Environment Agency

Harvesting Success: Pollution-Prevention Rules for Farmers

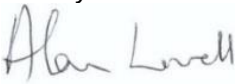
Helping you to comply with the law, reduce your risk of causing pollution and benefit your business

Agriculture and the environment go hand in hand, shaping our landscapes and providing food, spaces for people and wildlife, as well as offering flood resilience in a changing climate. However, agriculture does have an impact on the environment and is responsible for around 40% of waterbodies failing to achieve good ecological status in England.

Improving environmental performance does not have to affect the cost of food production or limit the running of an efficient business, but it will need farmers, their advisors, regulators and others in the supply chain to work together to implement solutions. The good news is that better management of our farmland resources brings not only benefits for the environment, but it is also at the heart of sustainable and profitable farming systems.

I am delighted that this guide has been produced and am confident that it will help farmers to understand the environmental rules and regulations that govern how they should farm. It brings together a summary of what the rules are and why these are important for both the environment and the farm business, as well as where to find more information.

I hope farmers will find this a useful reference tool to help navigate environmental regulations. It will help them to realise the benefits they can bring to their businesses as food producers, while safeguarding and enhancing our countryside.



Alan Lovell
Environment Agency Chair

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Diffuse Water Pollution

Nutrients, sediments, faecal pathogens, metals and other organic chemicals that run-off or are leached from soils into water, cause agricultural diffuse pollution. Agricultural diffuse pollution has a significant impact on our waters, with 40% being adversely affected by it. It is vital to protect our drinking water and the water environment from these pollutants.

The Reduction and Prevention of Agricultural Diffuse Pollution (England) Regulations 2018, also known as the '*The Farming Rules for Water*', were introduced to reduce and prevent diffuse water pollution from agricultural sources. These set a consistent baseline of good practice that all land managers must comply with.

Reducing the risks

- Plan all your applications of fertiliser and organic manures so that you only apply what the soil and crop need (which may also save you money).
- Apply fertilisers and manures under suitable weather and soil conditions.
- Minimise contaminated water in the yard.
- Minimise soil erosion.
- Ensure your workers and contractors know the rules.
- Reduce run-off risks by:
  - Maintaining good soil structure and removing compaction.

- Managing livestock to reduce poaching and run-off.
- Separating clean and contaminated water in yards.
- Providing vegetated buffer zones.
- Not leaving bare soil, e.g. by planting cover crops.

Top Tips

Take basic precautions to protect water quality:

- Identify any high-risk areas on your farm.
- Manage your drainage.
- Manage and make efficient use of your inputs, including manures, fertilisers and pesticides.
- Protect watercourses by using buffers.
- Protect and manage your soils.
- Understand your surroundings – are you in a Nitrate Vulnerable Zone (NVZ), does your farm affect bathing waters, drinking waters or areas protected for wildlife?

How will you benefit?

Reducing the risks of diffuse pollution benefits you:

- It makes your business more efficient by maximising use of resources and reducing costs.
- Business risks are reduced by complying with the law and avoiding financial penalties.
- It builds resilience to climate change, floods and droughts.
- The quality of your watercourses will be improved and protected.

Farmyard Drainage, Silage and Oil

Farmyard Drainage

- Rainfall from roofs and clean yard areas should be kept separate from dirty areas, such as loafing yards. This will reduce the amount of slurry that needs to be stored.
- Check and maintain gutters and downpipes to prevent clean water falling on dirty yards.
- Uncontaminated rainfall from roofs and clean yards (not used by animals) may be discharged into a ditch or watercourse, or could be collected to be re-used (rainwater harvesting).
- All run-off from yards used by animals must be collected, stored, and spread as slurry. It must not be allowed to enter any surface-water drains or ditches, or soak into the ground where it may pollute groundwater.
- Make sure that you know the location of clean water and contaminated (or fouled water) drains and where these lead to

Roofing yards and maintaining gutters and downpipes will save you money on slurry storage and spreading costs

Top Tips

- Consider roofing areas of yard to reduce the amount of rainwater falling on dirty yards and needing to be collected and stored as slurry.
- Routinely check surface-water outfalls into watercourses to ensure these are not causing pollution.
- Routinely check drains to ensure these are clear of debris and running freely. Repair as necessary, as soon as possible.
- Contact the Environment Agency if you require advice on what can and cannot be discharged to a watercourse. You may need an environmental permit.
- There are currently grants available for roofing yard areas, rainwater harvesting, rainwater goods, drainage and other yard works to reduce pollution risk.

