I. Semiannual Facility Inspection Checklist

Terrestrial Animal Housing and Support Areas

Date: ________________________ Observers: ________________________________

<table>
<thead>
<tr>
<th>Location:</th>
<th>Species:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **Location:**
  - animal areas separate from personnel areas (*Guide*, p 134)
  - separation of species (*Guide*, p 111)
  - separation by disease status (*Guide*, p 111)
  - security and access control (*Guide*, p 151)

- **Construction:**
  - corridors (*Guide*, p 136)
  - animal room doors (*Guide*, p 137)
  - exterior windows (*Guide*, p 137)
  - floors (*Guide*, p 137)
  - drainage (*Guide*, p 138)
  - walls and ceilings (*Guide*, p 138)
  - heating ventilation and air conditioning (*Guide*, p 139)
  - power and lighting (*Guide*, p 141)
  - noise control (*Guide*, p 142)
  - vibration control (*Guide*, p 142)
  - environmental monitoring (*Guide*, p 143)

- **Room/Cage:**
  - temperature and humidity (*Guide*, p 43)
  - ventilation and air quality (*Guide*, p 45)
  - illumination (*Guide*, p 47)
  - noise and vibration (*Guide*, p 49)

- **Primary Enclosure:**
  - space meets physiologic, behavioral, and social needs (*Guide*, pp 51, 55-63)
  - secure environment provided (*Guide*, p 51)
  - durable, nontoxic materials in good repair and no risk of injury (*Guide*, p 51)
  - flooring is safe and appropriate for species (*Guide*, p 51)
  - adequate bedding and structures for resting, sleeping, breeding (*Guide*, p 52)
  - objective assessments of housing and management are made (*Guide*, p 52)
  - procedures for routine husbandry are documented (*Guide*, p 52)
  - socially housed animals can escape or hide to avoid aggression (*Guide*, p 55)
  - cage height provides adequate clearance (*Guide*, p 56)
  - animals express natural postures, can turn around, access food and water, and rest away from urine and feces (*Guide*, p 56) [must]
  - rationale for *Guide*/USDA space exceptions approved by IACUC and based on performance indices (*Guide*, p 56)
  - dogs and cats allowed to exercise and provided human interaction (*Guide*, p 58)
  - nonhuman primates are socially housed except for scientific, veterinary or behavior reasons (*Guide*, pp 58-59)
  - single housing of nonhuman primates is for shortest duration possible (*Guide*, p 60)
  - opportunities for release into larger enclosures is considered for single caged nonhuman primates (*Guide*, p 60)
  - agricultural animals are housed socially (*Guide*, p 60)
- **Environmental Enrichment, Behavioral and Social Management:**
  - structures and resources promote species typical behavior (*Guide*, pp 52-54)
  - novelty of enrichment is considered (*Guide*, p 53)
  - species specific plans for housing including enrichment, behavior and activity are developed and reviewed regularly by IACUC, researchers and veterinarian (*Guide*, pp 53, 58, 60, 63)
  - animal care personnel receive training to identify abnormal animal behaviors (*Guide*, p 53)
  - stability of pairs or groups is monitored for incompatibility (*Guide*, p 64)
  - single housing is justified for social species (*Guide*, p 64)
  - single housing is limited to the minimum period necessary (*Guide*, p 64)
  - additional enrichment for single housed animals is provided (*Guide*, p 64)
  - single housing is reviewed regularly by IACUC and veterinarian (*Guide*, p 64)
  - habituation to routine procedures is part of enrichment program (*Guide*, p 64)

- **Sheltered or Outdoor Housing:** (e.g., barns, corrals, pastures, islands)
  - weather protection and opportunity for retreat (*Guide*, p 54) [must]
  - appropriate size (*Guide*, p 54)
  - ventilation and sanitation of shelter (no waste/moisture build-up) (*Guide*, p 54)
  - animal acclimation (*Guide*, p 55)
  - social compatibility (*Guide*, p 55)
  - roundup/restraint procedures (*Guide*, p 55)
  - appropriate security (*Guide*, p 55)

- **Naturalistic Environments:**
  - animals added /removed with consideration of effect on group (*Guide*, p 55)
  - adequate food, fresh water, and shelter ensured (*Guide*, p 55)

- **Food:**
  - feeding schedule and procedures including caloric intake management (*Guide*, pp 65-67)
  - contamination prevention (*Guide*, p 65)
  - vendor quality control (*Guide*, p 66)
  - storage in sealed containers (*Guide*, p 66)
  - expiration date labeling (*Guide*, p 66)
  - vermin control (*Guide*, p 66)
  - rotation of stocks (*Guide*, p 66)

