



**SID 5**

**Research Project Final Report**

**Note**

In line with the Freedom of Information Act 2000, Defra aims to place the results of its completed research projects in the public domain wherever possible. The SID 5 (Research Project Final Report) is designed to capture the information on the results and outputs of Defra-funded research in a format that is easily publishable through the Defra website. A SID 5 must be completed for all projects.

- This form is in Word format and the boxes may be expanded or reduced, as appropriate.

**ACCESS TO INFORMATION**

The information collected on this form will be stored electronically and may be sent to any part of Defra, or to individual researchers or organisations outside Defra for the purposes of reviewing the project. Defra may also disclose the information to any outside organisation acting as an agent authorised by Defra to process final research reports on its behalf. Defra intends to publish this form on its website, unless there are strong reasons not to, which fully comply with exemptions under the Environmental Information Regulations or the Freedom of Information Act 2000.

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**Project identification**

1. Defra Project code
2. Project title
3. Contractor organisation(s)
4. Total Defra project costs (agreed fixed price)
5. Project: start date .....   
end date .....

6. It is Defra's intention to publish this form.  
Please confirm your agreement to do so..... **YES**

(a) When preparing SID 5s contractors should bear in mind that Defra intends that they be made public. They should be written in a clear and concise manner and represent a full account of the research project which someone not closely associated with the project can follow.

Defra recognises that in a small minority of cases there may be information, such as intellectual property or commercially confidential data, used in or generated by the research project, which should not be disclosed. In these cases, such information should be detailed in a separate annex (not to be published) so that the SID 5 can be placed in the public domain. Where it is impossible to complete the Final Report without including references to any sensitive or confidential data, the information should be included and section (b) completed. NB: only in exceptional circumstances will Defra expect contractors to give a "No" answer.

In all cases, reasons for withholding information must be fully in line with exemptions under the Environmental Information Regulations or the Freedom of Information Act 2000.

(b) If you have answered NO, please explain why the Final report should not be released into public domain

## **Executive Summary**

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7. The executive summary must not exceed 2 sides in total of A4 and should be understandable to the intelligent non-scientist. It should cover the main objectives, methods and findings of the research, together with any other significant events and options for new work.

## Usage of PPPs in the UK

The total usage of PPPs across the UK would appear to be steady in terms of quantity of active ingredient used. However, the active ingredients supplied and used have changed as active ingredients have been removed from the market and other active ingredients, especially glyphosate, have taken their place.

There is evidence of significant quantities of agricultural PPPs being used by the amenity sector. Furthermore, there is evidence of parallel import provisions being used to facilitate non-registered PPPs onto the UK market.

## Key Drivers for Usage of PPPs

The desire to see best practice PPP use is a key driver for local authorities and larger private organisations. However, many construction organisations, private companies and smaller organisations have little understanding of the issues concerning PPP usage and are primarily concerned with having weed problems dealt with at the lowest cost. The quality of PPP application will for such organisations be entirely at the discretion of the contractor employed.

The removal of certain active ingredients from the amenity market has been an important driver for PPP use across the sector. This has resulted in reduced use of residual PPPs and a corresponding increase in glyphosate containing PPPs.

## Best Practice

BASIS qualifications, the BASIS register, BACCS and Amenity Assured, as well as NRoSO, have all been found to represent important quality standards for the amenity sector. However, PPP users, contractors and distributors that contributed to this study have indicated that these standards are not yet reaching their full potential in this regard. The following suggestions for improvement were put forward:

- greater promotion of these standards throughout the amenity sector;
- reassurance with regard to the reliability of these standards, as representing best practice in reality; and
- reduction in cost.

Furthermore, many respondents (questionnaire and case study) felt that there needed to be greater regulation of the amenity sector but that any regulation, new or existing, should be rigorously enforced. It was felt that without such enforcement, the nature of the industry was such that regulatory controls (current and future) would be ineffective in changing the behaviour of a significant sector of the industry.

