

REPORT SUMMARIZING INSPECTION TESTING OF EUTHANASIA CHAMBER



**VANCE COUNTY ANIMAL CONTROL
165 VANCE ACADEMY ROAD
HENDERSON, NC 27537
EEC PROJECT No.: N-10-094**

**PREPARED FOR:
VANCE COUNTY ANIMAL CONTROL
165 VANCE ACADEMY ROAD
HENDERSON, NC 27537**

**PREPARED BY:
EEC, Inc.
8514 SIX FORKS ROAD, SUITE 101
RALEIGH, NC 27615
PHONE: 919-846-1016
FAX: 919-846-1813
WEBSITE: www.eecincorporated.com**



**ANNUAL INSPECTION CHECKLIST
EUTHANASIA BY CARBON MONOXIDE**

**ANNUAL INSPECTION CHECKLIST
EUTHANASIA BY CARBON MONOXIDE
2010-11 INSPECTION**

FACILITY NAME: VANCE COUNTY ANIMAL CONTROL FACILITY MANAGER: ALEXANDER HARGROVE

LOCATION: 165 VANCE ACADEMY ROAD, HENDERSON, NC 27537

INSPECTOR: KAUSHAL SHAH COMPANY: EEC, INC.

DATE: 12/7/2010

<u>A</u>	<u>M</u>	<u>S</u>
----------	----------	----------

02 NCAC 52J .0600 – EUTHANASIA BY CARBON MONOXIDE

02 NCAC 52J .0601 – CARBON MONOXIDE EQUIPMENT

If Carbon Monoxide is used for euthanasia in a certified facility, the following requirements shall be met:

(1) Only commercially compressed, bottled gas shall be used	A		
(2) The gas shall be delivered in a commercially manufactured chamber that allows for the individual separation of animals;	A		
(3) Animals placed inside of the chamber shall be of the same species	NA		
(4) The chamber shall achieve a minimum six percent uniform concentration of carbon monoxide within two minutes of beginning the administration of the gas	A (0.1 – 10%)		
(5) Death shall occur within five minutes of beginning the administration of the gas; and	NA		
(6) Animals shall remain in the chamber with carbon monoxide for a minimum of 20 minutes.	A		

02 NCAC 52J .0602 – PROHIBITED USES

Carbon monoxide may not be used to euthanize animals in certified facilities in any manner inconsistent with guidelines for the use of carbon monoxide approved by the entities referenced in 02 NCAC 52J .0401. Additionally, carbon monoxide shall not be used to euthanize the following animals in certified facilities:

(1) Animals that appear to be less than 16 weeks of age;	NA		
(2) Animals that are pregnant;	NA		
(3) Animals that are near death.	NA		

02 NCAC 52J .0603 – DEAD ANIMALS

Live animals shall not be placed into a euthanasia chamber with dead animals in certified facilities.	NA		
---	----	--	--

02 NCAC 52J .0604 – INDIVIDUAL SEPARATION

Animals shall be individually separated within a euthanasia chamber in a certified facility.	NA		
--	----	--	--

02 NCAC 52J .0605 – CHAMBER REQUIREMENTS

(a) A euthanasia chamber in a certified facility shall be located in a well-ventilated place, preferably outdoors.	A		
(b) The chamber shall be in good working order.	A		
(c) The chamber shall have strong airtight seals around the doors and viewports.	A		
(d) The chamber shall have at least one port for viewing of the animals during euthanasia.	A		
(e) The chamber shall be lit sufficiently to allow observation of an animal in any part of the chamber.	A		
(f) Any chamber electrical wiring or components exposed to carbon monoxide must be warranted by the manufacturer to be explosion proof.	A		
(g) Any light inside of the chamber shall be shatterproof.	A		
(h) The chamber shall use exhaust ventilation to evacuate the gas from the chamber before the doors are opened upon completion of the process.	A		



A = acceptable; M = minor deficiency; S = significant deficiency (is or may be a threat to animal and human health or safety)

This Report Contains 3 Pages. If all pages are not included, this is not an authorized report.

**ANNUAL INSPECTION CHECKLIST
EUTHANASIA BY CARBON MONOXIDE
2010-11 INSPECTION**

FACILITY NAME: VANCE COUNTY ANIMAL CONTROL FACILITY MANAGER: ALEXANDER HARGROVE

LOCATION: 165 VANCE ACADEMY ROAD, HENDERSON, NC 27537

INSPECTOR: KAUSHAL SHAH COMPANY: EEC, INC.

