According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0579-0036. The time required to complete this information collection is estimated to average 2 hours par response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

This report is required by law (7 U.S.C. 2143). Failure to report according to the regulations can result in an order to cease and desist interagency Report Control No. 0180-DOA-AN

OMB APPROVED 0579-0036

Fiscal Year: 2009

UNITED STATES DEPARTMENT OF AGRICULTURE ANIMAL AND PLANT HEALTH INSPECTION SERVICE

ANNUAL REPORT OF RESEARCH FACILITY

(TYPE OR PRINT)

REGISTRATION NUMBER: 42-R-0003

Customer Number: 1575

2. HEADQUARTERS RESEARCH FACILITY (Name and Address, as registered with USDA, include ZIP Code)

1138 Pearson Hall Ames, IA 50011

Telephone: (515) 294 3115

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

FACILITY LOCATIONS (Sites) See Attached Listing

|   | ED BY OR DNDER CONTRO   | I C.   | I D. Number of animals upon   | sary or use APHIS FORM 7023A.)   | Y CONTRACTOR OF THE PARTY OF TH |
|---|---|--|---|--|--|
| A.  Animals Covered By The Animal Welfare Regulations | Number of animals<br>being bred,<br>conditioned, or held<br>for use in teaching,<br>testing, experiments,<br>research, or surgery<br>but not yet used for<br>such purposes, | Number of animals upon which teaching, research, experiments, or lests were conducted involving no pain, distress, or use of pain-relieving drugs. | Number of aritimats upon which experiments, teaching, research, surgery, or tests were conducted involving accompanying pain or distress to the animats and for which appropriate arestipetic, analgesic, or tranquilizing drugs were used. | E. Number of animals upon which teaching, experiments, research, surgery, or tests were conducted involving accompanying path or distress to the animals and for which the use of appropriate anesthetic, analgesic, or tranquilizing drugs would have adversely affected the procedures, results, or interpretation of the teaching, research, experiments, surgery, or tests. (An explanation of the procedures producing pain or distress on these animals and the reasons such drugs were not used must be attached to this report.)   | TOTAL NUMBER OF ANIMALS (Cols. C + D + E)  |
| 4. Dogs   | 193   | 41   | 850   |  | 891  |
| 5. Cals   | 3   | 122  | 233   |  | 355  |
| 6. Guinea Pigs  | 57  | 96   |   | 28   | 124  |
| 7. Hamsters   |   | 9  | 7   | The state of the s | 16   |
| 8. Rabbits  |   | 6  | 64  |  | 70   |
| 9. Non-human Primates                                 |   |  |   |  |  |
| 10. Sheep   |   | 43   | 67  |  | 110  |
| 11. Pigs  |   | 1  | 12  |  | 13   |
| 12. Cattle Animais                                    |   | 135  | 72  |  | 207  |
| Horses  |   | 41   | 10  |  | 51   |
| 13. Other Animals<br>Mu I e                           |   | 1  |   |  | 1  |
| Goats   |   | 29   | 17  |  | 46   |
| Opossum<br>Brazilian                                  | 24  |  | 37  |  | 37   |
| Jackrabbit  | ÷   | 13   |   | The second secon | 13   |

- Professionally acceptable standards governing the care, treatment, and use of animals, including appropriate use of anesthetic, analgesic, and tranquitizing drugs, prior to, during, and following actual research, teaching, testing, surgery, or experimentation were followed by this research facility.
- Each principal investigator has considered alternatives to painful procedures.
- 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 approved by the 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.
- The attending veterinarian for this research facility has appropriate authority to ensure the provisions 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 (C.E.O.) or Legally Responsible institutional Official (L.O.)) I certify that the above is true, correct, and complete (7 U.S.C. Section 2143).

SIGNATURE OF C.E.O. OR LO.

