

Case Study

Client Lafarge Cement UK
Hope, Derbyshire, UK

Project date 2004 – 2008
Area 4Ha

Case Study date February 09
Budget £6 K

Project: Landfill Closure Report & Monitoring

Submission of Landfill Closure Report for a former shale quarry located at the Hope Cement Works in Derbyshire. The landfill is licensed to accept mostly non-putrescible wastes generated at the works arising from cement production.

Subsequent gas, groundwater and leachate monitoring was undertaken during 2008 in accordance with the recommendations of the closure report.

Services provided

Environmental Consultants;

Description of project

Merebrook were commissioned by Lafarge to prepare and submit a closure report for a former landfill at their cement works in Hope, Derbyshire.

Lafarge have operated the landfill under a Waste Management License since August 1982. Filling activities were reported to have ceased in March 2004.

As part of the closure process, Merebrook undertook

an appraisal of the geological, hydrogeological and hydrological setting of the site.

A review of Lafarge's Environmental Operating Procedure was undertaken to determine the types and quantities of waste accepted over the permit lifetime.

Merebrook examined site investigation data collated by previous consultants. Risk assessment was undertaken for the identified receptors (ground water, surface water, human health and ecology).

As the waste mass has no low permeability cap or underlying liner it is open to infiltration by rainwater. Consequently, Merebrook recommended a programme of aftercare monitoring.

Monitoring of gas, groundwater, surface water and leachate was undertaken at quarterly intervals for a period of one year.

Samples were obtained for subsequent laboratory analysis whilst on site, *in-situ* field meter readings were taken for dissolved oxygen, redox potential, pH and electrical conductivity.

