



PACIFIC ISLANDS APPLIED GEOSCIENCE COMMISSION

International Network of Drinking Water Regulators (RegNet) Meeting and 26th Pacific Islands Environment Conference (PIEC)

RegNet: 19-20 June, 2009, Singapore

PIEC: 23-25 June 2009, Saipan, Commonwealth of Northern Mariana Islands

SOPAC Trip Report 473

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Water Sector

INTRODUCTION

SOPAC, on behalf of its Pacific island member countries, has actively participated in previous International Network of Drinking Water Regulators (RegNet) meetings and the Pacific Islands Environment Conferences (PIEC).

Both platforms presented good opportunities to share and learn from global experiences on sustainable water and environment management. It also provides the opportunity to meet a range of experts in the water and environment field thus expanding SOPAC's networking base.

As such, the SOPAC Water Services Coordinator attended both the RegNet meeting and the PIEC for 2009 after SOPAC received invitations for the respective gatherings.

The trip report summarises the outcomes of both the 2nd RegNet meeting and the 26th PIEC.

PURPOSE

- i) To represent SOPAC and the Pacific island member countries at the 2nd RegNet meeting and 26th PIEC.
- ii) To present on topics relating to water quality and water safety during the gatherings.

LIST OF PEOPLE MET

See Annex 1.

2ND INTERNATIONAL NETWORK OF DRINKING WATER REGULATORS (RegNet) MEETING

The RegNet meeting agenda is attached in Annex 2.

The World Health Organisation (WHO) sponsored 2nd RegNet meeting was hosted by the National Environment Agency (NEA) of Singapore. The venue for the event was PUB WaterHub in Singapore. PUB WaterHub is among the Asia-Pacific Water Forum Knowledge Hubs, similar to the Pacific IWRM Resource Centre, which is the knowledge hub for integrated water resources management in the Pacific. PUB WaterHub in Singapore is the regional water knowledge hub for urban water management.

The objectives of the RegNet meeting were:

- Review the progress of RegNet's activities as a follow-up to the February 2008 meeting in Geneva.
- Share experiences and expertise on various topics including regulatory frameworks, challenges faced with enforcement of regulations, water safety plans and building capacity and expertise.
- Establish strategic directions and future workplan for RegNet.

| Meeting Outcome | Action/Follow-up (if required) |
|---|--------------------------------|
| 1. Good progress in relation to the RegNet workplan was noted since the last meeting in 2008. | |
| 2. Upon suggestion from WHO's Guidelines for Drinking Water Quality Committee (GDWQ committee), RegNet will not focus on producing a guideline on Regulating Drinking Water from a Health Perspective but would rather work on Key Issue papers. Some key issue papers prepared include Key Principles of Regulation, Regulation of Source Water Protection, Regulating Drinking Water from a Public Health Perspective and Regulation of Plumbing Materials. | |
| 3. RegNet should continue to meet on a yearly basis until decided otherwise. Future meetings can be based on thematic areas for targeted discussions. Suggested themes in relation to drinking water regulations include Climate Change, Financing and Levels of Sophistication. | |
| 4. A concurrent WHO working group meeting on Pharmaceuticals and Personal Care Products (PCPP) in drinking water was also hosted at the PUB WaterHub venue. The PCPP working group shared their outcome with the RegNet group towards the end of their 2-day deliberations. The major recommendation of the working group was that currently there was no need to establish guideline values for pharmaceutical products in drinking water. Routine monitoring is not recommended, unless specific local risk is identified, and the focus should remain on issues of higher priority, one of which is managing the risks from microbiological organisms. A formal report will be released by WHO on this shortly. | |

