ReSAGPAPR WG Newsletter

Published by the Working Group on Remediation for Soil and Groundwater Pollution of Asian and Pacific Region Volume 7, Issue 1 December, 2018

Inside This Issue

Program of 8 th Business Meeting of ReSAGPAPR WG	3
Minutes of 8 th Business Meeting of ReSAGPAPR WG	4
Inter <mark>esting Sidelights: 8th Business Mee</mark> ting of ReSAGPAPR WG.	6
Inte <mark>resting Sidelights: Technical Tour at Tainan Hydraulics</mark>	
Lab <mark>oratory & Sustainable Environmental Research Laboratorie</mark> s	S,
Nati <mark>onal Cheng Kung University</mark>	8
Interesting Sidelights: Welcome Dinner	9
Interesting Sidelights: Site Visit to Linya-Liao, Kaohsiung	10
Inter <mark>esti</mark> ng Sidelights: Asia's New Bay Area	11
Interesting Sidelights: Culture Tour	12
Program of 2018 International Workshop: Investigation and	
Mitigation of Vapor Intrusion	13
International Workshop: Invited Speakers	15
Interesting Sidelights: International Workshop	16

Member Countries

























Chairman of ReSAGPAPR WG



Dr. Tsair-Fuh Lin

Chairman, Working Group on the Remediation of Soil and Groundwater Pollution of Asian and Pacific Region

Distinguished Professor, Groundwater and Drinking Water Laboratory, Department of Environmental Engineering, National Cheng Kung University

Chief Executive Officer, NCKU Research and Development Foundation

Program of 8th Business Meeting of ReSAGPAPR WG

Date: December 3 (Monday), 2018

Venue: No. 9 meeting room, Shangri-La's Far Eastern Plaza Hotel, Tainan

Prof. Dr. Tsair-Fuh Lin, Chairman of WG ReSAGPAPR

Time	Topic		
09:00- <mark>09:15</mark>	Registration		
09:15-09:30	 Opening Ceremony Prof. Zueng-Sang Chen, Former Chair, ReSAGPARP Prof. Tsair-Fuh Lin, Chair, ReSAGPARP Dr. Weber Chen, Executive Director, Soil and Groundwater Remediation Fund Management Board, Taiwan EPA 		
09:30- <mark>09:35</mark>	Group Photo		
09:35-10:20	 Introduction of the arrangement of the Training courses to be held in March, 2019 in Tainan and discuss on the selection of participating members. Two workshops and phase I ESA sponsored by TEPA will be held in two WG ReSAGPAPR member countries in 2019 Revision of the news on the website of Working Group of ReSAGPAPR and provision of more items, especially including activities and exchange information from MOU between country members. 		
10:20- <mark>10:40</mark>	Coffee Break		
10:40-11:50	Members reporting - Country Reporting in 2017-2018: Australia, Indonesia, Korea, Malaysia, New Zealand, Taiwan, Thailand, Vietnam (In alphabetical order of Country)		
11:50-12:00	Discussion on the actions for more interactions/collaborations among members		
12:00-12:05	00-12:05 Closing Ceremony		
12:05-13:30 Lunch			

Minutes of 8th Business Meeting of ReSAGPAPR WG

Date: December 3 (Monday), 2018

Venue: No. 9 Meeting room, Shangri-La's Far Eastern Plaza Hotel, Tainan

Chair: Prof. Dr. Tsair-Fuh Lin, Chairman of WG ReSAGPAPR

Participating Members:

Mr. Andrew Pruszinski (Australia), Ms. Melda Mardalina (Indonesia),

Mrs. Erini Yuwatini (Indonesia), Ms. Mok-Ryun Yu (Korea),

Ms. Su-jin Kang (Korea), Ms. Ijan Khushaida Binti Mohd Jan (Malaysia),

Mr. Bruce Croucher (New Zealand), Dr. Tsai-Fuh Lin (Taiwan),

Prof. Zueng-Sang Chen (Taiwan), Mr. Ping-Hsiung Ni (Taiwan),

Dr. Ching-Jen Ho (Taiwan), Dr. Hao-Chun Hung (Taiwan),

Dr. Chih Huang (Taiwan), Dr. Warapong Tungittiplakorn (Thailand)

Absent with apologies:

Dr. Harendra Kharkwal (India), Dr. Masanori Kobayashi (Japan),

Atty. Jonas R. Leones, CESO I (Philippines), Mr. Vinh Thanh Hoang (Vietnam)

Mr. Tennakoon Mudiyanselage Anuruddha Tennakoon (Sri Lanka),



Minutes of 8th Business Meeting of ReSAGPAPR WG (Cottinued)

A. Reports from the Secretariat:

- 1. Introduction of the arrangement of the Training courses to be held in March, 2019 in Tainan and discuss on the selection of participating officers.
- 2. Two workshops and phase I ESA studies sponsored by Taiwan EPA will be held in two WG ReSAGPAPR member countries in 2019.
- 3. Revision of the news on the website of Working Group of ReSAGPAPR and provision of more items, especially including activities and exchange information from MOU between country members.

