News from MJCA

Technical advisers on environmental issues

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Providing Independent technical advice on environmental issues

Foreword: letter from the editor

Happy New Year!

This newsletter comes with our best wishes for 2015 - a whole, fresh new year that lies in front of us full of all sorts of opportunities and possibilities. Marcus Aurelius said (a very very long time ago) *'Never let the future disturb you. You will meet it, if you have to, with the same weapons of reason which today arm you against the present.'* We look forward with relish to applying our 'weapons of reason' in 2015 and continuing to have the privilege of working in a field where we know we can achieve good things for the planet as well as working with and for people we like, admire and respect. HAPPY NEW YEAR FROM MJCA!

National Planning Policy for Waste and the Green Belt

Published in October 2014, the long awaited National Planning Policy for Waste (NPPW) provides concise and overarching waste planning policies that will sit alongside the National Planning Policy Framework as a consideration for planning authorities when discharging their role in waste planning matters, both in decision making and forming new Local Plans. The NPPW is more streamlined and does not deviate too far from the aims and objectives of its predecessor, PPS10: Planning for *Sustainable Waste Management.* The NPPW recognises the need for new waste management infrastructure whilst also protecting the environment and human health.

One of the most talked about changes from the introduction of the NPPW is the stance on development in the Green Belt. In assessing the suitability of sites for waste management facilities, the NPPW recognises that Green Belts have special protection in respect of development and states that suitable sites and areas outside the Green Belt should be considered in the first instance if proposals for waste management would be inappropriate development.

Waste management facilities are generally considered to be inappropriate development in the Green Belt, unless material considerations make it otherwise. These considerations could include the availability of large sites for large scale development not appropriate elsewhere, the proximity to waste arisings and where alternative sites may be less sustainable or unviable. However despite this a number of refusals of planning permissions have been made with respect to waste development in the Green Belt including the refusal on appeal of a time extension for Arpley Landfill of which one of the main considerations was whether the harm by reason of inappropriateness in the Green Belt is outweighed by other considerations (Appeal ref APP/M0655/A/13/2201665).

The NPPW does state that the local planning authorities should recognise the particular locational needs of some types of waste management facilities, so the new NPPW does not signal the end of waste development in the Green Belt, but it does perhaps indicate that developers must first consider the use of sites outside the Green Belt in locations where the development is compatible with surrounding land uses. As a consequence developers will need to consider with greater scrutiny than ever the proposed location of facilities in the Green Belt including the compatibility of the neighbouring land uses as well as the potential impact on the environment and amenity.

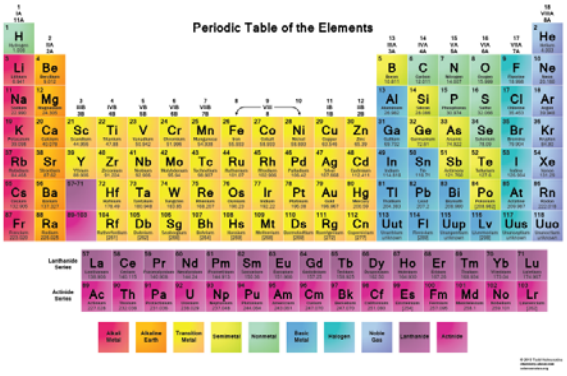
In October 2014 the Guardian published an article entitled 'Are solar farms really hitting British food production?' which discussed additional land uses on sites used as solar farms. See page 2 to see how landfill sites could hold an interesting solution.

Photos from theguardian.com and thetelegraph.co.uk

Changes to hazardous waste classification- WM3

Currently the assessment of whether waste is classified as hazardous is determined using Environment Agency Technical Guidance WM2 which is based on the waste framework directive (WFD), the list of waste (LOW) decision, the Dangerous Substances Directive (DSD) and the Dangerous Preparations Directive (DPD). Via a staged process which has been ongoing for a number of years the DSD and DPD are being replaced by the Classification, Labelling and Packaging Regulations which introduce a new system of chemical classification based on hazard classes replacing the old methodology which was based on risk phrases. The relevant parts of the WFD and LOW decision have been revised to take account of the changes which are due to apply fully from 1 June 2015.

As a result of these upcoming changes the Environment Agency on behalf of the Joint Agencies announced on 12 November 2014 the launch of a consultation on Technical Guidance WM3 – Waste Classification and Assessment to update and replace WM2. MJCA has been closely involved in the switch over to the new system through its membership of the CIWM hazardous waste special interest group and Defra Hazardous Waste Stakeholder Forum and will be contributing to the consultation on WM3. Look out for updates in future editions of the newsletter



Renewable energy and landfill

There are limited options available for the development of former (closed) landfill sites. These sites are often located away from urban areas and of low landscape value. So whilst they often are not necessarily suitable for conventional development they may be suitable for photovoltaic (PV) solar farm development. Closed landfill sites generally have no buildings or other structures on the land, they are often in areas located away from sensitive receptors such as residential properties, many sites have reasonable highway access and have a connection to the electricity grid particularly where they were former mineral working sites before being infilled or are producing energy currently from landfill gas. The availability and capacity of an existing grid connection is a significant factor in the development of a large scale solar PV facility. There are of course planning issues associated with developing solar farms on former landfill sites and technical studies of the sites are necessary together with discussions with the local planning authority, the Environment Agency, Natural England and other agencies.