Silage

Silage must be stored in accordance with the Silage, Slurry and Agricultural Fuel Oil (SSAFO) Regulations

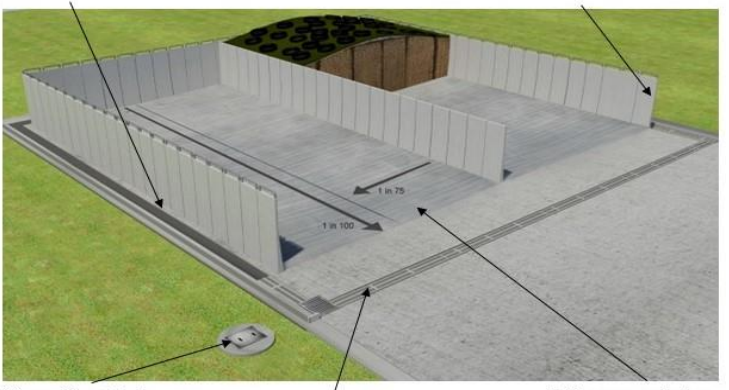
For silage clamps:

- These must have an impermeable floor and the structure must meet the loading requirements of British Standard BS5502

- The base must extend beyond the walls and have channels on all sides to collect effluent.
- Effluent tanks must be adequately sized and designed to last 20 years without maintenance if any part of the tank is below ground. The rest of the structure must be designed to last 20 years with maintenance.

Roofing silage clamps will reduce how much effluent you need to collect

- It must be a minimum of 10 metres from any inland freshwaters or coastal water.



You must notify the Environment Agency, ideally in writing, about any new, substantially enlarged or substantially reconstructed silage clamp at least 14 days before any construction begins. You can use: enquiries@environment-agency.gov.uk

You must comply with the Farming Rules for Water:

- Any silage effluent tanks must be at least 50 metres from any spring, well or borehole.
- Silage effluent tanks must not be located anywhere where these may cause a significant risk of agricultural diffuse pollution.

If the silage is being baled:

- It must be wrapped and sealed into an impermeable bag or membrane.
- It must be stored a minimum of 10 metres from any inland freshwaters or coastal waters.

For field silage that is made or stored on open land:

- You must notify the Environment Agency at least 14 days prior to using any site.
- It must be at least 10 metres from any inland freshwaters and coastal waters, and at least 50 metres from any protected water-supply source.

Top Tips

- Consider roofing your silage clamp (if the structure allows), as this will reduce the amount of silage effluent having to be collected, stored and spread; water from roofs can be directed to a clean-water drain.
- Grants are currently available for roofing and yard works.
- Inspect the clamp regularly for any damage to the concrete and seals. Silage effluent is highly polluting and corrosive and can escape to the environment through small cracks, causing pollution of surface waters and groundwater.
- Ensure the channels surrounding the silage clamp are kept clear of debris.
- A silage clamp with earth-banked walls is unlikely to be compliant with the Regulations if it was constructed after 1991.

Oil Storage

Fuel oil kept on agricultural land must be stored in accordance with the SSAFO Regulations (if over 1,500 litres)

- The tank, pipework, valves and taps must all be within an impermeable bund that can hold at least 110% of the capacity of the tank.

- The bund and base of the storage area must be designed and constructed so that with proper maintenance, these are likely to last for at least 20 years.
- The store and bund must not be within 10 metres of any inland freshwaters or coastal waters.All valves and taps must be locked and kept within the bund when not in use.

Bunded oil tank with a lockable hatch

You must notify the Environment Agency, ideally in writing, about any new, substantially enlarged or substantially reconstructed oil store at least 14 days before any construction begins. You can use: enquiries@environment-agency.gov.uk

Top Tips

- Consider using barriers to protect the oil store from being hit by vehicles in the yard.
- Do not site the tank near any drains.
- Have a spill kit to hand, e.g. sand or other absorbent material, in case of spillages.
- If possible, site the store away from farm entrances or public access areas to reduce the risk of theft.

