

## Day 1

### Training Workshop

### Water and Energy Conservation in Textile Processing Sector of Pakistan (Potential Concerns and Savings)

#### WORKSHOP PROGRAM

Session Number	Timings	Activity	Speaker
1	0915-0930	Registration of Participants	
	0930-0940	Welcome Remarks and Workshop Objectives	HNK-WWF
	0940-0950	Workshop Norms and Delegate Manual Intro	MAR-CTP
	0950-1000	Introduction of Participants	MAR-CTP
2	1000-1045	<b>Presentation:</b> Findings of the Need Assessment Study and Intro of the BEMPs Manual	AUR
	1045-1100	Q/A & Discussion	
	1100-1115	Tea Break	
3	1115-1215	<b>Presentation:</b> Water and Energy Conservation Opportunities in TPMs	AK
	1215-1230	Q/A & Discussion	
	1230-1330	Lunch Break	
4	1330-1420	<b>Presentation:</b> Process Specific Water and Energy Conservation Measures in TPMs	AK
	1420-1430	Q/A & Discussion	
	1430-1445	Tea Break	
5	1445-1520	<b>Presentation:</b> Case Studies for Water and Energy Conservation under Local Conditions (Cost Benefit Analysis)	SU-CTP
	1520-1530	Q/A & Discussion	
6	1530-1610	<b>Exercise 1:</b> Calculations to Estimate the Rate of Return for a Particular BEMP	AK
	1610-1630	Q/A & Discussion	

AK	Anton Kaasjager
AUR	Aziz ur Rehman
BEMP	Best Environmental Management Practices
CTP	Cleaner Technology Program for Textile Industry
HNK	Hammad Naqi Khan
MAR	Muhammad Arshed Rafiq
SU	Shafqat Ullah
TPMs	Textile Processing Mills

## Day 2

### Training Workshop

### Textile Processing Industry and Best Environmental Practices (BEMPs) (Potential Concerns and Savings)

#### WORKSHOP PROGRAM

Session Number	Timings	Activity	Speaker
1	0930-1045	<b>Presentation:</b> Pretreatment and Dyeing Processes/Machines, their Env. Concerns and BEMP options	AK
	1045-1100	Q/A & Discussion	
	1100-1115	Tea Break	
2	1115-1215	<b>Presentation:</b> Case Studies for Implementation of BEMPs Under Local Conditions (Cost Benefit Analysis)	AG
	1215-1230	Q/A & Discussion	
	1230-1330	Lunch Break	
3	1330-1415	<b>Presentation:</b> Printing and Finishing Processes/Machines, their Env. Concerns and BEMP options	AK
	1415-1430	Q/A & Discussion	
4	1430-1450	<b>Presentation:</b> Presentation by a Partner TPM Representative	TPM Rep.
	1450-1500	Q/A & Discussion	
	1500-1515	Tea Break	
5	1515-1555	<b>Exercise 2:</b> List the Pros and Cons of Implementing BEMPs Under Specific Conditions	AK
	1555-1615	Q/A & Discussion	
6	1615-1620	Closing Remarks	Chairman
	1620-1630	Certificate Distribution	APTMA

AG	Abdul Ghaffar
AK	Anton Kaasjager
BEMP	Best Environmental Management Practices
CTP	Cleaner Technology Program for Textile Industry
TPMs	Textile Processing Mills
TPM Rep	Crescent Bahuman

## Brief Bio-Sketches of Trainers

**ANTONIE KAASJAGER**, did MSC Physics from University of Utrecht in 1985. He is a Textile Researcher. His area of Expertise includes Industrial Processing of fibrous Materials. He has been working as Scientist at TNO Institute for Industrial Technology for 20 years. He has participated in textile related projects which varied from energy conservation in the textile industry to fault detection with the help of image processing techniques. He has also studied water and vapor transport through textile fabrics in order to optimize the comfort experience of clothing in the last couple of years.

**AZIZ UR REHMAN**, has a double Masters; in Environmental Engineering from University of Carleton, Ottawa, Ontario; and in Public Health Engineering from University of Engineering & Technology, Lahore, Pakistan. Besides, Mr. Rehman has received various trainings which include International Training on Waste Management in the University of Chalmers (Gothenburg) and University of Lund (Malmo), Sweden in 1994; Windhoek, Namibia in 1995. He presented a paper at International Seminar on urban environmental problems' in Rio-De Janeiro, Brazil in 1995.

