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MINISTRY OF HOUSING AND ENVIRONMENT

Meeting and Workshops

AN INTRODUCTION TO PFCS

Ahmed Hassaan Zuhair

Background

Perfluorooctane sulfonate (PFOS) and perfluorooctanoic acid (PFOA) are members of a chemical group known as perfluorinated chemicals (PFCs), characterized by chains of carbon atoms of varying lengths, to which fluorine atoms are strongly bonded. PFCs are used in a variety of applications such as non-stick pans, stain or water repellents, clothing or furniture, floor waxes and paper coating due to their exclusive properties of being heat stable, extremely resistant to degradation and repel both water and oil.

These properties that make PFCs so effective in consumer products are also the reason why they tend to persist in the environment. Research has revealed that PFOS is now a ubiquitous environmental contaminant bioaccumulating in wildlife and humans. PFCs have been detected at low concentrations in the environment, food, and in human blood in several different countries.

How am I exposed?

PFCs are used in wide array of consumer products and food packaging.

- Grease-resistant food packaging and paper products, such as microwave popcorn bags and pizza boxes, contain PFCs.
- PFOS was used until 2002 in the manufacture of 3M's Scotchgard treatment, used on carpet, furniture, and clothing.
- PFOA is used to make DuPont's Teflon product, famous for its use in non-stick cookware. If Teflon-coated pans are overheated, PFOA is released.
- PFCs are in cleaning and personal-care products like shampoo, dental floss, and denture cleaners.
- Even Gore-Tex clothing, beloved in the Northwest for its ability to shed water, contains PFCs.

Why should I be concerned?

PFCs are very persistent. Even if production were to end today, levels would continue to increase in the environment for many years to come. Researchers are finding serious health concerns about PFCs, including increased risk of cancer.

- PFOA is a likely human carcinogen; it causes liver, pancreatic, testicular, and mammary gland tumors in laboratory animals. PFOS causes liver and thryoid cancer in rats.
- PFCs cause a range of other problems in laboratory animals, including liver and kidney damage, as well as reproductive problems.
- PFOA's half-life in our bodies, or the time it would take to expel half of a dose, is estimated at more than 4 years. PFOS's half-life is estimated at more than 8 years.
- According to research scientists from University of California's Department of Epidemiology, exposure to perfluorinated chemicals such as PFOA and PFOS can lead to increase in infertility for women.

How can I reduce my exposure?

Avoid purchasing or, at a minimum, limit use of products containing PFCs.

Watch for packaged foods. Stay away from greasy or oily packaged and fast foods, as the packages often contain grease-repellent coatings. Examples include microwave popcorn bags, french fry boxes, and pizza boxes.

Avoid stain-resistance treatments. Choose furniture and carpets that aren't marketed as "stain-resistant," and don't apply finishing treatments such as Stainmaster to these or other items. Where possible, choose alternatives to clothing that has been treated for water or stain resistance, such as outerwear and sportswear. Other products that may be treated include shoes, luggage, and camping and sporting equipment.

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Check your personal-care products. Avoid personal-care products made with Teflon or containing ingredients that include the words ”fluoro” or ”perfluoro.” PFCs can be found in dental floss and a variety of cosmetics, including nail polish, facial moisturizers, and eye make-up.

Avoid Teflon® or non-stick cookware. If you choose to continue using non-stick cookware, be very careful not to let it heat to above 450ºF. Do not leave non-stick cookware unattended on the stove, or use non-stick cookware in hot ovens or grills. Discard products if non-stick coatings show signs of deterioration.

Reference:
http://pollutioninpeople.org/toxics/pfcs
http://greenchicgeek.blogspot.com/2009_02_01_archive.html
Perfluorinated chemicals – (incl. PFOS/PFOA) a document by WWF

IMPACT2C

Zammath Khaleel

“Quantifying projected impacts under 2°C warming” or IMPACT2C is essentially a research project to understand european climate in the pan european region with 2°C warming. This project would also be doing costing of the impacts and cost of possible mitigation/adaptation activities to avert the damage of the 2°C warming impacts. In addition to European regions, 3 non-European region were also part of the research considering their high vulnerability (River basins in Africa, Bangladesh, and small islands). The project is intended to give clarity to the on-going political debate of climate change and the prescribed ceiling of 2°C higher than pre-industrial level under Copenhagen Accord and Cancun Agreements.

