C	ONFERENCE HALL 1 (CCH1)	CONFERENCE HALL 2 (CCH2)	CONFERENCE HALL 3 (CCH3)
8:30 - 10:10 CI	IA1 Advances in bioremediation hair: Ryan Wymore, Geosyntec onsultants	MB1 International Committee on Contaminated Land (ICCL): Introduction and update from ICCL meeting Chair: Arminda Ryan, NSW EPA	MC1 Delineation and characterisation of NAPLs in the subsurface Chair: David Major, Savron
8:30		MB11 SUMMARY OF THE DISCUSSION AT THE ICCL MEETING	MC11 VARIABILITY AND UNCERTAINTY ASSOCIATED WITH SAMPLING,
8:50		Dominique Darmendrail, ICCL	ANALYSIS, AND RISK ASSESSMENT Naji Akladiss, Maine Department of Environmental Protection
9:10 T(IA12 MOLECULAR BIOLOGICAL TOOLS O IDENTIFY AND OVERCOME BSTACLES TO SOURCE ZONE IOREMEDIATION AT COMPLEX SITES ndrew Wollen, Microbial Insights	MB12 INDUSTRY PERSPECTIVE AND COMMENTARY	MC12 CHARACTERIZATION OF CONTAMINANT DISTRIBUTION TO MEET SITE-SPECIFIC REMEDIAL OBJECTIVES AT SPATIAL RESOLUTIONS APPROPRIATE TO SUBSURFACE CONDITIONS Gary Wealthall, Geosyntec Consultants
9:30 BI O M A TI	IA13 UNRAVELLING MICROBIAL IOREMEDIATION OF RGANOPHOSPHATES: A IETAGENOMIC SYSTEMS-BIOLOGY PPROACH homas C. Jeffries, University of Western ydney	Peter Nadebaum, GHD Pty Ltd	MC13 HIGH RESOLUTION SITE CHARACTERIZATION: THE PATH TO SUCCESSFUL REMEDIES AND REDUCED COST Seth Pitkin, Stone Environmental
9:50 C	IA14 BIOREMEDIATION OF /EATHERED HYDROCARBON ONTAMINATED CLAY SEDIMENTS avitha Ramadass, University of South ustralia	Discussion and questions	MC14 LNAPL TRANSMISSIVITY – WHEN TO USE IT AND A NOVEL WAY TO REFINE VOLUME ESTIMATES Travis Teoh, URS
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MEETING ROOM 11 (M11)	MEETING ROOM 12 (M12)	MEETING ROOM 13 (M13)
MD1 Vapour intrusion Chair: Jonathan Medd, Golder Associates Pty Ltd Sponsor: Golder Associates Pty Ltd	ME1 Metal(loid) assessment and remediation in soil and water Chair: Mike Sieczkowski, JRW Bioremediation	MF1 Impact of contaminants on human health Chair: Julian Cribb, Julian Cribb & Associates
MD11 RECENT DEVELOPMENTS FOR ASSESSMENT AND MANAGEMENT OF SOIL VAPOUR INTRUSION Ian Hers, Golder Associates Ltd	ME11 BIOPHYSICAL APPROACHES TO REMEDIATION OF HEAVY METAL(LOID) CONTAMINATED SOILS Nanthi Bolan, University of Newcastle / CRC CARE	MF11 POTENTIAL HEALTH IMPACTS OF TOXIC CHEMICALS IN FISH: THE CASE OF PEARL RIVER DELTA, SOUTH CHINA Ming Wong, Hong Kong Institute of Education
MD12 DESIGN, VERIFCATION AND DEVELOPMENT OF ACTIVE SOIL VAPOUR SAMPLING PORTS IN FRACTURED BASALT Daniel Hodges, Golder Associates Pty Ltd	ME12 APPLICATION OF A TOXICITY APPROACH TO EVALUATE FREE CYANIDE AND METAL CYANIDE COMPLEXES IN WATERS OF GOLD AND OTHER MINING Barry N. Noller, The University of Queensland	MF12 USING A LIFETIME PHYSIOLOGICALLY BASED PHARMACOKINETIC MODEL TO ESTABLISH ARSENIC DRINKING WATER GUIDANCE Zhaomin Dong, University of Newcastle
MD13 VAPOUR (TCE) INTRUSION AND THE RELOCATION OF PEOPLE FROM THEIR HOMES – THE CAUSE, THE RELOCATION, THE SCIENCE, THE OUTRAGE Danielle Marie Torresan, SA EPA	ME13 LONG-TERM IMMOBILIZATION OF As AND Pb CONTAMINATED SOIL USING WASTE OYSTER SHELLS Deok Hyun Moon, Chosun University	MF13 SOURCES, SPECIATION AND BIOAVAILABILITY OF HEAVY METAL(LOID)S IN COMPLEMENTARY MEDICINES Shankar Bolan, University of Newcastle
MD14 VAPOUR INTRUSION MITIGATION USING A DRAINAGE LAYER BELOW A LARGE COMMERCIAL FLOOR SLAB Rory Lane, BlueSphere Environmental	ME14 A TOWNWIDE STUDY INTO THE PRESENCE AND REMEDIATION OF LEAD TAILINGS – NORTHAMPTON, WESTERN AUSTRALIA Brad Dermody, Aurora Environmental	MF14 CONCENTRATION OF ARSENIC IN HOME GROWN VEGETABLES: HEALTH IMPLICATIONS Mohammad M. Rahman, University of South Australia
	MORNING TEA	

	CONFERENCE HALL 1 (CCH1)	CONFERENCE HALL 2 (CCH2)	CONFERENCE HALL 3 (CCH3)
10:40 – 12:20	MA2 Advances in bioremediation Chair: Megharaj Mallavarapu, University of Newcastle / CRC CARE	MB2 ICCL: State of practice and policy – Brownfield regeneration Chair: Mitzi Bolton, EPA Victoria	MC2 Delineation and characterisation of NAPLs in the subsurface Chair: Charles Newell, GSI Environmental Inc
10:40	MA21 IN SITU BIOREMEDIATION OF CHLORINATED SOLVENT SOURCES	MB21 STATE OF THE PRACTICE Paul Nathanail, University of	MC21 REVIEW OF CHARACTERIZATION METHODS FOR NAPL SOURCE ZONE
11:00	Hans Stroo, Stroo Consulting	Nottingham	DELINEATION AND MASS ESTIMATION Grant Carey, Porewater Solutions
11:20	MA22 FULL SCALE BIOREMEDIATION OF TRICHLOROETHENE Rachael Wall, Golder Associates Pty Ltd	MB22 STATE OF THE POLICY	MC22 INTEGRATED DNAPL SITE CHARACTERIZATION AND TOOLS SELECTION Ryan Wymore, Geosyntec Consultants
11:40	MA23 MODELLING NATURAL ATTENUATION: PLANNING RELIABILIY BY A LONG TERM PROGNOSIS? Martin Wegner, M&P GEONOVA GmbH	Joerg Frauenstein, UBA	MC23 STATE OF THE ART IN DEVELOPING CONCEPTUAL SITE MODELS FOR DNAPL GROUNDWATER PLUMES Tamzen McBeth, CDM Smith
12:00	MA24 ENHANCEMENT OF BIODEGRADATION OF 1,1,1-TCA AND 1,1- DCA BY THE INJECTION OF EVO AND NUTRIENTS Gregory Carli, GHD	Discussion and questions	MC24 AQUIFER TESTING TO DETERMINE BEDROCK ANISOTROPY AND LNAPL FLOW PATHWAYS Rhonda Hastie, Kleinfelder
12:20 – 13:20		LUNCH	