## Alternatives to PPP Use

A wide range of alternative methods and some alternative products such as insect biological control have been identified as being used within the amenity sector. Some local authorities and contractors are experimenting with new techniques. However, some including steam and flame treatments, were found by many to be ineffective, inappropriate (e.g. equipment too large for some urban areas), have health and safety concerns or were considered to be detrimental to the environment due to the high levels of fuel use and carbon dioxide emissions. The high levels of fuel use also raised concerns about excessive running costs.

In general, alternatives were considered to be valuable additions to PPP use that could usefully reduce the amount of PPP used. However, the industry was consistent in its opinion that some continued PPP use was essential. In this respect, examples were provided of the inability to effectively control some aquatic weeds following the withdrawal of certain active ingredients, with consequent damage to environmentally sensitive areas. These concerns were shared by the one conservation organisation case study and a contractor that undertook work for conservation organisations.

## Information Gathering

The questionnaire element of this study was not a success. The data gathered was useful to identify and to provide background to case studies but the sample response rate was such that the data were not sufficiently robust for meaningful statistical analysis. This should be set against the

previous evidence that the response rate to the 2007 survey (RPA, 2008) was far less than that of the previous 1996 survey (Produce Studies, 1996).

Without conducting a further survey to find out why respondents did not wish to respond, the actual reasons will never be known. However, feedback from some respondents did allow factors to be identified that may have contributed to the lower than anticipated response rate to the questionnaire for this study.

One factor was the reorganisations that appeared to be taking place within many local authorities. This resulted in these authorities having difficulties in identifying the most appropriate staff to provide responses and, even if contacted, these staff were to be occupied by the reorganisation to contribute. This factor also resulted in many local authority responses lacking access to any use data, as such data were not readily available.

A further factor identified was the increased responsibilities and workload placed on key local authority staff since the 2007 survey. Staff were not willing or unable to set aside the time to collect data and complete the questionnaire.

The final factor in the current campaign again affected local authorities. The period during which the survey was running coincided with an extremely cold winter with unusually heavy snow falls. Many PPP application staff were therefore fully occupied trying to keep roads and essential services open.

However, none of the factors identified can fully explain the very low response rate. For example, a number of local authorities from Scotland were able to respond when many from more southerly parts of the UK did not, even though they did not have the level of extreme weather to contend with that their Scottish counterparts did. Furthermore, some local authorities undergoing reorganisation did respond.

It is also acknowledged that virtually no PPP user organisations other than local authorities chose to respond and the response rate from contractors was also very low.

Manufacturers and approval holders that were members of the Crop Protection Association (CPA) did respond; they had been strongly encouraged to do so by the CPA. However, not all were able to provide data on the quantities of active ingredient or product supplied, even in terms of broad PPP type such as herbicides, fungicides and insecticides. Almost no such organisations outside of the CPA chose to respond. Furthermore, the study has identified evidence of agricultural PPP being used in amenity settings and of non-registered amenity PPPs being sold under false parallel import licences.

It is clear therefore that the data provided by manufacturers and approval holders on quantities cannot be considered representative of the market as a whole. Furthermore, although the qualitative information provided was very valuable, it almost exclusively represented the views of CPA members.

In sharp contrast to the questionnaire survey, the use of case studies has been found to yield valuable qualitative information from a wide range of actors in the amenity sector. However, it is acknowledged that the case studies - like the questionnaire survey - were dominated somewhat by local authorities. This domination by local authorities appears to be solely the result of these organisations choosing to take part in greater numbers than other organisations.

### **Future Studies**

This study was commissioned by the Chemicals Regulation Directorate (CRD) to update the available understanding of the use and usage of PPPs across the UK determined by the 2007 survey (RPA, 2008). The design of this study therefore mirrored that used previously as far as possible, including the number and detail of the questions asked of respondents. Efforts were made to make the questionnaire used as easy to complete as possible, however the questionnaires were essentially unchanged.

