



## Silage

*Silage can be made in clamps, bales or bulk bags (e.g. AgBag). In all cases silage and silage effluent **must** be handled and managed carefully to ensure no pollution occurs.*

Where silage is made and stored in bales or bags they **must**:

- be situated at least 10m away from any surface water drains, ditch, burn, river, loch or shoreline when stored, opened or unwrapped
- be enclosed and sealed using impermeable membranes or bags, and
- where bulk bags are used, be sited on a firm level surface and incorporate a facility to safely remove effluent and be resealed when not in use

## Silage clamps

All silage clamps, effluent channels and collection tanks **must** be maintained during their lifecycle to ensure they are kept free from any structural defects.

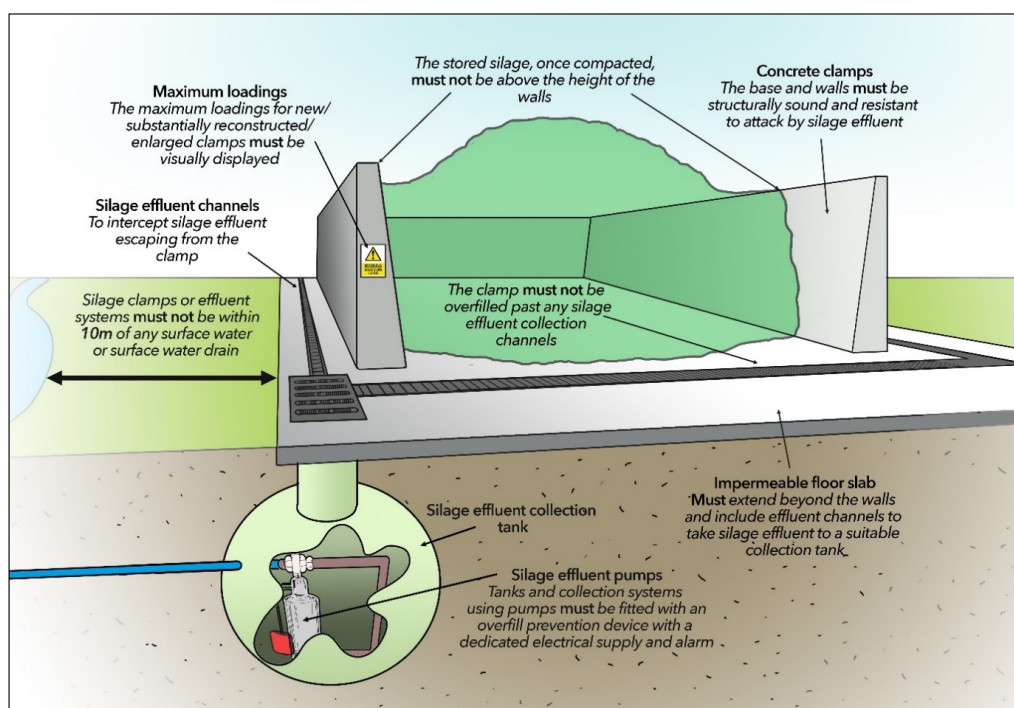


Figure 3.1. Silage clamp

## New or altered clamps and tanks

If you are considering a new silage clamp or silage effluent collection tank or alterations to any existing clamp or tank you **must**:

- notify and provide SEPA with an engineering plan at least 30 days prior to any work starting
- retain the engineers final sign-off certificate for the works for the life of the structure.

Existing silage clamps constructed prior to September 1991 **must** meet the below requirements by January 2026.

Existing silage clamps constructed or altered after September 1991 **must** meet the below requirements and the relevant British Construction Standards by January 2024.

## Earth bank clamps

All earth bank clamps **must**:

- have an impermeable floor slab and be constructed with channels to ensure all silage effluent is collected and conveyed to an appropriate silage effluent collection tank
- have the earth bank walls lined with an impermeable membrane such as 1000 gauge polyethylene or a similar material.
- be resistant to attack by silage effluent, especially the base and any channels or walls
- be located more than 10m away from any surface water or surface water drains. This includes their effluent collection systems
- never be overfilled past any silage effluent collection channels.