Examples of landfills being used as solar farms in America at Hickory Ridge Landfill (right) and at Westbury, UK (below), a former Viridor landfill site.

The construction of the solar panel array needs to take into account the circumstances of building on a former landfill particularly associated with differential ground settlement and uplift forces from wind on the panels, both of which can result in damage to solar panel frames and the foundations which ultimately may lead to failure of the PV panels. This may limit the depth of excavations and foundations and needs to take account of the thickness of the restoration soils. It is also necessary to maintain the integrity of an engineered cap which will have been placed to reduce the ingress of surface water and the release of landfill gas. It is important therefore to evaluate the impact the development will have on the ground conditions which is likely to including undertaking soil and leachate testing as part of any geotechnical and environmental assessment together with an assessment of potential for erosion of the surface cover, changes in surface water run-off patterns and the need for new surface water run-off controls.

MJCA has experience of undertaking assessments for the proposed development of solar PV facilities, including intrusive investigation to assess the geotechnical properties of the cover materials and the condition of the landfill or contaminated brownfield site.

New starters at MJCA

Since our last newsletter we have had six new employees join the company, including several graduates.

Clare Lucas joined MJCA in November 2013 after achieving a BSc in Geology from the University of Leicester and an MSc in Hydreology at the University of Birmingham. She specialised in the fate and transport of manufactured nanoparticles in sandstone porewater for her Masters thesis. Her interests include landfills, contaminated land and contaminant transport. In her spare time she plays as a jammer for the Central City Rollergirls roller derby team based in Birmingham.

UNIVERSITY OF BIRMINGHAM

Lilith Hitchman started work full time in July 2014 after carrying out work experience while studying for her MPlan in City and Regional Planning with a specialisation in environmental assessment and management at Oxford Brookes University. Her Masters dissertation looked at the influence EIA has on planning decisions with a focus on minerals and waste planning and Nationally Significant Infrastructure Projects. In her spare time Lilith is a keen baker.

OXFORD BROOKES UNIVERSITY

Stephanie Allcock joined MJCA in September 2014 after studying for a BSc in Geology and an MSc in Hydrogeology at the University of Birmingham with a specialisation in emerging contaminants in the Sherwood Sandstone Aquifer and preferential pathway transport for her Masters thesis. Her interests include contaminated land with particular emphasis on landfill pollution. In her spare time Stephanie enjoys baking and travelling.

UNIVERSITY OF BIRMINGHAM

Adam Wilson joined MJCA in March 2014 as a Senior Planner with 10 years experience working in minerals and waste consultancies. Adam has worked on a range of multidisciplinary planning and Environmental Impact Assessment projects the highlights of which include obtaining planning permission for energy from waste facilities, new mineral workings, quarry extensions and aggregate recycling facilities along with the restoration of mineral sites for leisure uses.

Claire Finney joined the process permitting department of MJCA in July 2014. She achieved a BSc in Geography from the University of Durham and then studied for an MSc in Natural Hazards at Kingston University specialising in bushfire hazards and mitigation in Australia for her Masters thesis. Claire's current interests include waste management and environmental permitting. An interesting fact about Claire is that she is an identical twin!

Durham University

Matthew Stewart has recently finished his Postgraduate MSc in Engineering Geology at the University of Portsmouth. His undergraduate degree was a BSc in Physical Earth Science at Swansea University. Currently Matthew is interested in assessing the stability of slopes with a particular interest towards the mining and quarrying environment. When he is not hard at work Matthew DJs as a hobby.

Swansea University Prifysgol Abertawe

Break through breast cancer bake off!

On Monday 27 October MJCA hosted a Breakthough Breast Cancer Bake Off with judging carried out by Leslie Heasman *(yum!-Ed)* and cake eating carried out by all. The winner of the bake off was Sophie Serdetschniy with her classic chocolate brownies. Together we raised a sum we can be proud of for research into a cure for cancer. Well done everyone!

Spooky Halloween

This Halloween things got spooky in the offices when everyone arrived to a mini pumpkin (orange!) on their desk to decorate. Judging was difficult but it was deemed the carved orange was the winner, closely followed by the Cheshire Cat. Competition entries were then eaten as a delicious and healthy afternoon snack!