STANDARD OPERATING PROCEDURES
DIVISION OF COMPARATIVE MEDICINE
UNIVERSITY OF SOUTH FLORIDA

TITLE: Feed and Bedding
SCOPE: Animal Care Personnel
RESPONSIBILITY: Facility Manager and Animal Care Personnel
PURPOSE: To Outline the Proper Procedures for the Procurement, Storage, and Dispensing of Animal Feed and Bedding.

I. PURPOSE

1. This procedure outlines the method of procuring animal feed and bedding and describes accepted guidelines for the storage of these supplies and the procedures for dispensing animal feed and bedding as part of routine husbandry and care of animals.

II. RESPONSIBILITY

1. It is the responsibility of the Facility Manager to ensure that all animal care personnel are adequately trained in the following procedures and that these procedures are adhered to. Facility Managers are responsible for ensuring the quality of all feed and bedding, monitoring milling dates, and discarding any expired feed.

2. It is the responsibility of the animal care staff to read, understand, and follow the procedures outlined below.

III. PROCEDURES

1. Feed:
   a. Harlan Teklad provides Global 18% Protein Rodent Diet (#2018), Global 19% Protein Extruded Rodent Diet (#2019), Irradiated Global 18% Protein Rodent Diet (#2918), Irradiated Global 19% Protein Rodent Diet (#2919), Irradiated Low Fat Diet (#2916), Low Fat Diet (#2016), Irradiated Fenbendazole-treated Teklad Rodent Diet (#TD 01432.l), Fenbendazole-treated Teklad Rodent Diet (#TD 01432), Teklad 22/5 Rodent Diet (Hamster #8640), Global Cat Diet (#2060), Canned Feline Food (#9300), Canned Canine Food (#9200), Global 27% Protein Canine Diet (#2027), Global High Fiber Rabbit Diet (#2031), Ruminant Diet (#7060), Teklad Miniswine Diet, grower and maintenance (#7037, #8753 and #8753c), Global 20% Protein Primate Diet (#2050), Global High Fiber Guinea Pig Diet (#2041), and Marshall Pet Products provides Marshall Premium Ferret Diet. Local feed suppliers provide LabDiet Monkey Diet, #5038, Pur Grain Pigeon Food, Chick starter, alfalfa hay, hay cubes, and mineral blocks. Xenopus Express (3/32" floating/45% protein and 3/32" sinking/52% protein) and Nasco supply Frog Brittle diet (#SA05960LMM) for Xenopus frogs. Live crickets and TotalBite™ cricket
food are purchased from Armstrong Cricket Farm for leopard frogs. ICN Biochemicals, Inc. supplies reagents for the preparation of semi-purified diets used in nutritional studies. Fresh diets and supplements (e.g., kale, carrots, leafy greens, fruit, and liver) are purchased from local supermarkets.

**NOTE:** All special order diets should be placed through the Facility Manager

b. Special Diets must be declared to Comparative Medicine prior to storage so the facility manager can ensure that each is appropriately labeled, stored, and maintained in accordance with this SOP.

c. All grain based diets should be irradiated prior to shipment.

d. All animal diets are inspected to ensure they are intact and not damaged upon arrival and prior to accepting. Animal diets are not accepted if damaged. Cans with major damage or damage at the seams are not accepted. Cans with minor damage (e.g., minor dents) are acceptable but must be used first.

e. All animal diets are inspected for a milling date or expiration date upon arrival. Diets are not accepted/purchased if they cannot be used up before their date of expiration.

f. No animals will be fed expired diets. Consider the following when determining expiration dates of animal diets:

1. Bagged laboratory diets with a milling date expire 180 days from the milling date.
2. Bagged laboratory diets without a milling date expire 90 days from date of purchase.
3. Canned animal diets with expiration dates expire on that date.
4. Canned animal diets with out an expiration date expire a year from the date of purchase.
5. Fresh diets are considered expired when they appear visibly spoiled, become discolored, wilted, stale, and would not be considered suitable for human consumption.

g. All diets (e.g., bagged, canned, and fresh diets) that are not labeled with a milling date or date of expiration must be clearly labeled with the date of purchase.

h. Special-order diets are often less stable than standard laboratory diets. If no expiration date is evident the manufacturer should be contacted for a statement as to the shelf-life of the product, preferably in writing.

i. All stocks of foodstuffs are rotated so that the old stock is used first.

