

Case Study

Customer: Transnet Rail Engineering – Sentrarrand

Requirement: Remediation resulting in rehabilitation of site

Year: 2009

Product: Biosolve, Terrazyme, Aquazyme and Microbe Soil Treat



Contact Details:

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There were two diesel spillages of approximately 50 000 litres from the shunting yard that contaminated a total of 546m² of ballast stone and soil.

This spillage was made worse by the high rainfall and close proximity of a storm water drain that allowed the majority of the diesel contamination into the “Vlei” area and further into the wetlands



Action

The work was focused on 4 main areas;

1. **Rail yard:** The immediate focus was to contain the existing spillage so no more storm water could be contaminated with the diesel. We also removed the highly contaminated soil and disposed of it into waste skips for safe disposal. The contaminated ballast stones we cleaned using our products Biosolve & Terrazyme, the remaining soil was treated with Biosolve, Terrazyme and Microbe Soil Treat.
2. **Storm water drains:** We utilized specialized High Pressure Drain cleaning equipment over 2 days to “flush out” any residual diesel and contaminated products that were residing in the drainage system.

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We provide Oily Water Treatment, Floating Skimmers and Vehicle Wash Water Reclaim Systems.

Call us for further information on our Ultraspin innovative hydro cyclone designs, separating oil and other contaminants from water while our Mycelx filtration removes 100% of TPH and oil and grease from water.

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- 3. Immediate Vlei area:** This area was the most critical as there was a high degree of free floating diesel on the water and in the surrounding soil and vegetation. We created a weir with 2 under flow pipes to allow the “cleaner” water to flow into the wetland area during rainfall conditions. The free floating oil was removed utilizing our mobile Ultraspin Oil Water Separator system & our Ecosorb rolls were used to mop up any residual diesel from the water surface. The highly contaminated soil and vegetation, such as reeds were removed and disposed of in waste skips for safe disposal. The remaining soil and water was treated using Biosolve, Terrazyme, Aquazyme and Microbe Soil treat in situ.
- 4. Wetlands area:** We also removed the contaminated reeds, grass and general vegetation and disposed of it into waste skips and treated the water and soil using Biosolve, Terrazyme, Aquazyme and Microbe Soil Treat in situ.

Result of Project:

DWAF, Transnet & Procon met on site to review the work done and consensus was reached that the areas in our scope of work had **exceeded expectations**, as even **new vegetation was starting to sprout**. The only area of concern was the small dam inlet that had the occasional sheen of diesel releasing from the dam bottom.

Procon proceeded to treat this with Aquazyme over the next few weeks.

The water was then tested downstream by DWAF and the **levels of contamination in the water were non-detectable**.

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