- Inspect your store regularly to make sure it is in good condition.
- Supervise deliveries if possible, making sure there is capacity in the tank and that it is delivered to the right location.
- Keep the filler hose inside the bund to catch any drips.

How will you benefit?

- Reduce storage and spreading costs by separating clean and contaminated water.
- Protect and enhance local habitat for fish, wildlife and recreation.
- Minimise risks to local water supplies.
- Better working conditions with a cleaner yard.
- Keep compliant with the law.

Slurry and Organic Manures

Organic manure is fertiliser derived from animal, plant or human sources and includes anaerobic digestates, livestock manure and slurry, silage effluent, biosolids and compost.

Slurry is made up of livestock excreta and bedding collected from yards and buildings, together with rainwater and washings that fall on yards and buildings that livestock use. In the past, other terms were used to describe slurry of varying strengths or dilutions, such as ‘dirty water’ and ‘lightly fouled water’. These are defined as slurry and must be managed as such.

Storage

All slurry stores (including stores for farmyard manure on hard standing) must be built to comply with the Silage, Slurry and Agricultural Fuel Oil (SSAFO) Regulations:

- These must be at least 10 metres from any inland freshwaters or coastal waters.
- The base and walls of slurry storage tanks, effluent tanks, channels, reception pits and pipes must be impermeable.
- These must be designed and constructed to last at least 20 years with proper maintenance.
- These must be built in accordance with BS5502.

- These must have a minimum freeboard (the gap between the top of the slurry and the top of the store) of 750mm for earth-bank lagoons and 300mm for other types of slurry store.
- These must have capacity for at least 4 months' slurry production, including any rainwater that falls on the store or is directed to it.
- Reception pits must have capacity to store 2 days' slurry production.
- If the store is fitted with a drainage pipe that slurry could flow out of, the pipe must be fitted with 2 lockable valves at least 1 metre apart. These must be locked shut when not in use.

Roofing your slurry store will reduce your storage needs and reduce ammonia emissions

You must notify the Environment Agency, ideally in writing, about any new, substantially enlarged or substantially reconstructed system at least 14 days before any construction begins. You can use: enquiries@environment-agency.gov.uk

You must comply with the Farming Rules for Water:

- Slurry stores must be at least 50 metres from any spring, well or borehole.

- Slurry stores must not be located anywhere where it may cause a significant risk of agricultural diffuse pollution.

If you are located within a Nitrate Vulnerable Zone (NVZ):

- You must have a minimum of 5 months' storage for cattle slurry and 6 months' storage for pig slurry and poultry manure.
- You must have a written calculation showing how much slurry storage is required for your farm, as well as how much capacity you have.

Mechanically separated slurry

- Once slurry has passed through the separator, the liquid will remain slurry, and must be stored in accordance with the SSAFO Regulations.
- The stackable material must be collected and stored on an impermeable surface to prevent leaching into soil.
- If liquid leaks from stackable material, you must capture it and store it as slurry.
- To prevent stackable material getting wet and turning back to slurry, it should be kept under an impermeable cover such as a tarpaulin or in a barn.
- Do not store it in an uncovered field heap, except for short periods when preparing to spread it to land.

- If the material does get wet again, you must store and manage it as slurry.

Farmyard Manure (FYM)

Farmyard manure can be stored in a temporary field heap if the following rules are met:

- It is 'stackable' and does not slump.
- It does not produce any run-off.
- It is stored at least 10 metres from any inland freshwaters or coastal waters.
- It is stored at least 50 metres from any spring, well or borehole.

Stackable farmyard manure in a field heap

- It is not stored anywhere where it may cause a significant risk of agricultural diffuse pollution.
- FYM can be stored in a yard on an impermeable surface provided that any run-off is collected and stored as slurry.

If you are in an NVZ:

- Temporary field-heaps must not be stored for any longer than 12 months in any one place and must be marked on your farm risk-map.
- You must leave a two-year gap before returning to the same site.