| Meeting Outcome | Action/Follow-up (if required) |
|--|--|
| 5. The workplan for the coming period was discussed and agreed by RegNet members. These include having a membership code, developing case studies on experiences with incorporating water safety plans into regulations, creation of a RegNet website and providing comments in key issue papers. | |
| 6. RegNet annual meetings will still be for a 2-day period and future meetings will be dovetailed to other regional or international gatherings. Possibility of having the next meeting dovetailed to the Stockholm Water meeting (August 2010) will be explored. | |
| <p>7. New WHO report on Safe Water, Better Health has been recently published. It states that almost one tenth of the global disease burden could be prevented by improving water supply, sanitation, hygiene and management of water resources.</p> <p>Safer water, better health – the first-ever report depicting country-by-country estimates of the burden of disease due to water, sanitation and hygiene highlights how much disease could be prevented through increased access to safe water and better hygiene. This comprehensive overview provides the epidemiological evidence and economic arguments for fully integrating water, sanitation and hygiene in countries' disease reduction strategies – a pre-requisite to achieving the Millennium Development Goals. It also provides the basis for preventive action by all relevant sectors managing critical water resources and services in support of public health efforts.</p> | <p>WASH team to note.</p> <p>Copy can be downloaded from WHO website.</p>  |
| <p>8. There exists a WHO WSPortal – Health through Water. The Partnership to Health through Water is a global alliance of programmes and initiatives dedicated to reducing the incidence of water-related diseases worldwide. The Partnership has a key area of work focused on advocating the adoption and implementation of Water Safety Plans (WSPs).</p> <p>As part of the Partnership, WSPortal aims to contribute to improving and maintaining the safety of piped drinking water supplies through the effective implementation of WSPs. This is achieved through collecting and disseminating case studies, references and tools, which provide practical guidance and evidence-based material of relevance that can be applied appropriately for a range of circumstances.</p> | <p>Drinking water safety planning team to note.</p> <p>More information at: www.who.int/wsportal/about/en/</p> |
| 9. The 2 nd Global Conference on Water Safety Plans is planned to be hosted in Malaysia in the 3 rd quarter of 2010. | Drinking water safety planning team to keep track. |

26th PACIFIC ISLANDS ENVIRONMENT CONFERENCE (PIEC)

The PIEC brief agenda is attached as Annex 3.

The 26th PIEC was co-sponsored by United States Environmental Protection Agency (US EPA), American Samoa EPA, Guam EPA and Commonwealth of Northern Mariana Islands Division of Environmental Quality (CNMI DEQ). The conference was held at the World Resort on Saipan, CNMI.

The overall theme for the conference was Climate of Change: Energising a Sustainable Future for Pacific Islands. Break-out sessions themes included Climate Change, Renewable Energy and Water.

The Water Services Coordinator attended all the combined sessions and the following break-out sessions:

- Perspectives on Water/ Wastewater Operator Training and Certification.
- Providing Safe Water and Wastewater Services in the Pacific Islands.
- Water Research in the Pacific.
- Laboratory Capacity and Communication.
- Preparing for Climate Change: A Framework for Island Readiness.

| Meeting Outcome | Action/ Follow-up (if required) |
|---|---|
| <p>1. Good reception of the Drinking Water Safety Planning concept after presentation by the Water Services Coordinator.</p> <p>US EPA Officers mentioned that it was similar to their sanitary survey, however, acknowledged that it was more structured and Pacific island appropriate.</p> | |
| <p>2. Other interesting presentations included:</p> <ul style="list-style-type: none"> • Certification for water operators. However, this is based purely on US EPA model and written examination based as opposed to actual practical at the plant itself. • Advantages of leak detection program (operating cost reduction, more water to maintain supply for 24 hours, detecting illegal connections). • Need for consumer education and awareness while putting in place water tariffs. • Adaptation as being a good approach to climate change. | |
| <p>3. Session with Freely Associated States (Palau, Federated States of Micronesia and Marshall Islands) and US territories (Guam, American Samoa and CNMI) laboratory personnel, EPA Directors and US EPA Certification Program Officer was very useful.</p> <p>Obvious needs identified by the group include:</p> <ul style="list-style-type: none"> • Better networking and coordination among the Island laboratories. • Building regional capacity, for example at Guam EPA or CNMI DEQ laboratories to monitor for nutrients and heavy metals. • Need to maintain Microbiological Certification Status through | <p>WQM Programme through Tasleem to maintain dialogue with the group and provide assistance where possible.</p> <p>WQM to continue the good partnership with Guam EPA and US Certification Program.</p> |

| Meeting Outcome | Action/ Follow-up (if required) |
|--|---------------------------------|
| <p>ensuring all procedures are met both for laboratory quality assurance as well as increased recurrent budget for consumables and reagents.</p> <ul style="list-style-type: none"> Country-specific drinking and marine water standards. Currently US EPA standards are adapted. | |
| <p>4. Interesting quotes picked up:</p> <ul style="list-style-type: none"> Leak detections and repair programs are the Blue Print to Water Resources Management. Climate Change: The Limits of our Thinking. Energy Efficiency – delivering the same energy service with less energy. | |

CONCLUSION AND RECOMMENDATIONS

Attendance by SOPAC on behalf of its Pacific member countries to the 2nd RegNet meeting and the 26th PIEC was useful.

Participation at the RegNet meeting ensures that key issue papers published as part of the RegNet forum on drinking water regulations are sensitive to needs and challenges of Pacific Island Countries. Future participation at RegNet meetings by SOPAC upon invitation is recommended.

The partnership with US EPA for benefit of SOPAC member countries in the northern Pacific should be maintained and forums like the PIEC should be attended to strengthen this existing partnership.

