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PDS 3b: Remediation

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M. Almeida
Federal University of Rio de Janeiro, Brazil
S. Fukada
Geo-Environment Engineering, Japan

Paper Presentation and Poster Discussion Session (PDS) for "3b: Remediation" was held at 16:00-19:00 on September 13. The presentations covered wide range of topics related to soil and groundwater remediation and contaminated land management.

For PDS 3b, 28 papers were selected. The presentations were divided into five broad groups of topics by Dr Jefferis, the General Reporter of Technical Session 3b: Remediation. Those five groups were: 1) Full-scale projects and case histories; 2) Field investigation techniques; 3) Laboratory investigations; 4) Modelling including numerical modelling; and 5) Environmental protection, risk and sustainability.

Laboratory investigations were the most common topic for the session, on the contrary, few presentations were on Full-scale project and Field investigation techniques. This indicated that some theories and technologies related to contamination & remediation have been developed in the laboratory scales and they may require further field investigation or testing before apply to full scale projects.

Each author had a 4 minutes oral presentation. After oral presentation, the poster presentation & discussion session was held.

The following 19 papers were presented at the PDS.

[1] Application of geosynthetic barrier wall to containment of hydrocarbons in the Arctic - *Mukunoki, T., Rowe, R.K., Hurst, P., Bathurst, R..J.*

[2] Performance of arsenic removal unit installed in Bangladesh and cement solidification of arsenic sludge from the unit - *Hussainuzzaman, M.M., Yokota, H.*

[3] Dewatering at the Port of Ngqura: A case study - *Vermeulen, N.J., Day, P.W.*

[4] In situ permeability measurement of a contaminant containment wall - *Soga, K., Sutherland, K.J., Kechavarzi, C., Whittle, R.W.*

[5] A novel technology for sniffing subsurface contaminants - *Kurup, P.U., Issac, B.*

[6] Entrapment and dissolution behavior of DNAPL on subsurface contamination process - *Kamon, M., Katsumi, T., Inui, T., Tsujimoto, K., Endo, K.*

[7] An experimental study of LNAPL lens formation using a centrifuge - *Nakajima, H., Kutter, B.L., Ginn, T.R., Chang, D.P., Mariño, M.A.*

[8] Comparison of single-well and two-well tracer tests at the laboratory scale - *Frippiat, C., Conde, P., Holeyman, A.*

[9] Evaluation of metal mobility and adsorption capacity of a compacted lateritic soil by sequential extraction - *Gabas, S.G., Boscov, M.E.G., Sarkis, J.E., Kakazu,M.H.*

[10] The on-site remediation of fine-grained soil based on the effect of permeability change after freezing and thawing - *Ito, Y., Nii, K., Aramoto, K.*

[11] Enhanced electrokinetic remediation of mixed heavy metal and organic contaminants in low permeability soils - *Reddy, K.R., Maturi, K.*

[12] Modeling of soil moisture profile during infiltration into vadose zone - *Sugii, T.*

[13] Soil water coupled analysis of land subsidence due to dewatering - *Kaneda, K., Matsuo, M.*

[14] A New concept for rockfill dams - Protecting the surrounding environment - *Kudou, A., Nishigaki, M., Torii, T., Asada, S.*

[15] Environmentally friendly systems to renovate secondary roads. Life-environment project: Kukkia Circlet. LIFE02 ENV/FIN/000329 - *Lahtinen, P.O., Maijala, A., Kolkka, S.*

[16] Risk perception and assessment of a brownfield site - *Sarsby, R.W., Karri, R.S.*

[17] Evaluating the sustainability of methods for mitigation of arsenic contaminated aquifers - *Mulligan, C.N., Yong, R.N.*

[18] Geotechnology in harmony with the global environment: dream or deliverable? - *Jefferis, S.A.*

[19] Flow visualization using transparent synthetic soil - *Liu, J., Iskander, M., Tabe, K., Kostarelos, K.*