FARMING & WATER SCOTLAND

Inorganic and liquid fertiliser storage and application

Inorganic and liquid fertilisers help to optimise crop yields when applied at the right time and in the right quantities, but they can cause significant pollution if they find their way into any surface water around the farm.

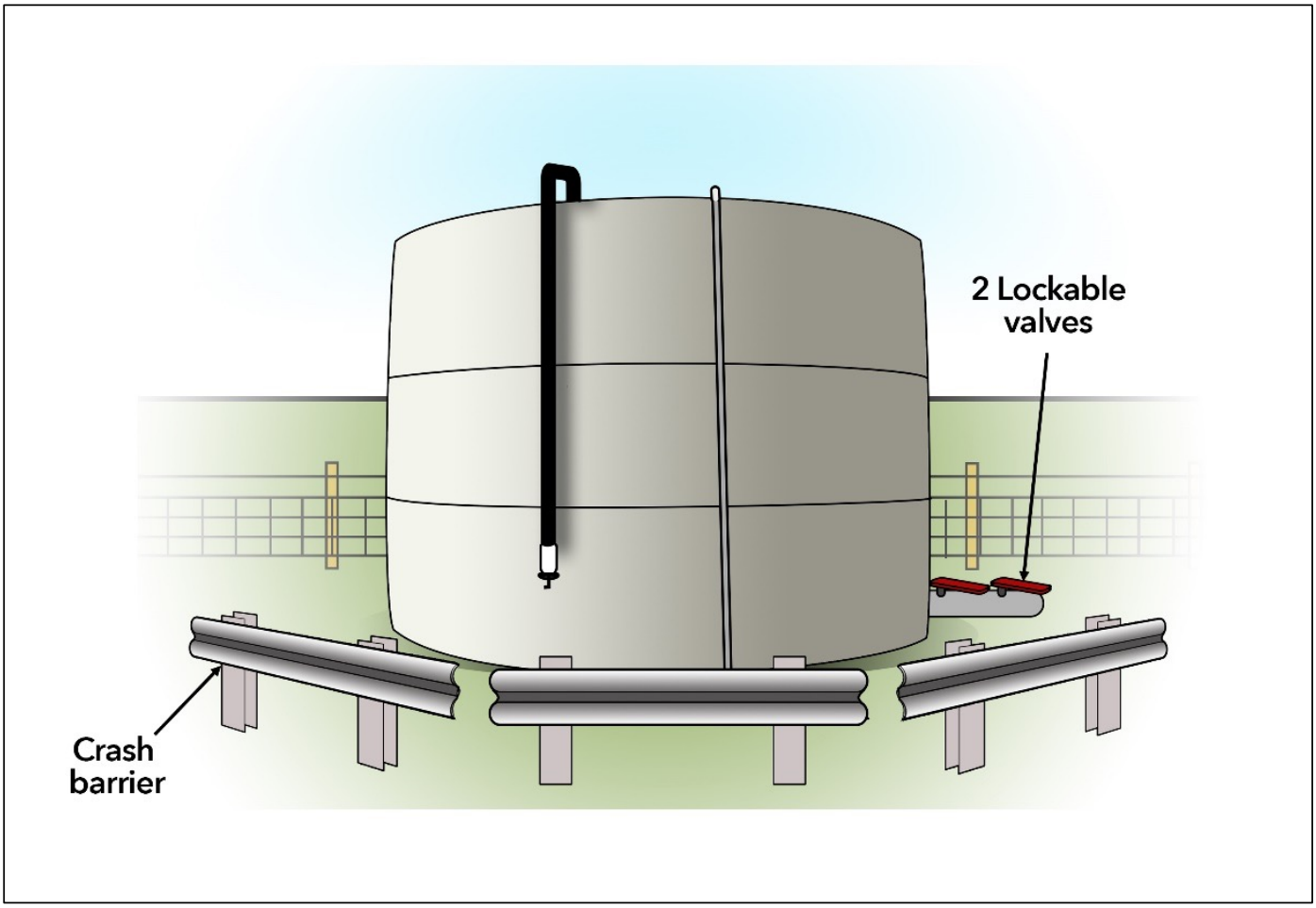

Figure 10.1. Inorganic and liquid fertiliser storage.

General storage of inorganic or liquid fertilisers

Inorganic or liquid fertiliser, including temporary storage in a mobile tank or bowser, **must** be stored on land that is:

- 10m from of any surface water, wetland or shoreline.
- 50m from any spring that supplies water for human consumption or any uncapped well or borehole.
- not waterlogged
- able to have an average soil depth of less than 40cm over gravel or fissured rock, unless the fertiliser is stored in an impermeable container.

Impermeable tanks used for the store of inorganic liquid fertiliser **must**:

- have a lockable double valve on the outlet that is closed and locked when the tank is unattended
- be located above ground
- be protected from vehicle collision.

Inorganic liquid fertiliser stored in a field **must** be contained in a tank, bowser or spreading equipment which:

- has hatches and lids are securely closed
- has outlets that are securely closed and locked, except when the fertiliser is being transferred or applied
- is held on a support in such a way that it cannot become dislodged, and the support is stable under the fully loaded weight of the tank or bowser and cannot itself become dislodged.

Application of inorganic or liquid fertilisers

When transferring liquid fertiliser to a tank, bowser or spreading equipment, all reasonable steps **must** be taken to prevent any spillage or leakage entering the water environment.

Crop requirement

To make efficient use of fertilisers it is important to take account of the nutrients in inorganic fertilisers when planning fertiliser applications. When applying fertiliser, you **must not**:

- exceed the crop requirement for nitrogen at time of application
- apply in excess of the amount required to maintain the target soil P status.

For more information on managing soil phosphorus see **Technical Note 668**.

Land suitability

Taking account of the weather, conditions of the land and location of features such as surface waters can greatly reduce the risk of causing pollution. When applying inorganic fertiliser, you **must not**:

- apply during heavy rainfall or if heavy rain is forecast within 24 hours
- apply to land that is:
  - within 2m of any surface water, wetland or shoreline
  - within 5m of any spring that supplies water for human consumption or any uncapped well or borehole
  - waterlogged
  - frozen
  - snow covered
  - sloping, unless a sufficient buffer is provided to intercept any run-off to prevent slurry reaching a surface water, or
  - has an average soil depth of less than 40cm over gravel or fissured rock.

Any equipment used to apply fertiliser **must** be maintained in a good state of repair and fertiliser **must** always be applied in such a way and at such times that the risk of pollution is minimised.

Definitions:

Container – means a single or double skinned fixed tank, a drum, a mobile bowser or (even if not connected to fixed pipe or fixed pipework) an intermediate bulk container.

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

Cultivation – the preparation of land prior to planting or harvesting any crop.

Fertiliser – any substance containing nutrients which is utilised on land to enhance plant growth, but excludes forestry brash.

Surface Water – any ditch, burn, river, wetland or loch.