



Engineering Group of the Geological Society
and the



Chartered Institution of Water and Environmental Management (CIWEM)

Evening Lecture

Thursday 13th March 2008, 5.30 for 6.00pm

EurGeol Paul C Maliphant & Geoff Webber

Waste Management: Dealing with Construction Waste

Venue: Halcrow, Burderop Park, Swindon, Wiltshire, SN4 0QD
(directions see [dtp://www.halcrow.com/html/contact/offices/swindon.htm](http://www.halcrow.com/html/contact/offices/swindon.htm))

Synopsis:

Two papers looking at modern approaches to the disposal of waste arising from demolition and construction operations.

Paper 1: Waste Minimisation on the Porth Relief Road. EurGeol Paul C Maliphant, Halcrow Group Limited

The £98M Porth Relief Road in the Rhondda Valley, South Wales which was opened in December 2006, comprises 8kms of carriageway and was the largest single road contract led by a UK local authority at that time. The scheme was delivered by an Integrated Project Team comprising Client/Contractor/Designer working in effective partnership which was set up based on client procurement best practice and utilised Early Contractor Involvement to ensure effective Value Engineering and achieve best value. Waste minimisation became a key driver during Value Engineering when the construction cost was reduced by £18M. Scheme alignment changes, earthworks design and reuse of residual earthworks and demolition surpluses to create two new development plateaus adjacent to the new highway were key to reusing or recycling some 96% of waste generated. Extensive contamination risk assessments facilitated the reuse of all site won materials in embankment/development plateau construction and in the formation of topsoil for landscaping use by blending it with composted green waste. Use of site won materials was therefore maximised and disposal to landfill was only required where site constraints prevented temporary stockpiling for subsequent reuse. Furthermore, Halcrow worked with Landtech (UK) Ltd to trial a new, successful protocol for eradication of Japanese knotweed (95% successful with one treatment) with disposal of infested soils on site in agreement with the Environment Agency and Countryside Council for Wales. The scheme has won awards from IHT and Constructing Excellence and is a finalist in the Geotechnical/Geoenvironmental Public Sector Project over 1M category of the inaugural 2008 Ground Engineering Awards.

Paper 2: Waste Acceptance Procedures – An Introduction to the New Requirements of the Landfill Directive, Geoff Webber, CEMEX UK Limited (formerly Ready Mixed Concrete).

The Waste Acceptance requirements of the Landfill Directive came into force in July 2005 via the Landfill (England & Wales) (Amendment) Regulations 2004. Two and half years later, there are many Companies wishing to dispose of their waste that have still to come to terms with these new requirements. The Regulations are more prescriptive than previous legislation, which almost inevitably, adds complexity to the process of disposing of waste.

This presentation will aim to explain the requirements for the inert waste sector and also set out the procedures that CEMEX has implemented to help customers comply with the new rules. To add to the difficulties of waste producers, the outstanding requirements of the Landfill Directive were introduced on 30th October 2007 including the requirement to treat all waste going to landfill. The final part of the presentation will briefly mention waste treatment and another, linked issue, the forthcoming introduction of Site Waste Management Plans.



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About the Speakers:

Paul Maliphant is an Associate Director (Engineering Geology) with Halcrow Group Limited based in their Cardiff office. In a career including spells in nationalised industry, local authority and consultancy he has added value to schemes as diverse as opencast coal mines, major new highways, public sector buildings, regeneration and landslide stabilisation schemes, canal restoration, minerals research, ground subsidence risk and spoil heap management, due diligence and planning guidance. He has worked as an expert witness, mediator and arbitrator on landslides, impacts of river diversions and canal restoration projects. As project manager for Halcrow's multidisciplinary services on the Porth Relief Road for the last 10 years he was responsible to the Integrated Project Team developed to deliver the scheme for geotechnical advice, earthworks and drainage design, ecological services and the category III independent checker of the landmark Rheola bridge. Waste minimisation was a key aspect of this work and Halcrow also acted as planning and design consultants to secure consents to reuse some 130,000m³ of residual earthworks surpluses to create two new development plateaus adjacent to the scheme for the future benefit of the local populace.

Geoff Webber is a Principal Advisor - Waste Management for CEMEX (formerly Ready Mixed Concrete) based at their head office at Thorpe near Staines. Geoff has a degree in chemistry & geology but considers himself to be a chemist. In his early years he worked in the laboratory of the Greater London Council's Poisonous Waste Unit, analysing samples of waste from companies all over London. He has also spent 10 years at Kent County Council where he was responsible for the Waste Regulatory functions of the County. He has now been with RMC/CEMEX for nearly 20 years and provides advice to operating company personnel within the Group regarding waste regulatory matters. Over the years he has sat on several peer review panels for waste management papers for the (old) DoE and currently sits on two Landfill Regulation Group sub-committees (EA/DEFRA) where he represents the Quarry Products Association.

Convenor: EurGeol Paul C Maliphant (email: maliphantpc@halcrow.com)

Attendance confirmation:

There will be a CIWEM charge of £3.00 for this meeting, payable on the door. Coffee, tea and biscuits will be provided.

Please note that places will be limited and allocated on a first come first served basis. Please book early to ensure your place. Attendance at evening meetings counts towards CPD and Structured Training

Please reserve me the following places(s) for the evening meeting to be held at Halcrow, Swindon on the 13th March 2008 _____CIWEM member(s) and / or _____GeolSoc member(s) and / or _____non-CIWEM/Geol Soc member(s).

Where did you hear about this meeting : Branch: Colleague : (Other) : _____

Your Name : _____ Fax : _____

Organisation : _____ Email: _____

Please list names of attendees : 1 _____ (CIWEM/Geol Soc/non CIWEM or Geol Soc)

2 _____ (CIWEM/Geol Soc/non CIWEM or Geol Soc)

3 _____ (CIWEM/Geol Soc/non CIWEM or Geol Soc)

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