

UNITED STATES DEPARTMENT OF AGRICULTURE
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. CERTIFICATE NUMBER: 34-R-0008
CUSTOMER NUMBER: 115

FORM APPROVED
OMB NO. 0579-0036

NOV 24 2004

ANNUAL REPORT OF RESEARCH FACILITY
(TYPE OR PRINT)

Dow Chemical Company
Toxicology & Environmental Research Consulting
1803 Building
Midland, MI 48674

Telephone: (989) -636-1509

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	0	140	0	0	140
5. Cats	0	0	0	0	0
6. Guinea Pigs	0	0	0	0	0
7. Hamsters	0	0	0	0	0
8. Rabbits	6	320	85	0	405
9. Non-human Primates	0	0	0	0	0
10. Sheep	0	0	0	0	0
11. Pigs	0	0	0	0	0
12. Other Farm Animals	0	0	0	0	0
13. Other Animals	0	0	0	0	0

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 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.

Please see attachment 2 for one exception to ensure the provision of adequate veterinary care and to oversee the adequacy of other aspects of animal care and use.

BY HEADQUARTERS RESEARCH FACILITY OFFICIAL
(Official or Legally Responsible Institutional Official)

DATE SIGNED

11/23/04

ATTACHMENT 1 TO APHIS FORM 7023

FACILITY LOCATIONS (SITE LISTINGS)

Registration Number	34-R-0008
Customer Number	115
Facility	Dow Chemical Company Toxicology & Environmental Research and Consulting Laboratory 1803 Building Midland, Michigan 48674 989-636-1509

ATTACHMENT 2 TO APHIS FORM 7023

SUMMARY OF AN EXCEPTION TO THE STANDARDS AND REGULATIONS UNDER THE ACT

The Dow Chemical Company Institutional Animal Care and Use Committee approved one exception to the standards and regulations of the Animal Welfare Act during the fiscal year 2003-2004. The exception required the use of metabolism cages with floor space slightly less than that required by the Animal Welfare Act. Four (4) female rabbits were housed in modified metabolism cages with a floor space of 2.6 square feet for 96 hours. The rabbits weighed 2.465 kg, 2.585 kg, 2.605 kg, and 2.560 kg respectively at the start of the 96 hour procedure. According to the Animal Welfare Act regulations, rabbits of this size require 3 square feet of caging floor space.

The exception was requested because of a study requirement to capture all excreta, carbon dioxide and organic volatiles subsequent to dermal application of a radiolabeled material. The information collected from all parameters was to be used to verify and determine the extent of dermal penetration and routes of excretion in the rabbit species prior to a registration study for the United States Environmental Protection Agency, OPPTS 870.3700 guideline. No commercial metabolism caging units could be found that both fulfilled both the housing requirements and allowed for satisfactory collection of respired carbon dioxide and organic volatiles. Small stainless steel and glass inhalation units were identified, in-house, as being suitable for the collection requirements. However, while the inside height was 19 inches, the floor space was only 2.6 square feet. Personnel were able to modify the units to accommodate the rabbits and allow for collection of all required parameters. The modifications included installation of flattened bar grids for flooring, attachments for J-type feeders and water bottles, installation of monitoring devices for temperature, humidity, and air flow inside the units, and removal of any objects that could have caused potential harm to the rabbits, such as exposed caulk. All modifications were done in consultation with the laboratory veterinarian.

The Dow Chemical Institutional Animal Care and Use Committee (IACUC) reviewed the exception, which included a description of the caging and justification for use of the caging. The IACUC approved the exception on October 17, 2003.

The four rabbits housed in the modified caging units were monitored by study personnel during the 96 hour period. All rabbits were observed to have normal postural adjustments and freedom of movement during the 96 hour collection period.



NOV 24 2004

The Dow Chemical Company
Midland, Michigan 48674

1803 Building
November 23, 2004

Elizabeth Goldentyer, D.V.M.
Regional Director - Animal Care, Eastern Region
United States Department of Agriculture
Marketing and Regulatory Programs
Animal and Plant Health Inspection Service
920 Main Campus Drive, Suite 200
Raleigh, NC 27606-5213

Dear Dr. Goldentyer,

Please find enclosed the original USDA Annual Report (APHIS form 7023 only) for the reporting facility of The Dow Chemical Company (registration number 34-R-0008, Customer Number 115). With one exception, this facility has adhered to the standards and regulations under the Animal Welfare Act, as indicated on the Annual Report form. The summary of the one exception, which was specified and explained by the principal investigator and approved by The Dow Chemical Company Institutional Animal Care and Use Committee (IACUC), is attached to the APHIS Form 7023.

The only facility location for this Annual Report is:

Site 1: Dow Chemical Company
Toxicology and Environmental Research and Consulting Laboratory
1803 Building
Midland, Michigan 48674

If you require additional information or clarification, please contact me.

Sincerely,

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

Toxicology and Environmental Research and Consulting
Midland, MI 48674
989-636-1509

Enclosures