- The field heap must be at least 30 metres from any surface water or land drain if the land slopes 12 degrees or more.

Top Tips

- It is highly recommended that you size any new slurry store for at least 6 months' storage capacity. This is to ensure that you can manage the timings of slurry applications and are not forced to spread when weather and soil conditions are not appropriate.
- Ensure that you have enough storage so that you do not need to apply organic manures when there is no soil and crop need.
- Contact your local Environment Agency Officer when planning a new store to get advice and guidance at the planning stage.
- Use a recognised tool such as *Slurry Wizard* (AHDB.org.uk) to calculate slurry production and rainfall needed to be stored.
- Make sure you use accurate rainfall data for your location and include a contingency for wetter than average years (if not using *Slurry Wizard*).
- Routinely check and maintain your store to prevent leaks and failures.
- Consider covering any slurry or FYM stores to minimise the amount of slurry to be collected, stored

- and spread. This will also minimise ammonia emissions.
- Consider sheeting manure heaps as this will reduce odour and ammonia emissions.Narrow and densely packed A-shaped heaps of manure will shed rainwater more readily and prevent manure from getting saturated.
- Have a contingency plan for how you would manage if you were unable to spread, e.g. due to bad weather.

How will you benefit?

- Adequate storage will allow better timing and use of organic manure nutrients and allow you to reduce the amount of manufactured fertiliser that you buy.
- Reduced risk of polluting local watercourses.
- Reduced fuel costs.
- Keep compliant with the law.

Nutrient Planning

You must comply with the Farming Rules for Water:

- The application of organic manure must be planned in advance so that it does not exceed the needs of the soil and crop at the time it is applied on that land.
- In most cases, there is no soil and crop need for nitrogen in the autumn and winter, and when there is it will be limited. Consult your qualified adviser

- Applications must be planned so that these do not give rise to a significant risk of agricultural diffuse pollution.
- Soil sampling and analysis must be carried out at least every 5 years on each individual cultivated field and should include pH, phosphorus (P), potassium (K) and magnesium (Mg).
- Nitrogen (N) levels may be determined by means of assessment of the soil nitrogen supply (SNS).

If you are in an NVZ you must:

- Produce a nitrogen fertiliser plan.
- Keep field records showing crop type and applications of organic and manufactured fertilisers.
- Have a risk map of the farm showing areas where organic manures can and cannot be spread.
- Calculate your livestock manure nitrogen farm limit (must be less than 170kgN/ha).

Top Tips

- You must be able to demonstrate that you have planned for soil and crop need. A written nutrient management plan, updated on an annual basis would be a good way to show this.

- Funding is currently available to produce a nutrient management plan.
- In most cases there will not be a soil and crop need for nitrogen in the autumn or winter. This includes cover crops.Ensure that you have enough storage so that you do not need to apply organic manures when there is not a soil and crop need.
- A risk map showing slope of the land, proximity to watercourses, springs, wells and boreholes, soil type and presence of land drains, is recommended as a useful tool to help planning of applications.
- Use a recognised planning tool and/or a FACTS-qualified advisor.

How will you benefit?

- Nutrient planning will optimise the timing and quantity of applications for soil and crop need, which may save expenditure on manufactured fertiliser.
- Reduce the risk of agricultural diffuse pollution, which will improve water quality in the local environment.

Applications of organic manures

You must comply with the Farming Rules for Water:

- Organic manures must not be applied:
  - if the soil is waterlogged, flooded or snow-covered;
  - if the soil has been frozen (for more than 12 hours in the previous 24 hours);

- if there is significant risk of causing pollution;
- within 10 metres of any inland freshwaters or coastal waters (6 metres if using precision spreading equipment); orwithin 50 metres of a spring, well or borehole.

- Organic manures must only be applied if there is a soil and crop need.
- You must ensure that reasonable precautions are taken to prevent agricultural diffuse pollution resulting from applications, e.g. checking spreading equipment for leaks, using appropriate spreading equipment such as dribble bar, trailing shoe, shallow injection.
- You must take into account weather conditions and forecasts for the land at the time of application and check ground conditions prior to any applications.
- Identify and remediate any compacted soil prior to spreading, as this will prevent slurry from infiltrating.

