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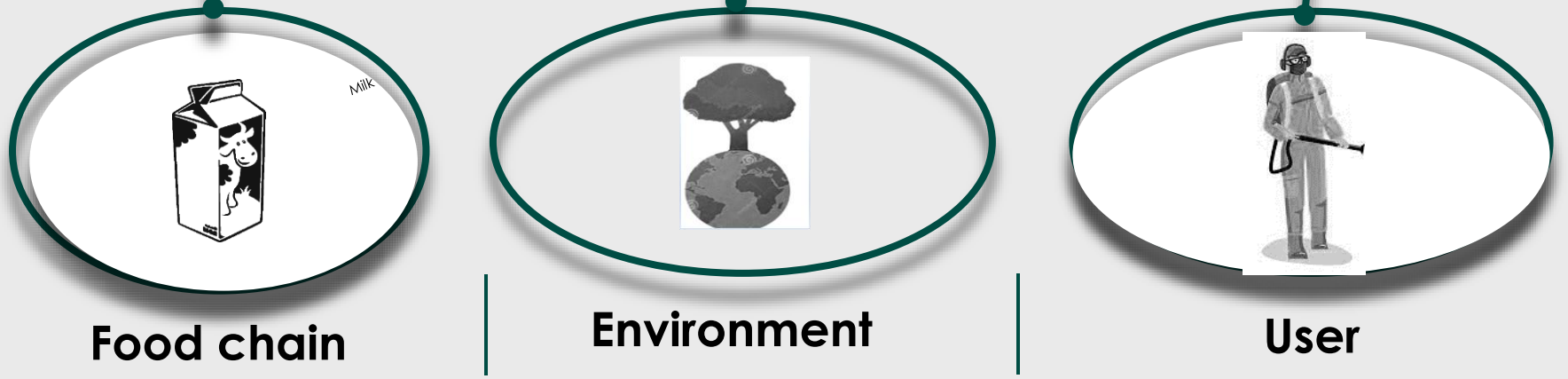
Bia agus Mara
Department of Agriculture,
Food and the Marine

FAS Training

SMR 7 – Use of Plant protection products
SMR 8 – Sustainable Use of Pesticides Directive

Raymond O'Neill
District Inspector,
Integrated Controls Division.

Objective of SMR 7 & 8 - To minimise risk to the…..

