
The
Voluntary
Initiative
CROP
PROTECTION
MANAGEMENT
PLAN

2003–2004

ACKNOWLEDGEMENTS

This simple Crop Protection Management Plan (CPMP) has been devised by the UK's farming unions (i.e. the National Farmers' Union of England and Wales, the National Farmers' Union of Scotland, the Ulster Farmers' Union and the Country Landowners' and Business Association). It is part of their contribution to the 'Voluntary Initiative', a programme of measures, agreed by Government, to minimise the environmental impacts of pesticides.

The farming unions wish to thank members of the following organisations for their considerable time, support and assistance in drawing up this document:AEA,Association of Independent Crop Consultants, BASIS, Crop Protection Association, English Nature, Environment Agency, FWAG, LEAF, NAAC, NPTC, Otley College, RSPB, SEPA, UKASTA and Water UK, together with numerous individual farmers and advisers throughout the UK who so freely gave their time when participating in the pilot testing programme.

The farming unions wish to thank the Assured Food Standards schemes and LEAF for supporting the production and distribution of this booklet to farmers and growers.

LEAF (Linking Environment and Farming) is pleased to support the development of this CPMP proforma. LEAF has been involved in whole farm auditing for 10 years and such planning approaches are key to setting targets, getting credit for current practices and identifying where improvements can be made.In all walks of life there is an increasing demand for documentary evidence of good practice, and templates, such as CPMPs and the LEAF Audit, are important in gaining trust and public confidence. CPMPs will be a valuable part of the farmer's decision making process and will contribute to whole farm planning

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INTRODUCTION

The Government wishes to reduce the impact on the environment resulting from the use of pesticides. It has explored the role of a specific tax as a means of achieving this objective. It was estimated in early 2000 that a pesticide tax, if introduced as the Government's consultants recommended, would increase farmers' and growers' pesticides bill by a minimum of 25% (equivalent to £25 per hectare or £125m per annum in total).

Consequently the farming unions and other stakeholders proposed an alternative approach (now called 'The Voluntary Initiative' or VI) which, if implemented to the satisfaction of Government, will avoid the need to introduce a pesticide tax.The VI is a five year programme of work that is forecast to cost farmers and growers £11m per annum (equivalent to £2.20 per hectare) when fully implemented.

One of the key elements in the VI is a commitment for farmers and growers to formally consider the environmental impact of their own activities and take steps to reduce it.This is encapsulated in the process of drawing up a 'crop protection management plan' or CPMP. The industry has set itself a target of 200k ha under such plans by the end of 2003 and 30% of all sprayed land by 2006 when the VI formally comes to an end.All farms are encouraged to participate, including mixed or livestock farms that occasionally spray grassland or grow a small acreage of cereals for stock feed or grow maize for silage.
What is a CPMP?

The purpose of a CPMP is to put the environment at the heart of crop protection.At an individual farm level, the process of building a CPMP identifies the environmental risks to water, insects, plants and animals and biodiversity on the farm, and seeks to relate the crop protection practices to minimising these risks. It should address the farm's crop protection policy, detail water protection measures taken, indicate a commitment to improve operator competency and consider how the direct and indirect impact of plant protection products on non-target species can be mitigated.

KEY TO ABBREVIATIONS IN TABLES

APS

AFS

FABBL

GENESIS

LEAF

SFQC

DEFRA's Green Code of Good Practice (COP)

Statutory Minimum (REGS)

HOW DETAILED SHOULD A CPMP BE?

In seeking to guide farmers and growers on the scope, depth and possible format of a CPMP, the farming unions have drawn up a proforma which tries to compliment other initiatives, both statutory and voluntary, to avoid duplication and unnecessary bureaucracy. For example, completing this proforma should satisfy the crop protection element of the whole farm environment plan envisaged under Defra's Entry Level Scheme and should also be compatible in the future with the EA's Environmental Management Systems for Farms (EMSF).

You should not feel that filling in this proforma is the only way to honour this commitment. Completing a LEAF or EMA audit is an equally valid alternative approach. Several commercial consultants and farm software companies are developing equivalent approaches/ products.

All stakeholders, however, agree it is important that a CPMP emphasises the ICM approach (involving the use of thresholds, decision support and appropriate doses) and the adoption of 'Good Agricultural Practice'. This resists any prescriptive approach to the selection and use of crop protection products.

HOW TO COMPLETE THE PROFORMA CPMP

- Ideally the farmer or grower should draw up a CPMP with his agronomist but it is quite possible to complete it on one's own.
- The proforma is based on a large table. It is divided into four sections (general, biodiversity, water and action plans) subdivided into specific activities.
- Four scenario of environmental practice are then given for each activity (poor, basic, good and best). The list of 'activities' (rows) is far from exhaustive and should not be seen as prescriptive. You may add any new ones that you consider relevant to your activities or ignore those that are not.
- Having decided which scenario best equates to your unit's situation/practice, note it by ticking in the small box in the bottom right corner.
- The 'scenarios' are meant to be incremental,ie. the proforma works on the assumption that when moving from 'good' to 'best' that you are doing everything in the 'good' scenario category.
- Any abreviation adjacent to a tick box indicates that this level equates to an standard that is either the statutory minimum, in an approved 'Code of Practice' published by Government, a LEAF Marque standard or in one of the AFS farm assurance schemes (see left).
- At the end of each section enter your performance 'profile' by counting up the ticks in each column.These can be used for comparative purposes in the future.
- A CPMP should be reviewed annually so after the initial set up session,only a short annual review will be needed.
- The 2003 proforma used a calculated percentage formula to provide a benchmark but this profile is now considered more informative well as being simpler for a paper based CPMP.
- When you have completed your CPMP, tell your agronomist and/or your assurance scheme. Make sure your agronomist knows about your profile and your action plan priorities.

SUBSEQUENT FARM MANAGEMENT ACTIVITIES

At the end of the proforma you are encouraged to complete a personal action plan with priorities for improvement in the coming year. As a general rule it is recommended that you should concentrate on lifting the performance of Ds (poor) and Cs (basic) up to B (good) rather than taking Bs (good) up to A (best).

Your action plan points should be specific with a time frame eg.The 2000 litre HKB Sprayer will be tested in NSTS by 31 January 2003.A N Other (operator) will register with NRoSO by 31 October 2003.