MEETING ROOM 11 (M11)	MEETING ROOM 12 (M12)	MEETING ROOM 13 (M13)
MD2 Vapour intrusion Chair: Kristi Hanson, Senversa	ME2 On-site remediation of contaminated land Chair: Annette Nolan, Enviropacific Services Sponsor: Enviropacific Services / ISOTEC	MF2 Impact of contaminants on human health Chair: Ming Wong, Hong Kong Institute of Education
MD21 ATTENUATION FACTORS FOR CHLORINATED VOCS – LESSONS LEARNED THROUGH 15 YEARS OF VAPOR INTRUSION EVALUATION IN EXISTING BUILDINGS Helen Dawson, Geosyntec Consultants	ME21 RECENT ADVANCES IN IN-SITU REMEDIATION TECHNOLOGIES Will Caldicott, ISOTEC	MF21 CLEANSING A POISONED PLANET: CHEMICALS, SCIENCE COMMUNICATION AND GLOBAL PEOPLE POWER Julian Cribb, Julian Cribb & Associates
MD22 RESULTS FROM CONTINUOUS MONITORING OF CHLORINATED SOLVENT VAPORS: RAMIFICATIONS ON SOIL GAS, SUB-SLAB SOIL GAS AND INDOOR AIR SAMPLING Blayne Hartman, Hartman Environmental	ME22 IS THERE A FUTURE FOR ONSITE CONTAINMENT? Andrew Pruszinski, SA EPA	MF22 HUMAN GUT MICROBIOTA- ARE THESE KEY TO EFFECTIVE FUNCTIONING OF HUMAN METABOLISM Ravi Naidu, CRC CARE / University of Newcastle
MD23 PETROLEUM HYDROCARBONS – OXYGEN DEMAND MODEL AND DATABASE USED TO SUPPORT SCREENING DISTANCES Jackie Wright, EnRiskS	ME23 PERMEABLE REACTIVE BARRIER: AN EFFECTIVE IN-SITU REMEDIATION TECHNOLOGY Volker Birke, Ostfalia University of Applied Sciences	MF23 TOTAL ARSENIC LEVELS IN RICE FROM BANGLADESH AND HUMAN HEALTH IMPLICATIONS Shofiqul Islam, University of South Australia
MD24 VALIDATION OF TCE & PCE IN REMEDIAL EXCAVATIONS USING VAPOUR HEADSPACE IN VIAL SAMPLING Adrian Heggie, WSP Parsons Brinckerhoff	ME24 COMBINING IN SITU CHEMICAL AND BIOLOGICAL OXIDATION FOR GROUNDWATER TREATMENT UNDER A PERFORMANCE BASED PROJECT DELIVERY PROGRAM Bruce Marvin, Geosyntec Consultants	MF24 HUMAN HEALTH IMPLICATIONS OF ARSENIC LEVELS IN A TROPICAL OPEN LAGOON Amii Usese, University of Lagos-Nigeria
	LUNCH	

	CONFERENCE HALL 1 (CCH1)	CONFERENCE HALL 2 (CCH2)	CONFERENCE HALL 3 (CCH3)
13:20 – 15:00	MA3 Bioavailability / bioaccessibility of contaminants Chair: Mark Cave, British Geological Survey	MB3 ICCL: State of practice and policy – Chlorinated solvent source zone remediation Chair: Andrew Pruszinski, SA EPA	MC3 Remediation and management of LNAPL in unsaturated and saturated zones Chair: Tamzen McBeth, CDM Smith
13:20	MA31 FROM BIOAVAILABILITY SCIENCE TO REGULATION OF ORGANIC	MB31 STATE OF THE PRACTICE	MC31 CROSSING THE GAP: STAR TREATMENT OF HETEROGENOUS NAPL DISTRIBUTION David Major, Savron
13:40	CHEMICALS Kirk Semple, Lancaster University	Hans Stroo, Stroo Consulting	MC32 MODELING LNAPL DEPLETION AT A FORMER XYLENE PROCESSING FACILITY (GERMANY) Grant Carey, Porewater Solutions
14:00	MA32 COMPARISON OF ORAL BIOAVAILABILITY OF BENZO[A]PYRENE IN SOILS USING RODENT AND SWINE MODEL Luchun Duan, University of Newcastle	MB32 STATE OF THE POLICY	MC33 RECONSTRUCTING THE RELEASE AND LONGEVITY OF LNAPL PETROLEUM FUEL IN THE FACE OF LIMITED DATA USING A MULTI-COMPONENT, MULTI-PHASE MODELLING APPROACH Kaveh Sookhak Lari, University of South Australia, CSIRO
14:20	MA33 ENHANCING THE IMMOBILISATION OF LEAD BY PHOSPHATE USING A BIODEGRADABLE CHELATE Peter Sanderson, University of Newcastle	Jeff Heimerman, US Environmental Protection Agency	MC34 USE OF LNAPL TRANSMISSIVITY METRICS IN LNAPL REMEDIATION IN THE NEWER VOLCANICS FRACTURED BASALT – A CASE STUDY Keith Maxfield, AECOM Pty Ltd
14:40	MA34 INFLUENCE OF SOIL AGEING ON LEAD BIOAVAILABILITY MA Ayanka Wijayawardena, University of Newcastle	Discussion and questions	MC35 BIOSPARGE REMEDIATION OF LNAPL AND DISSOLVED PHASE PETROLEUM IMPACTS ADJACENT TO COMMERCIAL BUILDINGS Geof Ellis, Golder Associates Pty Ltd
15:00 – 15:30		AFTERNOON TEA	

MEETING ROOM 11 (M11)	MEETING ROOM 12 (M12)	MEETING ROOM 13 (M13)
MD3 Vapour intrusion Chair: Jackie Wright, EnRiskS	ME3 On-site remediation of contaminated land Chair: Jean Meaklim, Greencap Sponsor: Enviropacific Services / ISOTEC	MF3 Advances in human health risk assessment Chair: Brian Priestly, Monash University
MD31 CHLORINATED VAPOUR INTRUSION – COST-EFFECTIVE SCREENING & MANAGEMENT USING	ME31 IN SITU REMEDIATION OF PETROLEUM HYDROCARBONS Tom O'Callaghan, Enviropacific Services	MF31 A HISTORICAL DEVELOPMENT OF CHEMICAL MIXTURES HEALTH RISK ASSESSMENT METHODS AND
INDOOR RADON Henry Schuver, US Environmental Protection Agency	ME32 IN SITU ENHANCED ANAEROBIC BIODEGRADATION OF BENZENE BY INJECTION OF A SULPHATE BASED SOLUTION Pedro Balbachevsky, URS Australia	APPLICATIONS Linda K. Teuschler, LK Teuschler & Associates
MD32 COMMUNITIES AND VAPOUR INTRUSION Lenny Siegel, Centre for Public Environmental Oversight (CPEO)	ME33 ENHANCING ISCO – STRATEGIES AND TOOLS Charles Grimison, Thiess Services Pty Ltd	MF32 DECISION MAKING AT CONTAMINATED SITES: ISSUES AND OPTIONS IN HUMAN HEALTH RISK ASSESSMENT Barrie C. Selcoe, CH2MHill
MD33 COMPLICATIONS OF AMBIENT SOURCES IN ASSESSING VAPOUR INTRUSION RISKS Kathleen Prohasky, ERM Australia	ME34 IN SITU CHEMICAL REDUCTION TREATMENT OF LEAD AND SILVER IN GROUNDWATER UPGRADIENT OF A DRINKING WATER SOURCE Gregory Carli, GHD	MF33 INNOVATIVE APPLICATIONS OF QUANTITATIVE HEALTH RISK ASSESSMENT Sophie Wood, ERM
MD34 VAPOUR INTRUSION – THE VALUE OF STRINGENT NOTIFICATION AND REPORTING REQUIREMENTS IN THE MANAGEMENT OF COMMUNITY RISKS Catherine Irwin, Golder Associates Pty Ltd	ME35 MANGANESE ACTIVATED PERSULFATE (MNAP) FOR THE TREATMENT OF A SOURCE ZONE: AN INNOVATIVE DUAL OXIDANT FORMULATION Bruce Marvin, Geosyntec Consultants	MF34 CADMIUM CHEMICAL FORM IN SOIL CONTAMINATION AND SIGNIFICANCE FOR HUMAN HEALTH RISK ASSESSMENT Barry N. Noller, The University of Queensland

	CONFERENCE HALL 1 (CCH1)	CONFERENCE HALL 2 (CCH2)	CONFERENCE HALL 3 (CCH3)
15:30 – 17:10	MA4 Bioavailability / bioaccessibility of contaminants Chair: Kirk Semple, Lancaster University	MB4 ICCL: State of practice and policy – Emerging contaminants Chair: Bruce Kennedy, CRC CARE	MC4 Remediation and management of DNAPL in unsaturated and saturated zones Chair: Naji Akladiss, Maine Department of Environmental Protection
15:30	MA41 REACHING A CONSENSUS ON BIOAVAILABILITY MEASUREMENTS; A CASE STUDY OF Pb in DUTCH TOWN	MB41 STATE OF THE PRACTICE	MC41 REMEDIATION IN THE YEAR 2025: HOW CLEANUP AT DNAPL SITES MIGHT
15:50	SOILS Mark Cave, British Geological Survey	Charles Schaefer, CDM Smith	EVOLVE Charles Newell, GSI Environmental Inc
16:10	MA42 QUANTIFYING STATISTICAL RELATIONS BETWEEN COMMONLY USED IN VITRO MODELS FOR ESTIMATING LEAD BIOACCESSIBILITY Kaihong Yan, University of Newcastle	MB42 STATE OF THE POLICY	MC42 COMBINING IN SITU THERMAL WITH BIOREMEDIATION FOR DNAPL TREATMENT: PEFORMANCE AND DESIGN CONSIDERATIONS Tamzen McBeth, CDM Smith
16:30	MA43 ASSESMENT OF ARSENIC SPECIATION AND BIOACCESSIBILITY IN MINE-IMPACTED MATERIALS Cameron Ollson, University of South Australia	C. Molenaar / E. Van Dyck	MC43 IN SITU SMOLDERING COMBUSTION (STAR) PRE-DESIGN EVALUATION (PDE) FOR L&DNAPL COAL TAR IN AN AQUIFER David Major, Savron
16:50	MA44 COPPER DECREASES ARSENIC SOLUBILITY, GROWTH AND UPTAKE AT TOXIC DOSE LEVELS (EC10 AND EC50) Mohammed Kader, University of Newcastle	Discussion and questions	MC44 A WEIGHT OF EVIDENCE APPROACH TO IN-SITU BIOREMEDIATION OF GROUNDWATER IN DNAPL SOURCE ZONES Jonathan Ho, AECOM
17:10 – 18:10		DRINKS AND POSTER SESSION	