ANNEX 1 List of People Met

1. RegNet Meeting

| Name | Designation/Organisation | Country | E-mail Contact |
|----------------------------|--|----------------------|--|
| Dr. Osward Chanda | Director, National Water Supply and Sanitation Council | Zambia | omchanda@zamnet.zm omchanda@nwasco.org.zm |
| Mr. Fernando Nhantumbo | Executive Secretary, Water Regulatory Council | Mozambique | secretario@cra.org.mz fnhantumbo@cra.org.mz |
| Ms Jan Bowman | Assistant Director, Environmental Health, Department of Human Services | Melbourne, Australia | Jan.bowman@dhs.vic.gov.au |
| Mr. Joselito Riego de Dios | Environmental / Occupational Health Office | Philippines | litoriego@yahoo.com |
| Dr. Teixeira de Carvalho | President, Agency of Regulation, Control & Inspection of the State of Goias | Brazil | presidencia@agr.go.gov.br |
| Mr. Gustavo Faleiros | Director of Sanitation, Agency of Regulation, Control & Inspection of public service of the State of Goias | Brazil | gustavofalaeiros@agr.go.gov.br |
| Dr. Pranav Joshi | Senior manager, Drinking Water Unit | Singapore | Pranav_joshi@nea.gov.sg |
| Dr. Jim Foster | Deputy chief Inspector(Science & Strategy), Drinking Water Inspectorate | United Kingdom | Jim.foster@defra.gsi.gov.uk |
| Mr. Okai Kotei | Director, Water Public Utilities Regulatory Commission | Ghana | info@purcghana.com patacus@yahoo.com |
| Jamie Lafontaine | Programme Manager-Legislative Initiatives, Health Canada-First Nations and Inuit Health Branch | Canada | Jamie_lafontaine@hc-sc.gc.ca |
| Dr. S Satish Appoo | Director Environmental Health Department | Singapore | S_satish_appoo@nea.gov.sg |
| Ms Lam Chung Hsiang | Environmental Health Executive, Environmental Health Department, National Health Agency | Singapore | Lam_chun_hsiang@nea.gov.sg |

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| Mr Leonardo A. V. Manus | Deputy Director, Department Of Water Affairs & Forestry | South Africa | manuslev@dwaf.gov.za |
| Dr Annabelle May | Inspector, Drinking Water Inspectorate | United Kingdom | Annabelle.may@defra.gsi.gov.uk |
| Terrance Thompson | WHO | Manilla | thompsons@wpro.who.int |
| Mr. Marzuki Bin Mohammad | Director research, Development and Innovation, National Water Services | Malaysia | marzuki@span.gov.my |
| Mr. Roberto Olivares | Director General, ADERASA | Mexico | Roberto.olivares@aneas.com.mx |
| Dr. Edward Ohanian | Director, Health and Ecological Criteria Division ,US Environmental Protection agency | United States Of America | Ohanian.edward@epamail.rpa.gov |
| Ms Manju Shreedharan | Environmental Health Executive, Environmental Health Department, National Environment Agency | Singapore | Shreedharan_manju@nea.gov.sg |
| Dr. luis Simas | Drinking Water Department Director | Portugal | Luis.simas@irar.pt |
| Mr. Ramanath Vidyanathan | Environmental Health Executive, Environmental Health Department, National Environment Agency | Singapore | Vaidya_ramnath@nea.gov.sg |
| Mr. Robert Boos | Coordinator, Water, sanitation, Hygiene & Health, WHO | Switzerland | bors@who.int |
| Ms Sinead Tuite | Technical Officer WHO/Health Canada Cooperation | Canada | tuites@who.int |
| Tasleem Hasan | Water Services Coordinator | Pacific | Tasleem@sopac.org |

2. PIEC: The participants list will be posted to the US EPA website in due course.

ANNEX 2 RegNet Meeting Agenda

Meeting of the International Network of Drinking-water Regulators 19 and 20 June 2009 Singapore

Day 1: Friday, 19 June 2009

0830 - 1015 Registration
Opening Ceremony (joint with PPCPs meeting)
Tea reception

SESSION 1

Moderator: Ms Sinead Tuite, WHO

1030 - 1100 Welcome – Mr Satish Appoo, Singapore
Purpose of meeting and expected outcomes – Mr Robert Bos, WHO

1100 - 1130 Introduction of participants – Mr Satish Appoo

1130 - 1200 Update on Key Deliverables from Previous Meetings – Ms Sinead Tuite, WHO

