

|   |                                      |                            |            |
|---|--------------------------------------|----------------------------|------------|
|  | <b>Title: Facilities Maintenance</b> | <b>SOP #</b>               | AV 50-102  |
|   |                                      | <b>Version #</b>           | 1          |
|   |                                      | <b>Implementation Date</b> | 11/13/2016 |
| <b>Page #</b>   | 1 of 4                               | <b>Next Review Date</b>    | 11/13/2019 |
| <b>Department</b>   | Attending Veterinarian               |                            |            |

## Standard Operating Procedure

### **1. Purpose**

---

To ensure that animal facilities are in good working condition and support the overall animal care and use program.

### **2. Scope**

---

Animal facilities must be maintained to promote appropriate animal care and use. The Animal Welfare Act, the Public Health Service Policy, the ILAR *Guide for the Care and Use of Laboratory Animals*, and the *Guide for the Care and Use of Agricultural Animals in Research and Teaching* require good working facilities a component of the animal care program.

### **3. Responsibilities**

---

Facility Managers are responsible for submitting and following up on work orders to Campus Services for repairs and maintenance.

### **4. Procedure**

---

Animal facility managers or designees can submit a work order to Campus Services via the Campus Services Help Desk portal on the Employee Login page on the Central Oregon Community College (COCC) website (<https://www.cocc.edu/employee-login/>). Emergency needs can be addressed by calling Campus Services at 541-383-7775.

**Structural:** Animal facilities must be structurally sound and in good repair to contain animals and to prevent the entrance of other animals and pests. Interior building surfaces in laboratory animal housing areas must be constructed and maintained to be impervious to moisture and easily sanitized. Surfaces should be highly resistant to the effects of cleaning agents, scrubbing, high-pressure sprays, and impact. Paints and glazes should be nontoxic if used on surfaces with which animals will have direct contact. In the construction of outdoor facilities, consideration should be given to surfaces that withstand the elements and can be easily maintained. Examples of preferred building materials include epoxy or methyl methacrylate (MMA) floors. Tile floors with grout and vinyl floors should only be used in areas with minimal exposure to moisture.

|   |                                      |                            |            |
|---|--------------------------------------|----------------------------|------------|
|  | <b>Title: Facilities Maintenance</b> | <b>SOP #</b>               | AV 50-102  |
|   |                                      | <b>Version #</b>           | 1          |
|   |                                      | <b>Implementation Date</b> | 11/13/2016 |
| <b>Page #</b>   | 2 of 4                               | <b>Next Review Date</b>    | 11/13/2019 |
| <b>Department</b>   | Attending Veterinarian               |                            |            |

**HVAC:** Secondary enclosures must maintain 10-15 fresh air changes per hour. HVAC systems and filters must be regularly evaluated and serviced. The ideal relative humidity range is 30-70% for animal rooms. Positive pressure airflow must be maintained in surgery rooms, animal rooms housing pathogen free animals, and clean storage rooms. Negative airflow should be maintained in quarantine rooms, necropsy rooms, and rooms containing aerosolized, infectious agents.

**Noise:** Noise levels should be maintained below 85 dB to prevent stress and illness to animals and staff. Personal Protective Equipment should be employed when noise levels exceed 85 dB. Building construction should include insulation to help muffle sound between rooms. Animals that make more noise (dogs, swine, nonhuman primates) should not be housed near sound-sensitive animals (rabbits and rodents).

**Lighting:** Photoperiods and light intensity must be maintained based on species specific requirements. Light fixtures, timers, switches and outlets should be properly sealed to prevent vermin from living there. Light bulbs and fixtures must have protective coverings to ensure the safety of animals and staff. Departments must have an established program to ensure that timers are working properly. A staff member must come into the facility during the dark cycle at least quarterly to ensure the timers are working properly.

**Temperature:** The temperature in primary and secondary enclosures must be maintained based on the specific needs of the species being housed. If the temperature falls outside the specific range for the species for longer than a brief period, Campus Services must be contacted.

