, but automakers that make the switch will get extra credits from the agency for reducing emissions that contribute to global warming. In the European Union, automakers are required to begin switching to an environmentally friendly refrigerant for newly redesigned vehicles on Jan 1.

Honeywell Transportation Systems and DuPont Co. make HFO-1234yf, which has been approved for use in the European Union and the United States. Read more: <http://bit.ly/WGmf8U>

SOURCE: Auto Week, 3 January 2013, By: David Sedgwick, Automotive News, <http://bit.ly/VFi2mB>

8- Chinese Refrigerant Counterfeiter Hit with Hefty Fine

USA: DuPont has finally released details of an action it completed last year against Chinese refrigerant counterfeiters which resulted in fines and damages of over \$70,000. Following a two-year investigation, a judicial settlement was reached in August when Quzhou Fuming Co of Quzhou City, Zhejiang Province, was required to pay the equivalent of \$39,400 to the Chinese government and to pay \$32,000 in damages and court costs to DuPont.

In 2009, a distributor alerted DuPont to potential counterfeiting of DuPont's Suva and Freon brands. With assistance

from a local law firm, DuPont requested that local authorities conduct a raid of the suspected counterfeit facility. A raid action in late September 2011 resulted in seizure of 1,500 empty refrigerant cylinders with Suva and Freon packaging, 1,000 counterfeit labels and 1,000 counterfeit DuPont Freon R22 cylinders. After the raid, DuPont issued cease-and-desist letters, however, the company did not respond to the request and continued to sell the counterfeit refrigerants. DuPont then filed a legal action against those responsible. The company is now under a permanent injunction to not sell DuPont refrigerants or engage in counterfeit activities involving DuPont trademarks going forward. As part of the sentence, the judge also required the company to post a formal public apology in two Chinese newspapers.

SOURCE: ACR News, 19 December 2012, <http://bit.ly/X7YQ0N>

LATIN AMERICA AND CARIBBEAN

9- Refrigeradoras mejorarán eficiencia

Gobierno invertirá \$9,5 millones en campaña para que costarricenses cambien equipos viejos

Las personas que cuenten con una refrigeradora mayor a cinco años de antigüedad podrán obtener una nueva, más eficiente a nivel energético, y con un precio menor hasta en un 25%, siempre y cuando entreguen sus equipos antiguos. El Ministerio de Ambiente, Energía y Telecomunicaciones (Minaet) retomará este año el programa de sustitución de refrigeradoras, que tendrá un costo aproximado para el Gobierno de \$9,5 millones en promedio. El objetivo es disminuir el consumo de electricidad del país y cumplir con una meta firmada en el Protocolo de Montreal. Este tratado internacional, firmado en 1987 por varios países, incluido Costa Rica, establece metas para disminuir las emisiones de gases de efecto invernadero que dañan la capa de ozono.

Costa Rica ya logró eliminar en el 2010 los gases clorofluorocarbonados (CFC), presentes en muchos aerosoles. Ahora, el objetivo es que para el 2030 no existan los refrigerantes hidroclorofluorocarbonos (HCFC), que ya no se incorporan en los equipos más nuevos pero persisten en el país en varias de las refrigeradoras antiguas.

El programa de sustitución tuvo un primer intento en el 2008 de la mano del Instituto Costarricense de Electricidad (ICE), pero no logró salir adelante porque no se tenían opciones para darle tratamiento a los equipos antiguos.

En esta oportunidad, este elemento no será problema, pues ya se negoció con varios proveedores la recolección y disposición final de las refrigeradoras.

¿Cómo operará?

La compra de una refrigeradora más eficiente y más barata será sencillo, según el plan.

En este momento, el Minaet está finalizando el estudio de factibilidad del proyecto y finiquitando acuerdos con los proveedores. Una vez que defina los establecimientos que formarán parte del programa, el consumidor solo deberá llevar su equipo antiguo y elegir el modelo que más se acople a sus necesidades.

Las cadenas de tiendas Grupo Monge y Gollo están anuentes a participar de la iniciativa, indicaron sus respectivos voceros, quienes ya sostuvieron reuniones con el Ministerio para amarrar los detalles logísticos.

Por su parte, Luis Fernando Monge Rojas, director ejecutivo de la Cámara de Representantes de Casas Extranjeras (Crece), manifestó que conocen la iniciativa pero las autoridades no han conversado con ellos.

