

National Action Plan

for the

Sustainable Use of Pesticides

2013



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Executive summary

Directive 2009/128/EC of the European Parliament and of the Council of 21 October 2009 establishing a framework for Community action to achieve the sustainable use of pesticides, more commonly referred to as “the Sustainable Use Directive”, was transposed into Irish law by Statutory Instrument No. 155 of 2012, European Communities (Sustainable Use of Pesticides) Regulations 2012.

Among the requirements of the Directive, is the requirement to adopt a National Action Plan (NAP) for the sustainable use of pesticides (Article 4). The plan should define a national strategy to achieve a sustainable use of pesticides and set down objectives, quantifiable measures and timeframes to reduce the risks associated with the use of pesticides.

The approach used is a combination of statutory measures and voluntary industry-led initiatives. The NAP consists of 4 broad areas, with proposed actions in each area, as follows:

- 1. Training, Education & Information Exchange;**
 - i. Statutory training requirements for advisors, distributors and professional users and establishment of registers of same.
 - ii. Enhanced information availability for general public.
 - iii. Establishment of Consultative Forum.
- 2. Controls on Application Equipment;**
 - i. Testing and certification of boom, orchard and blast sprayers to EN standards.
 - ii. Establish a register of inspectors of application equipment
- 3. Controls on Storage, Supply & Use;**
 - i. Define storage standards for wholesalers, retailers and professional users of professional products and wholesalers of amateur products. Issue guidance on the safe storage of pesticides in the home/garden situation.
 - ii. General prohibition on aerial application
 - iii. Enhanced awareness and utilisation of buffer zones, safeguard zones and further restrictions on use in sensitive and designated areas.
- 4. Integrated Pest Management (IPM).**
 - i. Adoption of principles of IPM at advisor and professional user level.

The plan aims to achieve a balance between ensuring human and environmental safety while maintaining continued viability of the farming and amenity sectors.

It is foreseen that State Agencies and other stakeholders will contribute significantly to the implementation of the plan and some will have a critical role in the success of specific projects.

As provided for in the Directive, each Member State is expected to maintain and revise its NAP to take account of the social, economic and environmental impacts of the measures, as well as the health of its citizens. It is proposed to revise the NAP within 2 years of its introduction and every 5 years thereafter. A review process, including the establishment of a Consultative Group, will be undertaken to advise on the revision of the plan in 2 years.

Regulation of Pesticides in Ireland

The term 'pesticide' describes a broad group of products that are used as plant protection products (PPPs) and/or biocidal products and some veterinary medicine products. It has been agreed at EU level that, for the present, only plant protection products should be included within the scope of the actions proposed in the Sustainable Use Directive. PPPs are used to protect plants from diseases or pests or to control the growth of plants in agriculture, horticulture, forestry, amenity, home/garden and non-crop areas. PPPs are, by their nature, biologically active and are designed to control organisms which are harmful to crops, e.g., weeds, insects, plant pathogens which are injurious to the health and integrity of the plant or plant product.

General Background

The regulatory system for PPPs in Ireland is based directly on EU legislation. This legislation, composed of both EU Regulations and Directives, provides a very high level of protection for man, animals and the environment. The legislation is based on a conservative approach to authorisation and use, such that levels of dietary exposure to PPPs are below safe limits and that PPPs are applied safely, only where absolutely necessary and in the least amounts possible.

In the EU, evaluation of the safety of PPPs is a 2-stage process involving all Member States, the Commission and the European Food Safety Authority. Firstly, the hazard properties of active substances are determined and at least one use with an acceptable risk is identified. The hazard of an active substance or PPP is an inherent property which can cause a harmful effect. It cannot be altered or mitigated. The evaluation takes into account both acute and chronic effects on different species of animals (including man), insects, plants, fish and other non-target organisms.