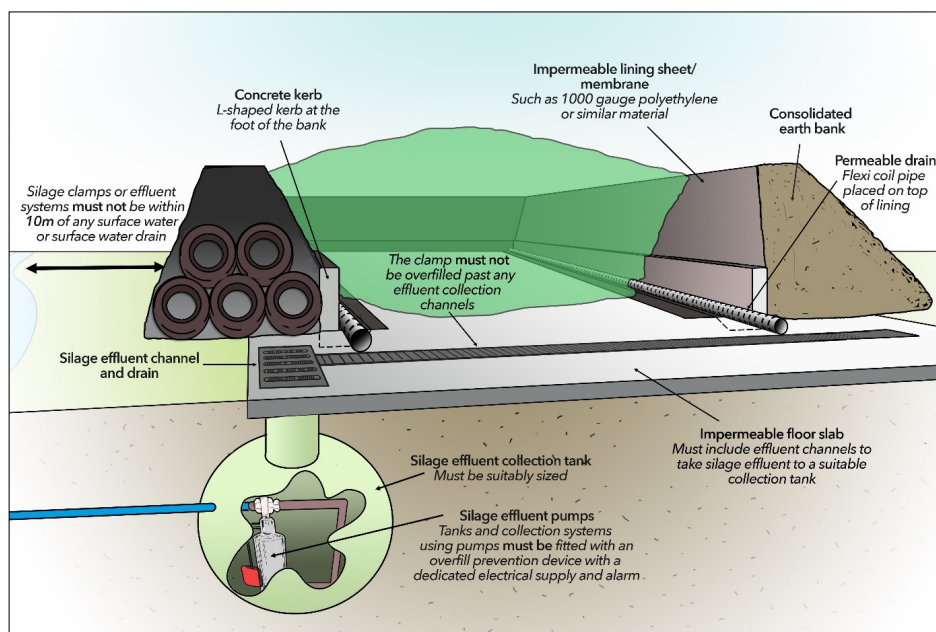


Figure 3.2. Earth bank clamps

## Clamps with walls made of materials other than earth

All non-earth bank clamps **must**:

- have an impermeable floor slab which extends beyond the walls and is constructed with effluent channels to ensure all effluent is collected and conveyed to an appropriate effluent collection tank
- never have the stored silage, once compacted, above the height of the walls
- have the maximum loadings for any new or substantially reconstructed/enlarged clamp visibly displayed.
- be resistant to attack by silage effluent, especially the base and any channels or walls
- be located more than 10m away from any surface water or surface water drains. This includes their effluent collection systems
- never be overfilled past any silage effluent collection channels.

## Silage effluent collection tanks

All silage effluent collection tanks **must**:

- be impermeable and resistant to acid attack
- be fitted with an automatic overflow prevention device, with a dedicated electrical supply and alarm, if any pumps are used
- be sized according to the capacity of the clamp (Table 3.1)
- never be installed, substantially reconstructed or enlarged without first being discussed with SEPA at least 30 days prior to any work commencing.

*Table 3.1. Effluent tank capacity*

Clamp capacity	Capacity of silage effluent tank
Less than 1500m <sup>3</sup>	20 litres for every 1 m <sup>3</sup> of clamp capacity 30m <sup>3</sup> plus an additional 6.7litres for every
1500m <sup>3</sup> or greater	1 m <sup>3</sup> of the clamp capacity over 1500m <sup>3</sup>

If you are considering a new silage clamp or silage effluent collection tank or alterations to any existing clamp or tank you **must**:

- consult with a suitably qualified engineer and have an engineering plan available for the proposed works
- notify and provide SEPA with the engineering plan at least 30 days prior to any work starting
- retain the engineers final sign-off certificate for the works for the life of the structure.

Silage effluent which is from an opened clamp and consists mainly of rainwater can be drained through a constructed farm wetland (CFW). The Constructed Farm Wetland Know the Rules Factsheet 5 gives details of types of run-off which may be conveyed to a CFW.

### Definitions:

**Constructed farm wetland** – A series of ponds for the treatment of lightly contaminated surface water, which have been constructed in such a manner that any discharge from the ponds does not pollute the water environment.

**Crop** – any plant grown for a commercial purpose and includes cereals, root crops, grass and trees.

**Draff** – The residue of grain after fermentation of the grain in a brewing or distilling process.

**Forage crop** – any crop grown as food for livestock or for use in energy production.

**Groundwater** – water below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil.

**Livestock** – any animal kept for use or profit as part of a commercial enterprise.

**Silage** – any forage crop, including draff, which is being or has been conserved by fermentation or preservation or both, including the use of additives.

**Silage effluent** – effluent produced from any forage crop which is being made or has been made into silage or a mixture consisting wholly of or containing such effluent, rainwater or groundwater, emanating from a silo, silage effluent collection system or drain.