(b)(6), (b)(7)c

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a valid CMB control number. The valid CMB control number for this information collection is 0579-0036. The time required to complete this information collection is estimated to average 2 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

This report is required by law (7 U.S.C. 2143). Failure to report according to the regulations can result in an order to cause and desixt

Interagency Report Control

No. D180-D20-A-AN

OMB APPROVED

and to be subject to penalties as provided for in Section 2150. REGISTRATION NUMBER: 42-R-0003

Interagency Report Control No. 0180-DOA-AN

Fiscal Year: 2009

UNITED STATES DEPARTMENT OF AGRICULTURE ANIMAL AND PLANT HEALTH INSPECTION SERVICE

## CONTINUATION SHEET FOR ANNUAL REPORT OF RESEARCH FACILITY

(TYPE OR PRINT)

Customer Number: 1575

2. HEADQUARTERS RESEARCH FACILITY (Name and Address, as registered with USDA, include ZIP Code)

Iowa State University 1138 Pearson Hall Ames, IA 50011

Telephone: (515) 294 3115

| D BY OR UNDER CONTROL  | OF RESEARCH FACILITY   | (Atlach additional sheets if neces.   | sary.)   |   |
|--|--|---|--|---|
| B.  Number of animals 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 leaching, research, experiments, or lests 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 and for which appropriate aneathetic, 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 which the use of appropriate anesthetic, analgesic, or tranquitizing drugs would have adversely attacted the procedures, results, or interpretation of the teaching, research, experiments, surgery, or tests. (An explanation of the procedures producing pain or distress on these animals and the reasons such drugs were not used must be attached to this report.) | TOTAL NUMBE<br>OF ANIMALS<br>(Cols. G + D + E   |
|  | 12   | 2   |  | 14  |
|  | 257  |   | -  | 257   |
|  | 2  |   |  | 2   |
|  | 1  |   |  | 1   |
|  | 4  |   |  | - 4   |
|  | 3  |   |  | 3   |
|  | 3  |   |  | 3   |
|  | 1  |   |  | 1   |
|  | 230  |   |  | 230   |
|  |  |   |  |   |
|  |  |   |  | -   |
|  |  |   |  |   |
|  |  |   |  |   |
|  |  |   |  |   |
|  | B.  Number of animals being bred, conditioned, or held for use in teaching, testing, experiments, research, or surgery but not yet used for            | B.  Number of animals 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 leaching, research, experiments, or lests were conducted involving no pain, distress, or use of pain-relieving drugs.  12  257  2  1 4 3 3 3 1 | B.  Number of animals being bred, conditioned, or held for use in teaching, research, experiments, research, or surgery but not yet used for such purposes.  C.  Number of animals upon which experiments, research, experiments, or lests were conducted involving no pain, distress, or use of pain-relieving drugs.  12  257  2  1  4  3  3  1  | Number of animals being bred, canditioned, or held for use in teaching, research, or surgery, or lasts were conducted involving accompanying pain or lasts were conducted involving accompanying pain or distress to the animals and for which he use of appropriate emesthetic, analgesic, or tranquilizing drugs were used of pain-relieving drugs.  12 22 25 7 2 1 4 3 3 3 1 |

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Each principal investigator has considered alternatives to painful procedures 2.)

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 approved by the 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 3.) exceptions, this summary includes a brief explanation of the exceptions, as well as the species and number of animals affected.

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> CERTIFICATION BY HEADQUARTERS RESEARCH FACILITY OFFICIAL (Chief Executive Officer (C.E.O.) or Legally Responsible Institutional Official (I.O.)) i certify that the above is true, correct, and complete (7 U.S.C. Section 2143).

SIGNATURE SEC

(b)(6), (b)(7)c

APHIS FI

## Column E Explanation

- 1. Registration Number 42-R-0003
- 2. Total number of animals used in the study;

66 in study; 28 in Column E

- 3. Species (common name) use in study; Guinea pig
- 4. Explain the procedure producing pain and/or distress;

The purpose of the study was to identify virulence of sheep strains of Campylobacter jejuni using the standard guinea pig model. An animal model is essential to assess the pathogenesis of this disease, as well as to evaluate the prevention (vaccination) and treatment. Once a guinea pig showed diagnostic signs of infection, euthanasia was performed. However, abortion occurred in 28 guinea pigs before other clinical signs of this disease were observed. The IACUC felt that abortion has the potential to lead to animal distress; therefore, the 28 aborting animals were placed in Category (Column) E.

5. Justification why pain and or distress could not be relived. State method or means used to determine that pain and/or distress relief would interfere with test results.

The abortion occurs too quickly for the drugs to have any positive effect. In fact, they would have complicated (delayed) the abortion process leading to prolonged pain and/or distress for the animal.

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:

Not required by Federal Regulations

Registration Number – 42-R-0003 October 1, 2008 – September 30, 2009

Exception to the AWA regulations and standards – None

None of the studies covered under these regulations used death as an endpoint.