When the inherent hazard associated with a substance or PPP is established, the level of likely exposure for man (worker, bystander and consumer) and/or non-target organisms to the substance or PPP is estimated to determine the risk associated with the intended use. The competent authorities in each Member State, individually, or in cooperation with competent authorities in other Member States, assess the risk relating to each PPP containing that active substance.

Risk Management

A PPP is not authorized for marketing or use, unless it is shown that the PPP can be applied without causing unacceptable harmful effects to human or animal health or to the environment. Where risks are identified and quantified, risk mitigation measures may be required to facilitate the safe use of the PPP in the field. Such measures include the use of buffer zones, personal protective equipment or other specific requirements.

This risk-based approach to PPP approval only allows substances to be authorised for marketing and use if it is shown that, where all instructions for use are adhered to and due care and attention is practiced, the product can be used safely and exposure occurs significantly below hazardous levels.

New Legislation

In adopting the 6th Environmental Action Programme in 2002, the European Parliament and the Council agreed to revise and enhance the legal framework for pesticides through the development of a *Thematic Strategy on the Sustainable Use of Pesticides*.

The Strategy recognised that the legislation at that time concentrated on providing controls at the 'start' and 'end' phases of pesticides, i.e. the authorisation of plant protection products for placing on the market and the control of their residues in food and feedstuffs, while providing very few controls during the 'use' phase at user level.

To address this regulatory gap, the Strategy introduced new legislation to regulate the "use" phase of plant protection products. The objective of the new legislation was 3-fold:

1. to encourage rational and responsible use of pesticides,
2. to improve the behaviour of pesticide users, and
3. to improve the quality of pesticide application equipment.

To facilitate implementation of the Thematic Strategy, the European Commission submitted proposals for a "Pesticide Package" to the European Parliament and the Council. The Packages contained 4 elements, as follows:

1. A draft Regulation on the placing of plant protection products on the market;
2. A draft Regulation on statistics on pesticides;
3. A draft Directive on farm machinery to include pesticide application equipment;
4. A draft Directive on sustainable use of pesticides.

These 4 pieces of legislation were agreed by the European Parliament and the Council in 2009.

1. A Regulation on the placing of plant protection products on the market - REGULATION (EC) No 1107/2009

While similar in many respects to previous legislation (Directive 91/414/EEC), the new regulation deviates significantly in a few areas. The principle of the hazard- and risk-based approach remains but the new Regulations preclude the approval of products containing substances with specific hazard classifications, unless the exposure is shown to be negligible. In addition, end users and advisors will face the challenge of "comparative assessment" and "substitution" at PPP use level, i.e., when a number of products are available for the same use in the same crop, the least hazardous product should be chosen, taking account of economic and practical disadvantages. Otherwise, a rationale will be required to support the choice of product used.

The Regulation has been implemented in Ireland by Statutory Instrument No. 159 of 2012.

2. A Regulation on statistics on pesticides - REGULATION (EC) No 1185/2009

A new regulation on the collection of PPP statistics obliges Member States to collect statistics on pesticide use. While this regulation will have no additional impact on most users of pesticides, users are obliged to make all records of PPP use available to the competent authorities, when requested. The information that is provided by users, for the purpose of collation of statistics, is treated as confidential.

The Regulation has been implemented in Ireland by Statutory Instrument No. 159 of 2012.

3. A Directive on farm machinery to include PPP application equipment - DIRECTIVE 2009/127/EC.

This legislation amends an earlier Directive on farm machinery and facilitates the inclusion of pesticide application equipment into the Directive. Its primary focus is to harmonise manufacturing standards for new equipment for applying PPPs before the equipment may be placed on the market by the manufacturer. This is not expected to have any significant effect at user level.

The Directive was transposed in Ireland by Statutory Instrument No. 310 of 2011.

