



DEPARTMENT OF HEALTH & HUMAN SERVICES

PUBLIC HEALTH SERVICE
NATIONAL INSTITUTES OF HEALTH

FOR US POSTAL SERVICE DELIVERY:

Office of Laboratory Animal Welfare
6700B Rockledge Drive, Suite 2500, MSC 6910
Bethesda, Maryland 20892-6910
Home Page: <http://grants.nih.gov/grants/olaw/olaw.htm>

FOR EXPRESS MAIL:

Office of Laboratory Animal Welfare
6700B Rockledge Drive, Suite 2500
Bethesda, Maryland 20817
Telephone: (301) 496-7163
Facsimile: (301) 402-7065

October 26, 2018

Re: Animal Welfare Assurance
A3106-01 [OLAW Case O]

Dr. Robert Tribble
Deputy Director for Science & Technology
Brookhaven National Laboratory
Building 460, P.O. Box 5000
Upton, NY 11973-5000

Dear Dr. Tribble,

The Office of Laboratory Animal Welfare (OLAW) acknowledges receipt of your October 23, 2018 letter reporting a serious deviation from the provisions of the *Guide for the Care and Use of Laboratory Animals* at Brookhaven National Laboratory. According to the information provided, OLAW understands that three mice died in experimental holding containers because the devices were stacked so that the ventilation holes in one were blocked. In addition, the stacking configuration did not allow visualization of the back row and the lids were not made to proper specifications and contributed to less ventilation.

The immediate action taken upon discovering condensation in one holder consisted of removing the three mice but they could not be revived. The surviving mice were transferred to their home cages. The holders will now be spaced to allow complete visualization of all mice, the sides without ventilation holes will be marked to ensure proper placement, and new lids were ordered which will be inspected before use.

Based on its assessment of this explanation, OLAW understands that measures have been implemented to correct and prevent recurrence of this problem. OLAW concurs with the actions taken by the institution to comply with the PHS Policy on Humane Care and Use of Laboratory Animals.

Sincerely,

(b) (6)

Axel Wolff, M.S., D.V.M.
Director
Division of Compliance Oversight

cc: IACUC Chair



A3106-0
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managed by Brookhaven Science Associates
for the U.S. Department of Energy

www.bnl.gov

October 23, 2018

Axel V. Wolff, M.S., D.V.M.
Director, Division of Compliance Oversight
Office of Laboratory Animal Welfare
National Institutes of Health
RKL1, Suite 1050, MSA 7982
6705 Rockledge Drive
Bethesda, MD 20892-7982

Dear Dr. Wolff:

Brookhaven National Laboratory (BNL), in accordance with Assurance A3106-01 and PHS Policy IV.F.3., provides this report of an animal welfare incident.

On October 16, 2018 three mice died during an experiment at the NASA Space Radiation Laboratory (NSRL). Specifics are listed below:

- 140 control mice housed in 28 cages (5 per cage) were separated into 56 holders containing 2 or 3 mice. Each 4"x 4" holder had removable lids with ventilation holes on two sides.
- All mice were loaded into holders within 30 minutes and stacked four high on a table, in two rows. Mice remained in their holders for one hour.
- As soon as unloading began, one holder in the second row was observed with condensation. The mice were immediately removed from the holder, but they could not be revived.
- The rest of the mice were unloaded and carefully observed before being transferred to their home cages. All animals appeared normal and there was no evidence of condensation in other holders. The room temperature and humidity were ideal for rodents and an auxiliary fan was used to provide increased air flow to the animal holders.
- Researchers reviewed their procedures with facility management and other personnel.

- 1) **Finding:** Stacked holders were placed in two rows with a small space between each that did not allow for easy viewing of the back row.
Corrective action: All holders are now placed in a holder frame or in a single row on the table to ensure an unobstructed view of all animals in the holders.
- 2) **Finding:** Ventilation holes on the holder lid are only on two opposite sides leaving the remaining sides solid. If the holder is placed with the ventilation holes on the sides instead of from front to back, air flow into the holder would be blocked by the holders on either side. It is not clear whether the holder was placed in the wrong position due to the urgency of removing the mice from the holder, however, this is the most likely scenario.
Corrective action: Solid sides of the holder lids are now marked to clearly visualize improper placement of the holder.
- 3) **Finding:** Lids used for this study were not made to specifications. This batch was tooled incorrectly and provided less ventilation than specified.
Corrective action: The incorrectly tooled lids were discarded and 800 new holder lids were ordered. All new lids and other animal related equipment will be inspected and approved before use by NSRL staff.

Brookhaven National Laboratory is committed to protecting the welfare of animals used in research and appreciates the guidance and assistance provided by OLAW in this regard. Should you have any questions regarding this report, please contact Timothy Green, PhD, IACUC Chair.

Thank you for your consideration of this matter.

Sincerely,

(b) (6)

Robert E. Tribble
Deputy Director for Science & Technology
IACUC Institutional Official

RT:dm

Morse, Brent (NIH/OD) [E]

From: OLAW Division of Compliance Oversight (NIH/OD)
Sent: Thursday, October 25, 2018 3:20 PM
To: (b) (6) OLAW Division of Compliance Oversight (NIH/OD)
Subject: RE: OLAW Assurance D16-00067

Thank you for providing this report. We will send an official response soon.

Best regards, Brent Morse

Brent C. Morse, DVM, DACLAM
Director
Division of Compliance Oversight
Office of Laboratory Animal Welfare
National Institutes of Health

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From: (b) (6)
Sent: Thursday, October 25, 2018 2:25 PM
To: OLAW Division of Compliance Oversight (NIH/OD) <olawdco@od.nih.gov>
Subject: OLAW Assurance D16-00067

Attached please find a report of an animal welfare issue. Please contact me if you have any questions.

(b) (6)