This design was chosen in consultation with CRD to allow for backward comparability with the previous 2007 survey. However, given the failure of this major element of the study to yield the volume of data expected of it, it is suggested that an alternative method be considered for any future studies.

In particular, it is suggested that any future questionnaire should be very much shorter and simpler

that those previously used, comprising no more than ten or so key questions. These questions could be chosen to focus on whatever the key concerns were at the time of commissioning.

The case study element of this study was very much expanded to gather additional qualitative data to compensate to some degree for the lack of quantitative data. This element of the study appears to have been very successful and it is therefore suggested that any future study includes case studies as a major element of its design.

## **Project Report to Defra**

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8. As a guide this report should be no longer than 20 sides of A4. This report is to provide Defra with details of the outputs of the research project for internal purposes; to meet the terms of the contract; and to allow Defra to publish details of the outputs to meet Environmental Information Regulation or Freedom of Information obligations. This short report to Defra does not preclude contractors from also seeking to publish a full, formal scientific report/paper in an appropriate scientific or other journal/publication. Indeed, Defra actively encourages such publications as part of the contract terms.

## **References to published material**

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9. This section should be used to record links (hypertext links where possible) or references to other published material generated by, or relating to this project.

BCPC/CABI (2007): **UK Pesticide Guide 2007** (ed. R Whitehead), BCPC/CABI Publishing.

Crop Protection Association (2001): **Minimising the Environmental Impacts of Crop Protection Chemicals**. Revised and extended proposals from the Crop Protection Association, The National Farmers Union, the National Farmers Union of Scotland, the Country Land & Business Association, The National Association of Agricultural Contractors, the Agricultural Engineers Association, and the UK Agricultural Supply Trade Association. Crop Protection Association UK Ltd, UK.

Defra/HSC/NAW (2006): **Pesticides, Code of Practice for Using Plant Protection Products**, Department for Environment, Food and Rural Affairs, London.

Haskoning (2006): **Non-Agricultural Diffuse Pollution – Substance and Impact Matrix**, prepared for Defra, 2006.

NAAC (2004): **Weed Control in Public Spaces**, National Association of Agricultural Contractors, Peterborough, UK.

Pesticides Forum (2007): **2006 report of indicators reflecting the impacts of pesticide use**. Department for Environment, Food and Rural Affairs, London.

Pesticides Forum (2009): **The 2009 Report on the Impacts and Sustainable Use of Pesticides: A Report of the Pesticides Forum**, available for download from the Amenity Forum Internet site (<http://www.amenityforum.co.uk/>).

Produce Studies (1996): **The Non-agricultural Use of Pesticides in England and Wales**, prepared for the Department of the Environment, UK, HMSO.

RPA (2008): **Determining the Usage and Usage Patterns of Amenity Pesticides Across the UK (PS2230)**, prepared by Risk & Policy Analysts and Brit Vegetation Management for Pesticides Safety Directorate and Department for Environment Food and Rural Affairs, UK.

UK Government (2006): **Pesticides and the Environment. A Strategy for the Sustainable Use of Plant Protection Products and Strategy Action Plans**, Department of Agricultural and Rural Development, Department for Environment Food and Rural Affairs, Pesticides Safety Directorate, Scottish Executive and Welsh Assembly Government, UK.

UK Government (2008): **UK Pesticides Strategy: A Strategy for the Sustainable Use of Plant Protection Products**, Department of Agricultural and Rural Development, Department for Environment Food and Rural Affairs, Health and Safety Executive, Pesticides Safety Directorate, Scottish Executive and Welsh Assembly Government, UK.

Voluntary Initiative (2006): **The Future for the Voluntary Initiative**, proposals from The Voluntary Initiative Steering Group submitted to Lord Rooker Defra Minister of State for Sustainable Farming and Food.