4. A Directive on the sustainable use of pesticides - DIRECTIVE 2009/128/EC

The “Sustainable Use Directive” is aimed at regulating the “use” phase of PPPs, i.e., the movement of PPPs from retailer/distributor to application of the PPPs by the professional user, (i.e. farmer, landscaper, etc.). The Directive requires Member States to introduce provisions for the training and certification of distributors, advisors and users, the testing and certification of application machinery, the drafting of National Action Plans (NAP), the protection of the aquatic environment and other environmentally sensitive areas and Integrated Pest Management (IPM).

The current regulations on authorisation of pesticides contribute to the sustainable use objectives since they ensure that the necessary information is at hand to enable the product to be used safely. The number of accidents or incidents involving pesticide poisoning in the EU is very low, considering the widespread use of PPPs. There are also principles of “Good Plant Protection Practice” (GPPP) which outline basic principles of appropriate PPP use, requirements for the keeping of records of use and for the proper storage of pesticides.

Directive 2009/128/EC, for the first time, attempts to harmonize, across the EU, measures concerned with use phase of PPPs. It is in this context, that the elaboration of a “National Action Plan” (NAP) for the sustainable use of pesticides is necessary. The NAP will be crucial to the successful implementation of the Directive and is pivotal to accomplishing the aims of the Directive.

Individual measures on training, sprayer inspection, etc., are included in the NAP. Other issues are also addressed, including use near surface water, use in water abstraction areas, use in environmentally sensitive areas, use in municipal areas and other use scenarios. ‘Buffer zones’ and ‘no-spray zones’ are also considered.

The Directive was transposed in Ireland by Statutory Instrument No. 155 of 2012.

Consultation

The Department of Agriculture, Food and the Marine, (DAFM), undertook a comprehensive consultation of stakeholders prior to transposing the Sustainable Use Directive into Irish law. Stakeholders were presented with a discussion document which outlined all elements of the Directive and proposals on how DAFM would implement each element. The consultation attracted comments from over 70 individuals, companies, representative bodies, government agencies, county councils, non-governmental organisations, etc. This consultation gave a very useful insight into how stakeholders viewed that certain aspects of

the Directive should be implemented. Subsequently, this information was used to help design and draft the new Irish legislation in this area.

The National Action Plan (NAP) for the sustainable use of pesticides in Ireland

Article 4 of EU Directive 2009/128/EC requires Member States to establish a National Action Plan aimed at setting quantitative objectives, measures, timetables to reduce risks and impacts of pesticide use on human health and the environment and at encouraging the development and introduction of integrated pest management (IPM) and alternative non chemical approaches. Each National Action Plan must detail how the Member State will implement the measures in the Directive and shall take into account actions under other Community legislation that impact on the use of pesticides, e.g., Water Framework Directive 2000/60/EC.

The NAP consists of 4 broad areas with actions and activities in each area:

1. Training, Education & Information Exchange;
2. Controls on Application Equipment;
3. Controls on Storage, Supply & Use;
4. Integrated Pest Management (IPM).

The approach used is a combination of statutory measures and voluntary industry-led initiatives. DAFM is responsible for implementation of the NAP. However, it is envisaged that collaboration with other State agencies and bodies on specific projects will form an integral part of the NAP. It is also foreseen that stakeholders will contribute significantly and some will have a critical role in its implementation.

As provided for in the Directive, each Member State is expected to maintain and revise its NAP to take account of the social, economic and environmental impacts of the measures, as well as the health of its citizens. It is proposed to revise the NAP within 2 years of its introduction and every 5 years thereafter. A review process, including the establishment of a Consultative Group, will be undertaken to advise on the revision of the plan in 2 years.

DAFM is also mindful of the need to minimise, as much as is practicable, the additional regulatory burden and costs to be placed on industry.

The success of each measure proposed in this NAP will be gauged primarily by the number of objectives achieved or satisfactorily addressed. Additional indicators will be considered when EU harmonised indicators have been developed.

Area 1: Training and Education & Information Exchange

Training and Education

Advisors

The training requirements for advisors in crop protection are designed to ensure that advisors, who are certified as having complied with the prescribed standard, have a basic scientific background to act as a foundation to support a more specific education in crop protection. Such education coupled with an individual's experience in the field and continuous professional education will ensure that crop protection solutions are science based, contemporary, ecologically sound and economically viable.