“Como Cámara, estamos de acuerdo con el Gobierno en impulsar este tipo de iniciativas, pero es importante contar con objetivos y planes de acción concretos de cómo vamos a alcanzar estas metas para establecer una buena coordinación y acordar con los proveedores”, externó Monge.

Los equipos antiguos serán tratados debidamente por gestores de residuos autorizados por el Ministerio de Salud. Luego de que el almacén se los entregue, los desmantelarán y darán tratamiento al gas refrigerante, al aceite lubricante y las espumas aislantes.

En este momento, el Ministerio está en conversaciones con empresas como Valu Shred, Ecofrigo–Hope, Trec y Aseae, que dan tratamiento local parcial o integral fuera del país.

¿Cómo localizarlas?

Las refrigeradoras eficientes se identificarán con el sello Energice, que otorgará el Instituto de Normas Técnicas de Costa Rica (Inteco) y utilizado actualmente solo en fluorescentes.

La adaptación de esta norma entró en vigencia el 14 de diciembre del 2012 y, actualmente, la certificación está en proceso. Este sello será el que defina si el equipo cumple o no con la norma de Inteco y, por ende, tendrá un precio menor entre un 6% y un 25%, según el modelo y la capacidad del equipo; a menor capacidad en pies, más es el incentivo. En el país también existen refrigeradoras con otro tipo de sellos similares que, aunque no tendrán una subvención en el precio, generan ahorros en la factura eléctrica por su menor consumo.

Andrea Morales Mata, coordinadora de Responsabilidad Social de Gollo, comentó que ya algunos proveedores les han externado el interés de importar modelos con otras certificaciones para que adquieran el sello Energice.

“Existen opciones que además de energía, ahorran agua y vienen con luz LED, por ejemplo”, agregó Morales.

A nivel mundial, el sello más conocido es Energy Star, creado en Estados Unidos.

¿Cuánto costará?

La subvención en el precio, la difusión de la campaña y la logística tendrán un costo de \$9,5 millones, informó René Castro, ministro de Ambiente. El ICE aportará \$2 millones y el resto serán cubiertos por el Minaet con títulos de bonos de carbono. No obstante, aclaró que este dinero no será un gasto, pues al tener cada vez más refrigeradoras que consumen menos, el país tendrá que generar menos energía y ahorrará ese dinero.

Se estima que se cambiarán 300.000 equipos por año durante los cuatro años que durará la campaña, lo que ahorrará entre 101 y 294 GWh, dependiendo si los sellos que se otorguen generen ahorros de 5%, 10% o 15%.

En dinero, representa ahorros en generación entre \$2,68 millones y \$7,05 millones y alrededor de 5.437 toneladas

de dióxido de carbono. El Ministro explicó que la campaña durará solo cuatro años porque luego la sustitución se hará de manera voluntaria, aun cuando no se subvencione el precio, pues el consumidor aprendió la importancia de tener equipos más eficientes. “Así ocurrió con los fluorescentes, ahora el costarricense tiene más conciencia de la importancia de no usar bombillos tradicionales, aunque ya no se regalen las luces”, comentó Castro. El Ministro estimó que los consumidores podrán iniciar la sustitución de sus equipos durante el primer trimestre de este año.

SOURCE: El Financiero, Costa Rica, 13 Enero 2013, Por: Leticia Vindas Quiros, <http://bit.ly/W3qddd>

ASIA PACIFIC

10- Pacific Islands Enforcement Training Peaks as Freeze Target Looms

Bangkok, 21 December 2012 – The Pacific Island Countries (PICs) are in full speed in the national delivery of the training programme for Customs and other enforcement officers on monitoring and control of ozone-depleting substances (ODS) under the Montreal Protocol.

“The Pacific countries, being small island developing states (SIDS), are considered as a special case by the international community. When it comes to major environmental concerns like ozone layer depletion and climate change, their contribution is not as big as other nations but the negative effects to these countries are greatest. However, the PICs have shown potential in taking a leadership role in the implementation of the Montreal Protocol through effective and timely implementation of their HPMPs (HCFC Phase out Management Plans), particularly the capacity-building programmes on enforcement and the refrigeration servicing sector,” said Mr. Atul Bagai, Senior Regional Coordinator, UNEP DTIE OzonAction, Regional Office for Asia and the Pacific (ROAP).

Article 5 of developing countries like the Pacific countries must freeze their import of HCFCs to their baseline consumption (2009-2010 average) in the beginning of 2013. Hydrochlorofluorocarbons or HCFCs are harmful ozone-damaging chemicals commonly used in refrigeration and air-conditioning systems in homes, offices, restaurants, malls, ships and fishing vessels, etc.

