**ANNUAL REPORT OF RESEARCH FACILITY**

**TYPE OR PRINT**

1. **CERTIFICATE NUMBER:** 50-R-0001  
   **CUSTOMER NUMBER:** 41

**E. I. DuPont Denemours & Company, Inc.**  
Haskell Laboratory  
Elkton Road  
P.O. Box 50  
Newark, DE 19714

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 (Site)** - See Attached Listing  
Site #001, Haskell Laboratory,  
Bldg 1

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

<table>
<thead>
<tr>
<th>A. Animals Covered by The Animal Welfare Regulations</th>
<th>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</th>
<th>C. Number of animals upon which teaching, research, experiments, or tests were conducted involving no pain, distress, or use of pain-relieving drugs</th>
<th>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 anesthetic, analgesic, or tranquilizing drugs were used</th>
<th>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 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 in these animals and the reasons such drugs were not used must be attached to this report)</th>
<th>F. <strong>TOTAL NUMBER OF ANIMALS (COLUMNS C+D+E)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Dogs</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
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<tr>
<td>5. Cats</td>
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<td>0</td>
<td>0</td>
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<td>8. Rabbits</td>
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<td>10. Sheep</td>
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</table>

**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 research, 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 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 in 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)

<table>
<thead>
<tr>
<th>Certificate of CEO or Institutional Official</th>
<th>Name &amp; Title of C.E.O. or Institutional Official</th>
<th>Date Signed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

APHIS FORM 7023  
(Replaces VS FORM 18-23 (OCT 88), which is obsolete)
November 24, 2003

Elizabeth Goldentyer, DVM
USDA,APHIS, REAC
Eastern Regional Office
920 Main Campus Drive
Raleigh, NC 27606

Dear Dr. Goldentyer:

To address the issue of the category E animals in the USDA annual report of the DuPont Haskell Laboratory for Health and Environmental Sciences (50-R-0001), I am providing a list of two types of skin irritation studies, three types of eye irritation studies and four copper toxicity studies, which were conducted in rabbits to meet the criteria of various regulatory agencies or for safety assessment. All study protocols and SOP’s were reviewed and approved by the Haskell Laboratory’s Institutional Animal Care and Use Committee (IACUC).

**Skin Irritation Studies**

Eleven (11) rabbits that were used in one of the following tests experienced signs that were considered to fall into category E. These studies comply with or are based on (screening studies) test guidelines OPPTS 870.2500 (1998) and OECD 404 (1992).

1. **Skin Irritation Study in Rabbits** – The purpose of this study is to supply safety assessment information and to enable companies to file for pre-market notifications (PMNs).

2. **Acute Dermal Irritation/Corrosion Study** – This study is conducted for the registration of products with the Organization for Economic Cooperation and Development (OECD) and/or the Environmental Protection Agency (EPA).

**Eye Irritation Studies**

Four (4) rabbits that were used in one of the following tests experienced signs that were considered to fall into category E. These studies comply with or are based on (screening studies) test guidelines OPPTS 870.2400 (1998) and OECD 405 (1987).
1. Eye Irritation Study – The purpose of this study is to supply safety assessment information and to enable companies to file for pre-market notifications (PMNs).

2. Acute Eye Irritation/Corrosion Study – This study is conducted for the registration of products with the Organization for Economic Cooperation and Development (OECD) and/or the Environmental Protection Agency (EPA).

3. Eye Irritation Screen – The purpose of this study is to supply safety assessment information for Discovery compounds.

Testing for registration of crop protection chemicals is required under CFR 40 Part 158. Other testing is done for product stewardship purposes, for the reasons cited above.