Objectives

1. To ensure that those who are involved in dissemination of advice on the use of PPPs are educated to a minimum scientific standard and trained in the practicalities of crop protection in Ireland.
2. To improve and enhance the quality of advice given to professional users of PPPs.
3. To ensure that the principles of integrated control become an integral part of crop protection strategies.
4. To have a certification system in place and have a Competent Authority designated by 26th November 2013.

Measures

1. It is a statutory requirement for advisors to have a minimum level of training and education. This training is made up of "initial training" and "additional training".
2. The initial training shall be satisfied by obtaining qualifications through the National Framework of Qualifications. The requisite level may be obtained by completion of a single or multiple courses.
3. The requirement for additional training will be satisfied by continuous professional education.
4. DAFM will recognise awarding bodies working within the National Framework of Qualifications.
5. DAFM will consider, on a case-by-case basis, training and qualifications obtained outside the above mentioned framework.
6. A register of suitably qualified advisors will be established and maintained.

Indicator

The success of this measure will be gauged by the number of registered advisors in plant protection.

Distributors

The training requirements for distributors are designed to ensure that people involved in the sale and/or distribution of PPPs (wholesalers, retailers, vendors, distributors and suppliers) are appropriately educated to cope with situations that may arise during the PPP distribution phase. Such situations may include; container handling issues, handling of spillages, store and stock management and providing general PPP information to customers.

Objectives

1. To ensure that those who are involved in the distribution of PPPs are educated and trained to a minimum agreed standard.
2. To ensure that each business involved in selling PPPs has a trained person available at the time of sale.
3. To have a certification system in place and have a Competent Authority designated by 26th November 2013.

Measures

1. It is a statutory requirement for distributors to have a minimum level of training and education. This training is made up of “initial training” and “additional training”.
2. The initial training shall be satisfied by obtaining qualifications through the National Framework of Qualifications.
3. The requirement for additional training will be satisfied by continuous professional education.
4. DAFM will recognise awarding bodies working within the National Framework of Qualifications as recognised by Quality and Qualifications Ireland.
5. DAFM will consider on a case-by-case basis training and qualifications obtained outside the above mentioned framework.
6. A register of suitably qualified distributors will be established and maintained.

Indicator

The success of this measure will be gauged by the number of registered distributors of pesticides.

Professional users

The training requirements for professional users of PPPs are designed to ensure that professional users, who are certified as having complied with the prescribed standard, are adequately skilled to apply PPPs in a proficient and competent way. Such training shall emphasise topics such as handling of PPPs, dilution and mixing of PPPs before application, handling of packaging and remnants of pesticides, disposal of tank contents remaining after application, cleaning of equipment used, recovery or disposal. Sprayer operation and calibration shall also be covered. When such training is coupled with practical field experience, individuals will be well placed to ensure that unwanted or unintentional release of pesticides into the environment can be minimised.

Objectives

1. To ensure that professional users of PPPs are educated and trained to a minimum agreed standard.
2. To ensure that each entity involved in professional use of PPPs has a trained user available at all times of application.
3. To minimise unintentional application of PPPs, such as drift, spillages, overlapping application, etc.
4. To have a certification system in place and have a Competent Authority designated by 26th November 2013.

Measures

1. It is a statutory requirement for professional users to have a minimum level of training. This training is made up of “initial training” and “additional training”.
2. The initial training shall be satisfied by obtaining qualifications through the National Framework of Qualifications. The requisite level may be obtained by completion of a single or multiple courses.
3. The requirement for additional training will be satisfied by remote training in the form of technical bulletins being periodically issued, or/and other requirements as may be prescribed from time to time.
4. DAFM will recognise awarding bodies working within the National Framework of Qualifications as recognised by Quality and Qualifications Ireland.
5. DAFM will consider, on a case-by-case basis, training and qualifications obtained outside the above mentioned framework.
6. A register of suitably qualified professional users will be established and maintained.