REF	ACTIVITY	WHY THIS ACTIVITY IS IMPORTANT	GENERAL ADVICE	REFERENCE SOURCES
G1	Knowledge of the approved environmental Codes of Practice	All responsible persons should have copies of the relevant codes of good agricultural practice, which are practical guides to help farmers and growers avoid causing pollution. Abiding by the codes will contribute significantly to a persons ability to maintain good environmental practice. If you follow the advice given you will also be doing enough to comply with the law in respect of those specific matters addressed in each code. HSE inspectors refer to the guidance as evidence of good practice.	Defra's Codes for Protection of Air, Soil and Water cover prevailing law in England and Wales, the Codes cover Ulster whilst the Code of Good Practice for the Prevention of Environmental Pollution from Agricultural Activity (PEPFAA) applies in Scotland. The Code of Practice for the safe use of Pesticides on Farms and Holdings (often called the "Green Code") should be referred to for advice and guidance on measures that can be taken to protect humans and the environment from the negative effects of pesticides. For the purposes of this CPMP Pro Forma, organic farming is considered to equate to a full ICM programme.	The Codes for: Water (PB0587), Soil (PB0617), Air (PB0618), and the Green Code (PB3259) are available from Defra Publications (08459 556000) and/or The Stationary Office Ltd (0870 606 5566). The PEPFAA Code ISBN 07 559 10265 is available from The Stationary Office Ltd.
G2	Adoption of cultural control methods	Cultural control uses rotation, variety, sowing date and seed rate to avoid pests or minimise their effects. It encourages beneficial predators and parasites living in field margins, conservation headlands and specially created "beetle banks". Techniques such as cutting, harrowing and mulching may present a lower risk of harm to the environment and still protect crops from pest and disease.	Before using a pesticide it is important to examine other methods of control. Avoid becoming totally reliant on chemical control and where possible adopt cultural control methods (rotations, varieties, sowing dates etc) which will reduce pesticide input and lower costs. A diverse rotation can reduce the impacts of weeds, pests and diseases by interrupting the cycles. A wide range of crops in encouraged as it enhances habitats and produces a varied landscape - large areas of mono-cropping limit the opportunities for wildlife to find food, breeding sites or shelter. Drill crops as late as practical to reduce competition from germinating weeds and damage from aphid attach i8n the autumn, however, delayed sowing is not an option in soil types. Equally, early sowing is not an option for some areas. Integrate other control methods into your farming wherever possible and practice ICM.	
G3	Crop rotation	Crop rotation is crucial to prevent carry over of weeds, diseases and pests, especially nematodes by preventing the build-up of pests between susceptible crops. Skillful use of rotations maximises yields, reduces pesticide inputs, lowers costs and reduces the risk of environmental impact.	Adherence is recommended cropping intervals minimises pest build-up. A wide range of crops and sowing dates is encouraged as this enhances habitats and produces a varied landscape. Large areas of mono-cropping limit the opportunities for wildlife to find food, breeding sites or shelter. Crop distribution can exacerbate pest problems, especially if vulnerable crops are planted adjacent to the previous year's vulnerable crop - many pests can move from field to field. The best practices rotation is intended to supply food for birds and that bird cover on set-aside would count. It is recognised that keeping a percentage of land in continuous cropping can be sound practice when taken in a whole farm context. Note: The Defra CCS deadline for commencing spring sowing is mid-spring.	
G4	Variety choice	Pest resistant or pest-tolerant varieties have characteristics which help to minimise pest problems. Varietal resistance to pests can enhance control of soil-borne pests.	Where possible use pesticide resistant varieties as they will reduce pesticide input into the environment and lower costs. Applications of pesticides would take into account the inherent resistance of varieties (ie. appropriate dosages). It is accepted that variety choice is dictated by end-market specification and is therefore often out of the hands of the individual farmer or grower. If two varieties are fitted for the same market then choose to grow the one with the best disease tolerance. Take inherent disease resistance into account when planning possible the disease control measures eg. some diseases are more easily controlled with far lower doses of active than others. Do not neglect the disease diversification tables when planning the varieties to grow.	HGCA variety lists SAC Cereal Recommended List.
G5	Assessing the need to treat crops	Unnecessary use of pesticides can involve risks to the health of humans, both as users and consumers, insects, plants and the environment. It can also be uneconomic and could increase the possibility of pesticide resistance. Almost all pesticides, including fungicides, can have adverse effects, either directly or as a side-effect, on insects and other small organisms that are beneficial to farmers or the wider environment. Often these effects are only short-lived. In some cases unnecessary use may damage the crop. Consideration should therefore be given to alternative methods of tackling the problem before using the pesticide.	This is perhaps the most important and fundamental question for farmers and growers to consider in drawing up their CPMP. The decision to use a pesticide needs to be made carefully. The mere presence of a pest weed or disease in a crop does not justify action to be taken against it. It is important to firstly identify the pest or pests and consider whether the potential economic loss to the crop is outweighed by the cost of applying the pesticide needed or not. Although time-consuming it is good crop husbandry, can save money and will help to protect beneficial non-target species. Identifying crops at risk by forecasting, sampling, monitoring or trapping will help to maximise yields, reduce pesticide input and lower costs. The dose rate used should be appropriate and proportionate to the pest pressure plan to use as little as possible but as much as is necessary. Using too little is a waste of money and an unnecessary introduction of chemical into the environment. In addition what has been satisfactory in previous years may not be the most appropriate for the current crop. Frequent inspections mean that the product and the dose rate may be adjusted if the conditions in the current crop have changed since the recommendation was first made.	There are many sources of information and assistance in addressing this question, which tend to lead farmers into an appreciation of integrated crop management thresholds and their relevancy to farm and business practice eg. HGCA ICM Guidelines, LEAF ICM Handbook, TIBRE, SAC and ARC research reports.

ACTIVITY	GUIDANCE NOTES	ENVIRONMENTAL PRACTICE			
		D (POOR)	C (BASIC)	B (GOOD)	A (BEST)
GENERAL (1) – DECISION-MAKING & MONITORING					
Knowledge of the approved environmental Codes of Practice	G1	No knowledge of or no codes available on farm.	Limited knowledge of the code's content.	Copy of codes available and compliance with the statutory provisions therein.	Fully meet or exceed all statutory and advisory elements in the codes.
		☐	☐	*AFS* ☐	☐
Adoption of cultural control methods	G2	Total reliance on plant protection products.	Occasional use of cultural techniques (includes non-crop set aside) and limited consideration given to whether a pesticide is really needed.	Regular use of cultural techniques where appropriate.	Full ICM programmes on all crops.
		☐	☐	*AFS* ☐	*LEAF* ☐
Crop rotation	G3	Continuous autumn-sown cereals.	Arable rotation with autumn sown break crops or grass leys.	Crop rotation includes at least one spring sown break crop or set aside year.	FFull crop rotation which includes at least one year of uncultivated stubble or fallow from harvest to mid spring.
		☐	☐	*AFS* ☐	☐
Variety choice	G4	Pest and disease control by chemical means only, yield is the only consideration.	Pest/disease resistance considered, but not the primary factor.	Pest/disease resistance and variety diversification fully utilised.	Full ICM programmes on all crops.
		☐	☐	*LEAF* ☐	☐
Assessing the need to treat crops	G5	Applications made using dose rates and timings based on experience with the product in previous years.	Crop inspections used to vary either product or timing according to current crop requirements.	Frequent crop inspections used to adjust product and dose rate and timing to achieve most appropriate treatment.	No treatment unless ICM/economic thresholds or reliable prediction systems indicate the need for treatment.
		☐	☐	*AFS/ LEAF* ☐	☐
GENERAL SECTION PROFILE – SUB TOTAL		**D**	**C**	**B**	**A**