- **Water:**
  - ad libitum unless justified (*Guide*, pp 67-68)
  - QC procedures (*Guide*, pp 67-68)

- **Bedding and Nesting Materials:**
  - species appropriate (*Guide*, pp 68-69)
  - keeps animals dry (*Guide*, pp 68-69)
  - QC procedures (*Guide*, pp 68-69)
  - minimizes scientific variables (*Guide*, pp 68-69)

- **Sanitation:**
  - frequency of bedding/substrate change (*Guide*, p 70)
  - cleaning and disinfection of microenvironment (*Guide*, pp 70-71)
  - cleaning and disinfection of macroenvironment (*Guide*, p 72)
  - assessing effectiveness (*Guide*, p 73)

- **Waste Disposal:**
  - procedures for collection (*Guide*, pp 73-74)
  - procedures for storage and disposal (*Guide*, pp 73-74)
  - hazardous wastes are rendered safe before removal from facility (*Guide*, pp 73-74) [must]
  - animal carcasses (*Guide*, pp 73-74)

- **Pest Control:**
  - regularly scheduled (*Guide*, p 74)
  - documented program including control of rodent pests and insecticide use (*Guide*, p 74)

- Food troughs and water devices for agricultural animals allow access for all animals (*Guide*, p 60)

---

Semiannual Checklist  
March 2012 updated  
2
### Emergency, Weekend, and Holiday Animal Care:
- Care provided by qualified personnel every day (*Guide, p 74*).
- Provision for accessible contact information (*Guide, p 74*).
- Monitoring of backup systems (*Guide, p 143*).
- Veterinary care available after hours, weekends, and holidays (*Guide, pp 74, 114*).
- A disaster plan that takes into account both personnel and animals (*Guide, p 75*).

### Identification:
- Cage/rack cards contain required information (*Guide, p 75*).
- Genotype information included and standardized nomenclature used when applicable (*Guide, p 75*).

### Recordkeeping:
- Clinical records accessible and contain appropriate information (*Guide, pp 75-76*).
- Records are provided when animals are transferred between institutions (*Guide, p 75*).

### Breeding Genetics and Nomenclature:
- Appropriate genetic records, management, and monitoring procedures (*Guide, p 76*).
- Phenotypes that affect wellbeing are reported to IACUC and effectively managed (*Guide, p 77*).

### Storage:
- Adequate space for equipment, supplies, food, bedding and refuse (*Guide, p 141*).
- Bedding in vermin-free area and protected from contamination (*Guide, p 141*).
- Food in vermin-free, temperature and humidity controlled area and protected from contamination (*Guide, p 141*).
- Refuse storage is separate (*Guide, p 141*).
- Carcass and animal tissue storage is separate, refrigerated below 7°C and cleanable (*Guide, p 141*).

### Personnel:
- Adequate space for locker rooms, administration and training (*Guide, p 135*).

---

A = acceptable  
M = minor deficiency  
S = significant deficiency (is or may be a threat to animal health or safety)  
C = change in program (PHS Policy IV.A.1.a.-i.) (include in semiannual report to IO and in annual report to OLAW)  
NA = not applicable

---

NOTES:
Aquatic Animal Housing and Support Areas

Date: ___________________ Observers: __________________________________________
Location: _________________________________________________________________

