

## Teagasc Notes for week ending Friday 11<sup>th</sup> June 2021

### Best Management Practices When Using Pesticides Agricultural Sustainability Support and Advisory Programme Kilkenny

It is essential for farmers to take great care and follow best practice procedures when using pesticides, in particular applying grassland herbicides.

Monitoring of drinking water in Ireland continues to detect exceedances above the standard for certain herbicides. In 2020, there were 91 exceedances above the limit in 36 drinking water supplies. Although, the trends in the annual results are positive and clearly show a reduction in exceedances and supplies affected, the efforts by all stakeholders must continue.

The chemicals causing the greatest problems are MCPA (eg Agritox, Agroxone 50, M50, Mortone, NU46 etc) and 2, 4-D (eg Bandox EW, D50, Mortox 50 etc). These compounds known as Phenoxy Acids are highly soluble in water, more persistent in the environment and widely used. Two other herbicides with high usage and causing increasing concern are d Glyphosate (eg Roundup, Gallup etc) and Triclopyr. These four herbicides accounted for 78% of the exceedances in 2020.

#### How to minimise the impact on water bodies

Implementing best management practice at the risky stages of handling and using herbicides is the best mitigation advice to deal with the issue.

##### 1. Storage and Preparation for Spraying:

- The store should be: secure, well-constructed with warning sign at entrance, leakages can safely be retained, chemicals stored in original containers with labels attached and maintain low volume of stock.
- The applicator must be a trained Professional Pesticide User.
- Application equipment must be well maintained, regularly calibrated and tested every 3 years. Weed lickers and smaller boom sprayers (<3m) will be included in the testing regulation by end of 2021.
- Discuss with your Agricultural Adviser alternative methods of control: topping, drainage, sward improvement etc. A planned control strategy can justify spraying if other options have been explored first. These are important principles of Integrated Pest Management (IPM), a key requirement of the Sustainable Use Directive (SUD).

##### 2. Handling Herbicides

- Use appropriate Personal Protective Equipment (PPE) - Check safety data sheet.
- Minimise transport risks from retailer to farm and from farm to field as accidents can happen.
- Always read and follow label instructions (correct use, correct rate and correct time)
- Always use the approved application method (eg MCPA cannot be used in a weed licker/wiper or knapsack).
- Take care to avoid spills, especially when handling the concentrated product. It is best to have a containment system in place to catch spills eg drip tray.
- NEVER fill the sprayer directly from a watercourse.
- Sprayers should be filled where losses to water bodies cannot occur.

### 3. Spraying Herbicides

- Be aware of the location of water bodies on the farm. Take note of the buffer zone for the chemical and comply with the specified unsprayed strip (distance on label: generally 1-5m)
- Comply with the Safeguard Zones for the protection of drinking water abstractions from ground water.
- Spray when conditions are suitable: on a calm day, vegetation dry, no heavy rainfall for >2 days, land reasonably dry (no tyre marks) and a young crop of healthy weeds.
- Do not apply on waterlogged or poorly draining soils that slope steeply towards a water body or any other vulnerable area leading directly to surface or ground water (eg karst). Another potential high risk pathway is field drains filled towards the surface with stone. In this scenario avoid band spraying within 5m of the drain. Spot spraying is a safer option.
- Triple rinse the container and add the rinsate to the sprayer.
- Spray the tank washings (internal rinsing) and clean down the external parts of the sprayer in the field. Don't discard sprayer washings on a yard or gravel area as it can potentially enter a water body.

#### **Measures specific to Rush Control:**

MCPA shall not be used from 30<sup>th</sup> September to 1<sup>st</sup> March.

Spraying for rushes on marginal land is not necessary to satisfy BPS eligibility as topping or grazing will suffice.

Weed licking/wiping with Glyphosate is the safest chemical control method where waterbodies are at risk.

New guidelines from DAFM suggest CONTAINEMENT (topping and removal of rushes) is a more sustainable strategy than SUPPRESSION for rush control where extensive farming is practiced on a poor sward with poor soils, poor drainage, high rainfall and a risk to watercourses.