



OSR Herbicides?
Think Water

Assessing the Risks

Oilseed rape plays a valuable part in many farm rotations as a break and 'cleaning' crop, especially where black-grass is a problem. However, keeping herbicides out of drinking water sources is key to preventing restrictions on use, or even loss of the products.

What are the risks?

Despite taking care, the risks of oilseed rape herbicides affecting drinking water sources are many, including yard spills, run-off after heavy rain, losses through deep soil cracks, field drains and accidental overspray of ditches.

- 💧 What are the **local risks** to drinking water sources?
- 💧 What are the **risks on your farm, fields and soils**?
- 💧 How good are your **handling and filling** facilities?
- 💧 How will the **weather and field conditions** affect your spraying?

THE KEY HERBICIDES
carbetamide
clopyralid
metazachlor
propryzamide
quinmerac

Local Risks

The Environment Agency's 'What's in your Back Yard' (WIYBY) will identify if your farm is in a Drinking Water Safeguard Zone and if any oilseed rape herbicides are identified as a 'risk'.

Visit www.wiyby.co.uk or google "wiyby for farmers". Local information can also be obtained from your local water company or catchment officer.

Main soil types

Sandy and light silty

– naturally free draining. However, with little structure erosion is a risk.

Medium – reasonably free draining, less liable to compaction unless mismanaged

Heavy – compaction is a risk without adequate organic matter. Compacted soil is easily waterlogged and can suffer ponding, run-off or soil wash.

Chalk and limestone

– naturally free draining

Peaty

– can be free draining if land is drained

Assessing Farm, Field and Soil Risks

Begin by understanding the topography and drainage of your farm. Identify all water courses, from minor ditches to ponds and lakes.

Identify fields that slope down to water. The steeper the slope, the more chance of run-off.

For fields beside water courses assess any provisions to reduce run-off, eg buffer strips.

Soil type and structure will affect how quickly water will percolate through soil. While soil type and compaction will influence how quickly pesticides may run-off fields – either in solution with rainfall or attached to soil particles in erosion.

Well maintained **drainage** is important for good cropping on many soils, but may also speed up flow of pesticides in solution to water courses.

Cultivations can also affect how quickly herbicides can reach water courses. Identify where mole draining and sub-soiling have been carried out before sowing.



Use the VI's Check it Out Tool to review your spraying operations

Online tools

Adama's WaterAware app
Dow AgroSciences Postcode checker
AHDB soil monitoring tool

Filling and handling

Inspect areas where you fill the sprayer to see how any spills or splashes when handling pesticides or filling sprayers could reach drains and water courses. Pour a bucket of clean water on the area and watch where it drains to. Use the Check it Out Tool to review your filling, handling and application practices.

Improved water protection can best be achieved through purpose built filling areas, with separate drainage to handle spills, splashes and washing water. Alternatively – and far less expensively – it can be achieved by filling in the field. However, field-based filling operations must be carried out away from gateways, hard surfaces and any watercourse, including dry ditches.

More information can be found in the VI's Best Practice Guide to Handling Areas.

Weather and field conditions – when planning to spray

Wet weather poses the greatest risk to pesticide loss from fields soon after application.

- Use 5 five day forecasts to avoid applying herbicides when heavy rainfall is expected within 48 hours of application.
- Use online tools to assess risk.
- Frosty ground will also pose a risk of rapid run-off.
- Running drains are another indicator of a high risk of pesticide loss through the soil profile.

Use this check list to review your actions

| Objective | Detailed actions or issues | I'm doing this | Maybe I could do this | Not doing this | I will investigate | Not applicable |
|------------------------------------|--|----------------|-----------------------|----------------|--------------------|----------------|
| Assess local risks | Check WIYBY | | | | | |
| | Ask local water company | | | | | |
| | Contact catchment officer | | | | | |
| Assess field risks | Soil type | | | | | |
| | Drainage | | | | | |
| | Slope | | | | | |
| | Proximity to water | | | | | |
| Review handling area | Plan of drains near to handling area | | | | | |
| | Secure, bunded storage | | | | | |
| | Temporary bunding to catch spills when filling | | | | | |
| | Bunded filling area separate from any drains | | | | | |
| | Container cleaning and draining facilities | | | | | |
| | Secure storage for empty containers | | | | | |
| | Safe procedure for handling sprayer washings | | | | | |
| | Park sprayer under cover | | | | | |
| | Use the Check it Out Tool | | | | | |
| Check weather and field conditions | Use 5 day forecasts | | | | | |
| | Avoid spraying when heavy rain forecast | | | | | |
| | Use online tools to assess risk | | | | | |
| | Check field drains are not running | | | | | |
| | Avoid spraying when run-off likely | | | | | |



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www.osrherbicides.org.uk



The
Voluntary
Initiative

Promoting responsible pesticide use