Indicator

The success of this measure will be gauged by the number of entities involved in the use of PPPs authorised for professional use, which have a trained user available at the time of pesticide application.

Information exchange

There is a requirement to make information available to the general public on a range of PPP related topics. There is also a need to communicate and provide information to a number of other audiences, such as, advisors, distributors, professional users, other Government Departments and Agencies, Local Authorities and the Industry sector. Topics considered relevant include risks associated with PPP use to the user and the environment and information on safe storage and safe disposal of obsolete PPP and safe disposal of PPP packaging.

The flow of information from one individual to another or from one organisation to another (or any such combination) is seen as playing an important role in the success of the NAP. Similarly, if the NAP is to develop to address the issues that arise in the future or if the NAP needs to be amended to address current or evolving issues not remedied by the current NAP, an efficient means of harvesting feedback from all players and stakeholders is needed.

General Public & Amateur Users

Objectives

1. To ensure that members of the general public (amateur users and others) have sufficient access to general information on risks and benefits associated with PPP use. The risks should include those posed to the user, the environment and non-target organisms. Information on safe storage, exposure, hazards and safe disposal of PPPs and PPP packaging should also be included.
2. To increase the knowledge base of each interested individual to ensure that they are better educated to make decisions appropriate to their garden, with due consideration to neighbours, non-target organisms and the environment.
3. To have appropriately topical, up-to-date and balanced information on pesticides available to the general public.

Measures

1. Require chemical industry sector to produce information displays, pamphlets and leaflets for distribution through amateur retail outlets and make available such information through websites or other electronic means. Such information should be objective and impartial and should be easily understood by members of the general public.
2. Require individual companies to produce both general and product specific information displays, pamphlets and leaflets for distribution through amateur retail outlets and make available such information through websites or other electronic means. Such information should be easily understood by members of the general public.
3. Require retail enterprises to provide general information displays, pamphlets and leaflets for distribution through their amateur retail outlets and make available such information through websites or other electronic means, where appropriate. Such information should be easily understood by members of the general public, and help to elucidate the risks and benefits associated with the use of PPPs.

Indicator

The success of this measure will be gauged by the availability and accessibility, to the general public, of appropriately topical, up-to-date and balanced information on pesticides.

Other Audiences

Objectives

1. To facilitate additional information exchange and collection activities addressing a number of audiences.
2. To have appropriately topical, up-to-date and balanced information on pesticides available to the other audiences.

Measures

1. Establish a Consultative Forum to provide information, feedback and advice to DAFM. Representatives from a wide range of organisations, including Government Departments and Agencies, the Chemical Industry, NGO's, the farming industry, etc., will be invited to participate. The Forum shall be used to contribute to the NAP but also to share and discuss information and issues of common interest.
2. Convene other meetings, on particular issues and as the need arises, between Department of Agriculture, Food and the Marine and the Department of Environment, Community and Local Government, Environmental Protection Agency, Local Authorities, National Poisons Information Centre and other Government Departments and stakeholders.
3. Develop the functionality of the DAFM website in relation to pesticides:
 - a. Database on pesticide products to be enhanced to incorporate full Good Agricultural Practice (GAP) (rate & timing of application, etc.), all "off-label" instructions, classification and all relevant dates (registration/revocation/use-up/sell by, etc.), and links to Material Safety Data Sheets, product label and comparative assessment, if appropriate;
 - b. Guest contributors, e.g., a monthly column;
 - c. "Consultation" section for new legislation and general comment;
 - d. Latest news section;
 - e. Links to range of related and relevant websites;
 - f. General information and guidance, e.g., on choice of PPPs and safe handling and use of PPPs.
 - g. Include links to useful information sources, e.g., for crop protection strategies in other Member States, etc.
4. Enhance the availability of general information e.g., record keeping templates and guidance for completion of same, information on labelling, cross compliance, pesticide use statistics, etc.
5. Collate and make available Pesticide Usage Survey data.