Maldives is one of the small island states that are vulnerable to climate change. All scientific study conducted with climate change in relation to Maldives or any small island states has iterated the need and importance of climate change adaptation and non-action is not an option. Although these studies highlight that small island states are at the forefront of climate change impacts, due to various issues and constraints (mostly lack of data), country specific analysis of specific level impacts to understand the adaptation requirements for those impacts are lacking. Thus, this European research project is an opportunity for Maldives to fill in some of the gaps in understanding climate change and its impact on Maldives.

ARCTIC OZONE HOLE BREAKS ALL RECORDS

Mohamed Simah

In the first three months of this year, something unprecedented happened in the skies over the Arctic. A large hole appeared in the ozone layer, far bigger than any seen there before.

The Arctic ozone layer suffers a little damage every winter, but the effect is normally short-lived. "This is a clear step beyond that," says Neil Harris of the University of Cambridge. As the measurements came in, ozone researchers began to debate whether the loss could be compared to that seen over the Antarctic. "It's the first time we've even discussed that question," says Harris. Between 18 and 20 kilometers up, over 80 per cent of the existing ozone was destroyed. "The loss in 2011 was twice that in the two previous record-setting Arctic winters, 1996 and 2005," says Nathaniel Livesey of the Jet Propulsion Laboratory in Pasadena, California.

The hole was similar in size to those seen in Antarctica in the 1980s. The Antarctic hole has continued to grow since then, and is far larger today.

The Arctic ozone hole will have allowed more ultraviolet radiation than before through, but it is unlikely anyone has been seriously harmed, says Bruce Armstrong of the University of Sydney, Australia. "Occasional ozone depletion episodes such as this would add very little to the underlying population's risk of UV-related cancer."

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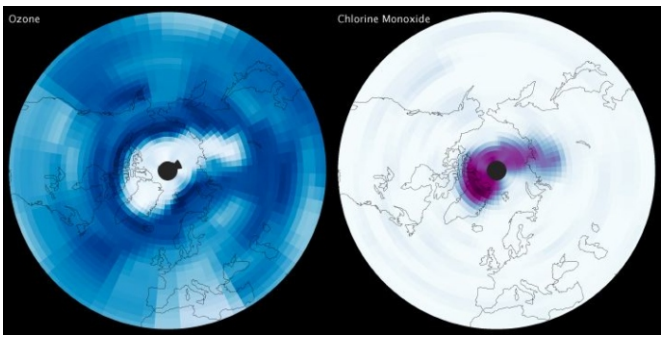
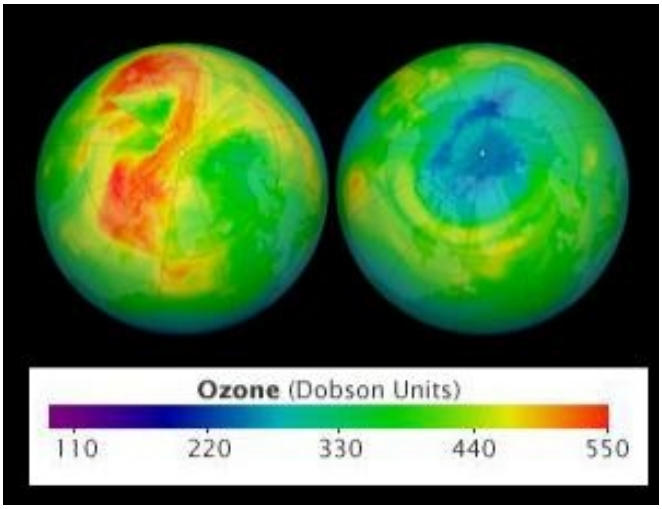


Ozone killer

The question now vexing atmospheric scientists is why the hole grew so large, and whether it will open again. Livesey and his colleague Michelle Santee say the hole formed because the stratosphere remained cold for several months longer than usual. The cold air allowed water vapor and nitric acid to condense into polar stratospheric clouds, which catalyze the conversion of chlorine into chemically active forms that destroy ozone.
But we don't know why the stratosphere stayed cold for so long. "That will be studied for years to come," Santee says.