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MEETING ROOM 11 (M11)	MEETING ROOM 12 (M12)	MEETING ROOM 13 (M13)
MD4 Contaminated land regulation and site audit process – clearing up the misunderstandings Chair: Ross McFarland, AECOM	ME4 Urban renewal Chair: Paul Vogel, WA EPA	MF4 Advances in ecological risk assessment Chair: Kenneth Kiefer, ERM
MD41 CONTAMINATED LAND REMEDIATION – DETERMINING ENDPOINTS Erwin Benker, NSW EPA	ME41 URBAN RENEWAL: PREPARING FOR A JOURNEY NOT PACKING FOR A DESTINATION	MF41 CHALLENGES WITH SOILS CONTAMINATED BY MIXED CONTAMINANTS: BIOAVAILABILITY, BIOREMEDIATION AND ECOTOXICITY
MD42 A REGULATOR'S PERSPECTIVE ON THE CLEAN UP OF GROUNDWATER AND EPA VICTORIA'S REFORM PROCESS Anne Northway, EPA Victoria	Paul Nathanail, University of Nottingham	CONSIDERATIONS Megharaj Mallavarapu, University of Newcastle / CRC CARE
MD43 PRACTICAL IMPLICATIONS FOR REMEDIATION WASTE MANAGEMENT RESULTING FROM NEW NSW REGULATIONS AND DRAFT SITE AUDITOR GUIDELINES Sophie Wood, ERM	ME42 MODELS AND LESSONS FOR DEVELOPING A CONTAMINATED SITE PROGRAM: AN INTERNATIONAL REVIEW Walter W. Kovalick, 8th Avenue Consulting	MF42 ASSESSMENT OF GROUNDWATER – SURFACE WATER INTERACTION IN A FRACTURED BASALT AQUIFER SYSTEM TO SUPPORT ECOLOGICAL RISK ASSESSMENT Frederic Cosme, Golder Associates Pty Ltd
MD44 ENVIRONMENTAL AUDIT REFORM: IS IT JUST ABOUT THE RED TAPE? Joanna Missen, EPA Victoria	ME43 FISHERMANS BEND URBAN RENEWAL AREA: PROACTIVE GROUNDWATER BACKGROUND STUDIES German Ferrando-Miguel, EPA Victoria	MF43 LINES OF EVIDENCE USED IN ECOLOGICAL RISK ASSESSMENT OF CONTAMINATED GROUNDWATER Kirsten Broadgate, Golder Associates Pty Ltd
MD45 NSW vs WA: WHO IS BETTER AT REGULATING CONTAMINATED LAND? Sarah Mansfield, Henry Davis York	ME44 COMMUNITY CONSULTATION IN AN URBAN RENEWAL PROJECT AND COMPETING OBJECTIVES Vanessa Bryant, Ramboll Environ Australia Pty Ltd	MF44 ASSESSMENT OF WEATHERED HYDROCARBON RESIDUAL TOXICITY USING ENDEMIC AUSTRALIAN FLORA AND FAUNA Muhammad Atikul Islam Khan, University of South Australia
	DRINKS AND POSTER SESSION	

8:50 TA12 FORMER CLANDESTINE DRUG LABORATORIES – HOW CONTAMINATED ARE THEY? Jackie Wright, EnriskS TA13 WHEN CONCEPTUAL SITE MODELS ARE WRONG – A CASE STUDY Penelope R. Woodberry, Golder Associates Pty Ltd DEFENCE SYMPOSIUM - INVITATION ONLY Surampalii Rao, Global Institute for Energy, Environment and Sustainability TA14 ASSESSING BACKGROUND CONCENTATIONS OF INORGANIC CONTAMINANTS IN THE BRIGHTON GROUP AQUIFER, SOUTHEAST MELBOURNE Megan Gaffney, ACLCA Victoria TA15 PERFORMANCE TESTING OF SUPER OXYGENATED WATER GENERATION AND DELIVERY METHODS JESSICA K. Ewers, Golder Associates Pty JETH, WESTERN AUSTRALIA JETH STATE TA15 PERFORMANCE TESTING OF SUPER OXYGENATED WATER GENERATION AND DELIVERY METHODS JESSICA K. Ewers, Golder Associates Pty		CONFERENCE HALL 1 (CCH1)	CONFERENCE HALL 2 (CCH2)	CONFERENCE HALL 3 (CCH3)
MITADMS) MODEL TO ESTIMATE BACK- DIFFUSION TIMERAME FOR THIN SILTS AND CLAYS Grant R. Carey, Porewater Solutions TC11 RISK BASED LAND MANAGEMENT: WHATTI TIS, WHATTI TIS NOT Paul Nathanail, University of Nottingham TC12 SUSTAINABLE DEVELOPMENT OF Paul Nathanail, University of Nottingham TC12 SUSTAINABLE DEVELOPMENT OF Paul Nathanail, University of Nottingham TC12 SUSTAINABLE DEVELOPMENT OF Paul Nathanail, University of Nottingham TC12 SUSTAINABLE DEVELOPMENT OF Paul Nathanail, University of Nottingham TC12 SUSTAINABLE DEVELOPMENT OF Paul Nathanail, University of Nottingham TC12 SUSTAINABLE DEVELOPMENT OF Paul Nathanail, University of Nottingham TC12 SUSTAINABLE DEVELOPMENT OF PROMPTED Surampail Rao, Global institute for Energy, Environment and Sustainability TC13 INNOVATIVE LINAPL CONCEPTUAL SITE MODEL DEVELOPMENT TOOLS IN SUPPORT OF MORE SUSTAINABLE RISK- BASED LINAPL SITE MANAGEMENT MELBOURNE Megan Gaffney, ACLCA Victoria TC13 INNOVATIVE LINAPL CONCEPTUAL SITE MODEL DEVELOPMENT TOOLS IN SUPPORT OF MORE SUSTAINABLE RISK- BASED LINAPL SITE MANAGEMENT Matthew Rousseau, GHD Ply Ltd TC14 REMEDIATION OF A PETROLEUM PRIDECASION PLUME IN PETROLEUM PRIDECAS	8:30 – 10:10	Chair: Gary Wealthall, Geosyntec	TB1 Defence Symposium	
8:50 TA12 FORMER CLANDESTINE DRUG LABORATORIES – HOW CONTAMINATED ARE THEY? Jackie Wright, EnriskS DEFENCE SYMPOSIUM - INVITATION ONLY Penelope R. Woodberry, Golder Associates Pty Ltd TA14 ASSESSING BACKGROUND CONCENTARTIONS OF INDRGANIC CONTAMINANTS IN THE BRIGHTON GROUP AQUIFER, SOUTHEAST MELBOURNE Megan Gaffney, ACLCA Victoria TA15 PERFORMANCE TESTING OF SUPER OXYGENATED WATER GENERATION AND DELVEWAY METHODS JESSICA K. Ewers, Golder Associates Pty Jessica K. Ewers, Golder Associates Pty Jessica K. Ewers, Golder Associates Pty JERTH, WESTERN AUSTRALIA PAUL NATHALIA TC12 SUSTAINABLE DEVELOPMENT OF BROWNFIELDS Surampalli Rao, Global Institute for Energy, Environment and Sustainability TC13 INNOVATIVE LNAPL CONCEPTUAL SITE MODEL DEVELOPMENT TOOLS IN SUPPORT OF MORE SUSTAINABLE RISK- BASED UNAPL SITE MANAGEMENT Matthew Rousseau, GHD Pty Ltd TC14 REMEDIATION END POINT: RISK BASED OR PUBLIC PERCEPTION? CASE STUDY OF THE REMEDIATION OF A PETROLLEM HYDROCASBON PLUME IN	8:30	MT3DMS) MODEL TO ESTIMATE BACK- DIFFUSION TIMEFRAME FOR THIN SILTS AND CLAYS		
9:30 ARE WRONG – A CASE STUDY Penelope R. Woodberry, Golder Associates Pty Ltd TA14 ASSESSING BACKGROUND CONCENTARTIONS OF INORGANIC CONTAMINANTS IN THE BRIGHTON GROUP AQUIFER, SOUTHEAST MELBOURNE Megan Gaffney, ACLCA Victoria TA15 PERFORMANCE TESTING OF SUPER OXYGENATED WATER GENERATION AND DELIVERY METHODS Jessica K. Ewers, Golder Associates Pty DEFENCE SYMPOSIUM - INVITATION ONLY BROWNFIELDS Surampalli Rao, Global Institute for Energy, Environment and Sustainability TC13 INNOVATIVE LNAPL CONCEPTUAL SITE MODEL DEVELOPMENT TOOLS IN SUPPORT OF MORE SUSTAINABLE RISK-BASED LNAPL SITE MANAGEMENT MATTHEW ROUSSEAU, GHD Pty Ltd TC14 REMEDIATION END POINT: RISK BASED OR PUBLIC PERCEPTION? CASE STUDY OF THE REMEDIATION OF A PETROLEUM HYDROCARBON PLUME IN PERTH, WESTERN AUSTRALIA	8:50	LABORATORIES – HOW CONTAMINATED ARE THEY?		Paul Nathanail, University of Nottingham
9:30 CONCENTARTIONS OF INORGANIC CONTAMINANTS IN THE BRIGHTON GROUP AQUIFER, SOUTHEAST MELBOURNE Megan Gaffney, ACLCA Victoria TC13 INNOVATIVE LNAPL CONCEPTUAL SITE MODEL DEVELOPMENT TOOLS IN SUPPORT OF MORE SUSTAINABLE RISK- BASED LNAPL SITE MANAGEMENT Matthew Rousseau, GHD Pty Ltd TC14 REMEDIATION END POINT: RISK BASED OR PUBLIC PERCEPTION? CASE OXYGENATED WATER GENERATION AND DELIVERY METHODS Jessica K. Ewers, Golder Associates Pty TC15 INNOVATIVE LNAPL CONCEPTUAL SITE MODEL DEVELOPMENT TOOLS IN SUPPORT OF MORE SUSTAINABLE RISK- BASED UNAPL SITE MANAGEMENT Matthew Rousseau, GHD Pty Ltd TC14 REMEDIATION END POINT: RISK BASED OR PUBLIC PERCEPTION? CASE STUDY OF THE REMEDIATION OF A PETROLEUM HYDROCARBON PLUME IN PERTH, WESTERN AUSTRALIA	9:10	ARE WRONG – A CASE STUDY Penelope R. Woodberry, Golder		BROWNFIELDS Surampalli Rao, Global Institute for
TA15 PERFORMANCE TESTING OF SUPER OXYGENATED WATER GENERATION AND 9:50 DELIVERY METHODS Jessica K. Ewers, Golder Associates Pty BASED OR PUBLIC PERCEPTION? CASE STUDY OF THE REMEDIATION OF A PETROLEUM HYDROCARBON PLUME IN PERTH, WESTERN AUSTRALIA	9:30	CONCENTARTIONS OF INORGANIC CONTAMINANTS IN THE BRIGHTON GROUP AQUIFER, SOUTHEAST MELBOURNE		SITE MODEL DEVELOPMENT TOOLS IN SUPPORT OF MORE SUSTAINABLE RISK- BASED LNAPL SITE MANAGEMENT
Ltd Penelope L. King, Environmental Strategies	9:50	OXYGENATED WATER GENERATION AND DELIVERY METHODS Jessica K. Ewers, Golder Associates Pty		BASED OR PUBLIC PERCEPTION? CASE STUDY OF THE REMEDIATION OF A PETROLEUM HYDROCARBON PLUME IN PERTH, WESTERN AUSTRALIA Penelope L. King, Environmental

