

Fact sheet 2: making field silage and silage in bulk bags

Are you planning to make field silage?

If you are planning to make field silage either in a heap or inside a large, sealed bag, this fact sheet will help you meet the requirements of the Water Resources (Control of Pollution) (Silage, Slurry and Agricultural Fuel Oil) (England) Regulations 2010. These are commonly referred to as the SSAFO Regulations and apply in England.



We have a duty to protect groundwater and ask that you avoid locating your system within a groundwater Source Protection Zone. Where this is unavoidable you should contact us.

If after reading these notes you are still unsure about your field silage or any other aspect of your farming operation which may be affected by the SSAFO Regulations, please contact us before starting any works. Mistakes can be expensive or result in additional works being required.

What is field silage?

Field silage is silage made on open land – that is, without the use of any walls, constructed base or floors or excavation works.

It includes silage made:

- on the surface of a field
- without any form of construction works
- in non-baled silage stored in bulk bags. (These can also be located on a yard providing provision is made to contain silage effluent and are not then classed as 'field silage')

It is NOT silage made:

- in a silo
- on a yard
- in a hillside bunker or clamp
- or compressed into conventional "big bales"

If any construction works or topsoil removal are undertaken, it ceases to be “field silage”, and the full requirements for silos may apply.

Simple in-filling of minor depressions with soil or sand to make the site level are allowed and not considered to be “construction”.

For information about other methods of making silage see fact sheet 3

How do the regulations apply to field silage?

Research shows that field silage heaps represent an acceptably low risk of pollution if the site is suitable. This means a suitable depth of topsoil is available, and the site is not subject to extensive fissuring or other preferential drainage pathways. You are allowed to make silage in field heaps or in non-baled bags, subject to certain conditions. You must ensure that:

- you notify us of the proposed site at least 14 days before it is first used. This includes field sites where bulk silage bags are intended to be used.
- the site is suitable
- there are no construction works, including floors, walls or earth banks
- the topsoil has not been excavated at all. This is very important as undisturbed soil is needed to help retain any silage effluent that may be produced and reduce the pollution risk
- the site must be at least 10 metres away from any inland freshwaters or coastal waters that silage effluent could enter
- the site must be at least 50 metres from any protected water supply source
- you consider the risk of agricultural diffuse pollution, such as field drains or connectivity via roads and ditches, when deciding where to locate field silage sites

Note: “inland freshwaters” includes any stream, lake, reservoir, ditch or perforated land drain, even if it flows for only part of the year.

Note: Protected water supply sources are licensed abstractions or unlicensed sources used for human consumption, farm dairies or in the preparation of human food. You can ask us about licensed sources and ask your neighbours about other sources. If you become aware that one of these sources is within 50 metres of your chosen site, you must not make silage there.

If you are in doubt, please contact us before starting to make field silage.

What are silage bags?

Silage bags resemble a large “sausage” used to store agricultural feeds, including grass, maize and whole crop silage. They may be used to contain excess production of silage but are most commonly used to store silage intended to be used in anaerobic digesters.

Silage bags may be suitable for storing silage:

- as field silage
- within a structure, such as a silo, or on a yard.

Different rules will apply depending on where the silage is stored.



How do the regulations apply to silage bags?

Where silage is stored in a non-baled bulk bag located on a yard, or in a silo, drainage from that area must be contained and the structure must satisfy the full requirements of the SSAFO Regulations. See fact sheet 3 for further information.

Silage bags are sufficiently airtight for the preservation process. However, they are not sufficiently impermeable to prevent the escape of liquid and are easily punctured or ripped by stones, crop stubbles, vermin, livestock, and machinery impacts.

Whilst silage bags can be stored on open land the risk of effluent loss is much greater than traditional bales. If silage has been harvested wet considerable effluent volumes can be produced. Effluent can also collect in significant quantity in pockets within the bag, or at one end. Precautions for traditional bales may not be sufficient to prevent pollution.

The risks to surface water and groundwater need to be assessed and agreed with the Environment Agency before a field storage site is used. Secondary containment of a sufficient standard may be needed to prevent pollution.

How will the Environment Agency decide if a field silage site is suitable?

We will consider the slope of the land, soil permeability, soil composition, soil depth and the likelihood of soil cracking and fissuring. We will also assess the risk of pollution to underground or surface waters. We consider the proximity of roads and farm tracks (both of which may increase the chances of silage effluent reaching watercourses), and of sensitive sites, such as Sites of Special Scientific Interest (SSSI).

Suitable sites should:

- have a minimal slope

- have a good cover of moisture retentive soil
- be at least the minimum required distance away from inland freshwaters or coastal waters, and protected water supply sources

They do not:

- have heavy clay soils which develop deep cracks
- have shallow soils over fissured rock
- drain towards tracks etc (that may provide pollution pathways)
- have sensitive sites, such as SSSIs nearby

How do I notify the Environment Agency that I intend to make field silage?

You must notify us at least 14 days before the site is first used.

Your notification should be in writing and clearly show the site location. A plan or map is essential but can be simple providing it is accurate.

You can download a [notification form](#) from the [GOV.UK](#) website.

What happens after I submit proposals to the Environment Agency?

We will assess your proposals and the site. In many cases we will visit the site and meet with you or your agent. We will usually make our assessment clear to you in writing.

If you do not hear from us within 14 days of our receipt of your notification you are free to make field silage providing you meet the requirements outlined above.

What happens if a protected water supply source is discovered within 50 metres of a site, or another risk is found after the site is first used?

If this happens the site should no longer be used. Selecting sites at least 50 metres inside the boundary of your property should help minimise the risk of such problems.

How can I minimise the risk of causing pollution when making silage by this method?

This method of silage making relies on the topsoil to retain any effluent. It is essential you do not remove topsoil.

Choose a level site, well away from any water features or drains.

Minimise silage effluent production by wilting the silage to achieve at least 25 per cent dry matter.

What happens if pollution occurs?

The responsibility for preventing pollution falls to the person with custody or control of the silage. Normally that is you, the farmer.

If pollution occurs you may be liable, even if we have agreed to the field heap site. Great care is essential in the selection of field silage sites.

If pollution occurs, you should report it. Call the Environment Agency incident hotline.
Telephone: 0800 80 70 60

Where can I find further help?

You can find further information on GOV.UK at [Storing silage, slurry and agricultural fuel oil - GOV.UK \(www.gov.uk\)](http://www.gov.uk)

To help identify any Source Protection Zones, look at [Groundwater source protection zones \(SPZs\) - GOV.UK \(www.gov.uk\)](http://www.gov.uk).

If you are unsure, please contact your local Environment Agency office via our general enquiries line. Telephone 03708 506 506