

Chapter 4: Farming

4.6 Agrochemicals Management 4.6.8 – 4.6.13

Agrochemicals management 4.6.8 - 4.6.13

This activity covers requirements that focus on agrochemicals **equipment** and **storage** as well as **record keeping**.



No.	Base requirements	Group certification			Ind. cert.
		S-farms	L-farms	Group mgt.	s/L
4.6.8	Pesticide applications are recorded. Records include: • Product brand name and <u>active ingredient(s)</u> • Date and time of application • Location and area (size) of application • Dosage and volume (organic or inorganic) • Crop • Name(s) of applicator(s) • Target pest Group management facilitates record keeping for group members when needed.	⊘	0	⊘	⊘
4.6.9	Empty pesticide containers and application equipment are washed three times, with the rinsing water used in the final batch of the mix for crop application. After applying pesticides, application equipment is washed three times, and any leftover mix is diluted with ten times the amount of clean water and applied evenly on the treated field to minimize environmental and health impacts. Empty pesticide containers are stored securely until they can be disposed of safely through a formal collection or recycling program or returned to the supplier. If the supplier does not accept empty containers, they are cut or perforated to prevent reuse. Prohibited, obsolete, and expired pesticides are returned to the supplier or local authority. If no collection system is available, these products are labeled and stored safely and separately from other products in a locked space.	⊘	⊘	⊘	⊘
4.6.10	Agrochemicals and application equipment are stored in accordance with label instructions to ensure minimal negative impact on the environment and human health. Agrochemicals must remain in their original containers or packaging. Facilities for storing agrochemicals and application equipment should be: • Dry, clean, and well-ventilated • Constructed from non-absorbent materials • Securely locked and accessible only by trained handlers • Inaccessible to children • Separated from crops, food products, and packaging materials	⊘			

Read the requirements and their applicability before you move on to the next page

Agrochemical application records



Alex is a manager of a small farm. He needs to record all pesticide applications. His application record needs to contain the following information:

- Product brand name and active ingredient/s
- Date and time of application
- Location and area (size) of application
- Dosage and volume (organic or inorganic)
- Crop
- Name/s or applicator/s
- Target pest

Group management facilitates record keeping for group members such as Alex, when needed.



Empty pesticide containers



After finishing a bottle of agrochemicals, the containers must be handled correctly. The empty containers should never be left in the field.





Empty pesticide containers and application equipment

In addition, empty pesticide containers and application equipment must be handled as follows:

- **Washed** three times and rinsing water used in the final batch for crop application.
- Leftover is diluted with ten times the amount of clean water and applied evenly on the treated field.
- After washing, containers should be **stored securely**.
- Containers are disposed of safely through a formal collection, recycling program or returned to supplier.
- Never reused to carry water or store other content
- If no disposal system is available containers are cut or perforated to **prevent reuse**.
- Prohibited, obsolete, or expired pesticides are **returned** to local supplier or local authority.
- If there is no collection system, these products are **labelled**, **stored safely** and **separately**, and in a locked space.

Case scenario

Let's have a look at an example.

When Alex finishes using an agrochemical, what should he do with the container?

- A. Burn it in the field
- B. Put it in a waste bin for plastics
- C. Wash it three times
- D. Keep it in the agrochemical storage
- E. Reuse it for storing salt
- F. Return it to the supplier





What should he do with the container?

Think about the answer before you move on to the next page

Case scenario - Solution

The correct answers are C, D and F.

C. Wash it three times

- D. Keep it in the agrochemical storage
- F. Return it to the supplier

Empty containers cannot be treated as normal waste, and they cannot be reused for other purposes.

They must be washed three times, kept in the agrochemical store, and when possible, returned to the supplier.



Agrochemicals and application equipment storage for small farms in group certification

As Alex is an operator of a small farm, he needs to comply with 4.6.10.

His agrochemicals and equipment are stored in accordance with the label instructions. He keeps agrochemicals in their original containers and packaging.