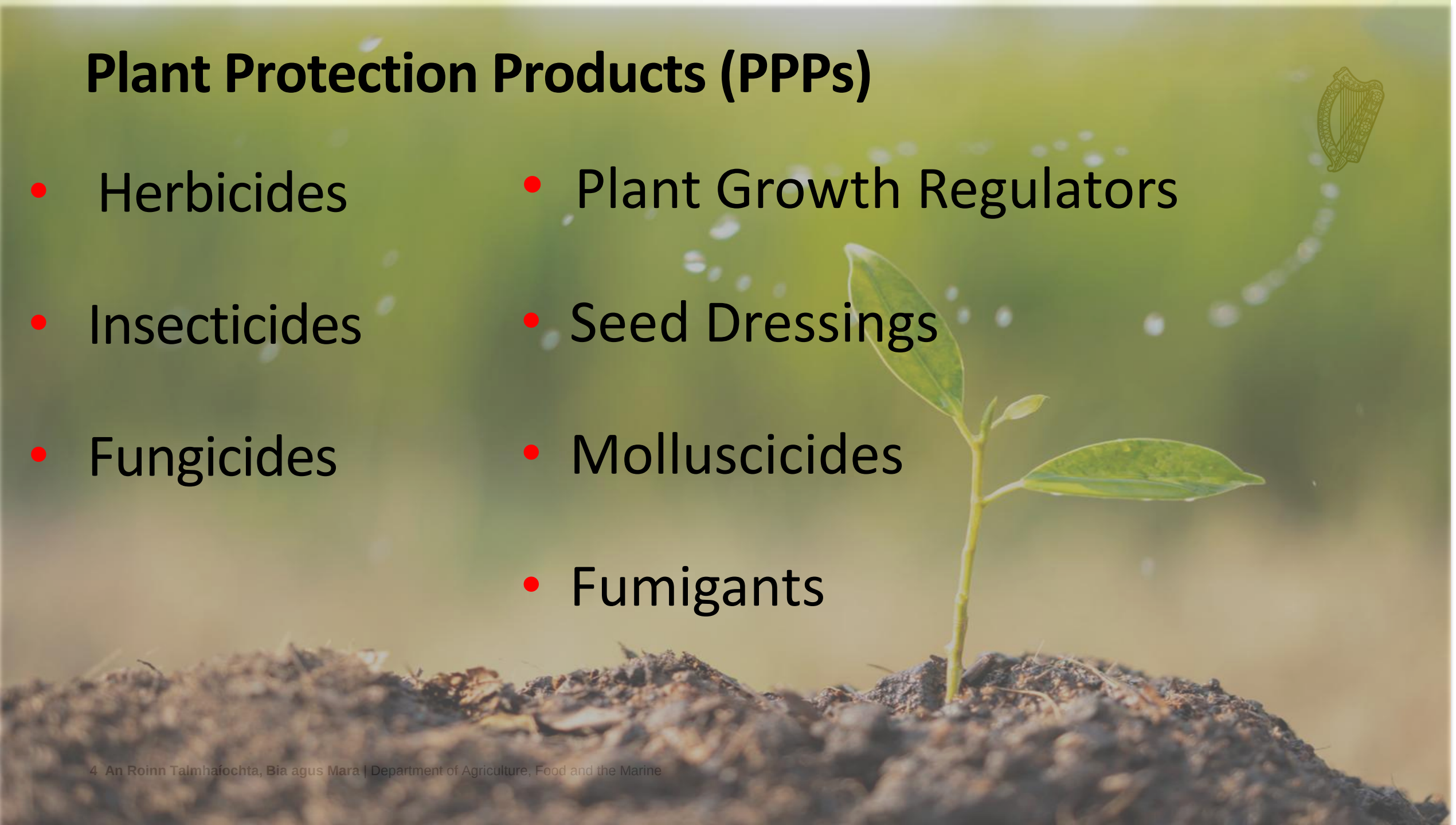


Pesticides – legal basis

Plant Protection Products	SUD
Council Regulation 1107/2009/EC	EU Directive 2009/128/EC
SI No. 159 of 2012	SI No. 155 of 2012

Plant Protection Products (PPPs)

- Herbicides
- Insecticides
- Fungicides
- Plant Growth Regulators
- Seed Dressings
- Molluscicides
- Fumigants



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SMR 7

Proper & safe use of plant protection products

SMR 7

Can only use a PPP where it is:

Approved and used in accordance with the label recommendations

- Records of purchases and/or returns
- Complete records of use & store inventory.
- Compliance with good plant protection practice

Integrated pest management

- all eight principles of IPM addressed

Pesticide Registration

PPPs must be **registered** with the Pesticide Control Division

Approved Plant Protection Products = PCS No

or as non-hazardous waste.
Contains 1,2-benzisothiazolin-3-one. May produce an allergic reaction
To avoid risks to human health and the environment, comply with the instructions for use.
PCS No. 05395

Registers and labels of authorised PPPs available at

www.pcs.agriculture.gov.ie/registers/

Filter by function and/or crop

registers/

Products Registers

Listen

Plant Protection Products Registers

The Product Registers for plant protection products (PPPs) contain details of authorised PPPs for sale and use on the market in Ireland.

- Plant Protection Products Database
- Plant Protection Products Labels
- List of Active Substances and MRLs
- Off-Label Extension of Authorisation for Minor Uses (EAMU)
- Recently Withdrawn Plant Protection Products
- Recent Active Substance Withdrawals
- Plant Protection Products Books

Product Name	PCS No.	Function
Accurate	05654	Herbicide
Afinto	06733	Insecticide
Alister Flex	05183	Herbicide
Ally Max SX	03435	Herbicide
Ally SX	05590	Herbicide
Ally Ultra	05075	Herbicide
Alonty XL	06872	Fungicide
Amistar	05072	Fungicide
Ampect	06827	Fungicide
Anthem	04761	Herbicide
Aquino	06751	Fungicide
Aragon	06699	Fungicide
Arbiter	05542	Herbicide
Arizona	04555	Fungicide
Ascra Xpro	05240	Fungicide
Aurelia	06106	Fungicide