The IACUC approved the conduct of these studies without the use of anesthetics, analgesics or tranquilizing drugs because the use of such drugs could adversely influence the experimental compound’s effect on the animal or alter the animal’s reaction to the experimental compound, resulting in invalid interpretation of the clinical signs by the scientists. Test guidelines (OPPTS) for these study types do not allow for the use of anesthetics, analgesics, or tranquilizing drugs, other than allowing use of local anesthetics in eye irritation studies where extreme pain is expected. Most tested substances are novel materials for which there is little or no information available upon which to predict the response. Test substances are not tested if it is expected they will produce corrosion or severe irritation (e.g., based on pH). The materials for registration studies are tested in step-wise fashion (one rabbit first, then two more if the first does not display severe response) if the test substance may be expected to produce a severe response, based on data from similar materials.

**Copper Toxicity Studies**

Thirty-four (34) rabbits were used in one of the following tests experienced signs that were considered to fall into category E. The 24-day tolerability study was designed to select dose levels for a subsequent pilot developmental toxicity study. The 28-day tolerability study tested the toxicity of five copper substances in preparation for the pilot study. The pilot study set the dose level for the main study. The main study complies with test guidelines U.S. EPA Health effects Guidelines OPPTS 870.3700. Prenatal Developmental Toxicity Study (August, 1998); International Conference on Harmonization (ICH). Tripartite Guidelines on Detection of Toxicity to Reproduction for Medicinal Products, Federal Register, September 22, 1994, Section 4.1.3.

1. A 24-Day Tolerability. The purpose of this study was to determine the tolerability of a copper substance administered orally by gavage to non-pregnant rabbits for 23 consecutive days.

2. A 28-Day Tolerability. The purpose of this study was to determine the maximum tolerated dose for five copper test substances.
3. Pilot Developmental Toxicity. The purpose of this study is to provide preliminary assessment of maternal and developmental toxicity of the test substance.

4. Developmental Toxicity. The purpose of this study is to evaluate the developmental toxicity of a test compounds administered to assumed pregnant rabbits during gestation.

The IACUC approved the conduct of these studies without the use of anesthetics, analgesics or tranquilizing drugs because the use of such drugs could adversely influence the experimental compound’s effect on the animal or alter the animal’s reaction to the experimental compound, resulting in invalid interpretation of the clinical signs by the scientists. Test guidelines (OPPTS) for this study type do not allow for the use of anesthetics, analgesics, or tranquilizing drugs.

DuPont actively supports research programs to develop scientifically acceptable refinements and alternatives to animal testing. We do use a commercially available in vitro system (Corrositex®) as a screen. We have also developed and validated the mouse local lymph node assay, which is used as a replacement for guinea pig dermal sensitization. This assay is a refinement of the sensitization testing which involves much shorter exposures, and uses fewer animals, than the guinea pig assays. In those cases where an in vitro system provides sufficient information, no additional studies with animals are performed. At present, there are no validated alternatives that would completely replace animal tests which are required by national and international laws and regulations.

Also, please note that there were no exemptions or exceptions to any USDA regulations and standards to report for this year.

Sincerely,

(b)(6), (b)(7)(C)
ANNUAL REPORT OF RESEARCH FACILITY
(TYPE OR PRINT)

UNITED STATES DEPARTMENT OF AGRICULTURE
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

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.)

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<thead>
<tr>
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<th>F. TOTAL NUMBER OF ANIMALS (COLUMNS C + D + E)</th>
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</thead>
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<tr>
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<td>Sheep</td>
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<td>Other Farm Animals</td>
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<td>315</td>
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</tbody>
</table>

ASSURANCE STATEMENTS

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

SIGNATURE

DATE SIGNED: 11/2003

APHIS FI
(AUG 91)
Customer ID and Site Address:

ID: 27
431 County Road
Millsboro, DE 19966
County: Sussex
Customer ID and Site Address:

ID: 27
35500 West 91st Street
De Soto, KS 66018
County: Johnson
Customer ID and Site Address:

ID: 27

12707 Shawnee
Mission Parkway
Shawnee, KS 66216
County: Johnson
Customer ID and Site Address:

ID: 27
902 Sugar Grove
Avenue
Dallas Center, IA 50063
County: Dallas
Customer ID and Site Address:

ID: 27
Bldg 24
717 Highway 59/60
South
Worthington, MN 56187
County: Nobles

Telephone
Customer ID and Site Address:

ID: 27

27480 King Avenue
Rushmore, MN 56168
County: Nobles
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: 50-R-003

2. Number 11 of animals used in this study.

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

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

Following CPV challenge in non-vaccinated animals, clinical signs include leukopenia, depression, pyrexia, vomiting, abdominal pain and diarrhea. Clinical signs are required in control animals in order to determine vaccine efficacy.