6. Conduct Crop Protection Surveys, including gathering of data on changes in cultural practices, IPM, etc.

Indicator

The success of this measure will be gauged by the availability and accessibility, to other audiences, of appropriately topical, up-to-date and balanced information on pesticides.

Area 2: Controls on Application Equipment

Testing of Application Equipment

It is estimated that there are 30,000 to 40,000 tractor-mounted or trailed sprayers in the country¹, some of which are operational on a frequent basis, such as those found on arable farms (estimated 20%), while the remainder are operated less regularly (many not operated within the previous 12 months). While it is currently possible to have a sprayer voluntarily tested in Ireland, very few users have availed of this service. For the present, knapsacks and handheld equipment are excluded from testing.

In addition to statutory testing of application equipment, professional users must conduct regular calibrations and technical checks of all PPP application equipment being used.

Objectives

1. To ensure that all boom sprayers (>3m) and orchard/blast sprayers have been tested and certified.
2. To ensure that all sub-standard boom sprayers (>3m) and orchard/blast sprayers be either decommissioned or repaired to the required standard.
3. To have a system in place to ensure that all boom sprayers (>3m) and orchard/blast sprayers are inspected, at least once, by 26th November 2016.

Measures

1. Establish a register of inspectors of pesticide application equipment.
2. Establish a web portal to allow uploading onto a register of application equipment certified as being compliant.

Indicator

The success of this measure will be gauged by the number of boom sprayers (>3m) and orchard/blast sprayers certified as complying with the specified standard.

¹Statistic extracted from 2011 Single Payment Scheme inspection programme.

Area 3: Controls on Storage, Supply & Use

Controls on Pesticide Storage

The storage of plant protection products has been regulated at professional user level since 2006. However, it has never been legislated for at distributor level (wholesalers and retailers).

Distributor Level

Objectives

1. Define, in consultation with the industry, storage standards for wholesalers and retailers of professional products and wholesalers of amateur products.
2. Define, in consultation with the retail industry, storage and display standards for retailers of amateur products.
3. To have all pesticide products appropriately stored.

Measures

1. Regarding professional use products, the storage standards agreed shall reflect the risks associated with the materials being stored, as well as the location of the storage facility and its proximity to various landscape features, public spaces, etc. These standards shall consider size, extent and scale of the business.
2. Regarding amateur use products, the standards shall consider issues such as the types of products on display, accessibility of products to children, proximity to other products being retailed (animal feed, food, etc.). These standards will take account of the relatively dilute nature of most of the plant protection products concerned and the less hazardous nature of these products.

Indicator

The success of this measure will be gauged by the number of stores, at distributor level, complying with the specified standard.

Professional User Level

Objectives

1. Define, in consultation with the professional user representative organisations, storage standards for users of professional products.
2. To have all pesticide products appropriately stored.

Measures

1. The storage standards agreed shall reflect the risks associated with the materials being stored, as well as the size, extent and scale of the business. Standards will be broadly similar to those previously included in legislation and shall be proportionate, so as to reflect the relative risk associated with the amounts being stored.

Indicator

The success of this measure will be gauged by the number of stores, at professional user level, complying with the specified standard.

Amateur User Level

The overall amounts of PPPs stored at amateur user level are estimated to be quite small. Consequently, no specific provisions are proposed for this area. It is proposed to issue guidance on the safe storage and use of pesticides in the home/garden scenario. Such guidance will be developed in consultation and in association with the industry and consumer-based stakeholders.

Controls on Pesticide Supply

Existing measures require that only authorised products, appropriately packaged and labelled, may be sold or supplied. Additional measures to permit traceability in the supply chain have been introduced by S.I. No. 159 of 2012. The packaging for pesticides is aimed at protecting both the users and the environment. It should ensure that the product cannot be altered, substituted or otherwise adulterated before supply to the user. The pack size should be appropriate to the proposed scale of use.