MEETING ROOM 11 (M11)	MEETING ROOM 12 (M12)	MEETING ROOM 13 (M13)
TD1 Data quality issues – different perspectives Chair: Cheryl Lim, National Measurement Institute / CRC CARE	TE1 Contaminants of emerging concern Chair: Daniel Slee, National Measurement Institute Sponsor: CH2M	TF1 Reducing uncertainty and risks in environmental investigations Chair: Therese Manning, EnRiskS
	TE31 EMERGING ENVIRONMENTAL CONTAMINANTS AND CURRENT ISSUES	TF11 REDUCING UNCERTAINITY DURING REMEDIAL DESIGN – A CASE STUDY Charles Grimison, Thiess Services Pty Ltd
INTRODUCTION	Susan Richardson, University of South Carolina	TF12 USING MASS BALANCE IN RISK ASSESSMENT Kenneth Kiefer, ERM
REGULATOR'S PERSPECTIVE Erwin Benker, NSW EPA LABORATORY'S PERSPECTIVE David Springer, Envirolab CONSULTANT'S / AUDITOR'S PERSPECTIVE Phil Sinclair, Coffey LANDOWNER'S PERSPECTIVE Craig Barnes, Airservices CLOSING REMARKS	TE32 NATURE, ENVIRONMENTAL FATE, AND POTENTIAL HUMAN AND AQUATIC TOXICITY OF POLAR METABOLITE MIXTURES IN GROUNDWATER AT BIODEGRADING FUEL RELEASE SITES PRE-RECORDED VIDEO Dawn Zemo, Zemo & Associates Inc	TF13 FAST TRACKED: THE ENVIRONMENTAL RISKS AND CHALLENGES OF GRADE SEPARATION PROJECTS Alessandro Sica, Golder Associates Pty Ltd
	TE33 PROVIDING THE INFRASTRUCTURE NEEDED TO IMPROVE THE QUALITY OF PBDE MEASUREMENTS IN AUSTRALIA Gavin Stevenson, National Measurement Institute	TF14 OCCUPATIONAL HYGIENE IN THE REMEDIATION INDUSTRY: A REVIEW OF RISK IN RECENT CASE STUDIES DURING GASWORKS REMEDIATION Kate Cole, Thiess Services
	TE34 DETERMINING LEVELS OF PBDES ON CONTAMINATED SITES AND ASSESSING THE IMPLICATIONS FOR SITE REMEDIATION IN AUSTRALIA Thomas McGrath, RMIT University	TF15 ASSESSING CONTAMINATED SITES DATA – TRADING ACCURACY FOR KNOWLEDGE Peter Beck, GHD Pty Ltd

	CONFERENCE HALL 1 (CCH1)	CONFERENCE HALL 2 (CCH2)	CONFERENCE HALL 3 (CCH3)
10:40 – 12:20	TA2 Advances in site characterisation Chair: Tamie Weaver, ERM	TB2 Defence Symposium	TC2 Case studies – contaminated site assessment, remediation and management Chair: Raghava Dasika, URS
10:40	TA21 RECENT DEVELOPMENTS IN IDENTIFICATION OF UNKNOWN CONTAMINATION SOURCES AND		TC21 FIRST APPLICATION OF THE SUPER OXYGENATED WATER (SOW) TECHNOLOGY IN AUSTRALIA: CASE STUDY FOR SANDY SOILS Paolo Arcidiacono, Golder Associates Pty Ltd
11:00	MONITORING NETWORK DESIGN FOR CONTAMINATED GROUNDWATER SYSTEMS Bithin Datta, James Cook University		TC22 POINT COOK THERMAL DESORPTION REMEDIATION PROJECT Will Magnus, Enviropacific Services
11:20	TA22 ANALYTE ION DETECTION METHOD AND DEVICE (probeCARE) Liang Wang, University of Newcastle	DEFENCE SYMPOSIUM – INVITATION ONLY	TC23 MACDONALDTOWN GASWORKS – AN MGP CASE STUDY Adam Fletcher, Thiess Services Daniel Wedgwood, Sydney Trains
11:40	TA23 EVALUATION OF STATISTICAL AND GEOCHEMICAL METHODS FOR DISTINGUISHING SOIL CONTAMINATION FROM BACKGROUND CONCENTRATIONS Hannah Mikkonen, RMIT University		TC24 COST EFFECTIVE CUTEP REMEDIATION AND METRICS UTILISING LNAPL TRANSMISSIVITY David Jackson, Environmental Strategies
12:00	TA24 THE USE OF CONTAMINANT MASS FLUX AND MASS DISCHARGE TO SUPPORT GROUNDWATER REMEDIATION AT A HISTORICAL GASWORKS, BARANGAROO, SYDNEY AUSTRALIA Graham Hawkes, AECOM		TC25 DEVELMENT OF TECHNOLOGY FOR REMOVAL OF URANIUM FROM CONTAMINATED SOIL USING INDOOR ELECTROKINETIC DECONTAMINATION EQUIPMENT Gye-Nam Kim, Korea Atomic Energy Research Institute
12:20 – 13:20		LUNCH	

