

# SAFE SLURRY HANDLING



**Think**  
Safety and Take Action

*'Remember, just one lungful of slurry gases will kill'*

# Slurry GAS - The Facts

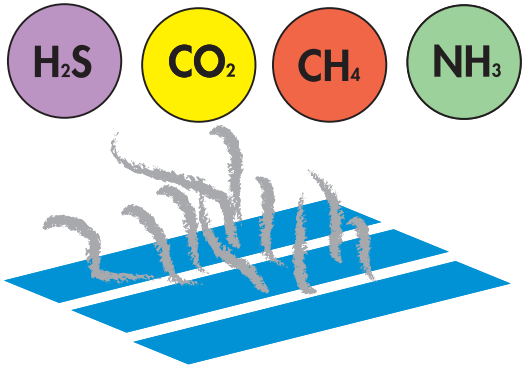
- Gases such as Hydrogen Sulphide ( $H_2S$ ), Carbon Dioxide ( $CO_2$ ), Ammonia ( $NH_3$ ) and Methane ( $CH_4$ ) are produced by bacteria during the decomposition of slurry.
- Hydrogen Sulphide gas is poisonous to humans and animals.

## It is:

- Fatal in seconds, one breath will kill
  - Found in tanks, silos and above ground level where there is little ventilation
  - Smells like rotten eggs, but quickly kills the sense of smell.
- 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.

Before building or modifying a slatted house consult the Department of Agriculture, Food and the Marine, Specification 123

**DANGER  
SLURRY  
GASES  
CAN KILL** ! ●



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# Precautions When Agitating Slurry

## Prevent Deaths from Toxic Gases

- **Ventilate**

- choose a windy day
- open all doors and outlets

- **Evacuate**

- all persons
- all animals
- control access

- **Agitate**

- do not allow slurry to rise to within 300 mm of bottom of slat
- agitate from up-wind position for a minimum of 30 minutes
- do not stand or stoop near agitation points, keep well away
- do not enter the building for one hour after agitation
- avoid smoking and naked flames



## Prevent Deaths from Drowning

Adults, children or farm pets can fall into unprotected slurry tank manhole openings. Always provide:

- adequate temporary protection of openings
- install safety access manhole covers with safety grids
- warn elderly persons, children and visitors
- use warning signs

## Protect Lagoons

- slurry lagoons must be protected by unclimbable fence or wall (1.8m high)
- access gates must be secured and locked
- ensure scrape holes are adequately protected
- prevent access by children who are at particular risk

## Emergencies

- never attempt a rescue, the chance of rescue will be gone if you also collapse
- call "Emergency Services" - 999 or 112.

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# Think

## Safety and Take Action



# Other Safety Considerations

- Entry into slurry tanks should only be done by a specialist contractor.
- Never enter a slurry tank unless absolutely essential and then only following special arrangements. If entering a tank you must wear a safety harness connected to a lifeline held by two people and use fresh air breathing apparatus.
- Toxic gases can remain in the tank long after it is empty and could cause suffocation/death.
- While gas detection systems are available, they are not recommended for use by farmers. Gas monitors can only be used safely along with full breathing apparatus and should not be used as a substitute for the safety guidelines outlined.

## Farm Check List

- Are safety access covers in place?
- Are tank openings properly protected?
- Are agitation guidelines followed?
- Are machine operators aware of the dangers?
- Are PTO shafts covered?
- Are warning signs in place?



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