| • Location:                                                                 |
| o animal areas separate from personnel areas (*Guide, p 134*)                 |
| o separation of species (*Guide, p 111*)                                     |
| o separation by disease status (*Guide, p 111*)                              |
| o security and access control (*Guide, p 151*)                               |
| • Construction:                                                             |
| o corridors (*Guide, p 136*)                                                 |
| o animal room doors (*Guide, pp 137, 150*)                                   |
| o exterior windows (*Guide, p 137*)                                         |
| o floors (*Guide, pp 137, 150*)                                             |
| o drainage (*Guide, pp 138, 150*)                                           |
| o walls and ceilings (*Guide, pp 138, 150*)                                 |
| o heating ventilation and air conditioning (*Guide, pp 139, 150-151*)       |
| o power and lighting (*Guide, pp 141, 150*)                                 |
| o noise control (*Guide, p 142*)                                            |
| o vibration control (*Guide, p 142*)                                        |
| o environmental monitoring (*Guide, p 143*)                                  |
| • Water Quality:                                                            |
| o standards for acceptable quality are established (*Guide, p 78*)           |
| o chlorine, chloramines, chemical, and reactive bioproducts are removed or  |
| neutralized prior to use in aquatic systems (*Guide, pp 78, 86*) [must]       |
| • Life Support System:                                                      |
| o water source is based on appropriate controls and research requirements (*|
| Guide, p 79*)                                                               |
| o biofilter is of sufficient size to process bioload (*Guide, p 80*)         |
| [must]                                                                     |
| • Temperature, Humidity and Ventilation/Illumination/Noise and Vibration:   |
| o temperature and humidity (*Guide, pp 43, 80-81*)                          |
| o ventilation and air quality (*Guide, pp 45, 81*)                          |
| o illumination (*Guide, pp 47, 81*)                                         |
| o noise and vibration (*Guide, pp 49, 81*)                                  |
| • Primary Enclosure:                                                        |
| o allows for normal physiological and behavioral needs (*Guide, p 82*)       |
| o allows social interaction for social species (*Guide, p 82*)              |
| o provides a balanced, stable environment (*Guide, p 82*)                   |
| o provides appropriate water quality and monitoring (*Guide, p 82*)          |
| o allows access to food and waste removal (*Guide, p 82*)                    |
| o restricts escape and entrapment (*Guide, p 82*)                           |
| o allows undisturbed observation (*Guide, p 82*)                            |
| o constructed of nontoxic materials (*Guide, p 82*)                         |
| o prevents electrical hazards (*Guide, p 82*)                               |
| o space needs of species are evaluated by IACUC during program evaluations  |
| and facility inspections (*Guide, p 83*)                                    |
| • Environmental Enrichment, Social Housing, Behavioral and Social Management: |
| o enrichment elicits appropriate behaviors and is safe (*Guide, p 83*)      |
| o semi-aquatic reptiles are provided terrestrial areas (*Guide, p 83*)      |
- handling is kept to a minimum and appropriate techniques are in place at facility or protocol level (*Guide, p 84*)
- nets are cleaned, disinfected and managed to avoid contamination of systems (*Guide, p 84*)

**Food:**
- storage to prevent contamination, preserve nutrients and prevent pests (*Guide, p 84*)
- delivery ensures access to all, minimizing aggression and nutrient loss (*Guide, p 84*)
- storage times are based on manufacturer recommendations or accepted practice (*Guide, p 84*)
- a nutritionally complete diet is provided (*Guide, p 84*)

**Substrate:**
- amount, type and presentation of substrate is appropriate for the system and the species (*Guide, p 85*)

**Sanitation, Cleaning and Disinfection**
- frequency of tank/cage cleaning and disinfection is determined by water quality, permits adequate viewing and health monitoring (*Guide, p 86*)
- cleaning and disinfection of macroenvironment (*Guide, p 86*)

**Waste Disposal:**
- procedures for collection (*Guide, pp 73-74*)
- hazardous wastes are rendered safe before removal from facility (*Guide, pp 73-74*) [*must*]
- animal carcasses (*Guide, pp 73-74*)

**Pest Control:**
- regularly scheduled (*Guide, p 74*)
- documented program including control of pests and insecticide use (*Guide, p 74*)

**Emergency, Weekend, and Holiday Animal Care:**
- care provided by qualified personnel every day (*Guide, pp 74, 87*)
- provision for accessible contact information (*Guide, pp 74, 87*)
- emergency response plans in place to address major system failures (*Guide, 87*) [*must*]
- veterinary care available after hours, weekends, and holidays (*Guide, pp 74, 114*) [*must*]

**Identification:**
- cage/tank cards contain required information (*Guide, pp 75, 87*)
- genotype information included and standardized nomenclature used when applicable (*Guide, pp 75, 87*)

**Recordkeeping:**
- water quality parameters and frequency of testing recorded (*Guide, p 88*)
- records kept on feeding, nonexpired food supplies, live cultures (*Guide, p 88*)

**Storage:**
- adequate space for equipment, supplies, food, substrate and refuse (*Guide, p 141*)
- substrate protected from contamination (*Guide, p 141*)
- food in vermin-free, temperature and humidity controlled area and protected from contamination (*Guide, p 141*)
- refuse storage is separate (*Guide, p 141*)
- carcass and animal tissue storage is separate, refrigerated below 7ºC and cleanable (*Guide, p 141*)

**Personnel:**
- adequate space for locker rooms, administration and training (*Guide, p 135*)

* A = acceptable
  M = minor deficiency
  S = significant deficiency (is or may be a threat to animal health or safety)
  C = change in program (PHS Policy IV.A.1.a-i.) (include in semiannual report to IO and in annual report to OLAW)
  NA = not applicable

