

# SLURRY GAS

## MIXING SLURRY SAFELY



STOP AND THINK

**SAFE**

SLURRY ANIMALS FALLS EQUIPMENT

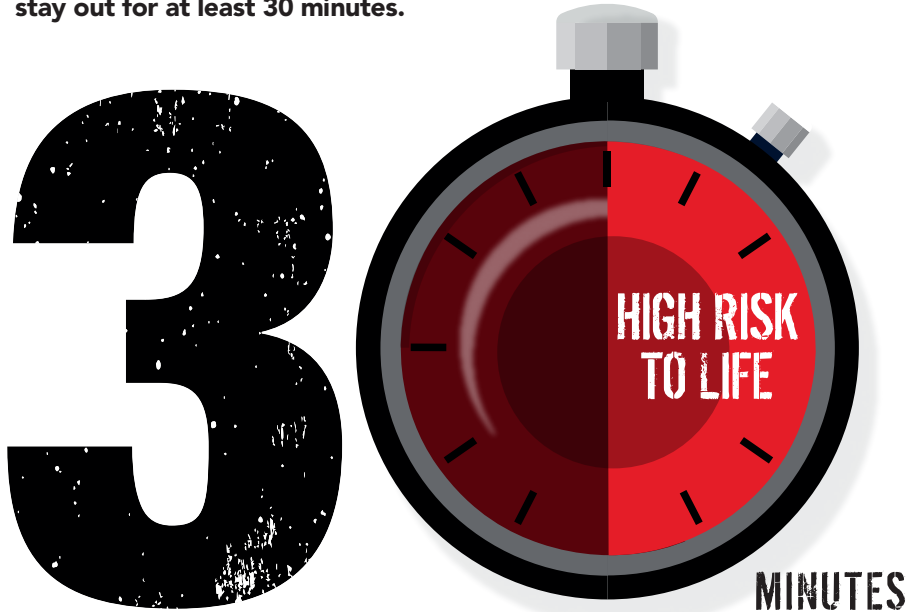
## Rapid Danger

**As soon as slurry mixing starts, the gas is released very quickly and in large quantities** (just like a shaken fizzy drink bottle being opened) – that’s why you must get out of the shed immediately.

The **first 30 minutes** are the most dangerous. This is why it is so important for farmers to **leave the shed as soon as mixing starts and stay out for at least 30 minutes.**

ventilation, especially at slat level and to try to mix on a windy day. Even at low concentrations, the gas can knock out your sense of smell adding to the danger.

**DO NOT** stay in the shed to check if the mixing is happening properly, you may have got away with this in the past, but you are putting your



As mixing continues, the quantity of slurry gas released reduces. The concentration decreases as it mixes with the air. That’s why it is important to ensure good

life at risk. Instead, follow the code, get out and only go back after at least 30 minutes.

Tragically, over the past few years, incidents involving slurry have claimed the lives of a number of people in Northern Ireland, including a child.

Don't let it happen on your farm!

## STOP AND THINK

- **STOP and THINK** - about the job and plan to do it safely.
- **THINK** - cover all openings.
- **THINK** - keep children and animals well away when working.
- **THINK** - stay out for at least 30 minutes after mixing starts.

## Slurry Gas Kills

Slurry gas is a mixture of gases - the most dangerous gas is hydrogen sulphide which is extremely poisonous. A low concentration knocks out your sense of smell so you don't know it's there. At higher concentrations you will rapidly find it harder to breathe and become confused. At certain concentrations ONE BREATH CAN KILL.

This gas is heavier than air so:

- It will settle over the slats – therefore it's important to have good ventilation at slat level.



- Try to mix the tank when there is at least 30 cm (1 foot) of space between the top of the slurry and the slats. The more poisonous gas in this space, the less there will be in the shed.
- Bending down into the invisible gas cloud for even a few moments can cause unconsciousness.
- Slurry gas can linger in low lying areas, e.g. milking parlour pits, so you may need to stay out of these areas for longer than 30 minutes.

If outside mixing points are fitted at each end of the house, it's a good idea to remove lids at both ends during mixing to reduce gas build-up in the house. But remember - keep the secondary grids in place.

**Remember!** - Every time the pump is moved or the direction changed to mix another part of the tank, gas will be given off again. Stay out of the building for at least another 30 minutes.

## Gas Monitors

Gas monitors can provide an additional safety precaution but they must be properly maintained, checked and calibrated.

Monitors should only be regarded as a back-up to the Slurry Mixing Code, never a substitute. When a tank is first mixed, gas levels can rise so quickly that an alarm may not give you time to get out.

Monitors can be useful when you want to go back into the shed to check it is safe to do so. Nearly all monitors require some level of calibration or "bump" test with a gas sample to check they are working correctly.

Visit [www.hseni.gov.uk/farmsafe](http://www.hseni.gov.uk/farmsafe) for questions that you should ask suppliers and manufacturers regarding personal gas detection monitors before you purchase or hire them.



## Questions

### Will a facemask help?

A mask will not help during mixing.

However, there are some devices that can be used in an emergency, e.g. Escape Hoods. Many of them are designed for a single use over a short time but they are not designed for use during normal slurry mixing operations.

They may be appropriate if you need to get someone out of a shed who has collapsed on the slats, but not someone who has fallen into the tank. They are only safe to use if you know how to use the hood properly!

### When is it safe to enter the tank?

**NEVER!** There is always a risk of gas when entering a tank. Only people who have the proper training and equipment should enter a tank. In an emergency, contact Northern Ireland Fire and Rescue who have the right equipment and training to deal with the situation.



Follow the

**SLURRY MIXING**  
**CODE**

to stay out of trouble.

- ✓ Keep children away from the area at all times when working with slurry.
- ✓ If possible, mix on a windy day.
- ✓ Open all doors and windows.
- ✓ Take all animals out of the building before starting to mix slurry.
- ✓ Use outside mixing points first.
- ✓ If slats are removed, cover exposed areas of the tank beside the pump/mixer to stop anything falling in.
- ✓ Start the pump/mixer - then get out and stay out of the building for as long as possible - **at least 30 minutes.**
- ✓ Any time you have to go into the building, try to make sure that another adult knows what you are doing and can get help if necessary.
- ✓ If you have to re-enter to move the pump, or change the direction of the pump, leave the building as soon as this is done. Do not go back in for as long as possible – **at least another 30 minutes.**

## NEVER

- Rely on filter type facemasks.
- Use gas monitors as a substitute for working safely.
- Have naked flames near slurry, as slurry gas mixture is flammable.
- Stand close to the exhaust of a vacuum tanker when it is being filled.

## In an emergency

- Call 999 and tell them slurry gas may be present.
- If possible, stop the pump and get the person to fresh air.
- Don't put yourself at risk - people have died trying to save others.

### For more information please contact:

HSENI, 83 Ladas Drive, Belfast BT6 9FR

Helpline: 0800 0320 121

Email: [mail@hseni.gov.uk](mailto:mail@hseni.gov.uk)

Web: [www.hseni.gov.uk/farmsafe](http://www.hseni.gov.uk/farmsafe)

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