



Focus of the Month

Water Safety Plans

Water safety plans (WSPs) are an effective means of ensuring water safety that is controlled within water supplies. This is achieved through undertaking a systematic and detailed assessment and prioritization of hazards and hazardous events in the water supply chain. A WSP identifies how events can be controlled, how control can be monitored and putting in place plans to rectify faults quickly and efficiently. Importantly, the WSP approach facilitates improvements of what is already in place ensuring that increases in water safety and quality can still be delivered in the short term, even if it is identified that capital investment is required in the longer term.

The basic concept within a WSP is that the focus should be on the operational processes and actions that are undertaken to ensure safe drinking water is provided rather than testing the water that is delivered. This does not mean that water quality testing is not important - it is a fundamental component of the WSP in verification. However, the WSP moves away from only taking action when a water quality test shows contamination (remedial action) to an approach that takes action once the water supply operation is beginning to deteriorate and the risk of contamination has increased (preventive action). Besides the advantage offered by a preventive approach, cost and procedural aspects also are added benefits – as the emphasis is placed here on simple surrogate tests rather than more expensive and difficult microbial and chemical analyses. Details in http://www.who.int/water_sanitation_health/dwq/safetyplans/en/.

In 2005, the Australian Agency for International Development (AusAID) and the World Health Organization (WHO) agreed to

implement a project on **Accelerating effective water sanitation and hygiene management for health, with primary emphasis on the Asian Region**. Utilizing the capacity and outreach that WHO has developed over the last few years in the area of policy development and capacity building for drinking water quality, AusAID is supporting WPRO and SEARO countries to develop, test and apply a range of analytical tools and good practice approaches. On the latter, the emphasis has been on promoting and developing the *Water Safety Plans* and applying this in Healthy Settings. The project period is from mid 2005 to mid 2007.



WSP ensures water safety from catchment to consumer.

Currently, Bangladesh, Bhutan, China, Laos, Myanmar, Vietnam are involved in the project with Cambodia, Philippines, Thailand joining shortly. The project aims to share its experiences widely and therefore regular international meetings are planned during 2007.

Highlights

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Mid term review of Aus-Aid supported Project activities at Hanoi

A mid-term review meeting was held in Hanoi from September 5-7, 2006 at the invitation of the Government of Vietnam. Some 25 representatives from the project countries, AusAID, WHO and from partners such as UNICEF and the World Bank attended. On behalf of WHO, Mr Terrence Thompson, now at WHO/WPRO but earlier at WHO/SEARO, hosted the workshop. Other participants included Dr Jamie Bartram (WHO/HQ), Dr. Andrew Trevett (WHO Bangladesh), Dr. Maung Maung Lin (WHO Myanmar), Ms. Payden (PHE, Royal Government of Bhutan) and Mr Han Heijnen (represented WHO/SEARO).



Participants at Hanoi meeting.

While reviewing it was noted that training and consultation for WSP development and studies such as those on Burden of Disease, are only just starting to result in national interest. It was concluded that it would be important to focus on the policy impact of the activities and how one could permeate the sector with these experiences so that scaling up would become possible. Countries also indicated the need for adjustments to activities to make the outcome more productive.

India takes steps in launching WSP activities

Since the Water Safety Plan (WSP) approach is one of the important components of the recent WHO publication on "Guidelines for Drinking Water Quality", local level applications is being initiated in urban settings in some selected metro towns and also guidance documents are being prepared that will help in WSP orientation in the country. Under these approaches the following activities have been initiated in India:

- The Hyderabad Metro Water Supply and Sewerage Board (HMWSS&SB), after the introductory workshop in May 2006, has already



WSP aims at controlling the contamination of water by risk assessment surveys and awareness campaigns.

identified three sites for demonstration projects in the city.

- WHO-India is supporting National Environmental Engineering Research Institute (NEERI) to undertake a study concerning change in water quality from source to the consumer in a selected slum colony of Delhi.
- The third initiative under WSP is the development of "Guidance Manual for Drinking water Quality Monitoring and Assessment". The documents have been developed by NEERI and National Institute for Communicable Diseases.

Drinking Water and Sanitation coverage in SEA Region is a cause for concern:

A recent (2006) report, by WHO & UNICEF on joint assessment of MDG drinking water and sanitation targets-reveals the following facts about south East Asia region,

- The region is well on track with the MDG targets for water supply coverage but in sanitation the picture is dismal
- Indonesia (urban), Maldives (rural) and Myanmar (urban) have got 5, 19 and 6 percent decline respectively in water supply coverage as compared to 1990 base line year (due to population growth).
- Bangladesh, India and Indonesia are lagging behind in sanitation coverage while Thailand and Myanmar are ahead of MDG targets for sanitation
- Country wise picture of coverage stands as given in table (of 2004 assessment).

No	Country	Population			Drinking Water (%)			Sanitation (%)		
		Total (million)	Rural (%)	Urban (%)	Total	Rural	Urban	Total	Rural	Urban
1	Bangladesh	139.21	75	25	74	72	82	39	35	51
2	Bhutan	21.16	91	09	62	60	86	70	70	65
3	India	1087.12	72	28	86	83	95	33	59	22
4	Indonesia	220.0	53	47	77	69	87	55	73	40
5	Korea DPR	22.38	39	61	100	100	100	59	60	58
6	Maldives	0.32	71	29	83	76	98	59	42	100
7	Myanmar	50.0	70	30	78	77	80	77	77	88
8	Nepal	26.59	85	15	90	89	96	35	30	62
9	Sri Lanka	20.57	79	21	79	74	98	91	89	98
10	Thailand	63.69	68	32	99	100	98	99	99	98
11	Timor East	0.88	92	08	58	56	77	36	33	66

Source: Meeting the MDG drinking water and sanitation target – The urban and rural challenges of the decade”, WHO & UNICEF 2006.

