## Case Study 1: Enclosed sprayer washdown area and sprayer store



The applicant farms 575 hectares, 50 % of which have a direct run-off and proximity to the River Ems or River Lavant, which ultimately flow into Chichester Harbour AONB. The farmer, who participates in several environmental schemes, had previously obtained advice from the Downs & Harbours Clean Water Partnership on ways to reduce contamination risks and nutrient runoff from fertilizer and pesticide sprayer operations on the farm. The aim is to reduce the level of contaminants entering the watercourses that flow into AONB Harbour waters.

This project was for the construction of a long-term enclosed sprayer washdown area, filling station, spray store and wastewater filtration system all in one barn. The objective is a reduction of the amount of chemicals entering the soil and thus a reduction in the pollution risks for Chichester Harbour. The project is designed to provide a show case facility promoting best practice in farm management approaches to minimizing pollution risks in environmentally sensitive areas.

This facility allows for the sprayer to be washed inside and out within the confines of the washdown area. This is a change from current approved practice whereby sprayers are flushed in field (using a built-in clean water tank) with dilute washings being sprayed onto the crops.







The sprayer washings collected within the new washdown area contain chemical residue. To remove contaminants, the washings are collected in a high-volume wastewater storage system and put through a biofiltration system which separates the chemicals from the water. The clean water is then returned to the ground in an approved surrounding vegetated area.



The facility also allows for filling operations within a bunded area to control any leakage that may occur. Filling was previously done in the field using a bowser. There is also a provision for the harvesting of rainwater for use in spraying applications, therefore reducing the requirement on water resources.



The project met FiPL themes under the headings of Nature and Place. It also supported many of the Chichester Harbour AONB Management Plan priorities, in particular improving water quality and conserving and enhancing the landscape.

The overall project cost was £54,718. The Local Assessment Panel (LAP) awarded a FiPL grant of £35,568 to this showcase environmental project. The remainder was funded by the farmer.