The Montreal Protocol Enforcement Training Workshops in the Pacific Islands are managed by government National Ozone Officers (NOOs) with the support of UNEP’s ROAP Compliance Assistance Programme, and the Oceania Customs Organisation Secretariat (OCO). Funding assistance is provided by the Montreal Protocol Multilateral Fund (MLF) under the approved HPMP for the Pacific region.



The regional HPMP covers twelve PICs - Cook Islands, Federated State of Micronesia (FSM), Kiribati, Marshall Islands, Nauru, Niue, Palau, Samoa, Solomon Islands, , Tonga, Tuvalu and Vanuatu. A major component of the HPMP is institutional and human resource capacity-building of enforcement officers relating to trade controls and monitoring of HCFCs and other ODS. Based on the data of the Ozone Secretariat, HCFCs are the major ODS imported in the Pacific islands. The other ODS imported is Methyl Bromide used in plant quarantine and pre-shipment.

In the second half of 2012, a series of training workshops were conducted in the following Pacific countries: Nuku’alofa, Tonga (10-12 July), Honiara, Solomon Islands (6-10 August), Port Vila, Vanuatu (3-5 October), Majuro, Marshall Islands (7-9 November), Koror, Palau (1-2 November), and in Apia, Samoa (4-7 December). Similar capacity-building workshops will be conducted in Tuvalu from 16-18 January 2013 and in Kiribati from 23-25 January 2013.

The training workshops, attended by Customs, Environment, Quarantine, Fire and other enforcement officials, succeeded in enhancing their capacities in effective control, monitoring and enforcement of the regulation of ODS trade and in achieving compliance with the Montreal Protocol. They were , Key stakeholders such as the customs brokers, shipping agents and the private sector were also invited.

The training also aimed to provide a platform that will strengthen and enhance partnership amongst law enforcement agencies in responding to issues relating to ODS trade and control. It was tailored to promote ownership amongst key stakeholders in terms of implementation and enforcement of



Montreal Protocol requirements.

“The challenges faced by the Pacific Islands in complying with the Montreal Protocol are truly unique. Given the very low volume of ODS consumption, one small error in import can easily lead to a case of potential non-compliance. For example, one single non-permitted import of a 50kg cylinder of HCFC can exceed the 2013 annual HCFC quota limit in many of the PIC countries. There is very little room for error on the administration of annual HCFC quotas; all HCFC imported are for servicing,” said Ms. Artie Dubrie, Regional Network Coordinator for PICs, UNEP DTIE OzonAction, ROAP.

To sustainably manage compliance, NOOs need to monitor the type and



cost of HCFC alternatives available on the local markets both as an annual reporting requirement to the MLF and to provide policy support in national development processes such as those of climate mitigation and energy efficiency. Another area requiring attention which can contribute to potential compliance risk is the use of ODS in the fisheries sector and for both local and foreign registered vessels. The fisheries sector is one of the largest economic activities in the Pacific Islands. To date the emphasis on ODS control has been focused on land-based infrastructures.
SOURCE: [OzonAction](#), December 2012

11- Task Force to Assess Level of Compliance

KARACHI: The Ministry of Commerce has called a meeting of the inter-ministerial task force on Jan 10 to assess level of Pakistan's compliance with the international conventions mandatory for its inclusion in EU's GSP+ scheme.

According to sources, the European Commission has expressed reservations over the violations of human rights conventions including the misuse of blasphemy law in Pakistan. Sources said that Europeans were not against the religion or the religious practices nor the blasphemy law itself. They were concerned about the misuse of the law even against Muslims.

Prime Minister Raja Pervez Ashraf had constituted an inter-ministerial task force to resolve all issues relating to human rights, labour rights, environmental and narcotics for guaranteed better market access to European Union's market. The prime minister asked the task force to ensure timely fulfillment of procedural EU formalities. The 27 international conventions mandatory for GSP+ include the prevention and punishment of the crime of genocide (1948), the elimination of all forms of racial discrimination (1965), civil and political rights (1966), economic, social and cultural rights (1966), the elimination of all forms of discrimination against women (1979), convention against torture and other cruel, inhuman or degrading treatment or punishment (1984), the rights of the child (1989), and convention concerning forced or compulsory labour No.29 (1930), freedom of association and protection of the right to organise No.87 (1948), the application of the principles of the right to organise and bargain collectively No.98 (1949), equal remuneration of men and women workers for work of equal value No.100 (1951), the abolition of forced labour No.105 (1957), discrimination in respect of employment and occupation No.111 (1958), minimum age for admission to employment No.138 (1973), and the prohibition and immediate action for the elimination of the worst form of child labour No.182 (1999).