**NOTES:**
## Washington State University

### Institutional Animal Care and Use Committee

#### Cagewash

**Date:** ____________________  **Observers:** ___________________________________________

**Location:** ____________________________________________________________

<table>
<thead>
<tr>
<th><strong>Construction and Operation:</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>o dedicated central area for sanitizing cages and equipment is provided (<em>Guide, p 143</em>)</td>
<td></td>
</tr>
<tr>
<td>o cage-washing equipment meets need (<em>Guide, p 143</em>)</td>
<td></td>
</tr>
<tr>
<td>o doors, windows, floors, drainage, walls, ceilings (<em>Guide, pp 136-138</em>)</td>
<td></td>
</tr>
<tr>
<td>o convenient to animal areas/waste disposal (<em>Guide, p 143</em>)</td>
<td></td>
</tr>
<tr>
<td>o ease of access (including door size) facilitates use (<em>Guide, p 143</em>)</td>
<td></td>
</tr>
<tr>
<td>o sufficient space for staging and maneuvering (<em>Guide, p 143</em>)</td>
<td></td>
</tr>
<tr>
<td>o safety precautions/clothing/equipment used for waste disposal/prewash/acid wash (<em>Guide, p 143</em>)</td>
<td></td>
</tr>
<tr>
<td>o traffic flow clean to dirty with no contamination of clean equipment by dirty equipment and appropriate air pressurization (<em>Guide, p 143</em>)</td>
<td></td>
</tr>
<tr>
<td>o insulation and/or sound attenuation present as needed (<em>Guide, p 143</em>)</td>
<td></td>
</tr>
<tr>
<td>o utilities are appropriate (<em>Guide, p 143</em>)</td>
<td></td>
</tr>
<tr>
<td>o ventilation meets heat and humidity load (<em>Guide, p 143</em>)</td>
<td></td>
</tr>
<tr>
<td>o safety features (e.g., SOPs, warning signs, eyewash stations) are in use (<em>Guide, p 143</em>)</td>
<td></td>
</tr>
<tr>
<td>o functioning safety devices to prevent entrapment in washer/sterilizers (<em>Guide, p 143</em>)</td>
<td></td>
</tr>
<tr>
<td>o cage wash temperatures are monitored and records are available (<em>Guide, p 73</em>)</td>
<td></td>
</tr>
<tr>
<td>o appropriate clean cage storage (<em>Guide, p 141</em>)</td>
<td></td>
</tr>
</tbody>
</table>

* **A** = acceptable  
  **M** = minor deficiency  
  **S** = significant deficiency (is or may be a threat to animal health or safety)  
  **C** = change in program (PHS Policy IV.A.1.a.i.) (include in semiannual report to IO and in annual report to OLAW)  
  **NA** = not applicable

**NOTES:**
Special Facilities: Aseptic Surgery

Date:__________________ Observers:________________________
Location:________________________________________________

- **General Considerations:**
  - location minimizes traffic/contamination (*Guide, p 144*)
  - functional components (surgical support, animal preparation, surgeon scrub, operating room, postoperative recovery) are designed and separated (physically or otherwise) (*Guide, p 144*)
  - appropriate drug storage, control, expiration date monitoring (*Guide, pp 115, 122*)
  - safe sharps disposal system (*Guide, p 74*)
  - adequate records of anesthesia and perioperative care (*Guide, p 122*)
  - aseptic procedures in use for all survival surgery (*Guide, pp 118-119*)

- **Operating Room:**
  - effective contamination control procedures (*Guide, p 144*)
  - effective cleaning procedures/dedicated tools (*Guide, p 145*)
  - interior surfaces smooth and impervious to moisture (*Guide, p 145*)
  - HVAC system meets *Guide* requirements (*Guide, p 145*)
  - lighting safe and appropriate (*Guide, p 145*)
  - outlets safe and appropriate (*Guide, p 145*)
  - scavenging of anesthetic gases implemented (*Guide, p 145*)

- **Surgical Support:**
  - facility for washing, sterilizing, storing instruments and supplies (*Guide, p 145*)
  - autoclave monitoring procedures are implemented (*Guide, pp 119, 145*)
  - storage of autoclaved materials maintains sterility (*Guide, p 145*)
  - cold sterilization procedures are appropriate (*Guide, p 119*)

- **Animal Preparation:**
  - contains large sink to facilitate cleaning of animal and operative site (*Guide, p 145*)

- **Surgeon Scrub:**
  - outside operating room, non-hand-operated sink (*Guide, p 145*)

- **Postoperative Recovery:**
  - allows adequate observation, easily cleaned, supports physiologic functions, minimizes risk of injury (*Guide, p 145*)

- **Dressing Area:**
  - place for personnel to change (*Guide, p 145*)

