RemActiv™ Case Study

RemActiv Trials Successful for Pacific National

Pacific National engaged environmental engineering consultants RCA Australia to independently assess RemActiv™ as a bioremediation agent for cleaning up diesel spills in the rail industry.

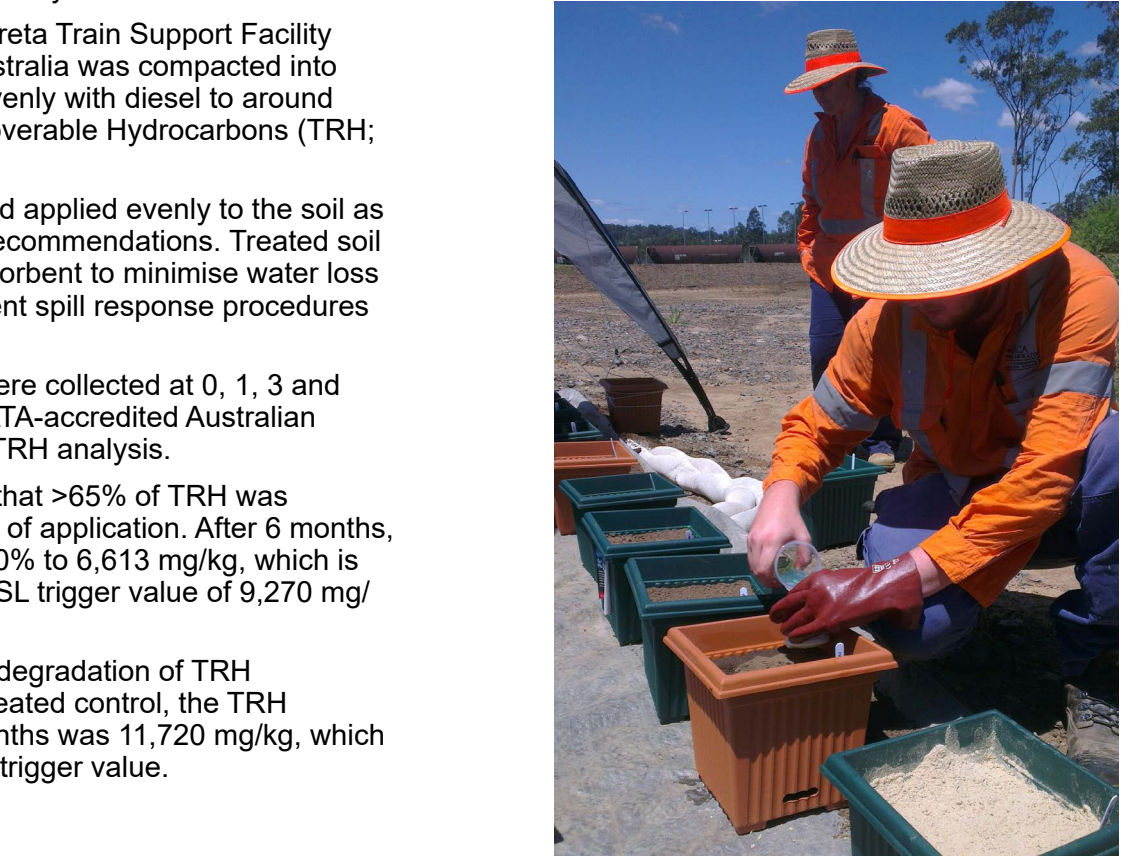
Soil collected from the Greta Train Support Facility in New South Wales, Australia was compacted into containers and spiked evenly with diesel to around 35,000 mg/kg Total Recoverable Hydrocarbons (TRH; C_{10} to C_{40}).

RemActiv was diluted and applied evenly to the soil as per the manufacturer's recommendations. Treated soil was covered with an absorbent to minimise water loss and to replicate the current spill response procedures of Pacific National.

Triplicate soil samples were collected at 0, 1, 3 and 6 months and sent to NATA-accredited Australian Laboratory Services for TRH analysis.

Results (Fig. 1) showed that >65% of TRH was degraded within 1 month of application. After 6 months, TRH was reduced by >80% to 6,613 mg/kg, which is well below the NEPM* ESL trigger value of 9,270 mg/kg.

While significant natural degradation of TRH also occurred in the untreated control, the TRH concentration after 6 months was 11,720 mg/kg, which exceeds the NEPM ESL trigger value.



Pacific National setting up RemActiv trial

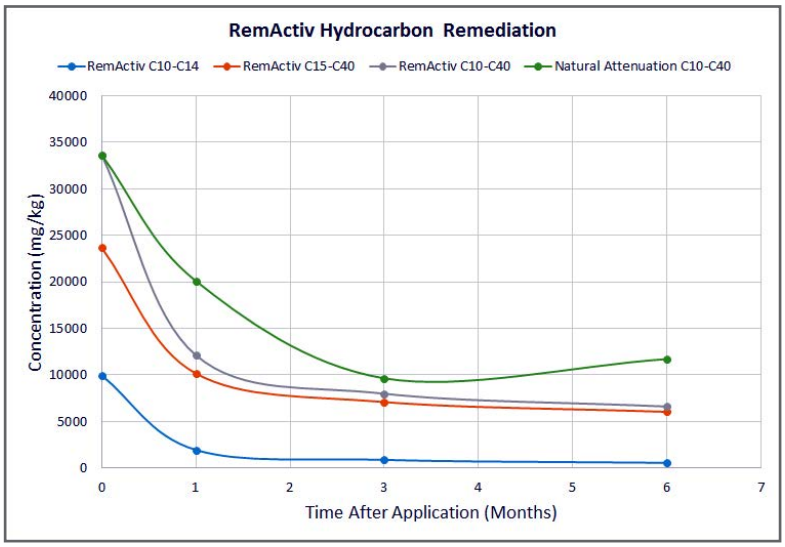


Figure 1: Degradation rates of total recoverable hydrocarbons in diesel contaminated soil following RemActiv treatment

In summary, RemActiv reduced diesel contamination in soil to below the regulatory trigger value within 6 months, with minimal soil management requirements.

The procedure involves simply spraying a single dose of RemActiv on the spill site at the recommended dose and then covering the spill with organic absorbent material to reduce evaporation.

This paves the way for the use of RemActiv as a simple, practical and cost effective bioremediation product for quickly reducing the impact of hydrocarbon spills in the rail industry.

* NEPM = National Environment Protection (Assessment of Contaminated Site) Measure 2013

P 08 8470 0716 E info@rembind.com W remactiv.com