1200 - 1300 Lunch

1300 - 1400 Tour of Research Facilities at WaterHub

SESSION 2

Moderator: Mr Satish Appoo

1400 - 1430 Country Presentation – Dr Ed Ohanian

1430 - 1500 Country Presentation – Mr Marzuki bin Mohammed

1500 - 1530 Country Presentation – Dr Luis Simas

1530 - 1600 Discussion of common themes and challenges

1600 - 1630 Health Break

SESSION 3

Moderator: Mr Oswald Chanda, Zambia

1630 - 1730 Presentation on compliance and enforcement: Mr Leonardo Manus

1730 - 1745 Wrap up

Day 2: Saturday, June 20, 2009

SESSION 4

Moderator: Mr Terrance Thompson, WHO/WPRO

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|-------------|---|
| 0900 - 1000 | Presentation on Lessons Learnt from Incorporating Water Safety Plans into Regulations – Doctors Annabelle May and Jim Foster. |
| 1000 - 1030 | Moderated discussion and sharing of experiences on incorporating water safety plans into regulations – Mr Terrance Thompson. |
| 1030 - 1100 | Health Break |
| 1100 - 1200 | Translating WSPs into Regulation: next steps – Mr Terrance. |
| 1200 - 1300 | Lunch Break |

SESSION 5

Moderator: Mr Fernando Nhantumbo, Mozambique

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|-------------|---|
| 1300 - 1330 | Presentation on experiences building expertise and capacity – Mr Jamie LaFontaine. |
| 1330 - 1400 | Presentation on experiences building expertise and capacity – Mr Tasleem Hasan. |
| 1400 - 1500 | Presentation on and discussion of Water Safety Plan assessment/ compliance tool – Dr Annabelle May. |
| 1500 - 1530 | Health Break |

SESSION 6

Moderator: Dr Pranav S Joshi, Singapore

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| 1530 - 1600 | Update on outcome of PPCP working group |
| 1600 - 1700 | Facilitated group discussion on objectives and operations of RegNet |
| 1700 - 1730 | Define RegNet's work plan and next steps Facilitated by Ms. Sinead Tuite, World Health Organisation |
| 1730 - 1745 | Closing Remarks – Mr Satish Appoo |

Annex 3

PIEC Agenda

26th Pacific Islands Environment Conference

| TUESDAY, JUNE 23 | | | WEDNESDAY, JUNE 24 | | THURSDAY, JUNE 25 | | |
|------------------------|---|---|--|--|--|--|---|
| 7:30 a.m. | Registration, Exhibits, Refreshments | | Registration, Exhibits, Refreshments | | Registration, Refreshments | | |
| 8:00 a.m. | | | Marianas Military Buildup Overview | | Science for Effective Management: Identifying Watershed Effects in Coral Reef Ecosystems | Restoring and Revitalizing the Land: Brownfields Programs in the Pacific | Recycling and New Solid Waste Management Technologies |
| 8:30 a.m. | Welcome and Opening Program | | Strategies for Island Sustainability: The Importance of Vision and Follow-through | | Preparing for Climate Change: A Framework for Island Readiness | | |
| 9:15 a.m. | Keynote: Planning for a Future Without Oil Gil Masters, Stanford University | | | | | | |
| 10:00 a.m. | BREAK | | BREAK | | BREAK | | |
| 10:30 a.m. | Confronting Climate Change in the Pacific: National, Regional, and Local Perspectives | | Pacific Success Stories | | Closing Session and Panel Discussion | | |
| 11:30 a.m. | LUNCH BUFFET: Jungle Stage Sponsored by CNMI Coastal Resources Management Office and ExxonMobil | | LUNCH on own | | LUNCH (Box Lunch Pick-up, Pre-order required) | | |
| 1:30 p.m. | Climate Change 101 | Perspectives on Water/ Wastewater Operator Training and Certification | Environmental Education: Schools and Youth | Green Building: LEED and Tropical Building Codes | Water Research in the Pacific | Micronesia Challenge and Sustainable Conservation Financing | Field Trips: Marpi Brownfields, UXO (Departs 11:30 a.m.) Mañagaha Conservation Snorkel (Departs 12:15 p.m.) |
| 3:00 p.m. | BREAK | | BREAK | | | | |
| 3:30 p.m. to 5:00 p.m. | Adaptation to Climate Change in the Pacific | Providing Safe Water and Wastewater Services in the Pacific Islands | Environmental Education: Social Marketing | Renewable Energy Technology Showcase | Laboratory Capacity and Communication | Department of Defense Environmental Stewardship in the Marianas | |
| | 5:45 p.m. Governor's Reception Fiesta Resort (Transportation Provided) | | 5:30 p.m. "Made in the Marianas" Festival CNMI Museum (Transportation Provided) | | 5:00 p.m. Night Market, Garapan (Transportation on your own) | | |

"Climate of Change: Energizing a Sustainable Future for Pacific Islands"