

UK-ADAPT

www.uk-adapt.org.uk

December 2006 Newsletter

This newsletter is the ninth of a series of monthly updates on the UK-ADAPT initiative. It is provided to all registered users on the UK-ADAPT website. Please forward to any colleagues that might be interested in UK-ADAPT and encourage them to use the website.

Overview

There has been limited activity on the UK-ADAPT website during December. We are still targeting key individuals from the research community to collate relevant diffuse pollution projects and it is hoped that more projects will be added to the website soon.

New Projects

There are 175 projects currently listed on the website. Please continue to review all diffuse pollution projects undertaken by your organisation since 2000 and consider registering them on UK-ADAPT. If anyone has a large number of projects to register, please contact Becky Humphrey for assistance on 01954 268267 or uk-adapt@adas.co.uk

The next UK-ADAPT workshop

Following the success of our 2006 workshop, we plan to hold another event in Spring 2007. The themes of the workshop are still being finalised, so if you have any suggestions, we would welcome your ideas. It is important that all projects on the UK-ADAPT website are updated before this event, in order to review the UK-ADAPT initiative accurately. Please review your projects and send suggestions for the workshop to uk-adapt@adas.co.uk

Upcoming Conferences and Events

Free PLANET nutrient planning workshops for farmers and advisors are being held during January. For further information please visit www.environmentssensitivefarming.co.uk, call the events line on 0845 602 3864, or email fred.deboise@adas.co.uk.

- Monday 22nd January 2007, Morpeth Golf Club, Northumberland
- Tuesday 30th January 2007, Holiday Inn, Ipswich

UK-ADAPT Feedback

If you have any comments on the website or require assistance with registering and editing projects or updating contact details, please contact us at uk-adapt@adas.co.uk

Featured Case Study

Each newsletter features a flagship project that has recently been added to the UK-ADAPT website. This month we focus on **NITRABAR**, an EU research project looking at on-farm removal of nitrates to protect surface water. If you would like your project to be featured in next month's newsletter, please contact www.uk-adapt.org.uk

NITRABAR - Remediation of Agricultural Diffuse NITRAte Polluted Waters through the Implementation of a Permeable Reactive BARrier

www.nitrabar.eu

Levels of nitrates in many groundwater bodies and rivers throughout Europe continue to be of concern with regard to regulatory compliance and ecological impacts. Despite substantial progress in the adoption of best practice for nutrient management, a legacy of nutrient release from agricultural practices has arisen and the control of nitrates remains a challenge. There have been calls for technological approaches to compliment available management tools.

NITRABAR is an EC LIFE Environment Project to demonstrate the application of permeable reactive barrier (PRB) technology for on-farm removal of nitrate from shallow groundwater before it reaches surface water courses. Essentially the NITRABAR system is a narrow trench, installed between the field and a water body, which is filled with a mixture of natural materials. As nutrient rich waters pass through the system the nitrates are converted to nitrogen gas by naturally occurring micro-organisms which attach themselves to, or live in between, the materials. The NITRABAR Project considers that PRB technology may have an application in strategically targeting locations of high nitrate flux on agricultural land.

The demonstration system is being installed at a site in Northern Ireland. Once installed, the NITRABAR system will be monitored extensively over a two year period in order to evaluate its performance. A key priority for the project is the provision of information that promotes replication of the NITRABAR approach. A detailed report explaining how the system was designed and implemented will be produced and accompanied by workshops in the participating countries to help interested parties replicate the system.

The project is a joint effort between the following project partners: Queen's University Belfast (Environmental Engineering Research Centre), Ecomesh Ltd. (Northern Ireland), the Environment Agency of England and Wales, APCO (Malta), Greensan (Belgium), PRGW (Poland) and CL:AIRE (London). The project is being managed and co-ordinated by the Integrated Pollution Management Knowledge Transfer Network based at Oxford University. For more information visit www.nitrabar.eu. Register on-line to receive regular project updates and share your views on the NITRABAR approach. Alternatively, contact the Project Manager, Bruce Howard via nitrabar@earth.ox.ac.uk.

The NITRABAR project has been made possible due to the contributions of the partners involved and the contributions of the LIFE financial instrument of the European Community.