MEETING ROOM 11 (M11)	MEETING ROOM 12 (M12)	MEETING ROOM 13 (M13)
TD2 Data quality issues – panel discussion Chair: Neil Shepherd, NATA	TE2 Contaminants of emerging concern Chair: Joytishna Jit, University of South Australia / CRC CARE Sponsor: CH2M	TF2 Ground gas Chair: David Adams, Environmental Strategies Sponsor: Environmental Strategies
	TE21 EMERGING CONTAMINANTS UPDATE, WITH A FOCUS ON PER- AND POLYFLUOROALKYL SUBSTANCES AND 1,4-DIOXANE William H. Diguiseppi, CH2M	TF21 GROUND GAS RISK MANAGEMENT – LESSONS LEARNT FROM AN AUDITOR'S PERSPECTIVE Tim Chambers, Environmental Strategies
Panel discussion	TE22 KEY ISSUES REGARDING THE FATE AND TRANSPORT OF EMERGING CONTAMINANTS Charles Schaefer, CDM Smith	TF22 INSTALLATION AND PILOT TRIAL OF SOIL VAPOUR EXTRACTION (SVE) FROM A HORIZONTAL WELL IN THE NEWER VOLCANICS BASALT BENEATH AND OPERATING PLANT BUILDING Patrick Clarke, Senversa Pty Ltd
	TE23 RISK-BASED MANAGEMENT AND REMEDIATION FOR BENZO(A)PYRENE Peter Nadebaum, GHD Pty Ltd	TF23 ASSESSING THE HYDROCARBON NATURAL SOURCE ZONE DEPLETION RATE OF NON-AQUEOUS PHASE HYDROCARBONS BY MEASURING SOIL GAS FLUX Danny McDonald, Cardno
	TE24 INVESTIGATION OF EMERGING CONTAMINANTS IN ENVIRONMENTAL WATERS Yvonne Yin, National Measurement Institute	TF24 THE USE OF PASSIVE SOIL GAS (PSG) SURVEYS TO IMPROVE THE USABILITY OF INFORMATION GATHERED DURING PRELIMINARY SITE INVESTIGATIONS AT PETROLEUM CONTAMINATED SITES Paul R.D. Wright, WrightKunsult Environmental Solutions
	LUNCH	

	CONFERENCE HALL 1 (CCH1)	CONFERENCE HALL 2 (CCH2)	CONFERENCE HALL 3 (CCH3)
13:20 – 15:00	TA3 Remediation panel Chair: David Reynolds, Geosyntec Consultants / David Thomas, Chevron Sponsor: Geosyntec Consultants	TB3 Defence Symposium	TC3 Case studies – contaminated site assessment, remediation and management Chair: Louise Cartwright, Enviropacific Services
13:20			TC31 LONG-TERM BIOEMEDIATION AND MANAGEMENT FOR A CO-MINGLED CHLORINATED SOLVENT AND 1,4-DIOXANE SOURCE AREA AND PLUME Ryan Wymore, Geosyntec Consultants
13:40			TC32 TOWARDS SUSTAINABLE REMEDIATION IN THE 21ST CENTURY: DEFINED MECHANOCHEMICAL REDUCTIVE DEHALOGENATION AT ROOM TEMPERATURE IN A BALL MILL Volker Birke, Ostfalia University of Applied Sciences
14:00	The panel will consist of representatives from industry, consulting, research, and regulatory bodies. This is an interactive session discussing various environmental topics of interest. The session will include brief presentations by panel members followed by a moderated discussion and debate. Audience participation technology (keypad clickers) will be available for attendees.	DEFENCE SYMPOSIUM – INVITATION ONLY	TC33 QUANTIFYING THE MASS OF PETROLEUM HYDROCARBON CONTAMINANTS DEGRADED BY MICROBIAL PROCESSES AT AN ACTIVE REMEDIATION SITE Stephen Cambridge, Coffey
14:20			TC34 BETTER MANAGEMENT OF REMEDIATION PROCESS UNCERTAINTY Christian M Borovac, Golder Associates Pty Ltd
14:40			TC35 ADVANCES IN FIELD SAMPLING: NO- FLOW VERSUS LOW-FLOW Claire Howell, WSP Parsons Brinckerhoff
15:00 – 15:30		AFTERNOON TEA	

MEETING ROOM 11 (M11)	MEETING ROOM 12 (M12)	MEETING ROOM 13 (M13)
TD3 Advances in analytical measurement and methods Chair: Scott Fraser, PerkinElmer Sponsor: PerkinElmer	TE3 Development of assessment criteria Chair: Jack Dempsey, EnRiskS	TF3 Reuse and rehabilitation of landfills Chair: Tim Marshall, Coffey
TD31 SINGLE PARTICLE ICP-MS (SP-ICP-MS) FOR THE DETECTION OF METAL-	TE31 APPLICATION OF SITE SPECIFIC ADSORPTION ISOTHERMS FOR DERIVING SOIL REMEDIATION GOALS PROTECTIVE OF GROUNDWATER – TOOWOOMBA GASWORKS CASE STUDY Barry Mann, GHD Pty Ltd	TF31 AN INTEGRATED INVESTIGATION APPROACH FOR CHARACTERISATION OF A LANDFILL LEACHATE PLUME Lange B. Jorstad, Geosyntec Consultants
BASED NANOPARTICLES IN ENVIRONMENTAL MATRICES Chady Stephan, PerkinElmer	TE32 REVIEW OF ECOLOGICAL INVESTIGATION LEVELS FOR TOTAL PETROLEUM HYDROCARBONS Therese Manning, EnRiskS	TF32 STRATEGIES IN MANAGING RISK OF LANDFILL GAS MIGRATION Aidan Marsh, Pacific Environment
TD32 DETERMINATION OF TOTAL RECOVERABLE HYDROCARBONS (TRH) IN SOIL USING SOXHLET EXTRACTION AND GC-FID Gabriela Saveluc, National Measurement Institute	TE33 RISK-BASED SCREENING CRITERIA FOR PCR USE OF WATER: IS 10 TIMES THE DRINKING WATER GUIDELINE PROTECTIVE? Kristi L. Hanson, Senversa Pty Ltd	TF33 AN AUSTRALIA-WIDE ASSESSMENT OF PERSISTENT, BIOACCUMULATIVE AND TOXIC CHEMICALS (PBTS) IN LANDFILL LEACHATES Christie Gallen, University of Queensland
TD33 TOTAL RECOVERABLE HYDROCARBONS IN WATERS: A CHEMIST'S PERSPECTIVE ON THE ANALYSIS OF SEMIVOLATILE PETROLEUM HYDROCARBONS Marc Centner, ALS Environmental	TE34 A CASE FOR HIL E – HEALTH INVESTIGATION LEVELS FOR INDIGENOUS AUSTRALIAN COMMUNITIES LIVING A TRADITIONAL LIFESTYLE Emmylou F. Cooke, Thiess Services	TF34 EFFECTIVE RESIDENTIAL REDEVELOPMENT OF A METHANEPRODUCING FORMER LANDFILL SITE, MELBOURNE, VICTORIA Warren Pump, ERM
TD34 DETERMINATION OF POLYCYCLIC AROMATIC HYDROCARBONS IN SPIKED AND AGED SOIL USING MODIFIED QUECHERS AND GAS CHROMATOGRAPHY WITH MASS SPECTROMETRY Vincent Lal, University of Queensland	TE35 DEVELOPING GROUNDWATER TIER 1 SCREENING CRITERIA FOR CHRONIC AND ACUTE VAPOUR RISKS FOR CHLORINATED HYDROCARBONS Kathleen Prohasky, ERM Australia	TF35 LNAPL EXTRACTION PRACTICABILITY ASSESSMENT – FORMER HAZARDOUS WASTE LANDFILL, TULLAMARINE, VIC, AUSTRALIA Alex Schiavoni, EHS Support