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 APHIS CFR 113.317
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: 50-R-0003

2. Number 11 of animals used in this study.

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

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

Clinical signs are required in control animals in order to determine vaccine efficacy. Clinical signs after challenge may include, depression, serious mucopurulent conjunctivitis, coughing vomiting and tenesmus.

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 APHIS CFR 113.306
Column E Explanation

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1. Registration Number: 50-R-003

2. Number 11 of animals used in this study.

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

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

Following challenge in non-vaccinated animals, clinical signs may include depression, coughing, vomiting or diarrhea. Clinical signs are required in control animals in order to determine vaccine efficacy.

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 APHIS CFR 113.305
Column E Explanation

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1. Registration Number: 50-R-003

2. Number 432 of animals used in this study.

3. Species (common name) Guinea Pigs of animals used in the study.

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

All 432 Guinea Pigs were used for testing as specified in 9CFR. All clinical signs and death are required when inoculated with Clostridium chauvoei.

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 APHIS CFR 113.106
Column E Explanation

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1. Registration Number: ________________

2. Number 4155 __________________ of animals used in this study.

3. Species (common name) Hamsters __________________ of animals used in the study.

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

All hamsters were used for testing as stated by 9CFR. Death is the end point.

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):

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<thead>
<tr>
<th>Agency</th>
<th>APHIS</th>
<th>CFR</th>
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<td>113.101, 113.102, 113.103, 113.104, 113.105</td>
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</tbody>
</table>
Column E Explanation

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1. Registration Number: 50-R-003

2. Number 476 of animals used in this study.

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

4. Explain the procedure producing pain and/or distress.
   
   All 476 rabbits were challenged with Clostridium Septicum. Pain and distress are due to the disease processes associated with the challenge. Animals are allowed to go 72 hours, when test results are interpreted.

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 CVB CFR 9 CFR 133.5
### ANNUAL REPORT OF RESEARCH FACILITY

#### TYPE OR PRINT

**FACILITY LOCATIONS:**

**ZENECA BIOMEDICAL RESEARCH**
WILMINGTON, DE 19850-5437

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**REPORT OF ANIMALS USED BY OR UNDER CONTROL OF RESEARCH FACILITY**

(Attach additional sheets if necessary or use APHIS FORM 7023A.)

<table>
<thead>
<tr>
<th>A. Animals Covered By The Animal Welfare Regulations</th>
<th>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.</th>
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<th>F. TOTAL NO. OF ANIMALS (Cols. C + D + E)</th>
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<td>10. Sheep</td>
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<td>11. Pigs</td>
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</tbody>
</table>

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### 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 research, teaching, testing, surgery, or experimentation were followed by this research facility.

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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 approved by the Institutional Animal Care and Use Committee (IACUC). A summary of all 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)

I certify that the above is true, correct, and complete (7 U.S.C. Section 2143)

**SIGNATURE OF C.E.O. OR INSTITUTIONAL OFFICIAL**

**NAME & TITLE OF C.E.O. OR INSTITUTIONAL OFFICIAL (TYPE OR PRINT)**

**DATE SIGNED**

11/14/2003

---

APHIS FORM 7023 (Replaces VS FORM 18-23 (Oct 88), which is obsolete)

(AUG 91)
APHIS Form 7023 Column E Explanation

This form is intended as an aid to completing the APHIS Form 7023 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: 50-R-0004

2/3. Species (common name) & Number of animals used in this study:

ferret (58)

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

Studies in ferrets are to evaluate whether candidate drugs have either emetic or anti-emetic properties. Animals are dosed with an emetic followed by and experimental compound and then videotaped for a period of time after dosing. Videotapes are read and scored for episodes of emesis and related behaviors.

