

Pesticide Handling Demonstration Sites



What is point source pollution?

Point source pollution is pollution from a single identifiable point. In this case, pesticide pollution from the pesticide handling area within a farmyard.

What is the problem?

Water destined for drinking water must adhere to the drinking water standards which say that no individual pesticide will exceed 0.1µg/l (0.1ppb). This is an extremely small amount and can be equated to:

- 1 stem of hay in 111,000 bales
- 1 grain of wheat in 390 tonnes
- 1 second in 320 years
- 1p in £100million

Background

With 40-70% of the (agricultural) pesticide load found in drinking water said to come from farm yards and with possible reductions of 99%, it is important that farmers look at the options available to them to contain any drips and spills of pesticides - ensuring they do not make their way into a drinking water source.

What is the Issue?

In November 2012, routine sampling by Anglian Water of two boreholes at Winterton WTW in North Lincolnshire, detected traces of two ingredients commonly used in pesticides. The boreholes were immediately taken out of use and an interim solution to source drinking water from an alternative supply was put into place. The elevated levels of Bentazone and Clopyralid were, after an external investigation report was conducted, thought to originate from the handling and filling area in the farm yard.

Anglian Water worked with farmers in the catchment of the boreholes, to improve the pesticide handling facilities within the farmyards to ensure any spills and drips are contained and the source protected. Monitoring of the water quality has seen the levels reducing year on year and, the water was returned into supply on the 1st April 2018. Refer to the Winterton Holmes case study for more information.

Riseholme Demonstration Site

A collaboration between Anglian Water, the University of Lincoln and the Environment Agency helped to provide a demonstration site for farmers to visit and view the options available to them to use in farmyards to contain pesticides. The site, based at the Riseholme Campus, Lincoln consists of demonstrating 3 on farm pesticide treatment options:

Biobed and Biofilters

These are on farm treatment units. Both using a 'biomix' of compost, soil and straw as the component to remove the pesticide from washings and spills when filling in the yard.



Heliosec

Is a tool designed and registered in France by Syngenta. Thanks to solar radiation and wind effect the liquid contained in the bottom of the Heliosec equipment evaporates leaving a thin solid layer of non-evaporable matter. This solid layer must be disposed according to the present legislation.



Moulton college Demonstration Site

In 2019 a pesticide handling site was set up at Moulton College, built upon the successes and lessons learnt from the one at the University of Lincoln. The farm here is used extensively for teaching purposes to support practical education and training with a commercial focus.

Farm manager, Malcolm Pate is keen to work with stakeholders to improve local water quality, and has been heavily involved in the Pesticide Handling Area development from the start.

The new handling area will provide a fantastic opportunity for the Agricultural students at Moulton College to see the best practice handling of pesticides. There are just under 100 students on Agriculture and Countryside courses at FE level. The new handling area will provide students with the opportunity to see best practice in action. It will also be a useful site visit for any external BASIS students who are studying at the college. Local water quality will also be improved by the use of the pesticide handling area, reducing the risk of spills and leaks to the environment.

Further information on biobeds and biofilters can be obtained from www.voluntaryinitiative.org.uk

To check if you are eligible for grant funding, please visit Catchment Sensitive Farming <https://www.gov.uk/government/publications/catchment-sensitive-farming-officer-contacts>

For further information:



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More information about Anglian Water's work in catchment to improve the quality of our drinking water can be found at

<http://www.anglianwater.co.uk/environment/our-commitment/our-plans/catchment-management.aspx>

Twitter: @AWCoastCountry

What can you do?

With best practice in mind, Anglian Water encourage all farmers to use, a drip tray.

Anglian Water, working with DaRo Products Ltd (<http://www.daroproducts.co.uk/>), commissioned drip trays which have been produced using recycled ABS plastic sheets (giving good strength and resistance).

The trays can be used under the induction hopper of the sprayer or have knapsacks positioned inside to ensure any drips during filling are captured.



Contact your local Anglian Water Catchment Advisor to see if you are eligible for a free drip tray.



Love every drop
Come rain or shine
Find out more at
AnglianWater.co.uk/farming

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