

Project Profile

Former Horizon Power Redbank Tank Removal Project



Client	Horizon Power
Location	Port Hedland, Western Australia
Duration	September 2014 – December 2014
Contract	Decommissioning and remediation of Redbank Power Station fuel storage tanks
Cost	\$1 million

Project Overview

McMahon Services were contracted to demolish four remaining above ground fuel storage tanks and infrastructure at the former Horizon Power Redbank Power Station. Two of the four tanks were located on an occupied property requiring safety planning and consultation.

This challenging demolition project was located within a Category 3 Cyclone passage. All structures were to be demolished from the top down and a strict Cyclone Management Plan developed. This meant that the team needed ready to undertake preparations for Cyclonic conditions within 72 hours notice.

The McMahon Services' Team took careful consideration when accessing the fuel storage tanks that had been redundant for in excess of 10 years. This was undertaken by cold cutting access and egress openings above the level of the sludge to allow for safe access and cross ventilation. Hot high pressure water cleaning inside the tanks while external temperatures were in excess of 40 degrees C.

The scope of works included the following:

McMahon Services

Head Office

T (08) 8203 3100 F (08) 8260 5210

E adelaide@mcmservices.com.au

W mcmservices.com.au



- › Removal of in excess of 80,000 litres of old fuel oil that had turned to sludge from within the tanks and redundant pipework
- › Internal cleaning of the tanks and pipework once sludge was removed
- › Demolition of three tanks measuring 10m diameter x 11 metre high and one tank measuring 26 metre diameter x 14m high including all associated pipework
- › Demolition of all concrete bund walls, footings and pads both under the tanks and in the redundant switchyard (1,300t app)
- › Pulverising of the concrete to 200mm minus so that it could be reused as backfill
- › Removal of a triple oily water interceptor pit including validation of surrounding soil
- › Validation of soil underneath the three tanks to ensure that there was no contamination
- › Removal of approximately 71 tonnes of contaminated soil to a licenced receiver
- › Backfilling and compaction of all voids left from removal of footings and pads with material (once confirmed uncontaminated) from under tank 1
- › Levelling of site and grading to falls to prevent ponding
- › Erection of 90lm (app) of 1800 high chainmesh fencing and repairs to existing fencing surrounding Switchyard
- › Recycling of approximately 200 tonnes of scrap steel

McMahon Services utilised a range of company-owned high performance heavy demolition machinery on this project, including the following:

- › Komatsu PC450 Excavator – fitted with a purpose-built demolition extension arm specifically designed for the demolition of large above ground storage tanks
- › Komatsu PC300 – 30 tonne excavator with grab, bucket and hammer
- › Komatsu PC220 fitted with various attachments
- › Hooklift Bin Truck