Chilly skies

Climate change could be partly responsible. That may seem counter-intuitive, but global warming occurs only at the bottom of the atmosphere. "Climate change warms the surface but cools the stratosphere," Harris explains.
In 2007 the Intergovernmental Panel on Climate Change concluded that "there has been global stratospheric cooling since 1979". "Whether that is because of climate change is speculation," Santee says.
More work must be done to find out if climate change is leading to stratospheric cooling – and encouraging the formation of ozone holes over the Arctic. Climate modelers are paying closer attention to the stratosphere than they did just a few years ago: it turns out to be crucial for many phenomena, including the subtle effects of the sun on regional climate.

Source: http://www.newscientist.com/article/dn20988-arctic-ozone-hole-breaks-all-records.html

POPULAR CHINESE ARTIST AND ENVIRONMENTALIST VISITS GHIYASUDHEEN INTERNATIONAL SCHOOL

Zainab Gulisthan

Mr. Yuan Xikun, the prominent Chinese artist, curator, environmentalist and the founder of the very first private museum in China: Jin Tai Art Museum in Beijing visited Ghiyasudheen International School yesterday.

Principal of Ghiyasudheen International School Mr. Thoha Saleem welcomed the artist and his team. In his visit Mr. Yuan addressed the students about his work and also demonstrated sculptures prepared by him. About 450 students from grades 4 to 6 took part in the event. At the event famous singer of China Ms Yuanyuan Liu who is also visiting Maldives with Mr Yuan performed for the students, where she interacted with the students and sang a Chinese song along with them.

Art pieces drawn by the students were presented as tokens of gratitude to Mr. Yuan and his team. This special visit to the school ended with a cultural performance by the students. Mr. Yuan and his team also viewed drawings by the students of Ghiyasudheen School which were displayed around the school hall.

The miniature sculptures “Urgency in the Polar region” and “Patron Saint of Forest-Tiger” were selected as the “Champion of the earth” award trophies by the United Nations Environment Programme in the year 2009 and 2010. Mr. Yuan was awarded the title 'Patron for the arts and Environment” by the Executive Director of UNEP under UN during the Shanghai World Expo 2010 in recognition of his contribution to his environmental work and social responsibly as an artist.

OZONE DAY BICYCLE RACE HELD

Zainab Gulisthan

The final event to mark this year's Ozone Day; the 'Ozone Day Bicycle Race 2011' was held at Hulhumale' on 7th October.

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The bicycle race, organized jointly with the Maldives Olympics Committee, was aimed at creating awareness about the harmful gases released by the motor-vehicles into the atmosphere, create awareness about the Ozone layer and also to promote the use of bicycles in the Maldives. Around 100 competitors took part in the race in five age categories; under 10 mixed, under 13 mixed, under 19 mixed, over 19 female and over 19 male.

The event was held in partnership with Housing Development Cooperation, Maldives Police Service and Maldives National Cadet Co who provided logistic and technical support to the event.

All participants were awarded certificates while winners from each category received bicycles, medals and cash prizes.

Prizes to the winners were awarded by the Minister of Housing and Environment Mr. Mohamed Aslam, Minister of State for housing and Environment Dr. Mohamed Shareef, Minister of State for Housing and Environment and a former bicycle race Champion Sh. Ilyas Hussain.

The Word Ozone Day marks the importance of the saving the Ozone layer and its role in the environment. The activities to mark this year's Ozone Day were held under the theme "HCFC phase out: a unique opportunity."
World Ozone Day is celebrated every year on 16th September.

Photo credit: Mohamed Asif

SHORELINE DYNAMICS

Maldives Environment Management Project

This article is an extract from the report "Coastal Monitoring, Reef Island Shoreline Dynamics and Management Implications" (2010) prepared by Dr Paul Kench for the Environmental Protection Agency and funded by the Maldives Environmental Management Project.

Assessment of shoreline dynamics

Through coastal monitoring it has been established that the magnitude of shoreline dynamics of reef islands can vary depending on the size, shape and location of reef islands. It is possible to categorize islands based on the process regime and degree to which shorelines change (Fig. 1). These differences can be used to inform the strategic placement and configuration of harbours and other coastal management strategies.