Statutory labelling measures are aimed at informing the user of the inherent hazards associated with the product, so that the appropriate steps may be taken to minimise the risk.

Objectives

1. To ensure that all professional PPPs are appropriately packaged and labelled.
2. To ensure that all sales of professional PPPs are accurately recorded by wholesalers and retailers.

Measures

1. All wholesalers and retailers of professional PPPs shall record details of the sale and/or supply of all pesticide products to professional users.
2. Develop a record keeping template and guidance for completion of same.
3. All wholesalers and retailers of professional PPPs shall retain such records for a period of at least 5 years.

Indicator

Full traceability of the sale and supply of professional PPPs is facilitated.

Controls on Pesticide Use

Objectives

1. To ensure that all Irish waters meet statutory quality standards.
2. To ensure that professional users record details of all pesticides used accurately, including a justification for use and reference to Integrated Pest Management techniques, where appropriate, and that these records are retained for a period of 3 years by these users.

Measures

A number of measures are introduced, to ensure that the impacts from the use of pesticides are reduced or controlled, as follows:

1. Aerial Application

Directive 2009/128/EC prohibits aerial spraying, except in circumstances where it is deemed to be absolutely necessary.

The use of aircraft to apply PPPs has been quite infrequent in Ireland and was largely restricted to the control of bracken and other woody weeds on lands owned by the Department of Defence.

Occasionally, aerial application was permitted by the designated authority (DAFM) where it was not possible to use ground operated sprayers/application equipment due to the prevailing ground conditions. Permissions granted, were always accompanied by a set of stringent terms and conditions which dictated the precise products that were to be used, the crop to be treated and the exact location of the fields to be treated. In addition to the DAFM permit, the applicants were required to consult with, and obtain approval from, the Irish Aviation Authority.

Currently, there are no aircraft based in Ireland with the capacity to apply PPPs and, therefore, DAFM will, before granting such approvals, liaise with the appropriate competent authorities in other Member States to ensure that such equipment is fit for purpose.

2. Buffer Zones

Where risks are identified and quantified, risk mitigation measures, such as, use of buffer zones, personal protective equipment or other specific requirements, may be required to facilitate the safe use of the PPP in the field. Where a product label makes reference to an aquatic buffer zone, there is a legal requirement that PPPs shall not be applied within the prescribed distance from the water course.

It should also be noted that, where an aquatic buffer zone is prescribed on a product label, it is the result of a risk assessment based on conservative assumptions. The risk assessment cannot take account of every use scenario and variable factor, such as different sizes of water course, reduced rate of PPP being applied, different types of nozzles being used on the application equipment, etc.

The buffer zone prescribed on the product label may, in future, be subjected to further local refinement at user level to take account of local conditions of use. A

separate more detailed document will issue regarding the refinement methodologies to be used and how to apply these methodologies.

3. Restricted & Sensitive Areas:

The implementing legislation (S.I. No. 155 of 2012) provides for restricted use of plant protection products in designated areas. Such areas include:

1. water abstraction sources (surface waters, spring, well or borehole etc..)
2. ground water vulnerable landscape features (karst areas, sink-holes, collapse features etc..)
3. areas used by the general public or vulnerable groups (public parks, hospitals, public schools, public playgrounds etc..)
4. areas designated as “Protected Areas” under the water framework directive
5. areas designated as “Special Protection Areas” under the wild birds directive
6. areas designated as “Special Areas of Conservation” under the habitats directive

Legislation stipulates “safeguard zones” for areas 1 and 2, i.e. exclusion areas where no PPPs can be applied, (see S.I. No. 155 of 2012).

