

Animal Gas Chambers



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Animal Euthanasia

- Euthanasia is derived from the Greek terms 'eu' meaning good and 'thanatos' meaning death.
- Euthanasia is used to describe ending the life of an individual animal in a way that minimises or eliminates pain and distress.
- Euthanasia is inducing death to an animal that is irredeemably sick, injured or traumatised or in the case of dogs, ones that are vicious.
- If an animal is to be killed, death must occur with minimal fear, anxiety, pain and distress.

Carbon Monoxide (CO)

- Colourless, odourless, tasteless, flammable gas
- Half life is 5 hours at room temp.
- Absorbed via the lungs and diffuses readily across capillary and placental membranes.
- The primary toxic effect is caused by hypoxia. CO binds to haemoglobin impairing oxygen delivery and utilisation.
- A secondary toxic effect of CO causes includes mitochondrial and cardiac depression.
- Hypoxia leads to cardiac arrest and eventual death.





Gas Chamber

as per Dr. Michael Moyer's position statement

- Animals are placed into a box that smells of fear and death.
- The gas flow sound is loud. **
- This causes fear and stress, some are frantic, others are frozen.
- Some bark, cry, whine and howl.
- Animals become disorientated and collapse.
- CO poisoning causes hyper-excitabile muscles to twitch.
- It can take up to 30 minutes for an animal to die which indicates organ failure prior to loss of consciousness and death. **
- There has been documented cases of animals surviving the gas chamber.

Delayed Death

- Paediatric, geriatric, sick, injured and pregnant animals may endure a prolonged death.
- These animals have the physiological ability to cope with hypoxia.
- Most animals entering the shelter system fall into this category.



Batch Killings

- 'Batch killings' or 'mass euthanasia' are a common method of killing by a gas chamber.
- Not every animal in a batch killing has the same physiological make up.
- The gas flow needed to accommodate multiple animals for efficient death, is extremely high. **
- Batch killings do not follow the minimum standards of euthanasia from the AVA and the Department of Environmental Biology at the Adelaide University.



Safety

- Acute exposure to high dose and chronic exposure to low dose CO are both hazardous.
- CO poisoning of a shelter worker can cause at a minimum, confusion and headaches, and can progress to CNS depression and death.
- In 1997, an Illinois shelter veterinarian was injured while using a gas chamber. In 2001, a Tennessee shelter worker died while operating a gas chamber. In 2008 and 2009, two gas chamber explosions were documented at two North Carolina shelters, both explosions injured workers.
- Transferring animals with aggressive behaviours, animals that are frightened and placing multiple animals into a gas chamber, poses a physical risk to personnel. **





SA Work Health & Safety Act

some examples of the Version 27/06/2013 with their max. fine

- Duty of care to ensure health and safety \$1.5m
- Requires information, training, instruction \$30k
- Requires adequate ventilation for health and safety \$30k
- Requires emergency plans and emergency stops controls \$30k
- Provide suitable PPE \$30k
- Monitoring airborne contaminant levels \$30k
- Results of air monitoring accessible to staff \$30k
- The concentration of flammable gas exceeds 5% of the LEL for the gas \$30k
- Maintenance, inspection, testing by a competent person \$18k
- Keep records of all tests, inspections, maintenance \$6k

Recommendations

- The recommended method of euthanasia for dogs and cats in shelters is an injectable overdose of sodium pentobarbital.
- Injection of SP causes a loss of consciousness within 3-5 seconds and clinical death within 2-5 minutes.
- The use of gas chambers is not cost effective **
- The Dept. of Environ. SA does not have a COP for euthanasia or states a preferred method. This recommendation is by the AVA and the University of Adelaide.



Overview

- CO chambers do not minimise fear, anxiety, pain and distress prior to death.
- CO chambers do not cause rapid unconsciousness and a quick/'good' death. **
- CO chambers are not reliable in delivering the same poisoning effects for each animal due to physiological variables affecting CO uptake.
- CO chambers are hazardous and unsafe for shelter workers to operate, and for them to work within its vicinity.
- CO chambers are not a preferred method of euthanasia for dogs and cats. **