There are also conventions on international trade in endangered species of wild fauna and flora (1973), Montreal protocol on substances that deplete the Ozone Layer (1987), Basel convention on the control of trans-boundary movements of hazardous wastes and their disposal (1989), biological diversity (1992), UN framework convention on climate change (1992), Cartagena Protocol on bio safety (2000), Stockholm convention on persistent organic pollutants (2001), Kyoto protocol on the UN framework convention on climate change (1998), UN single convention on narcotic drugs (1961), UN convention on psychotropic substances (1971), against illicit traffic in narcotic drugs and psychotropic substances (1988) and corruption (2004).

The EU is Pakistan's single largest trading partner accounting for 25 percent of Pakistan's total exports and 16 percent of total imports. Despite being the beneficiary of the EU's GSP scheme, products of export interest of Pakistan such as textile and clothing face high tariffs in the EU market. For textiles, average GSP tariff is 6.4 percent and for clothing average GSP tariff is 9.6 percent. These high tariffs constitute a serious obstacle to Pakistan's market access to the EU, especially when many of Pakistan's competitors already have duty-free access to the EU market and India is likely to finalise a free trade agreement with the EU.

Pakistan has officially welcomed the new GSP plus scheme in which the import vulnerability threshold for GSP-plus has been raised from 1 percent to 2 percent.

SOURCE: The News, Pakistan, 8 January 2013, By: Javed Mirza, <http://bit.ly/UFjRF6>

12- Suspected R22 Smuggler Surrenders

INDIA: A key suspect in a Euro1.4m refrigerant smuggling case has surrendered to police in New Delhi. Rohit Sakhuja, a Delhi businessman, is now being held in custody for his alleged involvement in an international syndicate thought to be behind the smuggling of R22 refrigerant, air conditioners and cigarettes.

In June last year India's Directorate of Revenue Intelligence (DRI) recovered eight containers filled with smuggled items from abroad. In addition to cigarettes, the officials seized over 8,000 air conditioners of various brands and 6,000 cylinders of R22 refrigerant. The contraband was imported on false documents. Officials immediately launched a hunt for two Delhi-based businessmen. One suspect, Ajit Chhadha, is already in custody.

SOURCE : ACR News, 3 January 2013, <http://bit.ly/Xm7SNB>

WEST ASIA

13- Training Workshop for Customs Officers on Modern Equipment to Control Refrigerants

[Organized by the Ministry of Environment, National Ozone Unit, Jordan, in collaboration with the United Nations Environment a three days training workshop for trainers in the General Customs Department and Jordan Institution for Standards and Metrology and Jordanian Chambers of Commerce].

تدريب موظفي «الجمارك والمواصفات» على أجهزة حديثة لفحص الغازات
نظمت وزارة البيئة ضمن مشروع الأوزون بالتعاون مع برنامج الأمم المتحدة للبيئة أخيراً دورة تدريبية للمدربين في دائرة الجمارك العامة ومؤسسة المواصفات والمقاييس وغرف التجارة الاردنية لمدة ثلاثة أيام في مدينة العقبة. وشارك في الدورة 30 موظفاً وموظفة درّبوا فيها على أجهزة حديثة حصل عليها الأردن مؤخراً لفحص المواد والغازات

التي تدخل في صناعة التبريد والتكييف؛ لضمان استيراد المواد والغازات السليمة بيئياً وصحياً، والحد من الاتجار غير المشروع لهذا النوع من الغازات المستنفذة لطبقة الأوزون.

وقال الأمين العام لوزارة البيئة المهندس أحمد القطارنة إن الوزارة معنية بأن تكون مدخلات الإنتاج في القطاعات الصناعية، وتحديدًا قطاع التبريد والتكييف سليمة بيئياً وصحياً؛ من خلال أحكام الرقابة على المعايير الحدودية باستخدام أحدث الأجهزة لتكون منسجمة مع متطلبات بروتوكول مونتريال.