Applying organic manures to meet crop and soil need will make best use of the nutrients on your farm and save money on manufactured fertiliser

If you are within an NVZ you:

- Must not apply organic manures in the closed period.
- Must not apply above the N-Max limit for the crop

- Must not apply more than 250kgN/ha/year from organic manures.

Spreading waste materials

You can spread some wastes to land to improve soil health and reduce costs on manufactured fertilisers, if you also comply with waste regulations. You may need an environmental permit if you operate a site where waste is treated.

Land-spreading deployment permits

- You must have a land-spreading permit and deployment to spread food/drink-industry waste, water-treatment cake, paper crumble, poultry-litter ash, gypsum and cement-kiln dust, amongst others.
- You must have a permit or exemption to spread compost and digestate unless these are compliant with Publicly Available Specification (PAS) and Quality Protocol (QP). Specifically, PAS 100 and CQP for compost and PAS110 and ADQP for digestate.
- You do not have to have a permit to spread biosolids (sewage sludge) to agricultural land.
- You can use the services of an individual or company that already has a land-spreading permit. The permit holder must apply for a farm-specific 'deployment', which must be approved by the Environment Agency before delivery and spreading begins.

- You must give the permit holder details of your cropping, soil tests and applications within the last year, plus planned applications for the coming year.
- The permit holder must give you:
  - a copy of the deployment approval letter;
  - a copy of the approved applications so that you can update your nutrient management plan before spreading occurs; and
  - spreading records once spreading is complete.

Exemptions and Low-Risk Waste Positions (LRWP)
These enable use of some lower-risk wastes in low quantities under certain conditions.

- Check you can meet the conditions.
- Examples include:
  - U10: spreading waste to benefit agricultural land.
  - D1: depositing waste from dredging inland waters.
  - LRWP 59: storing and spreading gypsum waste to benefit land.

Top Tips
- In most cases, there will not be a soil and crop need for nitrogen in the autumn or winter.
- Be prepared to postpone planned applications if the conditions are not right on the day.
- Do not spread if heavy rain is forecast in the next 48 hours.

- Ensure any staff/contractors responsible for spreading are aware of where not to spread and what to do if something goes wrong.

How will you benefit?

- Reduce the risk of agricultural diffuse pollution, which will improve water quality in the local environment.
- Keep you compliant with the law.

Manufactured Fertiliser

You must comply with the Farming Rules for Water when planning applications and applying fertiliser:

Planning

- Each application of manufactured fertiliser must be planned to meet, but not exceed, soil and crop need.
- You must also take into account slurry and organic manure applications when planning.
- Fertilisers must only be applied at the time of soil and crop need.
- Plan applications so that these do not give rise to a significant risk of agricultural diffuse pollution.
- You must take into account the weather conditions and forecasts for that land at the time of the application.

If you are within a NVZ you must also:

- Produce a nitrogen fertiliser plan.
- Keep individual field records of crop type and applications.
- Ensure you do not exceed the N-Max for the crop.

Applications

Manufactured fertilisers must not be applied:

- Within 2 metres of inland freshwaters or coastal waters, or a well, spring or borehole.
- If the soil is waterlogged, flooded or snow covered.

- If the soil has been frozen (for more than 12 hours in the previous 24 hours).
- If there is a significant risk of causing pollution.

You must:

- Take reasonable precautions to prevent agricultural diffuse pollution.
- Check spreading equipment for leaks and ensure correct calibration.
- If you are within an NVZ, you must not spread manufactured fertiliser within the closed period.

Storage

- Do not store manufactured fertiliser within 10 metres of inland freshwaters or coastal waters, or where there could be a risk of any run-off entering a watercourse.
- Liquid fertilisers must be stored in suitable tanks that are resistant to corrosion.
- Inspect tanks, pipes and valves regularly for any sign of leaking or corrosion.
- Undertake an environmental risk assessment:
  - Where this shows a high risk, construct secondary containment around the tank, pipes and valves. This must be able to hold at least 110% of tank capacity.