He has more than 17 years of international professional experience to his credit. Currently he is working as the National Project Coordinator for 'Cleaner Technologies Program for Textile Industries (CTP-T)'. He has worked as Project Manager in National Environmental Consulting, Pakistan; as an Environmental Engineer in AIMS Environmental, Ontario, Canada; as Part Time Professor in Humber College, Toronto, Ontario, Canada; and as a By-law Enforcement Officer City of Ottawa, Ontario. His areas of expertise include project management, supervising environmental audits of different textile industries; waste generation and characterization studies; preparing environmental solution packages and action plans for these industries; designing, supervising and commissioning primary wastewater treatment plants and preparing training and process control manuals. He has conducted Initial Environmental Assessment for 300 and environmental audits for 50 industries.

**SHAFQAT ULLAH**, has a Bachelor's degree in Chemical Engineering, from the University of the Punjab, Lahore. Presently he is working as the Regional Project Coordinator, Lahore Region, for CTP-Textile. During his more than 12 years of professional life, he has worked as process engineer and environmental engineer. He has an extensive experience of working with different industrial sectors of Pakistan including the textile processing sector. He has also been involved with Environmental Technology Program for Industries (ETPI), one of the largest ever industry-environment project of the country.

**KASHIF MASUD**, has a Bachelor's degree in Civil Engineering, from NED University, Karachi and Masters in Environmental Engineering, from the same institution. He has a work experience of over 7 years in the field of Environment and Civil engineering. He also has extensive experience of conducting Environmental Impact Assessments, Initial Environmental Examinations and other environmental studies. His main area of expertise is project management and development and implementation of Environmental Management Systems. He is currently working as Regional Project Coordinator, Karachi region, for CTP-Textile.

Mr. Masud has also worked as Assistant Residence Engineer at Combined Effluent Treatment Plant for Korangi Tanneries. He has also been involved in Process Design, BOQs preparation and Cost estimates of various treatment plants for individual industries. He was also involved in the feasibility studies of Korangi Industrial Area, Rainee Canal etc.

**MUHAMMAD YASEEN KHAN**, Mr. Muhammad Yaseen Khan has M.Sc. Degree in Urban and Regional Planning, from the university of Peshawar under the link program between the university of Nottingham UK and University of Peshawar, with main emphasis on “Environmental Impact Assessment” and “Environmental Hazards of Pakistan.” He got his B.Sc. degree in City and Regional Planning from the University of Engineering and Technology Lahore and He has one year experience in his credit from Peshawar Development Authority, He has also supervised the housing and Socio-economic survey of Allai Khawar Hydel development project and hospital solid Waste Management in NWFP. He has worked as an Environmental planner in the project, Viz. “Introduction of cleaner Technologies in the tanneries cluster of Punjab (ICTP) to conduct the Initial environmental examination (IEE) and detail audits of the various tanneries of Punjab. He has worked on the project, viz, Implementation of Cleaner Production Technologies (ICPT), Textile to conduct the Initial Environmental Examination of the textile industries of Lahore, Gujranwala and Faisalabad regions in order to prepare the need assessment and sector report of the textile industry. Presently, he is working as a Regional Project coordinator in the pro Cleaner Technologies Program for textile (CTP-Textile) to conduct the environmental audits of the textile processing industries of Faisalabad. Apart from the active member of environmental audit team, he has been entrusted with the tasks; Quality assurance of the audit reports, Office management. EMS Development and implementation in industries, Liaison and correspondence with the industry and industry association to facilitate the project, To assist and supervise the Industry workers and owners training regarding CP/CT and EMS and to Facilitate project workshops/seminars in order to disseminate project activities.

**MASROOR AHMAD KHAN**, Mr. Masroor Ahmed Khan possesses Master degree in the field of Applied Chemistry (Polymer-Textile Technology) from Karachi University and possesses 13 years of practical experience in various fields of textiles. He also holds Master of Business Administration from IBA, Karachi. Mr. Masroor is presently working as Textile Process Expert, in National Environmental Consulting (NEC) in the Cleaner Technology Program (CTP) for Textile Industry project. He leads the audit team for environmental audits and monitors the production processes, assists the management and the team on technical issues and supervises the flow monitoring for the wastewater treatment plants in the textile mills. He also acts as expert for Eco labeling in the textile mills and give consultancy on behalf of CTP technical and procedural issues during certification process. Mr. Masroor is also involved in writing environmental reports, action plans and other communication matters especially in his area of expertise.

**KHAWAR RASHID**, Mr. Khawar received his Bachelors degree (B.E) in Chemical Engineering from NFC Institute of Engineering and Technology affiliated with Bahauddin Zakriya University Multan 2000. Mr. Khawar is currently working as Textile Processing Expert in Cleaner Technology Program for Textile Industry. Mr. Khawar has work experience of six years in the field of textile research, engineering and operations. Before joining CTP he was Assistant Manager in Masood Textiles.