وأضاف أن الأردن استطاع الوفاء بمتطلبات بروتوكول مونتريال لحماية طبقة الأوزون في المدة المقررة سواء لجهة تطوير الصناعات الوطنية بالشكل الذي يحقق الفائدة البيئية، بحيث يصبح المنتج الصناعي منافساً في الأسواق الإقليمية والدولية، أو لجهة استكمال التشريعات الناظمة لهذا القطاع الحيوي.

وتخلل الدورة التدريبية تقديم شرح مفصل عن أجهزة كشف المواد المستنفذة لطبقة الأوزون التي قامت وزارة البيئة بتزويد دائرتي الجمارك العامة والمواصفات والمقاييس بها لاستخدامها على المعايير الحدودية.

إلى ذلك، أشار مدير مشروع الأوزون المهندس غازي العودات إلى اطلاع المدربين على إجراءات الرقابة والتحكم في المواد والمنتجات الخاضعة للرقابة بموجب التزامات بروتوكول مونتريال وتطبيقها، فضلاً عن التعرف على المواد الكيميائية الخاضعة للرقابة والمنتجات التي تحتوي عليها وفقاً للنظام الجمركي الخاص بمنظمة الجمارك العالمية.

وشرح مسؤول برنامج المساعدة على الامتثال في برنامج الأمم المتحدة للبيئة أيمن طالوني الاتجاهات الإقليمية والدولية للتجارة والاتجار غير المشروع للمواد الخاضعة للرقابة وفق بروتوكول مونتريال، وكيفية التعرف عليها باستخدام أحدث الوسائل والأجهزة؛ للحد من استخدامها وتداولها.

المصدر : <http://bit.ly/Y55zi4>, December 2012, Assabeel.

EUROPE AND CENTRAL ASIA

14- Hydrocarbon-Blown Fridges Are Hazardous Waste



UK: The UK Environment Agency has advised that all waste refrigerator insulation foam produced using a hydrocarbon blowing agent should be considered highly flammable and, as such, should be classified as hazardous waste.

The announcement is based on tests carried out on 20 refrigerators containing insulation blown using cyclopentane, i-pentane, n-pentane or mixtures of these gases. The study found that all tested foam samples should be considered "highly flammable" under European Test Method A10 Flammability (Solids) and concludes that all fridge insulation foam produced using a hydrocarbon blowing agent should be classified as hazardous waste, unless tested

and demonstrated otherwise.

The Environment Agency says that the results of the study will be used to identify options for minimising or preventing accidents and incidents and to ensure that fridges containing hydrocarbon blown foams are sent to appropriate permitted treatment facilities for storage and further treatment.

Modern fridges now contain insulating foam that is blown with hydrocarbon blowing agents which have replaced the use of CFCs, HCFCs and HFCs on environmental grounds. But, while hydrocarbon blowing agents are not ozone depleting and have low global warming potential, they do pose a greater fire risk due to their high flammability.

While the WEEE Directive and Defra's BATRR (Best Available Treatment, Recovery and Recycling Techniques) guidance do not explicitly require the collection and destruction of hydrocarbon blowing agents; appliances containing foam produced with these blowing agents must be treated in "intrinsically safe" plant, says the Environment Agency. Discussions are said to be currently underway with the HSE to confirm the definition of intrinsically safe equipment".

While some pentane fridges are processed in dedicated fridge plants, a number of operators currently co-process degassed hydrocarbon fridges in scrap metal shredders, whilst others process them in generic waste shredders or, even, car crushers.

There has previously been uncertainty regarding the correct classification of degassed hydrocarbon fridges under Duty of Care/Hazardous Waste Regulations and they have often been classified and transferred as non-hazardous wastes.

According to the Environment Agency, when assessing waste electrical equipment, such as fridges, it is the presence or absence of hazardous components that determines if they are classed as hazardous waste or not.

"Insulation foam that has been blown with a hydrocarbon blowing agent (pentane) has been demonstrated to possess the hazardous property H3A (highly flammable)" says the report. "This means it is a hazardous component and would, amongst other components, make a fridge a hazardous waste."

As a result, the Environment Agency maintains that degassed fridges that contain insulation foam produced with a hydrocarbon blowing agent should be classified and consigned under one of the following hazardous waste codes: 16 02 13 or 20 01 35. Similarly, foam panels mechanically cut and removed from fridges that contain a hydrocarbon blowing agent should be classified and consigned under the 19 12 11 waste code.

"It must be ensured that at sites accepting or producing wastes consisting of or containing hydrocarbon-blown fridge foam appropriate measures are provided for their safe storage and handling to prevent fire initiation and escalation/propagation," says the report.