Top Tips

- Produce and use a nutrient management plan.
- Make the most of nutrients in your organic manures before using manufactured fertilisers.

- Site all stores away from public access to minimise interference, vandalism and security risks.
- Store bagged fertilisers inside a secure, dry and well-ventilated building made from non-combustible material.
- Store fertilisers well away from any combustible materials such as straw and hay, as well as other chemical substances such as urea or pesticides.
- Do not store fertiliser within 50 metres of any well, spring or borehole.
- Make sure you have an accident and emergency plan to deal with any spillages.
- Clean up and contain any spillages as soon as possible; do not wash spilt material down the drain.
- It is advised to construct secondary containment around any tank used for storing liquid fertiliser.
- Consider using protective barriers to protect tanks against collision damage.

How will you benefit?

- Improve efficiency and reduce costs by planning applications correctly.
- Keeps you compliant with the law.
- Contributing to local habitat protection and enhancement.
- Correct storage will keep you safe and protect your farm and buildings from potential fires

Poaching and Erosion by livestock

You must comply with the Farming Rules for Water:

- You must ensure that poaching is prevented within 5 metres of inland freshwaters or coastal waters.
- Livestock feeders must not be positioned:
  - within 10 metres of inland freshwaters or coastal waters.
  - within 50 metres of a spring, well or borehole.
- Livestock feeders must not be located where there is significant risk of agricultural diffuse pollution from poaching around the feeder entering any watercourse.
- You must take all reasonable precautions to prevent agricultural diffuse pollution resulting from livestock.

Poaching within 5m of a watercourse creates a significant risk of diffuse pollution

Excluding livestock from watercourses will reduce poaching and soil erosion

Reasonable precautions include, but are not limited to:

- Moving livestock regularly.

- Erecting fencing around inland freshwaters or coastal waters.
- Wintering livestock on well drained and level fields.

Top Tips

- Managed or constructed drinking points in watercourses are no longer recommended. However, if it is unavoidable, limit the area that cattle have access to.
- Ideally, alternative watering facilities should be installed such as pasture pumps or troughs on a mains water supply.
- Move feeders and drinkers frequently to minimise poaching and soil erosion.
- Grants are currently available for fencing and livestock drinking facilities to prevent pollution.

How will you benefit?

- Benefits livestock health.
- Keeps you compliant with the law.
- Reduces the risk of losing land from bank erosion.
- Conserves farm soils and nutrients.

Soils and Cultivation

Under the Farming Rules for Water, you must take all reasonable precautions to prevent agricultural diffuse pollution from:

- The application of organic manure and manufactured fertiliser.
- Land management, cultivation practices and harvesting.

Rills and gullies in a bare field

Reasonable precautions in relation to soil include, but are not limited to:

- Establishing crops early in autumn and during dry conditions.
- Planting headland rows and beds across the base of any sloping land.
- Undersowing or sowing a crop to stabilise soil after harvest.
- Breaking up compacted soil.
- Establishing grass buffer-strips in valleys, along contours, slopes and field edges, and adjoining gateways.
- All soil erosion is likely to cause diffuse pollution, however any soil erosion over 1 hectare would be considered a breach of the Farming Rules for Water.

Land management practices where care must be taken to prevent soil erosion and run-off include:

- Creating farm tracks and gateways.
- Establishing seedbeds, polytunnels or tramlines.
- Cleaning out ditches.
- Installing drainage or irrigation.
- Irrigating crops or spraying these with pesticides, herbicides or fungicide.

Top Tips

- Consider doing a run-off and soil erosion risk assessment for your fields.
- Avoid planting high-risk crops such as maize and root crops on high-risk fields.
- High-risk fields include those with light sandy soils which are vulnerable to erosion, slowly draining soils that lie wet for prolonged periods, e.g. heavy clay soils and steeply sloping fields.
- Do not travel on or cultivate land when it is wet, as this can create compaction.
- Examine your soils to assess its structure and condition.
- Consider what can be done to improve any issues, e.g. remove compaction and capping, and increasing organic matter.
- Preparing a good seedbed will allow crops to establish quickly and will promote good drainage.

