



CARBON MONOXIDE EUTHANASIA PROTOCOLS

Technique: The goal is to euthanize the animals in a humane, timely and safe manner.

INDIVIDUAL ANIMAL:

This can be utilized with animals that are too ill or injured to be treated successfully or that have not responded to treatment. The individual animal euthanasia chamber should:

- Have enough room for one animal to fit with ease. example; either a small box chamber or PVC pipe
- Allow easy placement of the animal
- Give secure confinement of the animal
- Allow for proper administration of the bottled gas through a regulator.
- Allow for delivery of appropriate concentration of gas (4% minimum)
- Allow the mink to remain in the chamber for at least 4 minutes (a timing devise should be part of the setup).
- Be designed to allow for cleaning

GROUP EUTHANASIA;

Chamber construction should:

- Be sturdy with smooth surfaces that seals tightly and is cleanable.
- Have a self-closing door that allows rapid placement of the animal into the chamber.
- Setup with a side or bottom opening panel to allow for easy emptying of the chamber and observation of the animals.
- Use a system that tightly secures the compressed gas cylinder and protects the valve and delivery system.
- Have an automated valve or timed metering system for the administering the gas into the chamber at a predetermined pressure.
- Have a timing device that indicates the appropriate time has elapsed between the last animal that entered and the opening of the chamber.
- A minimum concentration of 40,000 ppm/ 4 % should be maintained in the chamber.



PERSONNEL SAFETY: goal is to eliminate any exposure of personnel to CO gas from low levels (normal euthanasia process) or high levels due to tank or system failures.

Storage of gas cylinders:

- Value covers need to be kept in place at all times during storage and handling.
- Tanks need to be kept secured from falling over
- Outside, secured storage is recommended for CO cylinders
- A CO alarm monitor should be in place for indoor storage
- No smoking in the storage area or when handling or using the compressed gas cylinders.

Administration of gas and euthanasia chamber use:

- Only appropriately trained personnel should be involved with the handling of compressed gas cylinders.
- Euthanasia personnel must be trained in the safe usage of the compressed gas cylinders and the operation of the euthanasia chamber.
- The instructions for the use of the euthanasia chamber should be readily available for review.

Personnel Training

- All individuals involved with the euthanasia process need to be trained in the proper use of the euthanasia chamber.
- Explain the safety concerns of CO; colorless, odorless, tasteless, very toxic at even low levels and explosive when mixed with air. (NO SMOKING)
- Explain the signs of toxicity; low exercise tolerance, headache, shortness of breath, nausea and dizziness.
- Explain the need to only charge the chamber and open the chamber in well ventilated areas, outside whenever possible and recognize the wind direction.
- Explain the farm's general procedure for euthanizing the mink.
- Explain the gas delivery system and its maintenance.



BASIC CRITERIA FOR EUTHANASIA PROTOCOL

- Written procedures for euthanasia
- Euthanasia chamber operation instructions, set up and shut down
- Gas administration procedure; when the gas is administered and for what length of time.
- Description of how animals are put into chamber and removal
- Minimum length of time in chamber (4 minutes)
- Signs of confirmation of death
- Calculations on gas concentration of chamber in relation to volume of chamber, regulated gas pressure and time of administration.(supplied charts)
- Written safety guidelines for personnel.