

Turn-key Environmental Treatment Services

- ▶ SOIL
- ▶ HAZARDOUS WASTE
- ▶ WATER
- ▶ GAS & VAPOUR

Introduction

McMahon Services provides turn-key treatment services for the environmental remediation market. Our team is comprised of PhD level scientists and senior engineers with a wealth of experience and practical hands on ability within the contaminated land and hazardous waste fields. Our in-house laboratory and engineering workshops enable us to continually deliver practical and cost effective turn-key solutions for our clients.

Our expertise and services include the following:

- ▶ Laboratory trials for scalable treatment applications
- ▶ Analytical chemistry
- ▶ Process engineering
- ▶ Specialist plant and equipment development

Treatment of contaminated soil, water, industrial waste, as well as gas and vapour is often not straight forward and requires a tailored approach. McMahon Services offer a streamlined solution between the technical expertise and the ability to execute the treatment outcome on site.

McMahon Services has the three most important aspects to enable turn-key treatment services to be provided:

- ▶ In-house laboratory
- ▶ Specialised team
- ▶ Engineering workshops and specialised plant

In-House Laboratory

Our in-house laboratory allows us to undertake a range of treatment trials on water, sludge and solid materials utilising a range of treatment methods. These include the following:

- ▶ Bioremediation
- ▶ Chemical fixation
- ▶ Neutralisation (PASS/ASS)
- ▶ Chemical oxidation

Trials are undertaken to meet technical, regulatory and financial objectives and directly link to full-scale treatment.



Collecting samples at Hills Industries remediation site



Dr. Ben Dearman undertaking trials in our in-house laboratory

McMahon Services provides in-house technical development services for the environmental remediation market.

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Specialised Team

The McMahon Services team is comprised of PhD level scientists and senior engineers that have extensive experience in developing turn-key solutions for a range of contaminant and material types. This experience is motivated to deliver practical cost-effective solutions to complex environmental problems. McMahon Services work closely with numerous environmental consulting practices and other industry experts to ensure successful outcomes.

Dr. Ben Dearman is our National Technical Manager, overseeing the development of all turn-key treatment projects. Ben holds a PhD in Environmental Biotechnology and has over 15 years' experience in the industry.

Engineering Workshops & Specialised Plant

McMahon Services maintain extensive engineering workshops which design, manufacture and maintain a comprehensive range of technical remediation and treatment equipment. This equipment is typically built for each unique remediation solution and includes:

- ▶ Groundwater handling and treatment systems
- ▶ Bioremediation aeration and filtration systems
- ▶ Specialised soil processing and treatment equipment
- ▶ Multi-phase extraction systems
- ▶ Chemical injection systems
- ▶ Gas extraction systems

Previous Projects

Key projects where McMahon Services have provided treatment services:

- ▶ **Hills Industries Site Remediation and Soil Treatment**
Chemical oxidation of contaminated soil using specialised treatment equipment based on lab-scale trials
- ▶ **BioInnovation Site Remediation**
Forced aeration biopile with in-house developed emission control system
- ▶ **Narrows Crossing - Acid Sulphate Soil Treatment**
PASS / ASS treatment using modified Reterra system
- ▶ **Bioremediation of TPH Contaminated Soil - Allubucket Attachment**
Lab-scale treatment trial and use of allubucket
- ▶ **Birkenhead Gasworks Site Remediation**
Chemical fixation lab-scale treatment trial using specialised treatment equipment