2. Bedding:

   a. Harlan Teklad provides ground 1/8" Corncob bedding (#7092), TEK-FRESH paper bedding (#7099), OMEGA-dri bedding (#6055), Soft Pelleted Paper bedding (#7084S), and Sani-Chips woodchip bedding (#7090). Shepherd Specialty Papers provides Enviro-dri shredded paper bedding and nesting material (#ED10 and #ED25), and ALPHA-dri® + Plus™, each which can be used in polycarbonate shoebox rodent cages. Corncob or pelleted bedding is used as an absorbent material in litter boxes for cats and as a liner in pans under cages with mesh floors when necessary. Harlan Teklad also provides absorbent liners used to line pans under suspended cages with grid floors, e.g., rabbit caging, bird caging.
b. Bedding clean rodent cages: Placing fresh bedding into polycarbonate rodent cages should take place in a designated, clean room or area. **Cages must be dry before bedding** is placed in them. Cages may have bedding placed in them in advance of scheduled change outs, but should not be left overnight in corridors without **protective covering** to prevent contamination of clean bedding. Stacks of stored bedded cages should have a microisolator filter top placed on top cage to limit exposure to airborne contaminants.

3. Feed And Bedding Storage:
   a. All bagged feed is stored in designated rooms at each facility. Bags are stored on rolling platform trucks **off of the floor**. All rooms are air conditioned and should be maintained at or below 70°F with humidity at or below 50%. Typical HVAC system performance in Florida may result in an occasional relative humidity reading that exceeds the Guide's recommended <50% humidity range for a brief period (i.e., less than 10 consecutive days). Facility Managers should notify the Assistant Director whenever relative humidity readings are outside recommendations for a period of 10 consecutive days. The Assistant Director will notify physical plant staff and ask that they evaluate HVAC system performance.

   b. **Opened dry feeds** are kept in a plastic feed barrel on wheels, or suitable container with a tight fitting lid. Feed barrels/containers are clearly labeled by attaching a **Feed Record Card**. This card identifies the type of feed, the room the barrel/container is assigned to, the date the feed is put into the barrel/container, expiration date of the feed, date when barrel/container is sanitized, and technician initials. **Feed barrels/buckets are designated for use in a specific room**, and are not to be moved between animal rooms. Barrels are routinely emptied of fines and remnant feed, and at a minimum, are washed and sanitized when barrels are emptied. Feed barrels that become soiled or require additional sanitation may have their contents emptied into a clean barrel and sanitized on an as needed basis, to be determined by the Facility Manager.

   c. Opened can diets are covered or placed in a suitable container, labeled with the date opened, and stored in designated “animal diets only” refrigerators.

   d. **Bedding is stored** on rolling platform trucks **off of the floor** in designated rooms at each facility. When bags are opened, bedding is stored in designated bedding bins with lids or labeled plastic barrels with wheels and tight fitting lids. Paper liners are stored off of the floor on carts.

   e. Facilities are maintained free of **vermin**. Feed and bedding storage rooms are sprayed by a pest control service, when needed, at the discretion of the Facility Manager.

4. Monitoring Feed and Bedding Storage Areas:
   a. Feed and bedding storage rooms are routinely monitored for **temperature, humidity, vermin, and sanitation**.

   b. Temperature and humidity are monitored using a certified room thermometer/hygrometer with minimum/maximum capabilities and the results recorded on the **Feed and Bedding Room Status Sheet** daily.