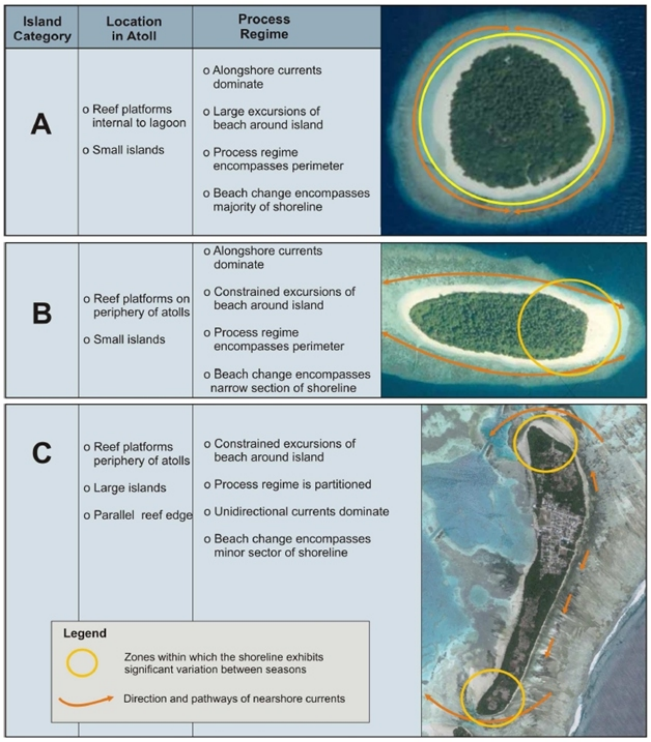

Figure 1. Division of reef island types in the Maldives based on location, coastal process characteristics and shoreline dynamics. Ongoing monitoring can develop further island categories.

Recommended management strategies: Type A and B Islands

Type A and B islands are small reef platform islands that can be located either in atoll lagoons (A) or on the periphery of the atoll rim (B). These islands exhibit a high degree of shoreline dynamism and shorelines are sensitive to changes in nearshore processes. On such islands it is recommended that:

i) Permanent and solid shoreline attached structures are prohibited.

Such structures alter nearshore processes and sediment transport and can destabilize island shorelines.

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ii) Harbours should be detached from island shorelines.

Harbour basins should ideally be located off the edge of the reef platform. Location of harbours off the reef edge would reduce impacts on reef platforms wave and current processes and minimize impacts on island shoreline dynamics. Piled jetties should connect the harbour basin and shoreline. If harbour basins are detached and located on a reef flat it is expected that environmental impacts will be similar to those predicted with breakwaters (Section 4.5.3).

iii) Detached harbours should be connected to the island via piled structures (jetties).

Piled structures allow maintenance of nearshore current processes and sediment transport alongshore.

Recommended management strategies: Type C Islands

Type C islands are larger, located on the periphery of atolls and are oriented parallel to the reef edge. These islands exhibit a high degree of shoreline dynamism at their terminal flanks but due to the extended size, circulatory flow patterns are not apparent and shoreline sediment movements do not encompass the entire shoreline. Indeed some sectors of these shorelines are relatively stable and adjoin extensive shallow lagoon environments. In such settings it is imperative to document the dynamic and stable sectors of shorelines.
On such islands it is recommended that:

iv) Permanent and solid shoreline attached structures are prohibited at terminal ends of islands.

Such structures alter nearshore processes and sediment transport and can destabilize island shorelines (see section 4.5).

v) Harbours should be detached from islands and located in proximity to the most stable sections of lagoon island shorelines.

Harbour basins should be located away from the island shoreline with a minimum separation of 30 m.

vi) Detached Harbours should be connected to the island via piled structures (jetties).

Piled structures allow maintenance of nearshore current processes and sediment transport alongshore.

vii) Permanent and solid shoreline-attached structures may be permitted where it can be demonstrated that the shoreline is stable over decadal timeframes and is not an important sediment bypass zone that connects dynamic sectors of islands.

Meeting and Workshops

MACHHAPUCHHRE PROVIDES SETTING FOR ASIA-PACIFIC COUNTRIES' SUMMIT ON OZONE AND CLIMATE ISSUES

Miruza Mohamed

Pokhara, 17 October 2011 – Government officers from over 25 Asia-Pacific countries have participated in the Joint Network Meeting of South Asia and Southeast Asia and the Pacific Ozone Officers from 17th-19th October 2011. This meeting, organized by the United Nations Environment Programme – Regional Office for Asia and the Pacific (UNEP-ROAP) under its Compliance Assistance Programme, provides a platform where ozone officers from Asia-Pacific governments discuss policy, strategy, and progress of action plans to enable countries in the region comply with obligations phase out ozone-depleting substances (ODS) following an agreed timetable under the Montreal Protocol on Substances that Deplete the Ozone Layer.