REF	ACTIVITY	WHY THIS ACTIVITY IS IMPORTANT	GENERAL ADVICE	REFERENCE SOURCES
G6	Choice of plant protection product	Correct choice of pesticide treatment is crucial not only to control the pest effectively but also to protect non-target species. The product's 'Environmental Information Sheet' provides key information on persistence and specificity.	Where possible choose products that have least impact on the surrounding area such as hedges, water courses and key species of wildlife and which are not harmful to predators and the other non-target species (See also Guidance B4). Try to choose formulations that minimise spills such as water-soluble bags or tablets. Efficacy should also be taken into account and users should consider the possible risk to humans and where applicable, livestock. Avoid the temptation to choose products that achieve total pest control. Identify the damaging pests or weeds and target control measures at them – leaving a few may be economically wise and provides food for wildlife. Read the label and observe any extra precautions that may apply to individual products.	BASIS, AICC
G7	Use of formal sources of advice on plant protection and/or crop production	It is usually worth seeking independent advice to identify appropriate measures that can be taken to prevent or control the risks associated with pesticides. Independent advice may also help with the diagnosis of the problem and selecting a means of control.	BASIS is an independent organisation set up to establish and assess standards in the pesticide industry relating to storage, transport and competence of staff. Advisers who also supply a product must hold a BASIS Certificate of Competence. BASIS also operates a professional {Register' where individuals must prove each year that they have remained technically up-to-date. Check that your adviser is on this Register.	
G8	Record-keeping	This is a statutory requirement under COPR (1986). A good pesticide recording system is a sensible management tool which can help one review past treatments and identify areas for improvement. Good records also help one stay within the law, manage stocks more economically and safely and provide a source of reference in the vent of the accidental contamination of people, wildlife or water.	The Green Code recommends that records on the following are retained: application, environment, health, stock disposal and equipment testing. There are no hard and fast rules for the way in which most pesticide records must be kept but it should be in a convenient way so they can be quickly consulted and easily understood. Various paper systems have been devised, which are now being superseded by farm management software. Records should be kept for a minimum of 3 years, but some need to be kept far longer for HSE purposes. the most recent computer programmes incorporate databases that check application against the appropriate regulations. Computer records are not necessarily better than paper systems. It all depends what is recorded and how easy it is to access. Generally automated recording only applies to precision farming systems which does have the advantage of showing what was actually applied to each part of the field, rather than just an average for the whole field.	CPA Leaflet – 'Record Keeping - A Practical Guide'
G9	Stock management of plant protection products	It is a growers responsibility to ensure that only approved products are applied to crops because the application of unapproved products is illegal. Many older crop protection products are no longer approved and changes to approval status are occuring all the time. To avoid large bills for waste disposal, an active process of stock management is required. Growers should be aware that the approval for many products will expire on 31 December 2003.	The Green Code should be referred to for advice and guidance on the requirement only to use approved products. The PSD Website contains a comprehensive list of all product approvals and their expiry dates if appropriate. Your agronomist should also be able to help you manage your stocks of crop production products.	The PSD website can be found at www. pesticides.gov.uk The CPA leaflet 'Pesticide Storage' contains advice and a checklist on store management.

ACTIVITY	GUIDANCE NOTES	ENVIRONMENTAL PRACTICE			
		D (POOR)	C (BASIC)	B (GOOD)	A (BEST)
GENERAL (2) – DECISION-MAKING & MONITORING					
Choice of plant protection product	G6	Products selected by price and effectiveness only.	Products selected for effectiveness whilst avoiding environmental impact.	Pesticide selected largely on their environmental profile by consulting environmental information sheets where available.	Choice of product is considered within an overall ICM strategy.
		☐	*COP* ☐	☐	*LEAF* ☐
Use of formal sources of advice on plant protection and/or crop production	G7	Rarely if ever, using own experience for crop protection products.	Farmer has his own BASIS qualification or takes occasional advice from a BASIS qualified agronomist.	Frequent advice taken from an agronomist on the BASIS Professional Register.	All treatments supported by written recommendations and checked against regulatory requirements.
		☐	☐	*AFS / ACCS* ☐	*LEAF* ☐
Record - keeping	G8	No records kept.	Modest system based on log book and /or invoices that complies with 'Green Code'.	System includes additional information such as justification, recommendation, harvest interval, etc.	Automated recording of treatments during application.
		☐	*COP / REGS* ☐	*AFS / LEAF* ☐	☐
Management of pesticide store	G9	No knowledge of what is in stock. No stock records. No annual checking of stock	Annual stock check. Annual inventory	Stock records maintained and up to date. Product approval status checked annually	Regular stock recording system. Regular checking of product approval status. Arrangements in place to ensure oldest products are used first.
		☐	☐	*AFS / LEAF* ☐	*AFS* ☐
GENERAL SECTION PROFILE – SUB TOTAL		**D**	**C**	**B**	**A**

REF	ACTIVITY	WHY THIS ACTIVITY IS IMPORTANT	GENERAL ADVICE	REFERENCE SOURCES
G10	Training in the proper application of pesticides	Under the Food and Environment Protection Act 1985 (FEPA) nobody is allowed to use pesticides unless they have received adequate instruction and guidance in the safe, efficient and humane use of pesticides and are competent for the duties they are called upon to perform. To achieve this, most users will be expected to have undergone some formal training and to have obtained a recognised Certificate of Competence relevant to the type of equipment they will be using.	Under the Voluntary Initiative operators are encouraged to join a continuous professional development programme, ie. NRoSO. All operators have a legal obligation to be trained even if they are covered by the "grandfather rights" age derogation. Regular refresher training is also strongly recommended.	County training group, Training Consultants. Local college training events & NRoSO membership.
G11	Ensuring all application equipment is fit for purpose.	Choosing the right equipment for the job and making sure it is properly maintained and correctly calibrated will significantly enhance both safety and efficiency of use.	Service of equipment on a regular basis. Make sure the equipment used is clean and there is a suitable and adequate supply of clean water. Particular care should be taken in selecting the right nozzles. Nozzle size and type may be critical in ensuring that the maximum dose is not exceeded, in ensuring the efficacy of the pesticide, and in minimising spray drift. Under the VI, farmers and growers are encouraged to maintain their equipment to a high standard and have it independently checked under the NSTS. It is good practice that all applicators are calibrated regularly (ie. at least 4 times a year) and especially after repair or changes.	BCPC Boom & Fruit Sprayers Handbook and "Using Pesticides" Handbook. HGCA publication. Guide to selecting nozzles. NSTS sprayer checklist.
G12	Filling/cleaning of booms and nozzles.	Certain sprayers require particular care when moving off to avoid localised overdosing or miss-application.	Purging on the move often means that the area needs spraying again to prevent misses which could lead to localised overdoses, especially on the headland. Recirculating booms avoid the need to purge. By spraying the headlands last one could avoid localised overdosing on the headland and by avoiding travelling on treated areas the amount of surface contamination on the sprayer is reduced.	
G13	Prevention of drift.	Spray drift is a common cause of the misuse of pesticides and a potential source of friction between farmers and their neighbours. Drift can also cause damage to wildlife and watercourses. By spraying in suitable weather conditions pesticide pollution of water can also be avoided because the weather conditions can significantly influence the levels of pesticides in surface water. Frosty and wet conditions contribute to surface run-off and wind speed and direction may increase spray drift.	To avoid spray drift apply pesticides only in favourable weather conditions (stable atmospheric conditions, favourable wind speed and direction) using suitably adjusted equipment (right nozzles and pressure choice, correct equipment setting, boom height). It is often assumed that low drift technology only means air including nozzles by }appropriate low drift technology' could include air sleeve sprayers, twin fluid atomisers, air inclusion nozzles, double orifice nozzles, controlled droplet applicators, electrostatics, shrouded sprayers, windbreaks, buffer zones etc. Only star rated nozzles can be used to reduce the buffer zone for LERAP purposes. the higher the star-rating the lower the risk of spray drift occurring and the more you are able to reduce the buffer zone. Always listen to the weather forecast, particularly wind speed and direction and check the wind on site. Safest spraying is in a Force 2 light breeze, blowing away from open water or other susceptible non-target areas. Avoid spraying in dead calm conditions, especially on warm sunny days. This reduces the size of spray droplets by evaporation and increases the risk of spray drift. Do not spray when the solid is waterlogged or frozen as this will increase run-off. It must be noted that the efficacy of certain products is adversely affected by certain low drift technologies. Always check the label before use.	NSTS sprayer checklist. CPA leaflet "Nozzle Selection and Maintenance - A practical Guide" and "Avoiding Drift". HTCA Nozzle Selection Chart.