Specifically, this means appropriate measures for waste separation/segregation, such as fire breaks/walls and the

prevention of flammable atmospheres.

Related Stories- [Fire brigade calls for higher standards in fridge freezers](#), 4-Jan-2013, UK: The London Fire Brigade has called for higher safety standards in fridge freezers in a new report which describes them as...

SOURCE: ACR News, 4 January 2013, <http://bit.ly/WqL5dk>

15- More than 150 Tons of Gas R-22 Used by Fishing Boats Have Been Confiscated; About 100 People Arrested for Illegal Trading of Gases Harmful to the Ozone Layer

The Civil Guard has developed along the last seven months the operation called "REFRECO", under the direction of the Public Prosecutor Office in charge of Environment and Urbanism. Searches have been conducted in 16 offices and warehouses of various companies and seven vessels of different countries have been inspected.



Illegal activities might have supposed about 4 million Euros of economic benefits per year. The Guardia Civil have developed Operation "REFRESCO", held in Las Palmas de Gran Canaria, Tenerife and Zaragoza. The operation involved more than 150,000 kilos of gas R-22 used by fishing vessels, which is banned in the European Union, being harmful to the ozone layer.

In the operation 97 people have been taken into custody for illegal trade of this gas and 16 offices and warehouses of various companies have been searched, and so have been seven vessels of different nationalities.

This service has been deployed by the Environmental Protection Service of Guardia Civil (SEPRONA) with more than 60 police officers involved under the direction of the Public Prosecutors Office in charge of the Environment and Urbanism and with the collaboration of the Ministry of Agriculture, Food and Environment.

The investigation began last February, when some information about several companies conducting business with R-22 was received by SEPRONA. This gas could be used to freeze fishing products in fishing boats offshore.

Great benefits for illegally selling gas R-22

In the European Union it is only allowed to use regenerated R-22 gas, although some developing countries that signed the Montreal Protocol could still use non-regenerated gas (About 20 Euros cheaper than regenerated). Therefore, the companies authorized by the European Commission can sell non-regenerated R-22 to fishing vessels flying under the flag of those developing countries.

However, along the investigation it has been revealed that certain activities had been executed by intermediates without the required authorization.

Thus, large amounts of this product were diverted to vessels that were not authorized for the use of non-regenerated R-22 and, in some cases, even were used in ground facilities. With this action, smuggling and trafficking of substances that deplete the ozone layer criminal offences were committed.

Through the acquisition and use of this gas at a low price by some companies, large profits were obtained and, by these means, those companies competed in the market in better conditions compared to others companies acting within the law.

The granting of authorizations to carry out this activity is highly restricted and controlled directly by the European Commission, the activity management exclusively under the responsibility of authorized companies.

SOURCE: Ministry of Interior, Spain, December 2012, Spanish version and related pictures are available at: <http://bit.ly/UkbQQJ>

FEATURED

Ozone Secretariat Highlights >>> http://ozone.unmfs.org/new_site/en/index.php

> [Application of paragraph 8 of Article 4 of the Montreal Protocol](#) with respect to the Beijing Amendment to the Montreal Protocol (Decision XXIV/2)

> [Dates and Venues of Montreal Protocol Meetings in 2013](#)

> [TEAP/Technical Options Committees Meetings- Dates and Venues for 2013](#)

The Multilateral Fund for the Implementation of the Montreal Protocol >>>

<http://www.multilateralfund.org>

> **The 68th Meeting of the Executive Committee** 3-7 December 2012, Montreal, Canada. Click the following link to read / Download the Report and related documents: <http://www.multilateralfund.org/68/default.aspx>

> Funding Success - the Multilateral Fund Celebrates 25 Years of the Montreal Protocol

The Multilateral Fund for the Implementation of the Montreal Protocol removed financial barriers that might have discouraged developing countries to accede to the Montreal Protocol.. [Read more](#)

Highlights from OzonAction >>> <http://www.unep.org/ozonaction/>

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> Achieving Climate Benefit Through Smart Technology Choices

Alternatives to HCFCs in the Foam Sector: Taking on the Challenge » is a 15 min short documentary developed by UNEP OzonAction Branch that seeks out answers from the technical and scientific experts closest to the issue and showcases some inspiring conversion projects. [Read more](#)