B. Members reporting (In alphabetical order):

Australia, Indonesia, Korea, Malaysia, New Zealand, Taiwan, Thailand, Vietnam

C. Discussion on the actions for more interactions/collaborations among members

- 1. Discussion on Conference Call frequency
- 2. More interactions among members by using social media

D. Follow-up Actions & Responsibilities:

For A1): The training courses will be held in March 18-23, 2019. Taiwan EPA would like to ask each member country to recommend three officers in charge of business related to soil and groundwater for the participation of the training courses in Tainan, Taiwan. Taiwan EPA will select two of the nominees of each country and support them with a round-trip economy-class airfare and accommodation from March 17 to 23 (7 nights) to join this training courses. As suggested by member countries, emergency response relevant regulations and actions will be emphasized and included in the training courses.

For C1): The Conference Call will be held once every 6 months and the Secretariat will draft the topics for discussion prior to each conference call. Each member is asked to identify a contact person in charge of the Conference Calls and Yearly Business Meeting.

For C2): Facebook will be the major social media for more interactions among members. The Secretariat will create a Facebook Group and all members will be invited to join the group.

Interesting Sidelights:

8th Business Meeting of ReSAGPAPR WG



Mr. Ping-Hsiung Ni (Taiwan)



Mr. Andrew Pruszinski (Australia)



Ms. Melda Mardalina (Indonesia)



Ms. Mok-Ryun Yu (Korea)

Interesting Sidelights:

8th Business Meeting of ReSAGPAPR WG (Cotinued)



Ms. Ijan Khushaida Binti Mohd Jan (Malaysia)



Mr. Bruce Croucher (New Zealand)



Dr. Hao-Chun Hung (Taiwan)



Dr. Warapong Tungittiplakorn (Thailand)

Interesting Sidelights: Technical Tour at Tainan Hydraulics Laboratory & Sustainable Environmental Research Laboratories, National Cheng Kung University



Tainan Hydraulics Laboratory:
Super Wave Flume



Tainan Hydraulics Laboratory:
Super Wave Flume



Sustainable Environmental Research Laboratories: Waste Treatment Plant



Sustainable Environmental Research Laboratories: Waste Treatment Plant

Interesting Sidelights: Welcome Dinner



Welcome Remark by Dr. Weber Chen, Executive Director,
Soil and Groundwater Remediation Fund Management Board,
Environmental Protection Administration, Taiwan



Discussion during dinner time

Interesting Sidelights: Site Visit to Linya-Liao, Kaohsiung



Site Briefing



Discussion



Site Tour



Soil Washing



On-site Introduction



On-site Introduction

Interesting Sidelights: Asia's New Bay Area



Site Introduction



Site Introduction



Site Introduction



Overlook of the Contaminated Site



Group Photo at Kaohsiung Main Public Library

Interesting Sidelights: Culture Tour



Lunch at 85 Sky Tower (Chao-Jiang Cuisine)



Visiting Fo-Guang-Shan Buddha Museum



Brief Introduction to Buddhism



Culture Tour



Group Photo at the Eightfold Path



Group Photo in front of the Fo-Guang Big Buddha

Program of 2018 International Workshop: Investigation and Mitigation of Vapor Intrusion

Date: December 5-6, 2018

Venue: International Conference Hall (1st Lecture Room), Kuang-Fu Campus,

National Cheng Kung University (No.1, University Road, Tainan City)

	DAY 1						
Wednesday, 5 December 2018							
Time	Duration (min)	Topic	Speaker				
09:00 - 09:30	30	Registration					
09:30 - 09 <mark>:45</mark>	15	Opening Remarks	Taiwan EPA				
09:45 – 10 <mark>:15</mark>	30	Introduction to Vapor Intrusion ■ EPA's Experience with Vapor Intrusion	Alana Lee				
10:15 – 10:45	30	Conceptual Site Model (Part 1) Sources of Vapor Intrusion (Groundwater / Soil Vapor / Potential Pathways) Examples of EPA Vapor Intrusion Sites	Alana Lee				
10:45 – 11 <mark>:00</mark>	15	BREAK					
11:00 – 11:30	30	Conceptual Site Model (Part 2) Chemistry and Physics of Vapor Intrusion Building Type, Construction, and Use	Mathew Plate				
11:30 – 12:15	45	 Vapor Intrusion Guidance, Resources, and Regulatory Framework Health Risk Evaluation and Screening Levels 	Alana Lee				
12:15 – 13 <mark>:30</mark>	75	LUNCH					
13:30 – 14:15	45	Screening Sites and Buildings for Vapor Intrusion Prioritizing Sites for Screening Multiple Lines of Evidence	Mathew Plate				
14:15 – 14:45	30	Planning Vapor Intrusion Investigations	Mathew Plate				
14:45 – 15:00	15	BREAK					
15:00 – 15:45	45	Community Relations and Access	Alana Lee		Alana Lee		
15:45 – 16:45	60	Sampling and Analytical Methods Air, Soil Vapor, Pathway, Flux Chamber Field Analytical and Laboratory Methods	Mathew Plate				
16:45 – 17:15	30	Questions and Discussion	All				
17:15	-	Day One Concludes					