ACTIVITY	GUIDANCE NOTES	ENVIRONMENTAL PRACTICE			
		D (POOR)	C (BASIC)	B (GOOD)	A (BEST)
GENERAL (3) – APPLICATION AND EQUIPMENT					
Training in the proper application of pesticides	G10	No training ever undertaken.	Limited basic training undertaken.	Operator holds relevant NPTC certificate or fully trained, but derogated under 'grandfather rights'.	Operators on NRoSO Register and certificated on all equipment used.
		☐	☐	*AFS / REGS* ☐	☐
Ensuring all application equipment is fit for purpose	G11	Sprayer serviced or calibrated only when found to be faulty.	Sprayer serviced and calibrated annually.	Regular recorded servicing and calibration of sprayer.	All application equipment NSTS-tested annually.
		☐	☐	*AFS / REGS* ☐	☐
Filling/clearing of booms/nozzles	G12	No particular attention paid to this operation and booms /nozzles are purged wherever most convenient.	Spray booms / nozzles purged whilst travelling over the crop.	Spray booms / nozzles purged whilst travelling over an under-dosed cropped area that is not close to surface waters.	Spray equipment has instant check valves and recirculating boom lines.
		☐	☐	☐	☐
Prevention of drift	G13	Spraying is done in all except very windy conditions.	Rely on suitable wind conditions as given in the 'Green Code' to control drift.	Use low drift technology when spraying adjacent to sensitive areas.	Use appropriate low drift technology at all times, except in exceptional circumstances.
		☐	*COP* ☐	*LEAF* ☐	☐
GENERAL SECTION PROFILE – TOTAL		**D**	**C**	**B**	**A**

REF	ACTIVITY	WHY THIS ACTIVITY IS IMPORTANT	GENERAL ADVICE	REFERENCE SOURCES
B1	Use of formal sources of environmental advice	Protecting and enhancing biodiversity is not always straightforward but neither is it necessarily as expensive as it might first seem. Seeking guidance on the measures that are most appropriate for your farm's potential contribution to wildlife protection and enhancement is strongly encouraged.	Environmental advice is available from organisations such as FWAG, The Game Conservancy Trust, County Wildlife Trusts, and LEAF.	FWAG, EMA and RSPB Information Sheets
B2	Evaluation of farm's environmental features	Identifying a farm's specific environmental features and assessing their ecological value is an important starting point when planning whether or not to apply pesticides, and how and when to apply them. Mapping the key environmental features, wildlife habitats and species on the farm will also enhance awareness by other farm colleagues. Protecting what is already of wildlife value on your farm would take preference over new habitat creation. Make sure you know what is important about your holding at an early stage of planning.	Mapping the key environmental features, wildlife habitats and species on the farm will also enhance awareness by other farm colleagues. Drawing up a simple 'environmental inventory' map is suggested. It can be based on a Rural Land Register map or the Ordinance Survey's Super Plan (widely adopted in the mapping module of many farm management software programs). Additional assistance from FWAG, BTO, Sustainable Farming Co, Farming Environment Co, local BAPs and farming conservation groups is available to help farmers.	FWAG 'Starter Pack' CD-ROM, FWAG Landwise Reports, local BAPs & BTO bird census, EMA.
B3	Environmental management training and competency	As part of the VI programme. farmers who make decisions about pesticide use should be competent in understanding environmental risks of pesticide use.	A NPTC certificate is being developed for farmers which addresses this issue. This will assist you in completing your CPMP, and will help you to identify measures you can take to protect and enhance wildlife on your farm.	Lantra, Colleges, NPTC & county training providers
B4	Reducing exposure of non-target organisms.	Generally speaking the risks to wildlife are greatest where broad spectrum insecticides are used because they can harm non-target species which provide natural biological control of crop pests and/or food for farmland birds. Similarly, the use of herbicides can remove weeds which provide an important resource for farmland birds such as a source of seeds overwinter. By avoiding the temptation to achieve total control the risks to biodiversity can be minimised. It can also be an economically wise move. Non-target organisms like birds and mammals can be at particular risk from treated seed and granular insecticides. Bees are important pollinators of crops and highly susceptible to many insecticides.	As far as possible choose products which are specific to the problem and are not harmful to predators and other non-target species. Identify the damaging pests or weeds and target the control measures at them. Notify local bee keepers (via your county spray liaison officers) if flowering crops are to be treated. Spray in early morning or late evening when bees are not working and take note of the specific label warnings on the product. Also, honeybees are best safeguarded by avoiding the use of insecticides when in-crop weeds are in flower. Make sure seeds dressed with pesticides, granules and pellets are incorporated thoroughly and do not leave any spills exposed on the soil surface. Buffer zones are important to protect non-crop habitats from pesticide drift. A "permanent" buffer zone will give vulnerable habitats permanent protection from drift.	EISs (Environmental Information Sheets) are issued for each product by the manufacturer. They are available on the VI website, CSL Liaison and from your distributor. CPA Leaflet – 'Pesticides & Conservation – A Practical Guide'. CPA Leaflet – "Insecticide Guidelines"