> **Montreal Protocol e-Learning Module** - UNEP DTIE's OzonAction Branch and the World Customs Organization collaborated to develop the Montreal Protocol e-learning module. This interactive online training module, based on UNEP's Training Manual for Customs Officers, presents the latest information on the international policy governing the control and monitoring of Ozone Depleting Substances, as well as an overview of the technical issues including new information on chemicals and products traded and how these may be smuggled. The module is periodically updated to take into account the developments in international trade and provides new material to reflect the changes in the Montreal Protocol, the Harmonised Systems codes, licensing systems and other relevant information. Once registered, users of the Montreal Protocol e-learning module can follow the course at their own pace and obtain a certificate after successfully completing it. The module is also ideal as an introductory course prior to attending UNEP's Customs training workshops and is also a great refresher course for experienced officers.



How to register - Customs and Enforcement officers: contact your country's national coordinator for the World Customs Organization to register: <http://e-learning.wcoomd.org/hosting/Learning/Coordinators.pdf> or contact the WCO E-learning team: elarning@wcoomd.org

National Ozone Officers who wish to use the course: Contact your UNEP OzonAction Regional Office.

> [UNEP/DTIE OzonAction Programme - Schedule of Events](#)

READING >>>



> **The Montreal Protocol and the Green Economy** - The Montreal Protocol offers a good example of how international cooperation in solving a global environmental problem can have significant spill over benefits that promote a Greener Economy. [Click here](#) to read/ Download



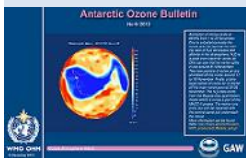
> **Protecting our atmosphere for generations to come, 25 years of the Montreal Protocol** - A special issue dedicated to stratospheric ozone and climate change related issues and the implementation of the Montreal Protocol, providing the most recent information on ozone protection activities from industry, governments, NGOs and international organizations. [Read/Download](#)



> **Vital Ozone Graphics, 3rd Edition**, the vital ozone graphics have been updated to reflect most recent data and information particularly the data reported by the Parties up to and including 2011... Click the links below to [download pdf](#) | [view in e-book format](#)



> UNEP-IIR-CS: Launch the "International Special Issue 2012-13 on the 25th Anniversary of the Montreal Protocol", [Read/ Download](#) / [Click here](#) to see pictures of the launch event



> **WMO Antarctic Ozone Bulletins: 2012** - The World Meteorological Organization Secretariat issues bulletins containing information on the state of the ozone layer in the Antarctic at roughly two week

intervals from August to November. The bulletins are based on data provided by WMO Members which operate ozone monitoring stations in the southern hemisphere and satellites to observe ozone globally. [Click here](#) to Read/Download



> **Hydrochlorofluorocarbon and Hydrofluorocarbon Emissions in East Asia Determined by Inverse Modeling**. Atmos. Chem. Phys. Discuss., 10, 2089-2129, 2010 www.atmos-chem-phys-discuss.net/10/2089/2010/doi:10.5194/acpd-10-2089-2010



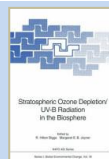
> **Artificial Cooling Makes Hot Places Bearable—But at a Worryingly High Cost**, The Economist, print edition, 6 January 2013 [Click here](#) to Read/Download



> **R-22 Phaseout, Refrigerator Recycling and Q&A from NYTimes' "Chilling Effect"**, By EOSClimate, 19 December 2012, [Click here](#) to Read/Download

> **Comprehensive Four-Year Study Finds Black Carbon Second Biggest Climate Pollutant, Behind Carbon Dioxide**

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The key topics are the interactive factors between the various research elements and the measurements needed to both validate ozone depletion and monitor UV flux changes in the biosphere...
By: R. Hilton Biggs, Margaret E. B. Joyner, Springer London, Ltd., Jul 31, 2012 - 373 pages

MEETINGS / EVENTS >>>

- 2013 -

> **Caribbean Regional Workshop on the Use of Integrated Environmental Assessment Tools for MEAs Mainstreaming, 28-30 January 2013, Saint Lucia**, this workshop will demonstrate the use of innovative integrated environmental assessment (IEA) tools to generate win-win scenarios for achieving national development priorities through more effective implementation of multilateral environment agreements (MEAs), with a focus on mainstreaming in relation to a cluster of biodiversity-related MEAs. The workshop is part of the EU-funded Multilateral Environment Agreements in African, Caribbean and Pacific countries (ACP MEAs) Project. **Contact:** Thérèse N. Yarde, Project Coordinator, CARICOM Secretariat +592 222 0001 x2719, tyarde@caricom.org