	CONFERENCE HALL 1 (CCH1)	CONFERENCE HALL 2 (CCH2)	CONFERENCE HALL 3 (CCH3)
15:30 – 17:10	TA4 globalCARE Chair: Ravi Naidu, CRC CARE Sponsor: CRC CARE	TB4 Defence Symposium	TC4 Case studies – contaminated site assessment, remediation and management Chair: Neil Proposch, Aurecon
15:30			TC41 RISK ASSESSMENT FOR LARGE FACILITIES OR PROGRAMS Barrie Selcoe, CH2MHill
15:50			TC42 DREDGING SYDNEY HARBOUR, ENVIRONMENTAL CONSIDERATIONS Ryan Well, Environmental Strategies
16:10	Launch of the Global Contamination and Remediation Enterprise (globalCARE). An overview will be presented by Ravi Naidu and Walter Kovalick.	DEFENCE SYMPOSIUM – INVITATION ONLY	TC43 COMPARISON OF IN-SITU SELF- SUSTAINING SMOULDERING COMBUSTION AND SEPR/S-ISCO METHODS FOR THE REMEDIATION OF COAL TAR DNAPL, BACCHUS MARSH, VICTORIA Matt Edwards, BlueSphere Environmental
16:30			TC44 DIRECT INJECTION OF EMULSIFIED VEGETABLE OIL FOR CHLORINATED SOLVENTS REMEDIATION Jessica Byrne, AECOM
16:50			TC45 MULWALA EXPLOSIVES AND CHEMICAL MANUFACTURING FACILITY – AN INTEGRATED APPROACH TO GROUNDWATER MANAGEMENT Melissa Saunders, AECOM Pty Ltd
17:10 – 18:10		DRINKS AND POSTER SESSION	
19:00 – 00:00		GALA DINNER	

MEETING ROOM 11 (M11)	MEETING ROOM 12 (M12)	MEETING ROOM 13 (M13)	
TD4 Role of measurement in supporting policy Chair: Paul Vogel, WA EPA	TE4 Development of assessment criteria Chair: Bruce Kennedy, CRC CARE	TF4 Sustainable remediation Chair: John Hunt, EIC Activities Sponsor: SuRF ANZ	
TD41 THE ROLE OF MEASUREMENT AND QUALITY ASSURANCE IN SUPPORTING ENVIRONMENTAL POLICY AND REGULATION FOR CONTAMINATION MANAGEMENT Cheryl Lim, National Measurement Institute / CRC CARE	TE41 NATIONAL GUIDANCE FOR EMERGING CONTAMINANTS AT CRC CARE Joytishna Jit, CRC CARE	TF41 THREE REASONS TO CONSIDER SUSTAINABLE REMEDIATION (SR) A	
TD42 PRODUCING TELEPHONE NUMBERS RATHER THAN REAL DATA FOR OUR MULTI-MILLION DOLLAR DECISION MAKING. A REVIEW OF DECISION CERTAINTY IN CONTAMINATED LAND ASSESSMENT AND REMEDIATION ROSS McFarland, AECOM Australia Pty Ltd	TE42 RISK BASED ASSESSMENT, MANAGEMENT AND REMEDIATION OF PFOS AND PFOA Peter Nadebaum, GHD Pty Ltd	GLOBAL PERSPECTIVE AND A MUTUAL INTEREST Hans Slenders, Arcadis	
TD43 CHALLENGES IN THE MEASUREMENT OF PFOS IN ENVIRONMENTAL SAMPLES: ARE THE NUMBERS MEANINGFUL TO ENVIRONMENTAL TOXICOLOGISTS AND REGULATORS Marc Centner, ALS	TE43 RISK-BASED METHODS TO DERIVE AQUATIC ECOSYSTEM GUIDELINES Kirsten Broadgate, Golder Associates Pty Ltd	TF42 SUSTAINABLE PRACTICE APPLICATION TO AUSTRALIAN AND REGIONAL REMEDIATION PROJECTS Garry J Smith, Geosyntec Consultants	
TD44 THE VALUE OF THE RIGHT RATHER THAN ACCURATE MEASUREMENT IN CHARACTERISING CONTAMINATED SITES Peter Beck, GHD	TE44 ADVANCES IN THE DETERMINATION OF A HUMAN HEALTH SCREENING CRITERIA FOR 6:2 FLUOROTELOMER SULFONATE Ruth Jarman, EnRiskS	TF43 REDUCING CONTAMINATED MATERIAL DISPOSAL VOLUMES – A SUSTAINABLE AND COST EFFECTIVE REMEDIATION APPROACH Yvonne Binai, GHD Pty Ltd	
TD45 ENVIRONMENTAL MEASUREMENTS AS THE BASIS OF POLICY CHANGE – A CASE OF THE TAIL WAGGING THE DOG? Dave Reynolds, Geosyntec	TE45 DERIVING CRITERIA FOR DIOXINS AND FURANS Olivia Henderson, WSP Parsons Brinckerhoff	TF44 REMEDIATION IN THE CONTEXT C GLOBAL SUSTAINABILITY Kevin Simpson, EHS Support	
	DRINKS AND POSTER SESSION		
	GALA DINNER		

WEDNESDAY, 16 SEPTEMBER 2015

	CONFERENCE HALL 1 (CCH1)	CONFERENCE HALL 2 (CCH2)	CONFERENCE HALL 3 (CCH3)
9:00 – 10:40	WA1 National remediation framework Chair: Kerry Scott, CRC CARE Sponsor: CRC CARE	WB1 Fractured rock sites Chair: Raghava Dasika, URS Sponsor: Geosyntec	WC1 Field measurement and sampling Chair: Bill Stavropoulos, SGS Leeder Consulting Sponsor: SGS Leeder Consulting
9:00	WA11 THE NATIONAL REMEDIATION FRAMEWORK – TOWARDS	WB11 SUBSURFACE CHARACTERISATION, MODELLING,	WC11 PERMEATION PASSIVE SAMPLING
9:20	HARMONISATION Bruce Kennedy, CRC CARE	MONITORING, AND REMEDIATION OF FRACTURED ROCKS Dave Reynolds, Geosyntec	IN ENVIRONMENTAL ANALYSIS Tadeusz Gorecki, University of Waterloo
9:40	WA12 OVERVIEW OF THE GUIDELINES FOR PERFORMING COST BENEFIT AND SUSTAINABILITY ANALYSIS OF REMEDIAL ALTERNATIVES Susan Barnes, CH2M	WB12 GEOLOGICAL INVESTIGATION USING MULTIPLE LINES OF EVIDENCE TO DETERMINE LNAPL PRESENCE IN BEDROCK Rhonda Hastie, Kleinfelder	WC12 A NEW METHOD FOR PERIMETER SAMPLING OF VOCs — "U.S. EPA METHOD 325: VOLATILE ORGANIC COMPOUNDS FROM FUGITIVE AND AREA SOURCES" Kristian Hansen, SGS
10:00	WA13 SUMMARY OF FOUR NATIONAL REMEDIATION FRAMEWORK GUIDELINES Luke Clements, CH2M	WB13 DEVELOPING CONCEPTUAL SITE MODELS FOR THE INVESTIGATION AND REMEDIATION OF FRACTURED ROCKS Gary Wealthall, Geosyntec Consultants Inc	WC13 RAPID ASSESSMENT OF A LARGE INDUSTRIAL MANUFACTURING SITE USING WMS-LU PASSIVE SOIL VAPOUR SAMPLERS Matthew B. Collyer, Edge Group Pty Ltd
10:20	WA14 IDENTIFYING AND ASSESSING CONTAMINATED SITE REMEDIATION OPTIONS Peter Nadebaum, GHD Pty Ltd	WB14 FRACTURED NEWER VOLCANIC BASALT – UNDERSTANDING KEY PROPERTIES THAT INFLUENCE REMEDIATION EFFICACY Jonathan Medd, Golder Associates Pty Ltd	WC14 A COMPARISON OF PASSIVE SAMPLING AND LOW-FLOW OR BAILED SAMPLING RESULTS ACROSS A RANGE OF AUSTRALIAN HYDROGEOLOGICAL SETTINGS Kenneth Kiefer, ERM
10:40 – 11:10		MORNING TEA	

MEETING ROOM 11 (M11)	MEETING ROOM 12 (M12)	MEETING ROOM 13 (M13)	
WD1 Risk assessment of contaminants Chair: Sophie Wood, ERM	WE1 Mine site remediation, revegetation and rehabilitation Chair: Nanthi Bolan, University of Newcastle / CRC CARE	WF1 Community consultation and contaminated site remediation Chair: Rebecca Hughes, SA EPA	
WD11 COMBINED GENOTOXIC EFFECT OF ARSENIC, CADMIUM, CHROMIUM AND FOUR POLYAROMATIC HYDROCARBONS Jack C. Ng, University of Queensland	WE11 CHALLENGES FOR NATIVE FOREST ESTABLISHMENT ON SURFACE MINES IN A TIME OF CLIMATE CHANGE Chris Barton, University of Kentucky	WF11 SOCIETAL PERCEPTIONS AND ACCEPTABILITY OF REMEDIATION TECHNOLOGIES Jason Prior, University of Technology Sydney	
WD12 EVALUATING CHROMIUM SPECIATION IN GROUNDWATER TO GUIDE RISK ASSESSMENT AND REMEDIATION DECISIONS Tamie Weaver, ERM	WE12 WEB BASED GUIDANCE FOR MINE WASTE REMEDIATION Michael R. Sieczkowski, JRW Bioremediation	WF12 REAL RISK VERSUS PERCEIVED RISKIN THE REMEDIATION INDUSTRY Kristy Thornton, Thiess Services	
WD13 RAPID RISK ASSESSMENT TO ADDRESS PUBLIC HEALTH CONCERNS REGARDING POTENTIAL EXPOSURE TO ANTIMONY Madeleine Thomas, Golder Associates Pty Ltd	WE13 MINE SITES – MANAGING THE NEXUS BETWEEN ACTIVE MINE SITES AND CONTAMINATED LAND PHILOSOPHY Tim Chambers, Environmental Strategies	WF13 ENHANCING RISK COMMUNICATION: IDENTIFYING INTEGRATION MECHANISMS BETWEEN EMPIRICAL SCIENCE, SOCIAL SCIENCE AND THE HUMANITIES Kathryne T. Hughes, University of Technology Sydney	
WD14 SOIL CONTAMINATION AMD RISK ASSESSMENT AT HOUNSLOW HEATH EX- LANDFILL SITE IN LONDON, UK John L Zhou, University of Technology Sydney	WE14 UTILIZATION OF BIOWASTES FOR MINE SPOILS REHABILITATION Hasintha Wijesekara, University of South Australia	WF14 ENVIRONMENTAL AND SOCIETAL MANAGEMENT OF CONTAMINATED LAND IN NIGERIA: THE NEED FOR POLICY AND GUIDANCE CHANGES Kabari Sam, Cranfield University	
MORNING TEA			