ACTIVITY	GUIDANCE NOTES	ENVIRONMENTAL PRACTICE			
		D (POOR)	C (BASIC)	B (GOOD)	A (BEST)
BIODIVERSITY (1) – ASSESSMENT					
Use of recognised sources of environmental/conservation advice	B1	Rarely if ever	Infrequently	Regular guidance taken from agronomists that have received environmental training.	Participating in programmes led by specialist nature conservation advisers eg.. FWAG
		☐	☐	*AFS* ☐	*LEAF* ☐
Evaluation of farm's environmental features	B2	No assessment made.	Full environmental 'asset' inventory completed and mapped.	Professional guidance taken on the environmental 'value' of the features found on the farm.	Participating (where appropriate) in recognised research/conservation programmes or management practices implemented for identified key species and habitats.
		☐	☐	☐	*LEAF* ☐
Environmental management training and competency	B3	No recognised training ever undertaken	Limited attendance at training events and demonstrations	Participating in CPD programmes or similar with strong environmental content	Suitably qualified in environmental conservation or working on farm with a formally qualified person
		☐	☐	*LEAF* ☐	☐
Reducing exposure of non-target organisms and vulnerable habitats to pesticides	B4	No special measures taken.	Appropriate plant protection products selected with reference to EISs. Attention paid to ensuring that applications are made correctly at optimum times and conditions. Use thresholds/forecasting where methods are available. Compliance with statutory and advisory buffer zones.	Identification of vulnerable features on farm and in-crop buffer zones used to protect all non-crop features (terrestrial and aquatic).	No pesticides used on vulnerable areas on farm, with permanent non-cropped buffer zones used to protect all terrestrial and aquatic features.
		☐	*REGS* ☐	☐	*LEAF* ☐
BIODIVERSITY SECTION PROFILE – SUB TOTAL		**D**	**C**	**B**	**A**

REF	ACTIVITY	WHY THIS ACTIVITY IS IMPORTANT	GENERAL ADVICE	REFERENCE SOURCES
B5	Encouraging in field biodiversity	Encouraging in-field biodiversity can increase the range and number of beneficial insects, prevent ingress of aggressive weeds and improve wildlife on farms. The wildlife that can occur within the crop, such as grey partridge, skylark, rare arable plants and a wide variety of insects, form an important part of the biodiversity on a farm.	The mix of rotation planning, buffer strips, variety choice, appropriate dose rate and product choice are typical parameters that should be considered. The provision of habitats such as 'beetle banks' grass strips/conservation headlands not only helps sustain biodiversity but allows natural pest predators to migrate easily into the crop. A weedy stubble can be used to provide weed seeds for birds overwinter. Such measures should be used to compensate for the loss of eg. week seeds or invertebrate food for birds if a broad spectrum pesticide has been used.	NIAB/ARC/HGCA guidelines. TIBRE Programme. CPA Leaflet – Pesticides & Conservation – A Practical Guide'.
B6	Conserving biodiversity in non-cropped areas	Sympathetically managed non-cropped areas such as field margin areas set aside strips, hedges and ditches help to increase insect biodiversity and natural biological control. Permanent grass margins will also prevent the movement of weeds into the crop whilst providing a habitat for wildlife if suitable managed.	Any non-cropped areas should be protected from contamination by avoiding overspraying or allowing spray to drift into ditches, hedges and hedge bottoms and other areas important for wildlife such as Natura 2000 (SSSIs). Consider positive wildlife management which might include altering the treatments applied to crop headlands or introducing boundary strips of bare ground/grass mixtures between the crop and the field boundary. Do not spray out hedge bottoms – there are better ways of managing weeds. ~Be aware of the indirect effect of broad spectrum herbicides which remove plants that host the insect populations upon which many bird species depend. Cultural methods need to be used judiciously as some and not necessarily friendly to wildlife eg. harrowing destroys eggs and young ground-nesting birds.	BPCA/WIIS guidelines & RRAG guidelines on resistance management. Advice on positive wildlife management is provided by FWAG, the Game Conservancy Trust and LEAF. CPA Leaflet - ''Pesticides & Conservation – A Practical Guide''. CPA Leaflet – ''Insecticide Guidelines''. Defra, CSS and ESA literature, SEFRAD Rural Stewardship Scheme literature.
B7	Rodenticide use	Residues of second generation anticoagulant rodenticides are known to occur widely in the tissues of a number of species of birds of prey such as red kite and barn owls, as well as other predators. Incidents of poisoning of birds of prey through eating poisoned rodents have been reported regularly. Following instructions correctly and fully, and using products and techniques which are less hazardous to birds of prey, will reduce the risk of contamination.	Follow best practice advice from PSD and HSE to avoid the development of resistance by rats to the newer anticoagulant rodenticides. General farmyard cleanliness/tidiness and effective storage of feeding stuffs significantly reduces rodent numbers. Be aware of the particular vulnerability of raptor members of the food chain and consider using a first generation rodenticide initially to reduce risks to birds of prey. unless resistance is known. Carefully follow the label instructions accompanying any rodenticide and clear up used baits and dead carcasses.	Control of rats with rodenticides: a complete guide for best practice. See www.csl.gov.uk and EN/RSPB leaflets.

ACTIVITY	GUIDANCE NOTES	ENVIRONMENTAL PRACTICE			
		D (POOR)	C (BASIC)	B (GOOD)	A (BEST)
BIODIVERSITY (2) – CONSERVATION					
Encouraging in-field biodiversity	B5	No special measures taken. ☐	Appropriate plant protection products selected e.g. avoiding broad spectrum products wherever possible. Applications timed to reduce risks to wildlife at critical periods. *AFS / COP* ☐	Widespread adoption of ICM techniques e.g. refuges, reduced dose rates, cultural control methods (including variety choice and mixtures) and use of thresholds/forecasting. ☐	Participating in an advanced conservation or stewardship programmes and use of compensatory measures (e.g. beetle banks, conservation headlands, provision of weedy stubbles) wherever broad spectrum herbicides and insecticides used. *LEAF* ☐
Conserving biodiversity in non-cropped areas	B6	No special measures taken. ☐	All non-cropped areas managed/ maintained sympathetically to wildlife needs. Compliance with statutory and advisory buffer zones adjacent to non-cropped habitats. *AFS / COP* ☐	Constructive and extended use of permanent non-cropped areas e.g. long term set aside. Buffer zones used to protect all non-cropped areas (terrestrial and aquatic). ☐	Participating in advanced conservation programmes. Permanent buffer zones used to protect all terrestrial and aquatic non-cropped habitats. *LEAF* ☐
Rodenticide use	B7	No special measures taken. ☐	Trained and competent in use of rodenticides. Prebaiting and bait/carcass removal practised. *AFS* ☐	Regular site cleansing and habitat removal practised. Advice sought on product selection to minimise risks to non-target organisms. Use of trapping in preference to rodenticides where possible. ☐	Full anti-resistance programme in place and all operators certificated or use BPCA licensed contractors. ☐
BIODIVERSITY SECTION PROFILE – TOTAL		**D**	**C**	**B**	**A**