His storage facilities should be;

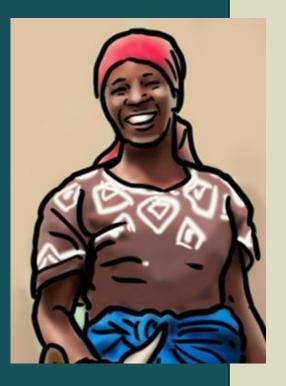
- Dry, clean, well-ventilated
- Made from non-absorbent material
- Safely locked and accessible only by trained handlers
- Not accessible to children
- Separated from crop, food products, and packaging materials



No.	Base requirement	Group certification			Ind. cert.
		S-farms	L-farms	Group mgt.	s/L
4.6.11	Agrochemicals and application equipment are stored in accordance with the label instructions and in a way that minimizes negative impact on the environment and human health. Agrochemicals are stored in their original containers or packaging. Facilities for storing agrochemicals and application equipment are: • Dry, clean, well-ventilated and with a sound roof and impermeable floor • Safely locked and accessible only by trained handlers • Separated from crops, food products or packaging material • With an emergency spill kit • With visible and understandable safety warning signs and pictograms • With an emergency procedure, eye-washing area and an emergency shower		⊘	⊘	⊘
	For small farms in groups only requirement 4.6.10 applies.				



Read the requirement and its applicability before you move on to the next page



Agrochemicals and application equipment storage for large farms in groups, group management, and individually certified farms

Amina is a manager of an individually certified farm. As with Alex, Amina's agrochemicals and equipment are stored in accordance with the label instructions. She needs to keep agrochemicals in their original containers and packaging.

Her storage facilities:

- ✓ Should be dry, clean, and well-ventilated
- $\checkmark\,$ Should have a sound roof and an impermeable floor
- Should not use wood for the floor or shelves, as it absorbs spillage and cannot be easily cleaned







Agrochemicals and application equipment storage for large farms in groups, group management, and individually certified farms

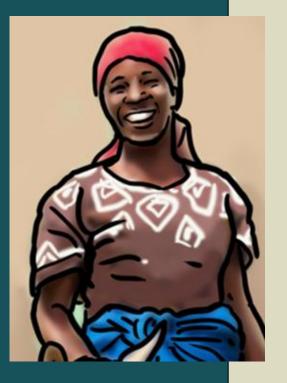
In addition to what was mentioned on the previous slide, her storage facilities should be:

✓ Safely locked and accessible only by trained handlers

- ✓ Separated from crops, food products, or packaging materials
- \checkmark Have clear and visible safety warning signs and pictograms





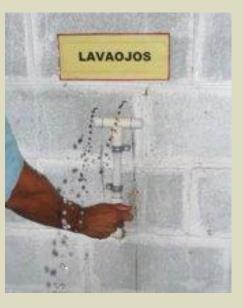


Agrochemicals and application equipment storage for large farms in groups, group management, and individually certified farms

Finally, she needs to make sure the facilities have:

- ✓ An emergency procedure.
- ✓ An eye-washing area and emergency shower, in case of an accident.
- \checkmark An emergency spill kit to clean any spillage.

(Below examples of an eye-washing facility and an emergency shower that can be created at a low cost.)







Case scenario

Let's have a look at an example.



Alex keeps his chemical bottles under his bed. He says this is the safest place in the house, as his children may access them if he keeps them elsewhere.

He says that his bedroom can be locked with a key, and only he can have access to the key.





Is this compliant with the requirement 4.6.10?

Think about the answer before you move on to the next page

The answer is "No."

A bedroom can never be considered a safe storage even if it can be locked. The person sleeping in the room can be intoxicated by the fumes coming out of the agrochemical bottles, or they could spill.



No.	Specialized requirement				
4.6.12	An up-to-date pesticide stock inventory is available and maintained. The inventory includes: • Date of purchase • Product brand name and active ingredient, including an indication of chemicals that are on the Risk Mitigation list • Volume • Date of expiration For groups this is only applicable for centralized stock.		⊘	0	⊘
No.	Continuous improvement requirement				
4.6.13	The equipment used for mixing and applying agrochemicals is calibrated at least once a year, after every maintenance session, and before it is used with a different type of agrochemical.	⊘	⊘	0	⊘



Read the requirements and their applicability before you move on to the next page

Agrochemicals stock inventory



Requirement 4.6.12 requires that an up-to-date pesticide stock inventory is available and maintained. This requirement is applicable to large farms, group management and individually certified farms.

As Amina is an individually certified farm, she needs to make sure that her inventory includes:

- Date of purchase
- Product brand name and active ingredient, including an indication of chemicals that are on the Risk Mitigation list.
- Volume
- Date of expiration

*For groups this is only applicable for centralized stock

Calibration of mixing and application equipment

For all small, large and individual certified farms as well as group management continuous improvement requirement 4.6.13 is applicable.

This requirement states that equipment used for mixing and applying agrochemicals is calibrated:

- At least once every year
- After every maintenance session
- Before being used with a different type of agrochemical







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