* A = acceptable  
M = minor deficiency  
S = significant deficiency (is or may be a threat to animal health or safety)  
C = change in program (PHS Policy IV.A.1.a.-i.) (include in semiannual report to IO and in annual report to OLAW)  
NA = not applicable

NOTES:
Washington State University
Institutional Animal Care and Use Committee

Special Facilities: Procedure Areas, Non-survival Surgeries, Laboratories, Rodent Surgeries, Imaging, Whole Body Irradiation, Hazardous Agent Containment, Behavioral Studies

Date:__________________ Observers:______________________________
Location:_____________________________________________________

• **General Considerations:**
  - labs used to house animals only when scientifically required and limited to minimum period necessary (*Guide*, p 134)
  - drug storage, control, and expiration dates (*Guide*, pp 115, 122)
  - sharps disposal (*Guide*, p 74)
  - anesthetic monitoring (*Guide*, p 120)
  - scavenging of anesthetic gases (*Guide*, p 21)
  - safety features (e.g., SOPs, safety signs, eyewash stations, secure gas cylinders) are in place (*Guide*, p 19)
  - carcass disposal (*Guide*, pp 73-74)

• **Additionl Concerns for Survival Surgery:** (rodent and minor procedures only)
  - rodent survival surgery clean and uncluttered, not used for anything else during surgery (*Guide*, p 144)
  - records of peri-operative care (*Guide*, p 120)
  - aseptic procedures (*Guide*, pp 118-119)
  - autoclave monitoring procedures (*Guide*, pp 119, 145)
  - storage of autoclaved materials (*Guide*, p 145)
  - cold sterilization procedures are appropriate (*Guide*, p 119)

• **Imaging/Whole Body Irradiation:** *NEW*
  - location of resource limits contamination risk (*Guide*, p 147)
  - appropriate transportation methods are in place (*Guide*, p 147)
  - gas anesthesia provision, scavenging and monitoring are appropriate (*Guide*, p 147)
  - appropriate sensors and ventilation are provided for cryogen gases (*Guide*, p 147) [must]
  - imaging console is located away from radiation source (*Guide*, p 147)

• **Hazardous Agent Containment:** *NEW*
  - facility adheres to APHIS, USDA and CDC Select Agent Regulations and other federal, state and local regulations including security measures (*Guide*, p 148) [must]

• **Behavioral Studies:** *NEW*
  - facility minimizes airborne transmission of noise and ground-borne transmission of vibration (*Guide*, p 149)
  - floor coverings reduce sound transmission (*Guide*, p 149)
  - testing equipment allows for surface disinfection (*Guide*, p 150)
  - components that cannot be cleaned are not in ready contact with animals and kept covered when not in use (*Guide*, p 150)
  - housing areas are contiguous with testing areas when appropriate (*Guide*, p 150)

* = A = acceptable  
M = minor deficiency  
S = significant deficiency (is or may be a threat to animal health or safety)  
C = change in program (PHS Policy IV.A.1.a.i.) (include in semiannual report to IO and in annual report to OLAW)  
NA = not applicable
II. Semiannual Program Review and Facility Inspection Report

Date:  
Members in Attendance: 

<table>
<thead>
<tr>
<th>Deficiency Category*</th>
<th>√</th>
<th>Location</th>
<th>Deficiency and Plan for Correction</th>
<th>Responsible Party</th>
<th>Correction Schedule and Interim Status</th>
<th>Date Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **A** = acceptable
- **M** = minor deficiency
- **S** = significant deficiency (is or may be a threat to animal health or safety)
- **C** = change in program (PHS Policy IV.A.1.a.-i.) (include in semiannual report to IO and in annual report to OLAW)
- **NA** = not applicable
- √ Check if repeat deficiency
III. Endnotes

1 Part 3 Subpart A 3.8 - “...research facilities must develop, document, and follow an appropriate plan to provide dogs with the opportunity for exercise. In addition the plan must be approved by the attending veterinarian. The plan must provide written standard procedures...”

2 Part 3 Subpart D 3.81 - “...research facilities must develop, document, and follow an appropriate plan for environment enhancement adequate to promote the psychological well-being of nonhuman primates.”

3 Part 3 Subpart A 3.6(c)(1) - “Each dog housed in a primary enclosure must be provided with a minimum amount of floor space, calculated as follows:
(length of dog in inches + 6)² / 144 = required floor space in square feet).”

- Part 3 Subpart D 3.80 (b) - “Primary enclosures [for nonhuman primates] must meet the minimum space requirements provided in this subpart.”

- In situations where the USDA regulations and the Guide differ with respect to space requirements, the larger of the two must be followed.