REF	ACTIVITY	WHY THIS ACTIVITY IS IMPORTANT	GENERAL ADVICE	REFERENCE SOURCES
W1	Protection of groundwater	Special attention should be paid to ground water protection. Once polluted, groundwater can take many years to recover as pollutants will not undergo the degree of dispersion, dilution and degradation that occurs in surface waters.	Professional advice is recommended if the farm is situated in a vulnerable area. Identifying and mapping sensitive areas on the farm will help users to recognise the areas where extra care should be taken when applying pesticides. Groundwater Protection Zones (GPZs) have been defined by the Environment Agency for nearly 2,000 groundwater sources used for public drinking water supply. The GPZs provide an indication of the risk to groundwater supplies. Generally the closer the activity or release is to a groundwater source the greater the risk. Three zones (an inner, outer and total catchment) are usually defined although a fourth zone (zone of special interest) is occasionally defined. The high risk products (identified by the EA for groundwater are atrazine, bentazone, simazine, chlorotoluron, mecoprop, isoproturon. This information is not generally available in Scotland – consult your local SEPA office.	www.environment-agency.gov.uk Go to 'Your Environment', click on 'What's in my backyard', go to 'Data Maps', Click on 'groundwater' in the Show Layer box in the left hand corner and then click GO. Input your postcode and press enter. Groundwater vulnerability maps available from the Stationary Office.
W2	Protection of surface water features	Under the Water Resources Act 1991 it is an offence for any person to cause or knowingly permit any poisonous, noxious or polluting matter to enter controlled waters. Some pesticides are extremely hazardous to fish and other aquatic organisms and can be lethal in very small doses.	Surface water includes lakes, ponds, reservoirs, streams, rivers and water courses (natural or artificial). It also includes dry ditches which have the potential to carry water at different times of the year and which feed into other watercourses. Ensure the operator is educated on the potential effects of pesticides on surface water. Identify and map surface water areas on the farm as this will help users to recognise the areas where extra care should be taken when applying pesticides. Use uncropped headlands as they separate spraying operations from watercourses. When spraying near a watercourse with a significant flow, spray in the opposite direction to the flow (ie. upstream). This reduces the maximum concentration of pesticides that could occur at any one point in the watercourse and hence reduces the risk to aquatic life. Problem pesticides for surface waters (identified by the EA) are isoproturon, mecoprop MCPA, simazine, chlorotoluron, bentazone and atrazine. Further details on problem pesticides in your area can be obtained from local EA offices or water companies.	CPA leaflet "Spray Drift – A Practical Guide" and "Every Drop Counts"
W3	Awareness of local/ downstream pesticide issues within the catchment	Pesticide losses from one farm may have implications for the quality of surface water downstream and the need to treat water abstracted for drinking water supply. Also, many farms in the neighbourhood and therefore in the same water catchment area, are likely to be using similar products at the same time. This increases the risk to the water environment more than if products were used over a longer time-frame. Awareness of factors affecting the catchment area and issues downstream may help individual farms to limit their contribution to the problem.	Think about the water on your farm and where it goes to. Avoid diffuse and point source pollution. Find out what problems exist in your area. Avoid problem pesticides where possible ie. pesticides which are most frequently found in surface water. These include isoproturon, mecoprop, MCPA, simazine, chlorotoluron, bentazone and atrazine. Reduce rates or avoid applications during vulnerable periods eg. wet autumns. Consult the relevant product application "decision trees".	Contact your local water company or relevant agency office for advice on local problem pesticides. CPA leaflets "Emergency Procedures – A Practical Guide" and "Every Drop Counts"
W4	Emergency Action Plan	The availability of an emergency action plan will help minimise water pollution problems caused by emergency incidents. Awareness of the plan among pesticide users will also help increase how efficiently an emergency incident is dealt with on-farm.	A plan instructing how to handle pesticides should be available on the farm. Everyone working with pesticides should be aware of this plan and of what to do in case of an emergency. Keep a detailed written record of every emergency and identify any necessary improvements to farm procedures. Be aware of the emergency phone numbers on product labels and keep an up-to-date list of addresses and telephone numbers of key emergency contacts. The availability of a mobile phone can be a distinct advantage in emergency situations. Review plans regularly, especially after any emergency incident.	CPA leaflet 'Emergency Procedures – A Practical Guide'.

ACTIVITY	GUIDANCE NOTES	ENVIRONMENTAL PRACTICE			
		D (POOR)	C (BASIC)	B (GOOD)	A (BEST)
PROTECTION OF WATER (1)					
Protection of groundwater	W1	Limited knowledge of groundwater vulnerability or Groundwater Protection Zones (GPZs).	GPZs identified.	Leaching potential of soils identified from relevant Agency's groundwater vulnerability maps.	GPZs and leaching potential identified. Products posing a high risk to groundwater not used.
		☐	☐	*LEAF* ☐	☐
Protection of surface water *(omit if no eligible watercourses/ surfaces water on farm)*	W2	Surface waters are not mapped.	All surface waters identified and mapped.	Map of the farm is available detailing the farm yard drainage system, field drains and drainage ditches.	Surface waters protected by uncropped or unsprayed 6m headlands.
		☐	☐	*LEAF* ☐	☐
Awareness of local/downstream pesticide issues within the catchment. *(omit if no eligible watercourses/ surfaces water on farm)*	W3	No knowledge of local catchment issues	Basic knowledge of water features in the catchment, sites of downstream abstraction points and problem pesticides.	Account taken of problem pesticides by adjusting rates and/or timing of applications to reduce risk.	Problem pesticides not used.
		☐	☐	*LEAF* ☐	☐
Emergency action plan	W4	No emergency plan.	Operators have a limited knowledge of the actions required in an emergency.	Staff or contractors have a clear understanding of actions required in the event of an accidental spillage.	A documented emergency action plan available to all staff, contractors and emergency services detailing farmyard/field drainage and places where pollution can be contained.
		☐	☐	*AFS* ☐	*LEAF* ☐
WATER SECTION PROFILE – SUB TOTAL		**D**	**C**	**B**	**A**

