

TOXFREE IN THE NEWS

Another World First at Fortescue: Bringing Technology to the Environment

Fortescue Metals Group and waste management service provider PT Environmental Services (PTES) have worked together to introduce a new technology which will deliver a step change in hydrocarbon contamination management at the Chichester Hub.

Using a revolutionary instrument, known as Remscan, PTES is able to monitor hydrocarbons in soils in real time, delivering timely and accurate decision making in the field.

Remscan was developed by a collaborative private sector-CSIRO project based in Adelaide and was released to the market in December 2012. PTES understood the value of the technology and approached Fortescue's Manager of Infrastructure, Mark Tazewell who supported its implementation at the company's Cloudbreak mine.

Using Remscan, three distinct improvements in hydrocarbon spill management are possible:

- Spills can be managed live in the field, allowing the clean-up supervisor to accurately direct the excavation of soils. It means only the soil which is actually contaminated is excavated, avoiding unnecessary contamination of surrounding soils and minimising the investment in remediation facilities.
- The spill location has conclusive data supporting the validation of the clean-up process. This can be archived for environmental audit and allows clean up equipment to be demobilised without the risk of recall and without the need to maintain quarantine around the spill zone pending time consuming laboratory data.

- The bio-remediation pads, which the contaminated soils are consigned, can be monitored more frequently and with more data points than would be possible using conventional laboratory-based monitoring. This enables greater testing of the conditions which yield the most efficient remediation conditions, minimising the investment required in bioremediation facilities.

Remscan was officially launched at Fortescue's Cloudbreak mine by General Manager Julie Shuttleworth, Mark Tazewell and Lincoln Morton, PTES Contract Manager during the commissioning of the new bioremediation pads at the waste management facility. Mark said the technology was consistent with Fortescue's focus on continuous improvement. "Remscan goes hand in glove with the new biopad facility and will ensure effective management of contaminated soils."

Lincoln said: "PTES was pleased to bring this technology to bear at Fortescue as the first deployment of Remscan on a mine site of any type in Australia and, indeed, the world. We see this as a means of strengthening our partnership and we appreciate the culture of Fortescue which welcomes new approaches and has facilitated this advancement."

The Remscan saw its first global deployment on a mine site at Cloudbreak on 9 April 2014.



Steve Gostlow, Lincoln Morton from Toxfree and Julie Shuttleworth, General Manager of FMG Cloudbreak.

**DIRECT FROM THE
FMG NEWSLETTER**