DATE: 12/7/2010

<u>A</u>	<u>M</u>	<u>S</u>
----------	----------	----------

02 NCAC 52J .0600 – EUTHANASIA BY CARBON MONOXIDE			
02 NCAC 52J .0605 – CHAMBER REQUIREMENTS (CONTINUED)			
(i) If the chamber is located outdoors:			
(1) The exhaust shall be vented at least eight feet above ground level.	A		
(2) The minimum stack velocity shall be at least 3,000 feet per minute;	A (4,000 fpm)		
(3) If there is a roof above the chamber, the exhaust shall be vented at least three feet above the highest point of the roof; and	A		
(4) The exhaust shall not be located within eight feet of any building air intakes.	A		
(j) If the chamber is located indoors:			
(1) The exhaust shall be vented to the outdoors at least three feet above the highest point of the roof;	NA		
(2) The exhaust shall not be located within eight feet of any building air intakes;	NA		
(3) The minimum stack velocity shall be at least 3,000 feet per minute;	NA		
(4) At least two carbon monoxide detectors shall be placed in the room.	NA		
02 NCAC 52J .0606 – INSPECTION AND RECORDS			
(a) Chamber seals, exhaust flow, carbon monoxide monitors and other equipment used in the euthanasia process in certified facilities shall be inspected at least monthly and repaired or replaced as necessary.	A		
(b) The chamber must be inspected at least annually by the manufacturer, its authorized representative or an industrial hygienist knowledgeable about the manufacture and operation of the chamber.	A		
(c) A record shall be made of each inspection recording the results, the date of inspection, and the name of the person performing the inspection. The record shall be maintained in the policy and procedure manual for at least two years.	A		
02 NCAC 52J .0607 – CLEANING CHAMBER			
A euthanasia chamber at a certified facility shall be cleaned between uses.	A		
02 NCAC 52J .0608 – OPERATIONAL GUIDES AND INSTRUCTION MANUALS			
Current operational guides and maintenance instruction manuals shall be kept in the room with the euthanasia chamber at all times in a certified facility.	A		
02 NCAC 52J .0609 – PERSONS REQUIRED TO BE PRESENT			
A euthanasia chamber in a certified facility shall not be operated unless a Certified Euthanasia Technician or a veterinarian licensed in North Carolina and one other adult are present at the time of its use.	A		



A = acceptable; M = minor deficiency; S = significant deficiency (is or may be a threat to animal and human health or safety)

This Report Contains 3 Pages. If all pages are not included, this is not an authorized report.

**ANNUAL INSPECTION CHECKLIST
EUTHANASIA BY CARBON MONOXIDE
2010-11 INSPECTION**

FACILITY NAME: VANCE COUNTY ANIMAL CONTROL FACILITY MANAGER: ALEXANDER HARGROVE

LOCATION: 165 VANCE ACADEMY ROAD, HENDERSON, NC 27537

INSPECTOR: KAUSHAL SHAH COMPANY: EEC, INC.

DATE: 12/7/2010

<u>A</u>	<u>M</u>	<u>S</u>
----------	----------	----------

02 NCAC 52J .0600 – EUTHANASIA BY CARBON MONOXIDE

Findings:

1. Average of Three CO Concentrations Readings around the door seals during test run of the machine

Reading 1: 11 ppm average with Maximum 72 ppm

Reading 2: 4.6 ppm average with Maximum 16.6 ppm

Reading 3: 9.3 ppm average with Maximum 50.6 ppm

2. CO concentrations inside the chamber were found to be: 0.1% and 10% on two separate readings.

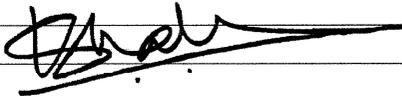
3. Exhaust Velocity of the Chamber was found to be above 4,000 Feet Per Minute.

Recommendations:

We recommend that the gaskets be replaced on a periodic basis. Also, cleaning the surface of the gaskets with mild cleaning agent to remove animal hair and other dust, which causes breach of the seal on the doors, causing CO gas leakage. Last gasket replacement was performed in October 2009. It is **highly recommended** to replace the gasket as soon as possible.

Based on the inspection performed, it is found that the chamber is safe to operate.

Inspected and Certified By:



Kaushal Shah
Environmental Engineer
EEC, Inc.



A = acceptable; M = minor deficiency; S = significant deficiency (is or may be a threat to animal and human health or safety)

This Report Contains 3 Pages. If all pages are not included, this is not an authorized report.