SDE News

Sri Lanka conducts an International Workshop on Rain Water Harvesting

The Ministry of Urban Development and Water Supply of Sri Lanka conducted an International Workshop on Rain Water Harvesting in Kandy, Sri Lanka from 27-29 September 2006. The theme of the workshop was “Making rain water every body’s business”. It was organized by the Ministry of Urban Development & Water Supply in collaboration with National Water Supply & Drainage Board, Lanka Rain Water harvesting Forum, UNICEF and WHO Sri Lanka. The workshop had Ministerial representation from regional countries and provided an opportunity for international networking. Mr Han Heijnen, WHO Nepal, participated and provided input on Rainwater Quality, Sanitation and Hygiene.



Rain Water Harvesting helps get safe drinking water at door step.

Delhi Declaration on Health Care Waste Management adopted

The Sixth Annual Conference of Indian Society of Hospital Waste Management was held at the India Habitat Center from 1-2 September 2006. The conference focused on “Quality Assurance: Role of Hospitals in Infection Control and Waste Management” and adopted a Declaration on Health Care Waste. It was attended by over 120 participants with representation from the Government of India, the Government of NCT of Delhi, Delhi Municipal Corporation, government and private hospitals, WHO and NGOs. The Honorable Chief Minister of NCT Delhi, Mrs Sheila Dixit, was the Guest of Honour for this Conference. Mr Alexander Hildebrand, Regional Adviser, Food and Chemical Safety, represented WHO and presented a keynote address entitled “Progress in Promoting the Sound Management of Health Care Wastes in the South East Asia Region”.

Nepal gears up for emergency preparedness and water quality monitoring

The Government of Nepal (Department of Drinking Water and Sewerage-DWSS) organized a week long (16-21 Sept-06) workshop on Environmental Health in Emergencies. The workshop, supported by WHO-Nepal and facilitated by RedR – India, was attended by participants from Govt departments, NGOs, UNICEF, WHO and UN-OCHA. Technical inputs were provided by Dr Jagdish Barot (STP-WSH, WHO/SEARO), Mr Han Heijnen (EHA-Nepal) and Mr Sharad Adhikari (NOO-Nepal). The Nepal Government has requested WHO to support couple of more similar workshops at zonal level as a follow up activity. Nepal hopes to put greater emphasis on systematic water quality monitoring in future action through a network of zonal laboratories.

EH in the News

The third edition of the WHO Guidelines for the Safe Use of Wastewater, Excreta and Grey water in Agriculture and Aquaculture was launched on 12 September 2006 during the International Water Association Congress held in Beijing, China from 10-14 September 2006. These revised Guidelines reflect a strong focus on disease prevention and public health principles and responds to a growing demand from WHO Member States for guidance on the safe use of wastewater, excreta and grey water in agriculture and aquaculture. (Source: PHE, WHO/HQ)

UNEP, UNESCO and WHO joined forces and produced an Ozonation Education Pack for primary school teachers- It was a global launch on the World Ozone Day (16 September 2006) in Delhi, Santiago, and Nairobi. WHO, through the INTERSUN-UV programme, has been involved in the production of this teaching resource, particularly in the health-related aspects of the teacher's guide. The Ozonation Education Pack targets schools worldwide and includes teacher's Guide, World Map, Calendar, Who Knows cards,

reusable UV meter for outdoor activity to measure the UV radiation (Source: PHE, WHO/HQ)

Partnership Launched to Create '3R' Knowledge Hub in Bangkok: BANGKOK, THAILAND – ADB, AIT, UNEP, and UNESCAP are jointly establishing a knowledge hub at Bangkok's Asian Institute of Technology with support from the UNEP Regional Resource Centre for Asia and the Pacific (UNEP RRC.AP) on "**Reduce, Reuse, and Recycle**" (3R). The knowledge hub will function as a think tank on technology, good practices, policy strategy and management, and issues related to 3R, which promotes sustainable production and consumption of limited natural resources, and improved economic and environmental efficiency.

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Upcoming Events:

- **32nd Water and Engineering in Developing Countries (WEDC) International Conference, Colombo, 13-17 November 2006** to share country experiences and strategic planning to strengthen environmental health capacity at country and regional level
- **WHO Regional workshop to implement integrated management of disease vectors (IVM), Vector Control Research Centre, Pondicherry, 18-21 December 2006.** This workshop is being planned to obtain consensus from SEAR countries to implement a regional strategy for integrated vector management (IVM) based on community participatory approaches.
- **East Asia Ministerial Sanitation Conference (EASAN):** A regional cooperation conference on Sanitation and Hygiene in East Asia is planned to be held in Xi-an, China in March 2007. The conference will be supported by the World Bank, UNICEF, DFID and other international development partners. The Government of China will host the meeting. For further details UNICEF China; and World Health Organization, West Pacific Regional Office can be contacted.

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