WEDNESDAY, 16 SEPTEMBER 2015

### WAZ Climate change and remediation—Presentations Chair vanessa Bryant, Ramboll Environ ### WAZ Climate change and remediation—Presentations Chair vanessa Bryant, Ramboll Environ ### WAZ Climate change and remediation—Presentations Chair vanessa Bryant, Ramboll Environ ### WAZ Climate change and remediation—Presentations Chair vanessa Bryant, Ramboll Environ ### WAZ Climate Change Cha		CONFERENCE HALL 1 (CCH1)	CONFERENCE HALL 2 (CCH2)	CONFERENCE HALL 3 (CCH3)
11:30 WA21 THE INFLUENCE OF CLIMATIC UNCERTAINTY ON GROUNDWATER RESTORATION METHODS SCOIL Warner, Ramboll Environ WA22 SEA LEVEL RISE AND CONTAMINATED SITES — MORE CHALLENGES AND HARD DECISIONS LIE AHEAD Paul van der Beeke, Golder Associates Phy Ltd WA23 GROUNDWATER MONITORING & RIMEDIATION UNDER CHANGING CLIMATE CONDITIONS TOWN TO MILE CHARGE CONTAMINATED SITES—CHARGE CLIMATE CONDITIONS TOWN TO MILE CHARGE CONTAMINATED SITES—CHARGE CLIMATE CONDITIONS TOWN TO MILE CHARGE CONTAMINATED SITES—CHARGE CLIMATE CONDITIONS TOWN TO MILE CHARGE CLIMATE CONDITIONS TOWN TO MILE CHARGE CLIMATE CONDITIONS TO MILE CHARGE CONTAMINATION IN POROUS SEMINATURE ON THE CHARGE CONTAMINATION CONTAMINATION IN POROUS SEMINATION CHARGE CONTAMINATION CONTAMINATIO	11:10 – 12:50	Presentations Chair: Vanessa Bryant, Ramboll Environ	Chair: Grant Carey, Porewater Solutions	•
11:30 WA22 SEA LEVEL RISE AND CONTAMINATED SITES — MORE CHALLENGES AND HARD DECISIONS LIE AHEAD Paul van der Beeke, Golder Associates Ply Ltd WA23 GROUNDWATER MONITORING & REMEDIATION OF A PROPERTY OF A PROPERT	11:10		DECHLORINATION OF TCE IN ROCK MATRICES	(PFOS) AND PERFLUOROOCTANOIC ACID (PFOA): ECOTOXICITY AND ENVIRONMENTAL CONCERNS Megharaj Mallavarapu, University of
11:50 CONTAMINATED SITES – MORE CHALLENGES AND HARD DECISIONS LIE AHEAD Paul van der Beeke, Golder Associates Pty Ltd WA23 GROUNDWATER MONITORING & REMEDIATION UNDER CHANGING CLIMATE CONDITIONS Tamie Weaver, ERM 12:10 WA23 GROUNDWATER MONITORING & REMEDIATION UNDER CHANGING CLIMATE CONDITIONS Tamie Weaver, ERM WA24 THE IMPLICATIONS OF CLIMATE CHANGE FOR SITE ASSESSMENT, MANAGEMENT AND REMEDIATION Stella Whittaker, Ramboll Environ WB24 FRACTURED ROCK BIOREMS ROUND STREET OR REMEDIATION CROSS ROADS: NEW MILLENNIUM MICROBIOLOGY VS LAST CENTURY HYDROGEOLOGY David Major, Savron WB24 FRACTURED ROCK BIOREMS ROUND STREET OR REMEDIATION AND USE OF FIRE-FIGHTING FOAMS – A FIRE SAFETY PERSPECTIVE Brett Staines, UTC Building and Industrial Systems	11:30	RESTORATION METHODS		TREATING PERFLUOROALKYL SUBSTANCES
12:30 WA23 GROUNDWATER MONITORING & REMEDIATION UNDER CHANGING CLIMATE CONDITIONS Tamie Weaver, ERM CHARACTERIZATION: CHLORINATED SOLVENT CONTAMINATION IN POROUS SEDIMENTARY ROCK Seth Pitkin, Stone Environmental WA24 THE IMPLICATIONS OF CLIMATE CHANGE FOR SITE ASSESSMENT, MANAGEMENT AND REMEDIATION Stella Whittaker, Ramboll Environ WA24 THE IMPLICATIONS OF CLIMATE CHANGE FOR SITE ASSESSMENT, MANAGEMENT AND REMEDIATION STella Whittaker, Ramboll Environ WB24 FRACTURED ROCK BIOREMEDIATION CROSS ROADS: NEW MILLENNIUM MICROBIOLOGY VS LAST CENTURY HYDROGEOLOGY David Major, Savron WC25 ENVIRONMENTAL FACTORS AFFECTING THE SELECTION AND USE OF FIRE-FIGHTING FOAMS – A FIRE SAFETY PERSPECTIVE Brett Staines, UTC Building and Industrial Systems	11:50	CONTAMINATED SITES – MORE CHALLENGES AND HARD DECISIONS LIE AHEAD Paul van der Beeke, Golder Associates	BASED SUBSTRATE TO REMEDIATE SHALLOW FRACTURED BEDROCK UNDER SAPROLITIC CONDITIONS	FLUOROTELOMERS PROVIDE A BETTER ENVIRONMENTAL SOLUTION AND SUPERIOR PERFORMANCE FOR CLASS B FIREFIGHTING FOAM APPLICATIONS
WA24 THE IMPLICATIONS OF CLIMATE CHANGE FOR SITE ASSESSMENT, MANAGEMENT AND REMEDIATION Stella Whittaker, Ramboll Environ WB24 FRACTURED ROCK BIOREMEDIATION CROSS ROADS: NEW MILLENNIUM MICROBIOLOGY VS LAST CENTURY HYDROGEOLOGY David Major, Savron WB24 FRACTURED ROCK BIOREMEDIATION CROSS ROADS: NEW MILLENNIUM MICROBIOLOGY VS LAST CENTURY HYDROGEOLOGY David Major, Savron AFFECTING THE SELECTION AND USE OF FIRE-FIGHTING FOAMS – A FIRE SAFETY PERSPECTIVE Brett Staines, UTC Building and Industrial Systems	12:10	REMEDIATION UNDER CHANGING CLIMATE CONDITIONS	CHARACTERIZATION: CHLORINATED SOLVENT CONTAMINATION IN POROUS SEDIMENTARY ROCK	CRITERIA AND WHAT HEALTH INVESTIGATION LEVELS MIGHT LOOK LIKE
12:50 – 13:40 LUNCH	12:30	CHANGE FOR SITE ASSESSMENT, MANAGEMENT AND REMEDIATION	BIOREMEDIATION CROSS ROADS: NEW MILLENNIUM MICROBIOLOGY VS LAST CENTURY HYDROGEOLOGY	AFFECTING THE SELECTION AND USE OF FIRE-FIGHTING FOAMS – A FIRE SAFETY PERSPECTIVE Brett Staines, UTC Building and Industrial
	12:50 - 13:40		LUNCH	