- Funding is currently available to carry out a soil management plan, as well as actions to improve soil health.

How will you benefit?

- Improve farm business profitability and resilience.
- Better ground conditions for field operations.
- Encourage deep rooting, improve drainage and reduce drought stress.
- Keep you compliant with the law.
- You could save money on fertiliser, fuel, seed and pesticide.
- Less water pollution and flooding.
- Conserves farm soils and nutrients.
- Increases resilience to climate change.

Leaving soil bare post-harvest increases the risk of soil erosion and run-off

Good soil structure promotes deep rooting and improves drainage

Pesticides

- You must be properly trained to use pesticides.
- Refer to *The HSE Code of Practice for using Plant Protection Products*.

Storage and use

- Do not locate pesticide stores where there is a risk of polluting surface waters or groundwater.
- Stores must have an impermeable floor and be able to contain 110% of the contents likely to be stored (185% if you are near an environmentally sensitive site).
- You can store small amounts of pesticide in a leak-proof, locked and fire- and impact-resistant container.
- You should use a designated area for mixing, filling and washing, to prevent contamination of soil, groundwater or surface water.
- The drainage and run-off from this area should be collected and disposed of appropriately.
- All spills must be soaked up immediately with absorbent material, e.g. sand or cat litter.
- Do not hose down spills.
- If any spills occur, contact the Environment Agency emergency hotline on 0800 80 70 60.

Responsible pesticide storage and use protects human health and the environment

Disposal

- The disposal of pesticide washings onto agricultural land requires a permit under the Environmental Permitting Regulations, unless it is applied in the field within the terms of the product approval.

Top Tips

- Produce a risk assessment and drainage plan.
- Check you know what sensitive receptors are nearby in the farmyard and the field, e.g. watercourses, SSSIs, abstractors and fisheries.
- Check any store is in good condition and away from surface-water drains.
- Have a spill kit available.
- Ensure staff are trained and know where to find designated handling, filling and washdown areas.
- Check the equipment is maintained and calibrated.
- Check the weather forecast and ensure the ground conditions are suitable.
- Funding is currently available for Integrated Pest Management plans; grants are available for pesticide handling areas and biobeds/biofilters.

How will you benefit?

- Keeps you compliant with the law.
- Reduces the risk of serious pollution incidents that may harm human health and water quality.

Sheep Dip

- All dips (including mobile dips, jetters and showers) and holding areas must be located at least:
  - 10 metres from any watercourses and wetlands;
  - 50 metres from any well, spring or borehole; and
  - 30 metres from any watercourse that drains into a river or wetland designated as a Habitats site, or a Site of Special Scientific Interest.
- Sheep-dip products must be handled or supervised by a person who holds a Certificate of Competence in the Safe Use of Sheep Dip.
- Do not dip sheep if rain is likely within 24 hours.
- Keep sheep in the drain pen until there is nothing dripping from their fleeces.

Disposal

- You must get a permit from the Environment Agency to dispose of used sheep-dip on land.
- You must not dispose of used sheep-dip if the land is flooded, waterlogged, frozen or compacted.
- You must keep records of the disposal.
- You may dispose of used dip by sending it off-farm, but you must use a licensed waste carrier.

Top Tips

- Read and follow the Groundwater Protection Code.
- Refer to *The Sheep Dip Code of Practice*.
- Ensure dip baths and draining pens are properly sited, constructed and maintained, and equipment is in good working order.
- Put procedures in place to deal with emergency spillages.
- Ensure contractors are aware of their responsibilities.
- You can mix used dip with controlled volumes of slurry or water in a slurry tanker to achieve the required dilution rate to apply to land.
- Empty the dip bath as soon as possible.
- Cover your dip bath when you are not using it.
- Grants are currently available for improving sheep-dip facilities to reduce the risk of pollution.

How will you benefit?

- Keeps you compliant with the law.
- Minimises the risk of polluting water.
- Reduces the risk of accidents, protecting human health and water quality.

Pigs and Poultry

If you rear pigs or poultry, you may need an environmental permit. You must apply for a bespoke environmental permit to rear pigs or poultry intensively in an installation if you have more than:

- 40,000 places for poultry.
- 2,000 places for production pigs (over 30kg).
- 750 places for sows.