Principles of Good Plant Protection Practice (GPPP)

- Correct choice of active substance
- Appropriate dosage rate
- Number, timing & frequency of application
- Method of application
- Strategies to reduce spray drift
- Resistance management
- Perform handling operations well away from waterways, ditches, drains, boreholes, wells and springs
- Maintain buffer zones

Integrated Pest Management (IPM)

IPM is a sustainable approach to managing pests by combining:-

- ✓ Biological,
- ✓ Cultural
- ✓ Chemical tools

in a way that minimises economic, health and environmental risks.

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Example of a Completed Grassland Farmer IPM Record Sheet

Application of Integrated Pest Management (IPM) at user level.

Herd Number: _____ Year: _____

Tick only the appropriate options currently practiced on your farm.

1. The prevention and/or suppression of harmful organisms			
Crop rotation		Sterile seedbed technique	
Clean machinery and equipment	✓	Clean potato boxes/growing trays etc..	
Nutrient management programme	✓	Irrigation (applied to schedule)	
Soil testing (pH, nutrients, OM)		Protect beneficial organisms	
Certified seed		Full inversion tillage (plough)	
Choose disease resistant varieties		Minimum cultivation	
Management of crop residues		Soil structure & compaction	✓
Use of optimal sowing date		Clean crop storage areas	
Other (please specify)			
2. Monitoring of harmful organisms			
Use early warning/forecasting systems		Monitor crops for pests/diseases	✓
Use weather forecast to aid decisions	✓	Advisor monitors crops	
Can identify main pests	✓	Use traps/sticky pads/lures	
Other (please specify)			
3. Application of plant protection measures			
Some crops treated preventatively		Advisor makes decision	
Decisions jointly made with advisor		Some decisions based on pest thresholds	✓
Other(please specify)			
4. Sustainable biological, physical or other non-chemical methods			
Use natural enemies		Use crop fleeces	
Use micro-organism plant protection products		Use crop netting	
Use propane burners for weed control		Use mechanical weeder (e.g., steerage hoe)	
Use manual methods	✓	Use deterrents (bangers, kites etc..)	
Use of topper/mower for weed control	✓		
Other (please specify)			

5. The pesticides applied shall be as specific as possible for the target pest.			
Applications usually for multiple pests		Resistance development is considered	
Different modes of action considered		Broad spectrum products avoided	
Different products considered	✓	Familiar with different product labels	✓
Economics are considered	✓	Use advisor to help decide on product(s)	
Consider following crops		Buffer zones are considered	✓
Use weed licker for weed control	✓	Use of seed dressings	
Avoid insecticide use where bees are foraging		Use drift reducing nozzles	✓
Use air assisted sprayer		Other drift reducing methods	
Other (please specify)			
6. Use of pesticides at necessary levels			
Use reduced rates of application		Use adjuvants to reduce PPP use	
Partially treat / spot spray fields	✓	Applications timed to minimise use	
Reduce frequency of application			
Other (please specify)			
7. Anti-resistance strategies applied to maintain the effectiveness of the products			
Use products with multiple modes of action		Use robust rates of PPPs	✓
Use tank mixes with multiple modes of action		Keep abreast of resistance development	
Familiar with different product labels	✓		
Other (please specify)			
8. Success of the applied crop protection measure			
Success or failure of intervention is measured	✓	Member of discussion group	✓
Success or failure of intervention is recorded	✓	Results discussed with advisor	
Crop yields are recorded			
Other (please specify)			

SAMPLE

Pesticides Worksheet: Store Inventory Records

Product Name (Trade Name)	**PCS Number** (as printed on product label)	**Pack Size** (kg or L)	**Quantity present**	**Supplier** (Name & Location)	**Date Purchased**

Herd No: _____ **Pesticide Application Record** **Year:**_____

Sprayer Cert Nos (for all sprayers > 3 years old used on the farm): _____ **Date last calibrated:** _____

For each plant protection and biocidal product used on the farm **during the previous 12 months** provide the following information (a photocopy of the records maintained or a computer printout of records maintained in electronic form can be accepted).
*Only complete if you have used the STRIPE initiative to reduce buffer zones e.g. Minidrift MD 04, Guardian Air 110 04, AVI 110-02.

