PURPOSE: To describe measures taken when the cage density in a mouse breeding colony cage fails to meet the minimum space recommendations outlined in the Guide for the Care and Use of Laboratory Animals (the Guide).

I. RESPONSIBILITIES

A. Research personnel are responsible for managing rodent breeding colonies consistent with the housing recommendations of the Guide.

II. GENERAL INFORMATION

A. Minimum space requirements for mice are listed in DLAR POL #112 (Minimum Space Requirements of Primary Enclosures).

B. Rodent breeding colony guidelines are listed in DLAR SOP #518 (Rodent Breeding Colonies).

C. The minimum floor space recommendation of the current version (8th edition) of the Guide for one female mouse with a litter is 51 square inches.

D. DLAR caging does not provide sufficient floor space to house multiple females, each with a litter, in the same cage and still meet the minimum housing recommendations of the Guide.

E. Failure to provide the minimum space recommendations of the Guide constitutes noncompliance.

F. In order to ensure consistency with the space recommendations of the Guide

1. only one female with a litter can be present in a cage,

2. only one additional adult (male or non-pregnant female) can be present in the same cage with a female and associated litter,

3. litters must be weaned no later than 28 days of age.

III. ACTIONS TAKEN IN RESPONSE TO AN OVERCROWDED MOUSE BREEDING CAGE

A. DLAR personnel take appropriate actions to resolve the overcrowded cage condition identified including

1. weaning litters 29 days of age or older;
2. removing other females from harem or trio breeding cages when one female is observed with a litter in the cage.

B. The PI and IACUC are subsequently notified by email of the overcrowded situation identified and the DLAR actions taken to resolve the noncompliance. Maintaining the appropriate cage population density in mouse breeding cages is the responsibility of research personnel.

1. Multiple litters: Advance notification is provided when DLAR personnel observe multiple litters in the same cage. Multiple litters may be from a single dam (pair mating) or from multiple females (harem mating). DLAR staff notifies the PI via the Comprehensive Animal Management System (CAMS) that a health case has been generated for the cage due to multiple litters. If research personnel have not separated the litters by 4 pm the day following the CAMS notification, DLAR staff will separate the litters.

2. Overdue weaning (>28 days of age): The DLAR does not provide advance notification of the actions taken to resolve non-compliance due to overdue weaning. However, DLAR staff notifies research personnel in CAMS after resolving overdue weaning noncompliance.

C. The IACUC monitors the number and frequency of overcrowded cages by PI, regardless of the number of applicable protocols, and requires a corrective action plan (CAP) when either:

1. three or more overcrowded caging incidents occur within a 30 day period, or

2. six or more overcrowded caging incidents occur within a 180 day period.

D. Actions, notifications, and charges for each “incident” of overcrowded cages are summarized at the end of this Policy in Appendix 1.

1. “Incident” refers to any number of overcrowded cages belonging to the PI found on the same day.

2. The PI is billed at the prevailing per diem rate for each new cage generated by DLAR personnel necessary to resolve the overcrowding.

3. Additional service fees are listed in Appendix 1. Service fees are charged for each overcrowded cage identified and separated. The DLAR service fee is billed to the department fund. Grant funding cannot be utilized to pay for the service fee associated with resolving the noncompliance.

E. The DLAR tracks noncompliance associated with overcrowded mouse cages on a fiscal year basis. The “incident” number for all PIs resets to zero at the beginning of the new fiscal year.
**Appendix 1.** Actions, notifications, and charges for overcrowded cages.

<table>
<thead>
<tr>
<th>Incident</th>
<th>DLAR Actions Taken</th>
</tr>
</thead>
</table>
| 1st      | • Animals separated  
          • PI and IACUC are notified |
| 2nd      | • Animals separated  
          • PI and IACUC are notified  
          • PI must retrain personnel on this Policy |
| 3rd +    | • Animals separated  
          • PI and IACUC are notified  
          • Additional $50 DLAR service fee is charged per cage separated  
          • Department chairperson is notified  
          • IACUC responds when criteria outlined in section III.C are met |

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1 The word “must” is utilized throughout this document in accordance with the current edition of the Guide for the Care and Use of Laboratory Animals (the Guide). According to the Guide “must indicates actions that the Committee for the Update of the Guide considers imperative and mandatory duty or requirement for providing humane animal care and use.”