Program of 2018 International Workshop: Investigation and Mitigation of Vapor Intrusion (Continued)

Date: December 5-6, 2018

Venue: International Conference Hall (1st Lecture Room), Kuang-Fu Campus,

National Cheng Kung University (No.1, University Road, Tainan City)

DAY 2				
Thursday, 6 December 2018				
Time	Duration (min)	Topic	Speaker	
09:00 – 9 <mark>:15</mark>	15	Re-cap of Day One / Introduction to Day Two	Alana Lee	
09:15 – 10 <mark>:15</mark>	60	Indicators, Tracers and Surrogates	Alana Lee	
10:15 – 10:30	15	BREAK		
10:30 – 11:45	75	Sampling Strategies Sampling design spatial, temporal, duration Supporting data pressure, temperature, ventilation	Math	new Plate
11:45 – 13 <mark>:00</mark>	75	LUNCH		
13:00 – 13 <mark>:30</mark>	30	Residential Building Investigation Strategy	Alana Lee	
13:30 – 14:00	30	Commercial/Industrial Building Investigation Strategy	Mathew Plate	
14:00 – 14:30	30	Future Building Investigation Strategy	Alana Lee	
14:30 – 15:00	30	Vapor Intrusion Data Evaluation (Background Sources)	Math	new Plate
15:00 – 15:15	15	BREAK		
15:15 – 16:00	45	Mitigation and Remediation	Mathew Plate	
16:00 – 16:30	30	Institutional Controls and New Building Construction	Alana Lee	
16:30 – 17:00	30	Questions and Discussion – Recap	All	
17:00	-	Workshop Ends		

International Workshop: Invited Speakers

Alana Lee has served as a Project Manager in the Superfund Division at U.S. EPA Pacific Southwest Region (Region 9) for over 20 years. Ms. Lee co-leads and actively participates in U.S. EPA vapor intrusion technical, policy and guidance workgroups and training, and serves as a resource to environmental agencies and practioners working on sites with potential vapor intrusion issues. For the past 17 years, Ms. Lee has been managing several vapor intrusion sites in California, where regional shallow trichloroethylene (TCE) groundwater contamination is being actively cleaned up, vapor intrusion investigations are being conducted, and preferential migration pathways are being investigated. Response actions are being implemented on properties planned for residential and commercial redevelopment that include engineering controls, institutional controls, and monitoring to address the subsurface vapor intrusion pathway. Ms. Lee has a B.S. in Chemical Engineering from the University of California Los Angeles and a M.S. in Environmental Management from the University of San Francisco.

Mathew Plate is an Environmental Scientist with the U.S EPA Region 9 in San Francisco, California. Mr. Plate has over 25 years of experience in the field of environmental monitoring and chemistry. For the past 20 years, he has served as an U.S. EPA expert on environmental monitoring, organic analytical chemistry, air sampling, and vapor intrusion. He routinely provides technical support to environmental monitoring and research projects that primarily involve vapor intrusion and/or ambient air monitoring. Mr. Plate has contributed to U.S. EPA guidance for sampling and analysis of pollutants in ambient air and vapor intrusion as well as guidance for the evaluation and assessment of environmental projects and data. Mr. Plate has a B.S. in Biological Science from the University of California Irvine.

Mr. Plate and Ms. Lee have lead vapor intrusion research projects assessing and developing monitoring techniques that are practical, cost-effective, and improve our understanding of subsurface contaminant vapor intrusion transport from the subsurface into buildings.

Interesting Sidelights: International Workshop



Group Photo of the Speakers and Honorable Guests



Opening Remark by Deputy Executive
Director Ping-Hsiung Ni



Opening Remark by Prof. Tsair-Fuh Lin

Interesting Sidelights: International Workshop (Cotinued)



Invited Speaker: Mr. Mathew Plate



Invited Speaker: Ms. Alana Lee



Questions and Discussion



Questions and Discussion



Workshop in Progress



Workshop in Progress