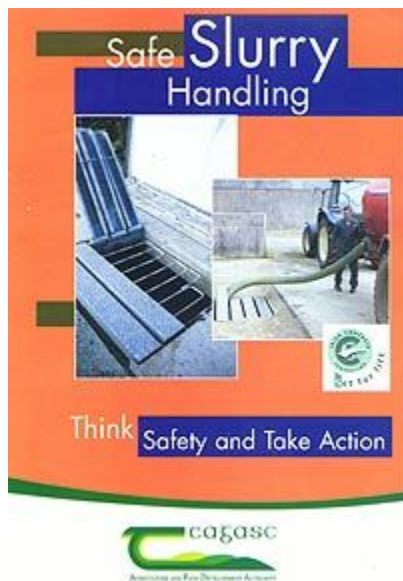


# Safe Slurry Handling



## Slurry - The Facts

- Toxic gases such as Hydrogen Sulphide ( $H_2S$ ), Carbon Dioxide ( $CO_2$ ), Ammonia and Methane are produced by bacteria during the decomposition of slurry.
- Hydrogen Sulphide gas is poisonous to humans and animals. It is
  - Fatal in seconds, one breath is enough
  - Heavier than air and is found at ground level in confined areas particularly on calm days,
  - Smells like rotten eggs, but high concentrations can't be smelled,
- Gas release is greatest
  - when the crust is broken,
  - in the first 30 minutes of agitation,
  - after silage effluent has been added,
  - after storage for several months.

## Precautions When Agitating Slurry

- Ventilate
  - Choose a windy day if possible
  - Open all doors and outlets
- Evacuate
  - All persons
  - All animals
- Agitate
  - Do not stand near slats
  - Do not enter the building for one hour

- Avoid smoking and naked flame
- Protect Openings
  - Install a manhole safety access cover
  - If slat(s) has to be removed, provide adequate temporary protection of openings
  - Warn children and visitors
  - Use warning signs

## Slurry Tank Protection

Adults and children can fall into unprotected slurry tank manhole openings. Always provide adequate temporary protection for tanks that have not got safety access covers.

## Other Safety Considerations

- Never enter a slurry tank without suitable breathing apparatus and proper training.
- Toxic gases can remain in the tank even when it is empty and could cause suffocation.
- The gas masks available have limitations. Always check with the manufacturer before using them.
- Gas detection systems are available but should **not** be used as a substitute for the safety guidelines outlined.

## Farm Check List

- Are safety access covers in place?
- Is there proper protection of openings?
- Are agitation guidelines being followed?
- Are PTO shafts covered ?
- Is the machine operator aware of the hazards?

## Think Safety and Take Action