**Recommended dry-bulb temperatures for common laboratory animals:**

- Mouse, rat, hamster, gerbil, guinea pig: 68-79°F (20-26°C)
- Rabbits: 61-72°F (16-22°C)
- Cat, dog, nonhuman primate: 64-84°F (18-29°C)
- Farm animals and poultry: 61-81°F (16-27°C)

**Vibration control:** Different species can detect and be affected by vibrations of different frequencies and wavelengths, so attempts should be made to identify all vibration sources and isolate or dampen them with vibration suppression.

|   |                                      |                            |            |
|---|--------------------------------------|----------------------------|------------|
|  | <b>Title: Facilities Maintenance</b> | <b>SOP #</b>               | AV 50-102  |
|   |                                      | <b>Version #</b>           | 1          |
|   |                                      | <b>Implementation Date</b> | 11/13/2016 |
| <b>Page #</b>   | 3 of 4                               | <b>Next Review Date</b>    | 11/13/2019 |
| <b>Department</b>   | Attending Veterinarian               |                            |            |

## 5. *References*

---

1. Institute of Laboratory Animal Resources: Guide for the Care and use of Laboratory Animals, National Academy Press, Eighth Edition ([http://www.nap.edu/catalog.php?record\\_id=12910](http://www.nap.edu/catalog.php?record_id=12910)).
2. Animal Welfare Act and Animal Welfare Regulations. United States Department of Agriculture ([https://www.aphis.usda.gov/animal\\_welfare/downloads/Animal%20Care%20Blue%20Book%20-%202013%20-%20FINAL.pdf](https://www.aphis.usda.gov/animal_welfare/downloads/Animal%20Care%20Blue%20Book%20-%202013%20-%20FINAL.pdf)).
3. National Institutes of Health: Public Health Service Policy on Humane Care and Use of Laboratory Animals (<http://grants.nih.gov/grants/olaw/references/phspol.htm>).
4. The Federation of Animal Science Societies: Guide for the Care and Use of Agricultural Animals in Research and Teaching, 3<sup>rd</sup> Edition, 2010 ([http://www.fass.org/docs/agguide3rd/Ag\\_Guide\\_3rd\\_ed.pdf](http://www.fass.org/docs/agguide3rd/Ag_Guide_3rd_ed.pdf)).

## 6. *Definitions*

---

1. AV – Attending Veterinarian – responsible for the health and well-being of all laboratory animals used at the institution
2. SOP – Standard Operating Procedure – established or prescribed methods to be followed routinely for the performance of designated operations or in designated situations
3. IACUC – Institutional Animal Care and Use Committee – responsible for assessment and oversight of the institution’s animal care program components and facilities
4. PI – Principal Investigator – a Central Oregon Community College employee having the background and training in scientific and administrative oversight necessary to conduct and manage the proposed study
5. Guide – the *Guide for the Care and use of Laboratory Animals*
6. AWA – Animal Welfare Act – requires that minimum standards of care and treatment be provided for certain animals bred for commercial sale, used in research, transported commercially, or exhibited to the public
7. PHS – Public Health Service – establishes guidelines for the proper care of animals to be used in research
8. ILAR – Institute for Laboratory Animal Research – provide the *Guide for the Care and Use of Laboratory Animals* to assist institutions in caring for and using animals in ways judged to be scientifically, technically, and humanely appropriate



**Title: Facilities Maintenance**

|                            |            |
|----------------------------|------------|
| <b>SOP #</b>               | AV 50-102  |
| <b>Version #</b>           | 1          |
| <b>Implementation Date</b> | 11/13/2016 |
| <b>Next Review Date</b>    | 11/13/2019 |

**Page #** 4 of 4

**Department** Attending Veterinarian

| Revision | Author       | Revisions Made  | Effective Date | Approval          |
|----------|--------------|---|----------------|-------------------|
| 1        | Cindy Elston | <ul style="list-style-type: none"><li>• New SOP</li></ul> | 11/13/16       | Cindy Elston (AV) |
|          |              | <ul style="list-style-type: none"><li>•</li></ul>         |                |                   |