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)

Animals in this category are given an emetic agent which causes vomiting and retching. The objective of these studies is to determine experimental compounds' effects on the emetic response. In order to evaluate this effect, we cannot alleviate these distress responses (retching, vomiting) with drugs that would confound the measurements.

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:
APHIS Form 7023 Column E Explanation

This form is intended as an aid to completing the APHIS Form 7023 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: 50-R-0004

2/3. Species (common name) & Number of animals used in this study:

Guinea Pigs (73)

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

This study is used to evaluate experimental compounds for suppression of isolation-induced vocalizations in guinea pig pups. Various antidepressant and anxiolytic drugs, acutely administered before transient maternal separation, have been reported to dose-dependently and completely inhibit separation-induced vocalizations in this species. Experimental compounds ability to suppress vocalizations is compared with that of clinically used antidepressants and anxiolytics.

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)

This study is designed to assess compounds in an animal model of human affective disorders. This animal model is based on separation-induced distress; therefore, alleviation of distress would make this behavioral assay invalid.

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:
APHIS Form 7023 Column E Explanation

This form is intended as an aid to completing the APHIS Form 7023 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: 50-R-0004

2/3. Species (common name) & Number of animals used in this study:

   Dogs (32)

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

   Single and Repeat dose toxicity studies are performed in dogs. Animals are dosed with experimental compounds and observed for drug related adverse clinical signs.

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)

   Single and Repeat dose toxicity studies are now required by worldwide regulatory agencies as part of the New Drug Application submission package. This type of study in the dog is extremely useful because it usually requires a small number of animals and provides valuable information on acute toxic effects and drug related adverse clinical signs. Providing relief of any drug related adverse effects would defeat the purpose of the safety assessment study. Determining the safety profile of a compound at the early stage of drug development minimizes the need for larger scale studies in future stages of drug development.

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:
### UNITED STATES DEPARTMENT OF AGRICULTURE
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

**ANNUAL REPORT OF RESEARCH FACILITY**

**TYPE OR PRINT**

---

**1. CERTIFICATE NUMBER:** 50-R-0006
**CUSTOMER NUMBER:** 45

University Of Delaware
Office Of Lab Animal Medicine
020 Wolf Hall
Newark, DE 19716

Telephone: (302) -831-2980

---

**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)

<table>
<thead>
<tr>
<th>Animals Covered By The Animal Welfare Regulations</th>
<th>A. Number of animals being bred, conditioned, or held for use in teaching, testing, experiments, research, or surgery but not yet used for such purposes.</th>
<th>B. Number of animals upon which teaching, research, experiments, or tests were conducted involving pain, distress, or use of pain-relieving drugs.</th>
<th>C. Number of animals upon which teaching, research, or tests were conducted involving accompanying pain or distress to the animals or for which appropriate anesthetic, analgesic, or tranquilizing drugs were used.</th>
<th>D. Number of animals upon which teaching, research, or tests were conducted involving accompanying pain or distress to the animals or for which appropriate anesthetic, analgesic, or tranquilizing drugs were used.</th>
<th>E. Number of animals upon which teaching, research, or tests were conducted involving accompanying pain or distress to the animals or for which appropriate anesthetic, analgesic, or tranquilizing drugs were used.</th>
<th>F. TOTAL NUMBER OF ANIMALS (COLUMNS C + D + E)</th>
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</thead>
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<td>5. Cats</td>
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<tr>
<td>6. Guinea Pigs</td>
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<tr>
<td>7. Hamsters</td>
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<tr>
<td>8. Rabbits</td>
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<td>3</td>
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<td></td>
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</tr>
</tbody>
</table>

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**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 use of 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 JACUCC. A summary of all such exceptions is attached to this annual report. In addition to identifying the JACUCC-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 Designee): [Signature]

**DATE SIGNED**

10/6/03

---

**APHIS FORM 7023**

(Replaces VS FORM 19-23 (OCT 88), which is obsolete.)