> **The International Air-Conditioning, Heating, Refrigerating Expo**, held in conjunction with the Winter Conference, 28-30 January 2013, Dallas Convention Center, www.ahrexpo.com



MACS Training Event and Trade Show, 7- 9, February 2013, Orlando, Florida, www.macsw.org



> **CHINA REFRIGERATION 2013** Trade Fair | 8 Apr. 2013 - 10 Apr. 2013, Shanghai, China
Initiated in the year of 1987, the International Exhibition for Refrigeration, Air-conditioning, Heating and Ventilation, Frozen Food Processing, Packaging and Storage (China Refrigeration Expo) has been reputed as one of the leading exhibitions you can't miss in HVAC&R industry for its over 20 years persistent improvement and innovation... [Click here](#) to learn more



> **First Announcement and Call for Papers – 5th International Conference, Ammonia Refrigeration Technology**, IIR Commissions: B2 with B1, D1. May 9-11, 2013, Ohrid, Republic of Macedonia, **Learn more** > <http://bit.ly/MOjCHD>

> **The Latest Technology in Air Conditioning and Refrigeration Industry. Energy Issues and Climate Change New Refrigerants, New European Regulations, New Plants**, 7-8 June 2013, Politecnico of Milano, Piazza Leonardo Da Vinci, 32 - Milano (Italy)... [Click here](#) to learn more

> **ATMOsphere America 2013 - THE BUSINESS CASE FOR NATURAL REFRIGERANTS IN NORTH AMERICA**, 2nd edition, 17 - 19 June 2013, Washington DC, USA. **Learn more** > <http://bit.ly/X7DOEH>

> **Focuses on Research & Integrated Project Delivery: ASHRAE Announces Call for Papers for 2013 Annual Conference**, 22-26 June 2013, Denver, Colorado. The conference seeks papers on current research worldwide; core HVAC&R applications and systems; and, featured for this conference, Integrated Project Design, Energy Modeling and Building Efficiency Performance... To submit a conference paper abstract or a technical paper and for more information about the tracks > www.ashrae.org/Denver

MISCELLANEOUS >>>



> **Susan Solomon Wins the BBVA Foundation Frontiers of Knowledge Award for Establishing the Links Between Atmosphere, Climate and Human Activity**... For the jury, "her early research, fundamental to the understanding of stratospheric chemistry, led to the strengthening of the Montreal Protocol to curb the use of ozone-destroying substances." In recent years, the citation adds, "her contributions and leadership within the IPCC and other forums is a role model of science for the public good." ... **SOURCE:** PRNewswire, <http://prn.to/ZyhTTu> | [Click here](#) to Watch Related Video

> **OECD Improves Tool to Predict the Hazards of Chemicals**

05/11/2012 - Governments and the chemical industry spend millions of dollars every year testing the safety of chemicals that people use in their everyday lives. Computer modelling, through the OECD-designed [QSAR Toolbox software](#), now replaces many of the

tests traditionally done in the laboratory. This allows regulators and industry to save money and use fewer animals to predict the hazardous properties of chemicals. An improved version of the QSAR Toolbox software, which OECD first released in 2008 to limit the number of laboratory tests needed, benefitted from advice and contributions from governments, NGOs and chemical industry. The QSAR Toolbox (03) offers new features and includes additional data sources; facilitates prediction accounting for metabolism; provides possibilities for predicting the hazard for mixtures; and possesses a more advanced search and reporting engine to handle single chemicals, mixtures, and metabolites. The new version also contains tools to predict repeated dose toxicity. The QSAR Toolbox was developed as part of the OECD's wider Chemicals Programme. Since 1978, the programme helping governments and industry find the most cost-effective way of assessing and managing the risks by chemicals OECD efforts to manage work-sharing and harmonise chemical safety policies across its member countries save government and industry more than EUR 150 million annually. **The QSAR Toolbox is available free of charge** at <http://www.oecd.org/env/hazard/qsar>. Besides download instructions this website also provides free training material. Additional questions can be addressed to OECD's Environment directorate: Joop de Knecht and Bob Diderich joop.deknecht@oecd.org or bob.diderich@oecd.org
Learn more > <http://bit.ly/WWkog1>



The Montreal Protocol Who's Who

<http://www.unep.fr/ozonaction/montrealprotocolwhoswho/PageFlip.asp>

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