

## WM2012 Conference Panel Report

### **PANEL SESSION 94: Resources for Safer and More Efficient Environmental Remediation**

**Co-Chairs:** Leo van Velzen, *NRG-Arnhem (Netherlands)*  
Rosa Ramirez, *US DOE (USA)*

**Panel Reporter:** Angie Jones, *AMEC (USA)*

#### **Panelists:**

1. Leo van Velzen, *NRG-Arnhem*
2. Peter Booth, *Senior Technical Director, WSP- Group*
3. Irena Mele, *Waste Technology Section Head, International Atomic Energy Agency*
4. Rosa Ramirez, *Environmental Engineer for International Program, US DOE*
5. Malgorzata Sneve, *Norwegian Radiation Protection Authority (Norway)*

More than 40 people attended this half panel session focused on ENVIRONET the IAEA Network on Environmental Management and Remediation. The network is actually promoting development of regulations, skills, training, technical outreach and funding needed to accomplish safer, more efficient remediation. The network will also transfer knowledge and lessons learned to encourage improved life cycle planning of future projects and the present generation of new legacy sites. The session opened with an overview provided by co-chair Leo van Velzen with each of the 4 panelists giving a 10 - 15 minute overview with PowerPoint presentations of their respective projects.

**Leo van Velzen** gave an overview of the ENVIRONET and its purpose that included training, sharing experiences, and collecting and sharing best management practices. He stressed that it provided an opportunity to bring together initiatives with other agencies, like US DOE. He shared that there were joint training courses on fundamentals of environmental remediation (ER) scheduled for April 2012 at Argonne Laboratory in Chicago. Annual meeting in Vienna in August will discuss ER E-Learning. Various other meetings on technologies, uranium and mathematical models have been or will be held throughout the year. Some benefits that have been seen in the past year have been the Fellowship Atomic Energy Commission of Syria in dealing with NORM at NRG, Netherlands and another is the deployment of a Mobile Unit for Site Characterization.

**Peter Booth** began by highlighting his role with ER for ENVIRONET and the constraints with D&D. It was noted that there over 150 reactors worldwide are operating that are over 30 years old and that majority of the 250 research reactors are over 40 years. Further only 17 of the 129 shutdown NPP's have been decommissioned. D&D is challenged by equipment de-fueling; waste management siting and trained professionals to do the work. ER-contaminated sites area all over and growing with opening of new mines (NORM-industries) and incidents like that at Fukushima. The Consortium for Risk Evaluation with Stakeholder Participation (CRESP) is made up of professionals that are engaged in complex science and engineering, economics, politics and project management. They are using ENVIRONET as a way to overcome challenges in managerial and technical constraints.

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**Irena Mele** spoke on the goal to advance ER and decommissioning for IAEA member states by overcoming barriers through ENVIRONET and how to respond: Mobile Unit for site characterization, E-Learning curriculum, Directory of Radiological Contaminated Sites (DRCS), TC projects Working Groups, and Regulatory Supervision of Legacy Sites (RSLs), constraints to implement D&D and ER and the Central Asian Coordinating Group (ACG) are funded by the donor states who also contribute to working groups that focus on some of the constraints. The action will be used to support development of a Nuclear Safety Action Plan.

**Rosa Ramirez** provided an overview of US DOE Environmental Management International Program that falls under Alice Williams (EM2.1) and that has a strategic plan outlined from 2010 – 2015. This strategic plan identifies areas where US DOE plans to collaborate with others. She mentioned the recent signing of the bilateral agreement between US DOE and UK NDA that extends the formal agreement to collaborate and now includes the Office of Nuclear Energy. Other countries that the US is working with include Belgium, Russian Federation, Sweden (SKB), and France (ANDRA) on repository issues and Canada (AECL) on pilot scaled technologies for Chalk River. Examples of collaboration include the UK National Nuclear Laboratory on the “Cryograb” for sludge removal and Russia/KRI for mercury cleanup.

**Malgorzata Sneve** spoke on the role and experiences of Norwegian Radiological Protection Authority in working with IAEA. She shared how safety culture was extended through improved communication of lessons learned from Russian - Norwegian Regulatory Cooperation. Working with Russian Federation for approximately 17 years on legacy waste site at the border dealing with spent fuel and radiological waste stored in vessels and dismantlement of submarines. Through this work she could address a number key regulatory challenges and the need to facilitate improved communications through joint meetings of involved stakeholders at all levels; as communication is vital to sustained safety culture enhancement. The work of the IAEA's international working forum on Regulatory Supervision of Legacy Sites (RSLs) for improving and development of effective and efficient regulatory processes in this field was also highlighted.

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