If you fall underneath these thresholds, or rear outdoor pigs, you must still comply with the regulations within this booklet and follow best practice to minimise your farm's impact on the environment.

Top Tips

- Choose sites that will minimise the risk of run-off to surface water and that will not have an adverse impact on groundwater.
- Sandy and silty soils on sloping sites in high rainfall areas should be avoided.
- Develop a system where grass cover is maintained on the site.
- Maintain grass-buffers to intercept any run-off that does arise.
- Move pigs to other paddocks when problems of run-off and erosion occur.

Water Resources

- You can abstract water from inland freshwaters such as rivers, streams, lakes and ponds, as well as groundwater sources such as wells, boreholes and springs.
- Up to $20m^3$ (20,000 litres) of water each day can be taken without needing an abstraction licence.
- If you abstract water from the same source at multiple points (e.g. the same river), the exemption from a licence only applies if the combined total of all abstractions does not exceed $20m^3$ per day.
- You must have an impounding licence if you plan on building a structure that can permanently or temporarily change the water level or flow. This includes dams, weirs, fish passes, sluices or reservoir embankments amongst others.

Top Tips

- Dairy cows use approximately 117 litres/day of water each (92 litres drinking water and 25 litres wash water). If your herd size is around 170 or more, it is likely that you will need an abstraction licence if not on mains water.
- Irrigating crops uses large quantities of water. You will need a licence if you are abstracting water for this use.

Waste management

You must store and dispose of any waste you produce on your farm correctly. You must not burn or bury it.

- Keep waste to a minimum by preventing, reusing, recycling or recovering waste (in that order).
- Sort and store waste safely and securely.
- Complete and keep for 2 years a waste transfer note for each load that leaves your premises.
- Check if your waste carrier is registered to carry your waste.
- Ensure that your waste is taken to an appropriately permitted site.
- Waste must be removed from your premises within three years or it is considered an illegal deposit.
- There are exemptions for some low-risk activities including treatment, storage and use of certain waste to enable recycling and reuse of these.
- You may require an Environmental Permit if you cannot comply with the limits of an exemption.

Hazardous waste, e.g. asbestos, batteries, oil and pesticide containers:

- Use authorised businesses to collect, recycle or dispose of your hazardous waste.
- Fill in and keep consignment notes for 5 years for all hazardous waste collected.

Further Information

This booklet is intended as a guide to the regulations and rules to reduce water pollution risks on the farm.

Further information is available from:
www.gov.uk/guidance/rules-for-farmers-and-land-managers

www.gov.uk/environment-agency

Catchment Sensitive Farming:
www.gov.uk/csf

Protecting our Water, Soil and Air (*Code of Good Agricultural Practice for farmers, growers and land managers*):
www.gov.uk/government/publications/protecting-our-water-soil-and-air

Mapping to check designations:
magic.defra.gov.uk

For general enquires or to talk to your local Environment Agency office please contact the Environment Agency National Customer Contact Centre:
03708 506 506
enquiries@environment-agency.gov.uk

If there is a pollution incident on your farm, please contact the Environment Agency hotline on:

0800 80 70 60

Self-reporting incidents can ensure that you get timely advice from the Environment Agency to minimise the impact to the environment and your business.

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www.gov.uk/environment-agency

Version 1

Minimum Legal working distances from inland freshwaters, coastal waters, springs, wells and boreholes		
• No applications of manufactured fertiliser	**2m**	Within 2 metres of any inland freshwater, coastal water, spring, well or borehole
• Prevent poaching	**5m**	Within 5 metres of any inland freshwater or coastal water
• No storage of organic manures or manufactured fertilisers • No application of organic manures • No livestock feeders	**10m** *(6m if using precision spreading equipment to apply organic manures)*	Within 10 metres of any inland freshwater or coastal water
• No storage of organic manures • No application of organic manures • No livestock feeders	**50m**	Within 50 metres of any spring, well or borehole
Storage of, and applications of organic manures must not give rise to a significant risk of agricultural pollution		