Machhapuchhre, a mountain located in north central Nepal and part of the Himalayan range, aptly provides the backdrop for the meeting as it symbolizes the need for immediate and collective action to phase out HCFCs to protect the ozone layer and mitigate climate change.
"The melting of permafrost in the Himalayan Mountains is three times that of the melting in the Arctic Circle caused by global warming. Through HCFC phase out under the Montreal Protocol, we can significantly cut greenhouse gas emissions and put a stop to the melting in the Himalayas," stated Mr. Shambhu Koirala, Chief District Officer of Kaski District and Chief Guest of the event.

"The theme of this year's Joint Network Meeting of Asia-Pacific countries is HCFC Phase-out for an Energy Efficient Future to stress ozone layer and climate change linkage and the huge energy efficiency opportunities in HCFC phase out," said Mr. Atul Bagai, UNEP Senior Regional Coordinator. "Through information exchange among governments, implementing agencies, donor agencies and other Montreal Protocol institutions, we aim to enable governments to inform and assist their industries and citizens in general in shifting to alternatives that will give them maximum benefits from

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In 2007, the 196 member-countries to the Montreal Protocol have agreed to accelerate the phase out of production and consumption of hyrdrochlorofluorocarbons (HCFCs), ODS commonly used in the foam-blowing and refrigeration and air-conditioning sectors.

"The networking activities such as Network Meetings organized by UNEP have contributed in ensuring the Montreal Protocol compliance of countries and resulted in improved implementation including, for example, data reporting of ODS production and consumption," shared Ms. Megumi Seki, Senior Scientific Affairs Officer, Ozone Secretariat.

The first regional network for ozone officers was established in the Southeast Asia and the Pacific region in 1992. The networking activity is on a regional basis and applying the principle of "collective learning by sharing while doing," builds the Ozone Officers' skills for implementing and managing their national ODS phase-out activities. Other notable outcomes of the regional networks include accelerated ratification of the Montreal Protocol and its Amendments; earlier development of national ODS legislation and other policy measures; more regular data reporting and improved compliance with the ODS phase-out schedules.

24 ASIA-PACIFIC COUNTRIES REACH GOAL ZERO:

100% PHASE OUT OF CFCS AND OTHER OZONE-DAMAGING CHEMICALS

Miruza Mohamed

Pokhara, 18 October 2011 – Twenty-four Asia-Pacific countries were recognized and conferred the Montreal Protocol Recognition Award on 17 October 2011 for compliance to the ozone-depleting substances (ODS) phase-out targets for 1 January 2010 set under the 1987 Montreal Protocol on Substances that Deplete the Ozone Layer. The award was presented by the United Nations Environment Programme (UNEP) Ozone Secretariat and OzonAction Programme during the Reception Ceremony of the three-day Joint Network Meeting of South Asia and Southeast Asia and the Pacific Ozone Officers from October 17 to 19 held in Pokhara, Nepal.

"The countries deserve acknowledgment for fulfilling their commitments to completely phase out their production and consumption of CFCs, carbon tetrachloride and halons by 1 January 2010. The compliance of all Asia-Pacific countries has played a significant role in the success of the Montreal Protocol as the best example for multilateral cooperation to protect the environment," said Ms. Megumi Seki, Senior Scientific Affairs Officer, Ozone Secretariat.

"We congratulate the Asia-Pacific countries for this achievement because compliance is not an easy task for governments. To attain this, governments have to synchronize their policies and legislations on ODS with programs to assist affected sectors to ensure the smooth transition to alternative chemicals and technologies," stated Mr. Atul Bagai, Senior Regional Coordinator, UNEP Regional Office for Asia and the Pacific.

The Asia-Pacific region is very important to the international community of ozone protectors because it is home to the largest producers and consumers of ODS. China and India were the largest producers of CFCs until 2007 and 2008, respectively, and now largest producers of HCFCs globally.

"CFCs and HCFCs are not just ODS but are also powerful greenhouse gases. Research has shown that because of the Montreal Protocol, the world had avoided 11 billion tonnes CO2 equivalent per year of greenhouse has emissions," claimed Dr. Sita Ram Joshi, Director-General of the Nepal Bureau of Standards and Metrology.