REF	ACTIVITY	WHY THIS ACTIVITY IS IMPORTANT	GENERAL ADVICE	REFERENCE SOURCES
W5	Accidental Spillage	Accidental spillages, if not dealt with quickly and appropriately can present a risk of pollution due to surface run-off, drain-flow or seepage.	Try to contain spillages as soon as possible after they have occurred. Keep a spillage kit to hand including brush, shovel, empty container/plastic bags and ties. Block drains if the spill might reach them. If liquid, put sand or another inert/ absorbent material (e.g. cat litter) round the soil and then onto it. If solid, sweep it up gently, sprinkle sand or another absorbent material onto it and sweep again. Collect all sweepings and contaminated materials into a strong, impermeable, marked container and dispose of via a waste disposal contractor.	CPA leaflet 'Emergency Procedures - A Practical Guide'
W6	Pesticide Storage Standards	If not properly stored pesticides may contribute to the pollution of surface and ground water. Prevention of fire is a high priority as "fire water" can easily pollute surface and ground water.	Make sure pesticide stores are suitably sited away from ponds, watercourses, wells and boreholes and where easy access can be gained by emergency vehicles. It should also be separate from buildings housing hay, straw, fertiliser, fuel and other combustible materials. The store building should be constructed of fire resistant materials, be well lit and ventilated and be marked with appropriate warning signs. It is strongly recommended that the store is bunded so that it is capable of containing all spillages and leakages. Records of all pesticides in storage should be kept (see G9). BASIS can provide further advice on best practice on pesticide storage for large stores and contractors	HSE Agricultural Information Sheet AIS16, Guidance on storing pesticides for farmers and other professional users. CPA leaflet - 'Pesticide storage - A Practical Guide'. BASIS can provide further advice on best practice on pesticide storage for large stores and contractors.
W7	Mixing pesticides and filling equipment	Most spills and splashes of concentrate are likely to occur during mixing and filling operations (each drop of undiluted product can contain up to half a gram of active ingredient - although this level sounds small the standard specified by the EU for the amount of pesticide in drinking water is very low - 0.1 parts per billion).	There is no definitive official advice on where to fill a sprayer although research into new advice is underway. Avoid filling sprayers in areas anywhere near drains where drainage water could contaminate rivers, streams or ditches. If possible, set aside a special area for mixing where spills cannot enter watercourses or drains - remember spills that are washed into yard drains can reach ground or surface water directly. Providing you are not in an area vulnerable to groundwater pollution, fill the sprayer on an area of grass and soil, (strengthened with 4-10cm of medium-sized gravel, hardcore road planings to take frequent traffic), rather than on concrete. Make sure the area is not underlain by drains. Great care should be exercised during the filling/mixing operations as spills and splashes (on concrete in particular) can present a serious risk of pollution from contaminated run-off following rainfall. Closed transfer systems are available but may not be suitable for all situations. Further advice can be sought from the environment agency.	CPA leaflet - 'Every Drop Counts'. Defra document - 'Keeping pesticides out of water'
W8	Protection of water supplies	Water should not be taken directly from mains water supply because of the risk of back siphoning leading to contamination of drinking water supplies.	An indirect water supply exists where the sprayer is not directly connected to the water source e.g. when an intermediate tanker (bowser) is used. The use of a one-way valve will protect water supplies by only letting water out of the mains and preventing back siphoning.	Agricultural premises - information for anyone installing, modifying or maintaining plumbing installations, prepared by Water Regulation Advisory Service. Go to www.wras.co.uk., click on 'Publications Index' and scroll down to 'Guidance Booklets'.

ACTIVITY	GUIDANCE NOTES	ENVIRONMENTAL PRACTICE			
		D (POOR)	C (BASIC)	B (GOOD)	A (BEST)
PROTECTION OF WATER (2)					
Product spillage	W5	Materials to contain spillages are not available on-farm.	Inert material near mixing facility.	Inert material in or near chemical store. Spillage kit close by.	Supply of inert material etc at all filling stations. Residues disposed via a licensed waste contractor.
		☐	*COP* ☐	☐	☐
Pesticide Storage Standards	W6	No safe designated storage.	Locked building or cabinet. Chemicals stored in plastic trays or store has impervious base with no drains and is bunded.	Locked, bunded, frost proof dedicated storage area. Store has been approved by an assurance scheme in last 3 years.	Store is purpose built to BASIS standards.
		☐	☐	*AFS* ☐	☐
Mixing pesticides and filling equipment	W7	Site is a) on porous sandy or shallow soils or b) on hard standing with surface drainage to drain, ditch, soak-away or watercourse.	Drainage from mixing/filling site will not reach drains, ditch, soakaway or watercourse. Spray tank is not allowed to overflow.	Mixing and filling is done on a bunded hard surface.	Additional special procedures are in place (including closed transfer systems). Drainage is to a sealed container for authorised disposal.
		☐	☐	*LEAF* ☐	☐
Protection of water supplies	W8	Mains supply, rivers,streams or pond water used to fill sprayers directly.	Indirect water supply used to fill most spray equipment. Mains supply is not fitted with a one-way valve.	Indirect water supply used on most occasions. Mains supply is fitted with a one way valve.	Water supply comes from an indirect mains supply or from collected rain water.
		☐	☐	*COP* ☐	☐
WATER SECTION PROFILE – SUB TOTAL		**D**	**C**	**B**	**A**

REF	ACTIVITY	WHY THIS ACTIVITY IS IMPORTANT	GENERAL ADVICE	REFERENCE SOURCES
W9	On-farm transport of pesticides – dilute pesticides	A significant number of pollution incidents leading to death of aquatic life are caused each year by accidents during the transport of pesticides.	If pesticides are transported in application equipment make sure hoses, nozzles and other fittings are maintained according to the manufacturers instructions. Drive carefully and at a steady pace to prevent the contents of the spray tank slopping out. Make sure that users are aware of exactly what to do in case of an accident. Take prompt action to limit the effects of any accidents. Check that all equipment and containers are properly closed and not leaking.	Follow the guidance given in the Defra "Code of Practice for the Safe Use of Pesticides on Farms and Holdings" (Green Code)
W10	On-farm transport of pesticides – Concentrate	A significant number of pollution incidents leading to death of aquatic life are caused each year by accidents during the transport of pesticides.	When transporting pesticide containers, load the vehicle in a way that prevents them from falling over and make sure that the load is secure before moving off. Take care to prevent damage to pesticide containers and equipment during loading and unloading. If possible take routes that avoid crossing or close proximity with watercourses ever if these are longer.	
W11	Local Environmental Risk Assessment for Pesticides (LERAP/no spray zones)	Many pesticides are highly toxic to aquatic life. LERAP/No-spray zones are a statutory requirement for these products to ensure that spray drift fallout into watercourses does not reach toxic levels and damage aquatic biodiversity. The continued availability of these products relies on compliance with this requirement. NB: This activity may be omitted if there are no eligible watercourses on the farm.	If you use a ground crop sprayer you may be able to reduce the water protection buffer zone detailed on the product label by carrying out a LERAP. Carrying out and recording a LERAP is compulsory and even if you decide to stick to the standard five metre buffer, a written record of your assessment must be kept. Even if a product does not have a statutory requirement for a no spray `zone it is best practice to apply a no spray zone for all pesticide applications alongside water courses.	MAFF publication – 'Local Environmental Risk Assessment for Pesticides – A practical guide'. Farmers and Growers' page on the Pesticide Safety Directorate's (PSD) website www.pesticides.gov.uk
W12	Cleaning / emptying inside of sprayer	The cleaning and emptying of the inside of the sprayer is a potential source of pesticide pollution and may adversely affect watercourses on the farm.	The sprayer manual will give guidelines on best washing procedure. Use this advice together with any specific product advice. The best place to clean and empty or spray out the inside of the sprayer is on an area of crop that has not received the maximum dose. If cleaning elsewhere the washings must be collected and either sprayed on to an area of crop that has not received the maximum dose or disposed of to another area of land in accordance with the Groundwater Regulations. Washings may also be disposed of via a licensed waste contractor. Procedures that minimise the need to empty the sprayer include the use of internal sprayer, tank cleaning units and rinsing devices, the use of tank rinse nozzles which allow the job to be done in the field quickly and with minimal water and the use of more water efficient sprayers. Clean the sprayer at the end of each spraying day (if you are using the same product on consecutive days it is not necessary to do a full clean).	CPA Leaflet - 'Sprayer Cleaning - A Practical Guide'