(AUG 91)
University of Delaware
Office of Lab Animal Medicine
056 McKinly Lab
Newark, DE 19716

Certificate Number: 50-R-0006
Customer Number: 45

FACILITY LOCATIONS (Sites)

- 020 Wolf Hall
- 046 McKinly Lab
- 133-138 Wolf Hall

10/6/03
Date
ANNUAL REPORT OF RESEARCH FACILITY

1. CERTIFICATE NUMBER: 50-R-0009
   CUSTOMER NUMBER: 47

Nemours Foundation, The
Alfred I. DuPont Hospital For Children
1600 Rockland Rd
Wilmington, DE 19899
Telephone: (302)-651-6860

REPORT OF ANIMALS USED BY OR UNDER CONTROL OF RESEARCH FACILITY

<table>
<thead>
<tr>
<th>Animals Covered</th>
<th>B. Number of animals being bred, conditioned, or held for use in teaching, testing, experiments, or surgery but not yet used for such purposes.</th>
<th>C. Number of animals upon which teaching, research, or experiments were conducted involving no pain, distress, or use of pain-relieving drugs.</th>
<th>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 anesthetic, analgesic, or tranquilizing drugs were used.</th>
<th>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 appropriate anesthetic, analgesic, or tranquilizing drugs were used.</th>
<th>F. TOTAL NUMBER OF ANIMALS (COLUMNS C + D + E)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Dogs</td>
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<td></td>
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<tr>
<td>5. Cats</td>
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<tr>
<td>6. Guinea Pigs</td>
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<td>7. Hamsters</td>
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<td>8. Rabbits</td>
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<td>9. Non-human Primates</td>
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<td>10. Sheep</td>
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<td>12. Other Farm Animals</td>
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<tr>
<td>13. Other Animals</td>
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<td></td>
</tr>
</tbody>
</table>

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 research, 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 appropriate 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 an 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)

DATE SIGNED 10/1/03
### Annual Report of Research Facility

**United States Department of Agriculture**

**Animal and Plant Health Inspection Service**

**Annual Report of Research Facility**

(**Type or Print**)

<table>
<thead>
<tr>
<th>1. Certificate Number:</th>
<th>50-R-0013</th>
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<tr>
<td>Customer Number:</td>
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Strategic Diagnostics Inc.

128 Sandy Drive

Newark, DE 19713

Telephone: (302) -456-6785

**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)

- 52 Anderson Road, Windham, M

**Report of Animals Used by or Under Control of Research Facility**

(Attach additional sheets if necessary or use APHIS Form 7023A)

<table>
<thead>
<tr>
<th>Animals Covered By the Animal Welfare Regulations</th>
<th>Number of Animals Being Bred, Conditioned, or Held for Use in Teaching, Testing, Experiments, Research, or Surgery but Not Yet Used for Such Purposes</th>
<th>Number of Animals Upon Which Teaching, Research, Experiments, or Tests Were Conducted Involving No Pain, Distress, or Use or Pain-Relieving Drugs</th>
<th>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 Anesthetic, Analgesic, or Tranquilizing Drugs Were Used</th>
<th>Number of Animals Upon Which Teaching, Research, Experiments, Surgery, or Tests Were Conducted Involving Accompanying Pain or Distress to the Animals and for Which 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 in These Animals and the Reasons Such Drugs Were Not Used Must Be Attached to This Report)</th>
<th>Total Number of Animals (Columns C + D + E)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Dogs</td>
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<tr>
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<td>13. Other Animals</td>
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</tbody>
</table>

**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 use in teaching, testing, surgery, or experimentation were followed by the 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 approved by 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 an 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)

Signature: [Signature]

Date: [Date]