Following Joint Network Meeting is a two-day workshop on HCFC Phaseout and its climate and energy use linkages from 20 to 21 October, in Kathmandu organized by UNEP in cooperation with the Nepal's Bureau of Standards and Metrology (NBSM) and India's Bureau of Energy Efficiency (BEE).

PERFLUORINATED CHEMICALS AND THE TRANSITION TO SAFER ALTERNATIVES

UNEP/OECD WORKSHOP

BEIJING, 5 SEPTEMBER 2011

Ahmed Hassaan Zuhair

Background and workshop objectives

In May 2009, the second session of the International Conference on Chemicals Management (ICCM2) adopted Resolution II/5 for the management of

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perfluorinated chemicals (PFCs) and transition to safer alternatives. The resolution invites governments, international organizations, and other stakeholders "to consider the development, facilitation and promotion in an open, transparent and inclusive manner of national and international stewardship programmes and regulatory approaches to reduce emissions and the content of relevant perfluorinated chemicals of concern in products and to work toward global elimination, where appropriate and technically feasible."

UNEP, DTIE, Chemicals Branch and the Organisation for Economic Cooperation and Development (OECD) have established a partnership to follow up on the above decision and are in that context establishing a Global PFC Group with representatives from each of the SAICM regions, non-governmental organizations, and other international organizations, as well as current OECD participants on PFC activities.

The objective of this workshop was to inform SAICM delegates from the Asia-Pacific region about recent PFC related regulatory and other activities in the OECD, to exchange information on relevant activities in the Asia-Pacific region, to brainstorm about possible activities that could be carried-out by the newly established Global PFC Group (i.e. to support developing countries in their efforts in this area) and to move the PFC agenda forward more broadly.

Summary of discussions

The UNEP/OECD Workshop on perfluorinated chemicals took place on 5 September 2011 in the framework of the SAICM Asia-Pacific Regional meeting.

Presentations were made by 8 countries (China, India, Japan, Korea, Thailand, Indonesia, Malaysia, Kiribati) and one NGO from the Asia-Pacific region on the status of knowledge and information needs and any regulatory activities they had on PFCs. These highlighted that while some data was available on measurements of PFCs in the environment, there remained a critical and largely unmet need for information on PFCs on both the technical and policy levels.

Governments of Russia, the US and Germany presented on their PFC programmes and/or the results of their investigations into the fate of PFCs in the environment and measured in humans. Australia presented the results of the 2009 OECD PFC Survey. A representative from the FluoroCouncil presented the work being done by its members in addressing PFC issues. All power point presentations are available in the following link: www.oecd.org/ehs/pfc.

The final session consisted of a brainstorming to develop ideas for possible future work of the OECD/UNEP Global PFC Group. The following ideas were discussed:

- The need for information exchange was clearly identified by the discussions of the workshop and the availability of information through the OECD PFC Web Portal was welcomed by participants. However, participants perceived a need for a concise summary of information that could be used to raise awareness of PFCs and assist them in formulating policy. The following synthesis papers could be developed by the Global PFC Group:
  - A synthesis paper on scientific evidence on PFCs
  - A paper that summarises information about regulatory approaches (e.g. those applied in the OECD);
  - A synthesis paper on alternatives;
- The further population of the PFC Web Portal (www.oecd.org/ehs/pfc), including with relevant information from developing and emerging economies would be another important measure to improve information.
- The extension of the OECD survey on PFCs to bring in reporting from the companies who have not participated yet in the survey was highlighted as a step which would be highly beneficial towards completing the current knowledge base on the production, use and releases of PFCs. Participants suggested that it would be helpful to circulate the survey questionnaire to countries and that a webinar discussing the survey methodology could help to build support for this activity.
- Many of the participants noted that, as they are not producing or processing PFCs in their countries, the main issue for them is to improve their understanding of articles / products which are being imported that contain PFCs. There is hence, a need for information that could help to identify these products. A paper that presents the major uses of different categories of PFCs could help to

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fulfil this need. Another idea that was brought forward is to develop a product labelling scheme.

- The need to carry-out an economic evaluation of the costs and benefits associated with the elimination of PFCs was identified.
- The Global PFC Group could lend its support to the development of guidance for the updating of National Implementation Plans under the Stockholm Convention.