ACTIVITY	GUIDANCE NOTES	ENVIRONMENTAL PRACTICE			
		D (POOR)	C (BASIC)	B (GOOD)	A (BEST)
PROTECTION OF WATER (3)					
On-farm transport of dilute pesticides (spray solution)	W9	Watercourses are crossed by fords and not bridge or tunnel (where available).	Transport of pesticides is in line with the guidelines set out in the Green Code. All equipment is checked for drips and leaks before setting off.	Transportation of pesticides around farm is minimised by suitable siting of pesticide store and mixing/filling areas.	Routes are chosen that avoid proximity to watercourses even if these are longer. Copies of the labels for the pesticides being transported are carried so that the emergency services will know exactly what they are dealing with.
		☐	*COP* ☐	☐	☐
On-farm transport of concentrated pesticides	W10	Pesticide containers are carried inside tractor cabs or along with other farm produce.	Transport of pesticides is in line with the guidelines set out in the Green Code. All containers are checked for drips and leaks before setting off.	Concentrate is transported in sealed, lockable containers.	Routes are chosen that avoid proximity to watercourses even if these are longer. Copies of the labels for the pesticides being transported are carried so that the emergency services will know exactly what they are dealing with.
		☐	*COP* ☐	☐	☐
Local Environment Risk Assessment for Pesticides (LERAP)/ no spray zones. *(omit if no eligible watercourses/ surfaces water on farm)*	W11	Not aware of LERAPs. Spray close to water with all products	LERAP always applied when required.	5m no-spray zone applied for all products with buffer zone requirement.	5m no-spray zone applied for all products.
		☐	*AFS / STATUTORY REGS* ☐	☐	☐
Cleaning/emptying inside of sprayer	W12	Sprayer not washed and/or washings not collected.	Sprayer manual guidelines on best washing procedures are followed and specific product advice taken into account.	Sprayer is washed out before leaving the field and washings are sprayed on a part of the crop that has not received the maximum dose or disposed onto 'groundwater authorised' site.	Procedures in place to minimise the need to clean an empty sprayer.
		☐	☐	*AFS / COP / LEAF* ☐	*AFS* ☐
WATER SECTION PROFILE – SUB TOTAL		**D**	**C**	**B**	**A**

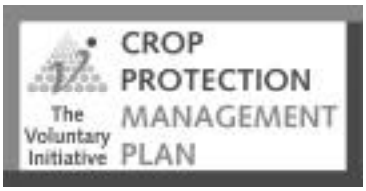
REF	ACTIVITY	WHY THIS ACTIVITY IS IMPORTANT	GENERAL ADVICE	REFERENCE SOURCES
W13	External cleaning of sprayer and other equipment	The cleaning of the exterior of the sprayer and other equipment is a potential source of pesticide pollution and may adversely affect watercourses on the farm through surface run-off, drain-flow or seepage.	Wash the outside of the sprayer with clean water. A low volume washing brush is more effective and uses less water than a high pressure spray gun. The best place to wash the sprayer is on an area of crop that has not received the maximum dose. If cleaning elsewhere the washing must be collected and either sprayed on to an area of crop that has not received the maximum dose or disposed of to another area of land in accordance with the Groundwater Regulations. Washings may also be disposed of via a licensed waste contractor. Nozzles, nozzle filters and boom end caps should be soaked in a bucket of appropriate cleaning agent and scrubbed clean with a soft brush. Contaminated mud from a treated field on tractor and sprayer wheels should be removed before leaving the field. Store the sprayer under cover to prevent rain washing off any contaminated deposits.	Follow ghr guidance given in the Defra "Code of Practice for the Safe Use of Pesticides on Farms and Holdings " (Green Code), CPA Leaflets – "'Agrochemical Disposal – A Practical Guide" and "Container Cleaning – A Practical Guide"
W14	Cleaning and disposal of empty pesticide cans	Cleaning containers correctly at the time of use ensures that a potential source of pesticide loss to the environment is kept to an absolute minimum. Thoroughly cleaned containers present the least possible hazard and the widest range of disposable options.	Always thorough rinse empty containers immediately after emptying. Thoroughly rinsed containers are generally safe for disposal. Do not allow the remaining liquids to dry. The washing of containers should take place away from the drains and watercourses. It is also economical and efficient to add the washings to the spray tank as this ensures that all the chemical is used up. Where possible, the use of closed transfer systems if recommended. Containers may currently be burnt or buried on farm but best practice is to dispose of via a waste contractor.	Follow the guidance given in the Code of Practice for the Safe Use of Pesticides on Farms and Holdings. CPA Leaflets 'Agrochemical Disposal – A Practical Guide'. 'Container cleaning – A Practical Guide'.

ACTIVITY	GUIDANCE NOTES	ENVIRONMENTAL PRACTICE			
		D (POOR)	C (BASIC)	B (GOOD)	A (BEST)
PROTECTION OF WATER (4)					
External cleaning of sprayer and other equipment	W13	Sprayer not washed or washed down on an unauthorised site. ☐	Wash down conducted on a site with a 'groundwater authorisation or washings collected and disposed to such a site. *COP / REGS* ☐	Sprayer is washed down before leaving the field in an underdosed area and away from watercourses. Sprayer stored under cover. *COP / LEAF* ☐	Secondary washings are applied to the same crop or sites with a 'groundwater authorisation' or all washings disposed of to a licenced waste contractor. ☐
Cleaning and disposal of empty pesticide containers	W14	Cans rinsed in dilute spray and stored for disposal. ☐	Cans are rinsed in clean water before on-farm burning. Provision of a sealed 'bin' for foil tops. ☐	Containers are cleaned and disposed of in line with the guidelines set out in the Green Code *AFS / COP* ☐	Cans are thoroughly cleaned. Empties are contained in a vessel for temporary storage, kept under cover and stored upright before disposal via incineration or at a licensed disposal site. ☐
WATER SECTION PROFILE – TOTAL		**D**	**C**	**B**	**A**

	ACTIVITY REF	ACTION PLAN
Priority improvements for immediate attention		
Improvements meriting attention in future.		

TARGET FARM PROFILE	A	B	C	D

Summary Information



Farm: .....

Address: .....

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Total Farm size (Ha) : .....

Estimated area treated with pesticides (Ha): .....

Date CPMP conducted: .....

Assisted by (eg. staff and advisor): .....

Profiles:

GENERAL	A	B	C	D
BIODIVERSITY	A	B	C	D
WATER	A	B	C	D
TOTAL	**A**	**B**	**C**	**D**

Comments: .....

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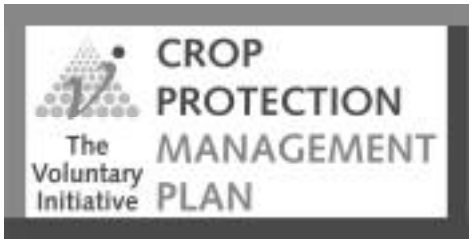
Projected review date: .....

Signed: **Date:**



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