Date applied	Product Name and PCS No.	Crop / Situation *(e.g. Spring Barley, Winter wheat, Grassland etc.)*	Location / LPIS No.	Area *(ha)*	Application rate *(L or kg / ha)*	Water rate *(L/ha)*	Method of Application *(Boom sprayer, Knapsack / Wiper, etc.)*	Buffer Zone Applied *(metres)*	Nozzle type* *(0nly if using STRIPE)*	Reason for treatment	Operator / PU No.
25/05/2022	Doxstar Pro *05459*	Grassland	E12345678	4 ha	2.0 l/ha	350	Boom Sprayer	5m		30% dock infestation	PU00001
05/06/2022	Proline *03786*	Winter Oilseed rape	E87654321	5 ha	0.4 l/ha	200	Boom Sprayer	5m		Phoma leaf spot >20% plants infected	PU00001

Buffer zones

- No-spray strip of a 3m minimum width between the edge of a water body and the edge of the treated area.
- Legal requirement to comply with buffer zone specified on product label.
- Applies to all types of surface water body, e.g. ditches, streams, ponds, rivers and lakes.

A systemic fungicide for use in winter wheat, spring wheat, durum wheat, winter barley, spring barley, triticale, rye and oats.

An emulsifiable concentrate containing [redacted]
and [redacted]

Danger:
Causes serious eye irritation.
Harmful if swallowed.
May cause an allergic skin reaction.
Suspected of causing cancer.
May damage the unborn child. Suspected of damaging fertility.
Very toxic to aquatic life with long lasting effects.

Wear protective gloves and eye/face protection.
Avoid breathing mist.
If exposed or concerned: call a poison centre or doctor/physician.
If in eyes: rinse cautiously with water for several minutes.
Remove contact lenses, if present and easy to do.
Continue rinsing.
Store locked up.
Dispose of contents/container to a licensed waste disposal contractor or collection site except for triple rinsed empty containers which can be disposed of as non-hazardous waste.
To protect aquatic organisms respect an unsprayed buffer zone of 5m to surface water bodies.

To avoid risks to human health and the environment, comply with the instructions for use.

10 L

19 / 21

PCS No: [redacted]

STRIPE – **S**urface water **T**ool for **R**educing the **I**mpact of **P**esticides in the **E**nvironment

Specified low-drift nozzles can reduce buffer zones for listed PPPSs - depending on choice of nozzle

Reduced rates can also mitigate buffer zones

Cannot eliminate buffer zone completely
min. distance of 3 m for **all PPPs**
- from all surface water bodies.

Pesticides 'Part 2' Inspection - Summary

Pesticide Control Division (PCD) assess product usage records for the last 12 months provided by farmer

- **Product registration**: was the product registered with PCD at the time of use.
- **Product application rates** - are these correct
- Was the product **appropriate** for the crop treated
- **Products used as per label** recommendations
- **Buffer zones respected** & products applied **at correct time**
- Is the **application equipment suitable for** the application of the product?
- Are Inspection findings in accordance with the **Principles of Good Plant Protection Practice?**
- Are inspection findings in accordance with the principles of **Integrated Pest Management (IPM)?**

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SMR 8

Sustainable Use of Plant Protection Products.

SMR 8 – articles from SUD (Dir 2009/128/EC)

- Article 5(2) [training & registration] and Article 8(1) to (5) [PAE testing and calibration]

- Article 12 [restrictions on the use of pesticides in protected areas defined on the basis of Directive 2000/60/EC and Natura 2000 legislation]

- Article 13(1) and (3) [handling and storage of pesticides and disposal of remnants]

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Sustainable Use Directive – Key aspects for SMR 8

- Training & registration of advisors, distributors & users of Plant Protection Products
- Testing of pesticide application equipment & calibration
- Storage & handling of PPPs
- Treatment of obsolete products; disposal of containers / packaging; tank remnants
- Protection of water from pesticides

Training and Registration Requirements

	Pesticide Advisor	Pesticide Distributor	Professional User	Equipment Inspector
Training Required	Yes	Yes	Yes	Yes
Register with DAFM	Yes	Yes	Yes	Yes
Maintain CPE	Yes	Yes	Yes (from 2025)	Yes

Professional User (PU)

Who are Professional Users?