Specifically with reference to the representation of the region in the Global PFC Group and the activities of the Group, the following points were made in the meeting:

- The OECD/UNEP Global PFC Group is still in formation. Terms of reference have been circulated by UNEP Chemicals to SAICM focal points and made available on the SAICM website. Nominations and coordination of the members from the Asia-Pacific region will be taking place through the SAICM regional focal point.
- The target is to have the regional members nominated by the end of September, and to have a first teleconference and the development of the work programme of the group in October/November 2011.
- Webinars on topics of interest to the group should be developed to keep the dialogue and information exchange going. Information on regulatory approaches, scientific insights and on alternatives were mentioned as potential topics for future webinars. It was noted that past webinars have presented some of this information and that they could be repeated in the future to respond the needs expressed during the Workshop.
- Participation in the development of guidance on PFCs by the global group would be one potential activity of the Group. This might be considered for PFOS specifically, through feedback and communications with the Secretariat of the Stockholm Convention.

These ideas will be fed into the discussions on future work that will be taking place within the OECD/UNEP Global PFC Group and will provide a valuable starting point for these discussions.

MANGROVES FOR FUTURE (MFF) EIGHT REGIONAL STEERING COMMITTEE MEETING

24-26 OCTOBER, 2011, BANDOS ISLAND RESORT, MALDIVES

Muhsina Abdul Rahman

MFF held its eight Regional Steering Committee (RSC-8) meeting in the Maldives. The outcomes will dictate MFF's direction for Regional Initiatives/Projects. MFF institutional partners and country representatives together with special invited experts joined hands to plan and decide on the future of MFF.

Mangroves for the Future (MFF) is a partnership-based initiative promoting investment in coastal ecosystem for sustainable development. MFF provides a collaborative platform to help countries; sectors and agencies in the MFF region tackle the growing challenges to coastal sustainability.

MFF has adopted mangroves as its flagship ecosystem in recognition of the important role that mangrove forests played in reducing the impacts of 2004 Indian Ocean tsunami, and severe effect on coastal livelihoods caused by the loss and degradation of mangroves. MFF began in 2006 inaugurated by for US president Bill Clinton. The countries in this initiative include India, Indonesia, Maldives, Pakistan, Seychelles, Sri Lanka, Thailand and Vietnam. The institutional partners of MFF are UNDP, IUCN, CARE, FAO, UNEP, Wetlands International, NORAD and SIDA.

The meeting was opened by H.E Ahmed Naseem, Minister of Foreign Affairs. Mr. Ahmed Naseem made a special remark on the challenges faced by Maldives in dealing with waste management issues and concerns over the severe coastal erosions. The 8th Regional Steering Committee was held to share the experienced learnt and success stories between countries in implementation of MFF since RSC-7 (Regional Steering Committee 7). The meeting was concluded after a Learning Seminar held on Sustainable Tourism and Coastal Environment.

Mangroves for the Future
INVESTING IN COASTAL ECOSYSTEMS

STAKEHOLDER CONSULTATION WORKSHOP ON SECOND NATIONAL REPORTING ON BIOSAFETY HELD 13 OCTOBER 2011

Muhsina Abdul Rahman

A Stakeholder Consultation Workshop on Second National Reporting on Biosafety was held on 13th October 2011 at Traders Hotel. The workshop was organized and conducted by Ministry of Housing and Housing and Environment in collaboration with Cartagena Protocol on Biosafety and Global Environment Fund (GEF). The Stakeholders who participated in the workshop were from different Government Agencies and NGOs relevant to the implementation of the Protocol. The workshop was inaugurated by the Director General of Department of Environment Mr. Mohamed Zahir.

The half day workshop was mainly focused on finalizing the 2nd National Report to Biosafety which focuses on the status of implementation of the Cartagena Protocol on Biosafety. Discussions on the way forward with other Multilateral Environmental Agreements (MEAs) and Cartagena Protocol on Biosafety were also held at the today's Workshop.

The Cartagena Protocol on Biosafety to the Convention on Biological Diversity is an international agreement which aims to ensure the safe handling, transport and use of living modified organisms (LMOs) resulting from modern biotechnology that may have adverse effects on biological diversity, taking also into account risks to human health. It was adopted on 29 January 2000 and entered into force on 11 September 2003. Maldives became a party to the convention on September 2003 and has developed the First National Report on Biosafety in 2008.

Photo Credit: Saudhulla Gasim

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