

UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. CERTIFICATE NUMBER: 51-R-0004  
CUSTOMER NUMBER: 80

FORM APPROVED  
OMB NO. 0579-0036

**ANNUAL REPORT OF RESEARCH FACILITY**  
( TYPE OR PRINT )

Virion Systems Inc  
9610 Medical Center Drive  
Suite 100  
Rockville, MD 20850

Telephone: (301)-309-1844

3. REPORTING FACILITY ( List all locations where animals were housed or used in actual research, testing, or experimentation, or held for these purposes. Attach additional sheets if necessary )

FACILITY LOCATIONS ( Sites ) - See Attached Listing

**REPORT OF ANIMALS USED BY OR UNDER CONTROL OF RESEARCH FACILITY ( Attach additional sheets if necessary or use APHIS Form 7023A )**

A. Animals Covered By The Animal Welfare Regulations	B. Number of animal being bred, conditioned, or held for use in teaching, testing, experiments, research, or surgery but not yet used for such purposes.	C. Number of animals upon which teaching, research, experiments, or tests were conducted involving no pain, distress, or use of pain-relieving drugs.	D. Number of animals upon which experiments, teaching, research, surgery, or tests were conducted involving accompanying pain or distress to the animals an for which appropriate anesthetic, analgesic, or tranquilizing drugs were used.	E. Number of animals upon which teaching, experiments, research, surgery or tests were conducted involving accompanying pain or distress to the animals and for wh the use of appropriate anesthetic, analgesic, or tranquiliz drugs would have adversely affected the procedures, res or interpretation of the teaching, research, experiments, surgery, or tests. ( An explanation of the procedures producing pain or distress in these animals and the reas such drugs were not used must be attached to this report	F. TOTAL NUMBER OF ANIMALS  ( COLUMNS C + D + E )
4. Dogs					
5. Cats					
6. Guinea Pigs					
7. Hamsters					
8. Rabbits					
9. Non-human Primates					
10. Sheep					
11. Pigs					
12. Other Farm Animals					
13. Other Animals					
Cotton Rats	8039	4840	90	0	12,969
Sigmodon hispidus					
Sigmodon fulviventer					

**ASSURANCE STATEMENTS**

- 1) Professionally acceptable standards governing the care, treatment, and use of animals, including appropriate use of anesthetic, analgesic, and tranquilizing drugs, prior to, during, and following actual rest teaching, testing, surgery, or experimentation were followed by this research facility.
- 2) Each principal investigator has considered alternatives to painful procedures.
- 3) This facility is adhering to the standards and regulations under the Act, and it has required that exceptions to the standards and regulations be specified and explained by the principal investigator and an Institutional Animal Care and Use Committee (IACUC). A summary of all such exceptions is attached to this annual report. In addition to identifying the IACUC-approved exceptions, this summary includes a brief explanation of the exceptions, as well as the species and number of animals affected.
- 4) The attending veterinarian for this research facility has appropriate authority to ensure the provision of adequate veterinary care and to oversee the adequacy of other aspects of animal care and use.

CERTIFICATION BY HEADQUARTERS RESEARCH FACILITY OFFICIAL  
( Chief Executive Officer or Legally Responsible Institutional Official )

b6, b7c

DATE SIGNED  
11/20/08

*[Handwritten Signature]*



# **VIRION SYSTEMS**

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I N C O R P O R A T E D

11/17/08

The facility and all aspects of the program are consistent with the PHS Policy, the Guide, and applicable Animal Welfare Regulations with the following exceptions:

Three departures from current animal welfare regulations are approved by the IACUC.

1. Current AWRs intimate that food should be provided in a receptacle. For example, the Guide states, "Feeders should be designed and placed to allow easy access to food and to minimize contamination with urine and feces." Rodents experiencing difficulty obtaining feed suspended in a wire bar lid or masticating biscuits are provided feed/fines or moistened feed on the floor of the cage. The committee approved this exception to the Animal Welfare Regulations (AWRs) on June 2, 2003, and re-approved this exception on April 24, 2006, October 23, 2006, April 16, 2007, October 15, 2007, April 7, 2008, and November 3, 2008.
2. The Animal Welfare Regulations state, "Trash containers in housing facilities and in food storage and food preparation areas must be leakproof and must have tightly fitted lids on them at all times." Waste that is or may be perceived to be contaminated by biohazards is disposed of using Medical Pathological Waste boxes which remain uncovered until sealed for incineration. The committee approved this exception to the AWRs on June 2, 2003, and re-approved this exception on April 24, 2006, October 23, 2006, April 16, 2007, October 15, 2007, April 7, 2008, and November 3, 2008.
3. According to an NIH guideline <http://oacu.od.nih.gov/ARAC/EuthCO2.pdf> guidance on euthanasia with carbon dioxide now specifies a flow rate [introduce 100% carbon dioxide at the rate of 10-20% of the chamber volume per minute] requiring that the user calculate the volume of the chamber and purchase and install a flow meter capable of delivering 10-20% of the chamber volume per minute. For example, for a 10-liter volume chamber, use a flow rate of approximately 1-2 liter(s) per minute. The committee approved an exception to this guideline in favor of utilization of a performance standard that ensures that all personnel euthanizing with carbon dioxide gas are aware that high concentrations cause pain/distress and to gradually increase exposure concentration while observing the animals to ensure that animals do not exhibit signs of pain/distress (hyperactivity, climbing chamber walls or onto each other, gagging) before they are narcotized. The committee approved this exception to current AWRs on October 15, 2007, April 7, 2008, and November 3, 2008.



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I N C O R P O R A T E D

(B)(6) (B)(7)(c)

### Column E Explanation

This form is intended as an aid to completing the Column E explanation. It is not an official form and its use is voluntary. Names, addresses, protocols, veterinary care programs, and the like, are not required as part of an explanation. A Column E explanation must be written so as to be understood by lay persons as well as scientists.

1. Registration Number: 51-R-0004

2. Number 0 of animals used in this study.

3. Species (common name) Cotton Rat of animals used in the study.

4. Explain the procedure producing pain and/or distress.

No cotton rats on study at Virion Systems, Inc. were found needing to be listed Column E. This was for the reporting period of 10/1/07 - 9/30/08, and was reviewed by the Virion Systems, Inc. IACUC Committee.

5. Provide scientific justification why pain and/or distress could not be relieved. State methods or means used to determine that pain and/or distress relief would interfere with test results. (For Federally mandated testing, see Item 6 below)

6. What, if any, federal regulations require this procedure? Cite the agency, the code of Federal Regulations (CFR) title number and the specific section number (e.g., APHIS, 9 CFR 113.102):

Agency \_\_\_\_\_ CFR \_\_\_\_\_

(B)(6) (B)(7)(c)