MEETING ROOM 11 (M11)	MEETING ROOM 12 (M12)	MEETING ROOM 13 (M13)
WD2 Nanotechnology for groundwater remediation Chair: Volker Birke, Ostfalia University of Applied Sciences	WE2 Mine site remediation, revegetation and rehabilitation Chair: Ravi Naidu, CRC CARE	WF2 Advances in waste treatment and management Chair: Warren Pump, ERM
WD21 ZERO-VALENT IRON MATERIALS FOR ENVIRONMENT RESTORATION – A RELOOK AT THE UNMODIFIED,	WE21 REHABILITATION FUTURES FOR COALMINES IN THE HUNTER VALLEY	WF21 IS SEGREGATION OF BONDED ASBESTOS FROM SOIL CHEAPER THAN DIG AND DUMP REMEDIAL METHODS? —REMEDIATION OF ASBESTOS IMPACT IN UNCONTROLLED FILL IN URBAN NSW – A CASE STUDY James Boyle, Coffey Environments
CATALYZED, AND SULFIDED IRON Weile Yan, Texas Tech University	Dee Murdoch, AECOM	
WD22 EVALUATING THE MOBILITY OF POLYMER-STABILISED ZERO-VALENT IRON NANOPARTICLES (NZVI) Laura Chekli, University of Technology Sydney	WE22 RISK ASSESSMENT AND MANAGEMENT OF DERELICT MINES IN NSW David Blackmore, Department of Industry-Resources and Energy	WF23 CHEMICAL PROPERTIES OF SEAWATER NEUTRALIZED RED MUD IN RELATION TO REVEGETATION Eileen Li, University of Queensland
WD23 DEGRADATION OF MALATHION BY BI-METALLIC FE-NI NANOPARTICLES GRAFTED ON PALYGORSKITE Binoy Sarkar, University of South Australia		WF24 REMEDIATION OF COMPLEX HAZARDOUS WASTES: HISTORICAL AND EMERGING CONTAMINANTS Annette Nolan, Enviropacific Services
WD24 1D and 3D MnO2 FOR CATALYTIC OXIDATION OF ORGANIC POLLUTANTS Shaobin Wang, Curtin University WD25 REMOVAL OF 2,4- DICHLOROPHENOL BY STABILIZED NANO- SCALE ZERO VALENT IRON Jiang Xu, East China Normal University	Discussion	WF25 PROFILES AND REMOVAL EFFICIENCIES OF POLYCYCLIC AROMATIC HYDROCARBONS BY TWO SEWAGE TREATMENT WORKS IN HONG KONG Ka Lai Chow, Hong Kong Baptist University
	LUNCH	

WEDNESDAY, 16 SEPTEMBER 2015

	CONFERENCE HALL 1 (CCH1)	CONFERENCE HALL 2 (CCH2)	CONFERENCE HALL 3 (CCH3)
13:40 – 15:20	WA3 Climate change and remediation – Panel discussion Chair: Scott Warner, Ramboll Environ Sponsor: Ramboll Environ	WB3 International and Australian developments on remediation strategy decision making Chair: Bruce Kennedy, CRC CARE	WC3 Per-fluorinated compounds Chair: Ruth Jarman, EnRiskS
13:40		WB31 THE EVOLUTION OF REMEDIATION STRATEGY FROM AN INTERNATIONAL POINT OF VIEW Hans Slenders, Arcadis	WC31 PROGRAMMATIC APPROACHES TO IDENTIFICATION AND MANAGEMENT OF PORTFOLIOS WITH SITES POTENTIALLY IMPACTED BY PER AND POLYFLUOROALKYL SUBSTANCES William H. Diguiseppi, CH2M
14:00		WB32 DETERMINING THE MOST APPROPRIATE REMEDIATION STRATEGY FOR A CONTAMINATED SITE Peter Nadebaum, GHD Pty Ltd	WC32 DECODING NEW FORMULATIONS OF AFFFS Cheng Fang, University of Newcastle
14:20	Panel discussion	WB33 DESIGNING A REMEDIATION SYSTEM – YOUR SOLUTION IS ONLY AS GOOD AS THE PROBLEM DEFINITION John Hunt, EIC Activities	WC33 THE ROLE OF IRON IN THE FATE AND TRANSPORT AND REMEDIATION OF PFAS Peter Storch, EHS-Support
14:40		WB34 REMEDIATION DECISION MAKING AND MANAGING RISK AND UNCERTAINTY Ian Brookman, Thiess Services Pty Ltd	WC34 PROFICIENCY STUDY OF LABORATORIES ANALYSING PFOS AND PFOA IN WATER AND SOIL Gavin Stevenson, National Measurement Institute
15:00		WB35 REMEDIATION OF COMPLEX CONTAMINATED GROUNDWATER SITES: PERSPECTIVES ON EFFECTIVE DECISION MAKING FOR PROJECT OBJECTIVES Dave Reynolds, Geosyntec	WC35 TREATMENT OF PFCS IN SOILS, SEDIMENTS AND WATER Annette Nolan, Enviropacific Services
15:20 – 15:50	WAA Clasing all and last	AFTERNOON TEA	
15:50 – 16:30	WA4 Closing plenary lecture Chair: Ravi Naidu		
	WA41 CONTAMINATED LAND: SCIENCE, G Campbell Gemmell, University of Glasgow	OVERNMENT AND THE MARKET – SQUARING	5 THE CIRCLE IN BOTH HEMISPHERES
16:30	LAUNCH OF ELSEVIER JOURNAL ENVIRONMENTAL TECHNOLOGY AND INNOVATION AND OFFICIAL CONFERENCE CLOSING		
17:00	CONFERENCE CLOSED		

MEETING ROOM 11 (M11)	MEETING ROOM 12 (M12)	MEETING ROOM 13 (M13)
WD3 Early career researchers / students – Presentations Chair: Kirk Semple, University of Lancaster	WE3 Advances in remediation technologies Chair: Surampalli Rao, Global Institute for Energy, Environment and Sustainability	WF3 Harnessing the value of waste Chair: Paul Vogel, WA EPA
WD31 IMPLICATION OF MICROBIAL CARBON USE EFFICIENCY IN CONTAMINATED SOIL Yilu Xu, University of South Australia	WE31 SCIENTIFIC ADVANCES AND INNOVATIVE APPLICATIONS IN ELECTROKINETIC REMEDIATION	WF31 ASSESSING CLEAN AND GREEN ENERGY FROM ORGANIC WASTE IN AUSTRALIA Jayant Keskar, CRC CARE
WD32 THE APPLICATION OF NANOPARTICLE MODIFIED ELECTRODES IN MICROBIAL FUEL CELLS FOR ELECTRICITY GENERATION Ying Cheng, University of Newcastle	Gordon C. C. Yang, National Sun Yat-Sen University	WF32 ASSESSMENT OF NITROGEN LOSSES THROUGH NITROUS OXIDE (N2O) FROM A WASTEWATER IRRIGATED SOIL Raghupathi Matheyarasu, University of South Australia
WD33 BIOREMEDIATION OF MERCURY BY BACTERIAL STRAINS ISOLATED FROM CONTAMINATED SOIL Khandaker Rayhan Mahbub, University of South Australia	WE32 AN EXAMINATION OF RECENT FIELD RESULTS FROM IMPLEMENTATION OF ELECTROKINETIC REMEDIATION APPROACHES IN LOW PERMEABILITY SOILS David A. Reynolds, Geosyntec	WF33 USE OF FOOD WASTES TO REPLACE PART OF FISH MEAL IN FISH FEED PELLET FOR LOWING LEVELS OF MERCURY, DDTS AND PAHS IN CULTURED FRESHWATER FISH Yu Bon Man, The Hong Kong Institute of Education
WD34 TWO-WAY INTERACTIONS BETWEEN ORGANOPHOSPHORUS (OP) COMPOUNDS AND SOIL MICROBIAL COMMUNITIES Smriti Rayu, University of Western Sydney	WE33 EVALUATION OF COMMERCIALLY AVAILABLE OXYGEN DISTRIBUTION TECHNOLOGIES Cristin L. Bruce, Shell	WF34 NUTRIENT MANAGEMENT IN ABATTOIR WASTEWATER IRRIGATED SOIL – BIOMASS AND ENERGY PRODUCTION Balaji Seshadri, University of Newcastle / CRC CARE
WD35 EFFECT OF PHOSPHATE ON TOXICITY AND ACCUMULATION OF ARSENIC IN SOIL MICROALGAE Mohammad Mezbaul Bahar, University of Newcastle	WE34 PHYSICS BASED MANAGEMENT OPTIMIZATION (PBMOTM) FOR WATER RESOURCE, ENVIRONMENTAL REMEDIATION AND DESIGN PROJECTS: THEORY AND APPLICATION Larry M. Deschaine, HydroGeoLogic Inc	WF35 ALGAL BIOMASS AFTER BIOREMEDIATION – AN ECONOMICAL SOURCE FOR BIOSYNTHESIS OF IRON NANOPARTICLES 546 Vidhyasri Subramaniyam, University of South Australia
	AFTERNOON TEA	