Any person who uses or applies professional use pesticides: farmers, contractors, landscapers, green keepers, CC workers etc.

FETAC

Record of Achievement (Teagasc)

awarded to

with the following results

Competence in Pesticide Application (Boom) Pass

Competence in Pesticide Application (Hand-held) Pass

Competence in Safe Use of Pesticide Products Pass

Register at:

www.agfood.ie for DAFM clients

http://www.pcs.agriculture.gov.ie/sud/sudreg/ if not a DAFM client

Professional **U**ser Number of person applying pesticides and copy of training certificate will be required as part of an inspection on conditionality

SMR 8: Handling

Clean, appropriate, well maintained Personal Protective Equipment (PPE)

Appropriate designated measuring equipment

- Scales and a check weight
- Graduated measures

Pesticide Storage

Dedicated bunded storage facility

Independently lockable
Keep out of reach of children

Segregated from food and feed

Warning sign at entrance
Well ventilated

A Safe Store?

No Absorbent material for spillages

Liquids beside powders

Adequate storage?

Warning Sign

Independently lockable

Not bunded

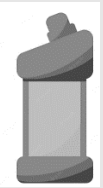
Good chemical store procedures.

First in - first out !!

Once products are past their "**use-by date**" they cannot be applied & must be correctly disposed

Empty, triple-rinsed, containers and foil caps must be disposed of correctly

Ensure products no longer approved for use are not retained in store



Hazardous Waste is disposed of by a licenced hazardous waste collection company

SMR 8 – Inspections

Part 1 inspection of SMR 8 assesses the **storage & handling of PPPs on farm**

Check for:

- Dedicated storage facility
- Segregated from food and feed
- Secure, bunded store & warning sign
- Facility for containing spills e.g. sand/peat
- Protective equipment/clothing for handling PPPs
- Powders are stored above liquids (avoid contamination) and products are in their original containers
- Is the applicant the sole owner/user of the PPP store?
  If No – must give Name & Herd No of owner/user.

Pesticide Application Equipment

Must be tested every 3 years.

All horizontal boom sprayers >3m boom width incl. quad boom sprayers >3m boom width.

Also includes:- Weedwipers/weedlickers ;
Seed treatment equipment;
All bush / orchard blast sprayers
Granular applicators (slug pellet applicators).

Knapsack sprayers exempt from testing.

AP-20P

Must be calibrated at least once each year/season

Pesticide Application Equipment (PAE)

Sprayer testing and sprayer calibration are **not** the same

Sprayer testing:

Initial test for all types of PAE is now 3 years from new **and** every 3 years thereafter

Date tested	Next date test due
2017	2022
2018	Before 1/1/2023
2019	Before 1/1/2023
2020	2023
2021	2024
Purchased new/tested 2022	2025

Calibration

Calibration is carried out by the
Professional User **at regular intervals and at least once per year**

- optimum coverage of the target
- ensures effective control
- correct amount is used without wastage
- saves time and money
- more effective and efficient spraying operation
- protects the environment

Replace worn nozzles with those which have equal flow rates.

Protection of water

Article 13(1) (a) Evidence that the pesticide mixing, filling and handling area does not present a risk to water

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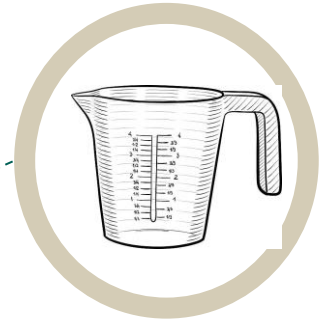
Main non-compliances identified:

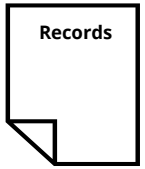
Invalid use/ illegal method of application



Maximum Individual Dose/Max. Total Dose exceeded

Sprayer not calibrated

Illegal use/product not recommended for use on crop



No records or incomplete pesticide application records

Further information

http://www.agriculture.gov.ie/

Conditionality requirements

http://www.pcs.agriculture.gov.ie

Register of approved plant protection products