Furthermore, legislation states that PPPs can only be used in areas 3 to 6 above, under strictly controlled conditions and only where deemed absolutely necessary. Users shall, wherever possible use low risk or biological PPPs. Where this is not practicable, due to health and safety issues or economic reasons, users may consider other methods of control. In such cases priority should be given to plant protection products that are not classified as R50 (Very toxic to aquatic organisms) in accordance with Directive 1999/45/EC (being replaced by Regulation (EC) No 1272/2008) or plant protection products containing active substances identified as being “priority hazardous substances” in accordance with Directive 2000/60/EC.

3. Develop a template for recording use of pesticides which would be available for downloading from the DAFM website.

Indicator

The success of these measures will be gauged by surface water continuing to meet statutory quality standards and the level of compliance with regard to record keeping established during inspections of professional users. Further indicators will be adopted when harmonised EU indicators are agreed.

Area 4: Integrated Pest Management

The Directive requires that the NAP should have a specific focus on the implementation and promotion of Integrated Pest Management (IPM), since it is recognised that sustainable use of pesticides is best achieved by use of all appropriate pest management options.

Objective

1. To ensure that IPM is followed by all advisors in crop protection and professional users of PPP, through the judicious use of pesticides, the use of non-PPP techniques, choice of varieties, cultivation techniques, crop rotation, etc., from 1st January 2014.

Measures

DAFM/Teagasc will facilitate the following actions and activities:

1. Development, modification and adjustment, as appropriate, of integrated control techniques to facilitate their application to Irish production conditions.
2. Introduction of guidance for professional users of PPPs that takes account of relevant social, political and economic issues, while maintaining a strong focus on environmental sustainability.
3. Application of the principles of IPM by all professional users (Appendix I).
4. Adaptation of research and development programmes to obtain the maximum output from specifically tailored input programmes
5. Incentivise the adoption of crop specific guidelines for integrated pest management.

Indicator

The success of these measures will be gauged by the number of advisors in crop protection and professional users who follow the principles of IPM.



Appendix I

General principles of integrated pest management

1. The prevention and/or suppression of harmful organisms should be achieved or supported among other options especially by:
 - crop rotation,
 - use of adequate cultivation techniques (e.g. stale seedbed technique, sowing dates and densities, under-sowing, conservation tillage, pruning and direct sowing),
 - use, where appropriate, of resistant/tolerant cultivars and standard/certified seed and planting material,
 - use of balanced fertilisation, liming and irrigation/drainage practices,
 - preventing the spreading of harmful organisms by hygiene measures (e.g. by regular cleansing of machinery and equipment),
 - protection and enhancement of important beneficial organisms, e.g. by adequate plant protection measures or the utilisation of ecological infrastructures inside and outside production sites.
2. Harmful organisms must be monitored by adequate methods and tools, where available. Such adequate tools should include observations in the field as well as scientifically sound warning, forecasting and early diagnosis systems, where feasible, as well as the use of advice from professionally qualified advisors.
3. Based on the results of the monitoring the professional user has to decide whether and when to apply plant protection measures. Robust and scientifically sound threshold values are essential components for decision making. For harmful organisms threshold levels defined for the region, specific areas, crops and particular climatic conditions must be taken into account before treatments, where feasible.
4. Sustainable biological, physical and other non-chemical methods must be preferred to chemical methods if they provide satisfactory pest control.
5. The pesticides applied shall be as specific as possible for the target organism and shall have the least side effects on human health, non-target organisms and the environment.
6. The professional user should keep the use of pesticides and other forms of intervention to levels that are necessary, e.g. by reduced doses, reduced application frequency or partial applications, considering that the level of risk in vegetation is acceptable and they do not increase the risk for development of resistance in populations of harmful organisms.
7. Where the risk of resistance against a plant protection measure is known and where the level of harmful organisms requires repeated application of pesticides to the crops, available anti-resistance strategies should be applied to maintain the effectiveness of the products. This may include the use of multiple pesticides with different modes of action.
8. Based on the records on the use of pesticides and on the monitoring of harmful organisms the professional user should check the success of the applied plant protection measures.

