1. Purpose:

The intent of this Animal Care and Use Procedure (SOP) is to describe the methods used for cleaning and sanitizing vehicles used in the transportation of animals. The AV may be consulted for emergency or temporary deviation; any permanent deviation must be approved by the IACUC prior to its implementation.

2. Scope:

This SOP is intended for staff responsible for vehicle or trailer cleaning. Cleaning and sanitization of transport vehicles is an important component of animal biosecurity. Control of vehicle detergent and disinfecting agents is crucial so as to avoid chemical run-off into the environment. Use of these compounds must be performed in a manner so as to allow capture of chemicals for either sanitary sewer or approved solid waste disposal.  
**NOTE:** The Texas A&M-Commerce Department of Safety & Risk Management should be contacted at 903-468-3287 and consulted for proper disposal location and considerations for animal waste and for detergent and disinfectant solutions. Contact Research Compliance at researchcompliance@tamuc.edu for assistance.

3. Materials and Equipment:

- Animal transport vehicle (or trailer: considered a “vehicle” for sanitation rules below)
- Animal waste disposal items (e.g., shovel, broom, waste collection container)
- Disinfectant (e.g., bleach/water solution or quaternary ammonium compound diluted as per manufacturer’s recommendations)
- Water
- Chemical collection equipment (e.g., sanitary sewer drain, mop/bucket, garbage collection method)
- Vehicle cleaning / sanitization log

4. Responsibilities:

A. The University Attending Veterinarian (AV) oversees all aspects of animal health and husbandry and is assisted by program faculty and staff. In any case of animal welfare negligence, the AV and his designees have the authority to intervene immediately.
B. Texas A&M-Commerce IO, Veterinary Care Team and IACUC ensure provision of supplemental husbandry and programmatic oversight, and assist the AV in enforcing and implementing the veterinary care program.
C. Texas A&M-Commerce faculty and staff ensure implementation of all procedures including husbandry, documentation, student oversight, and IACUC and AV regulator compliance.
D. Texas A&M-Commerce faculty and staff ensure compliance with this SOP and all other applicable A&M-Commerce IACUC and AV regulations, SOPs, guidance, and directives.

5. Procedures:

General Considerations
- Organic material must be removed (“cleaned) from the vehicles prior to disinfecting to allow for proper effectiveness of the disinfecting agent.
- A log of all vehicle cleaning and sanitization activity must be maintained. T There will be one log for each vehicle or trailer.
- Wear Personal Protective Equipment (PPE) consistent with disinfectant solutions Materials Safety Data Sheet (MSDS).
- If a vehicle or equipment is damaged by cleaning or disinfection, such as by scrubbing or pressure spraying, or by the animals themselves, immediately notify your supervisor. Damaged surfaces are resistant to cleaning and disinfection and can lead to animal health concerns or regulatory non-compliance.

Vehicle Definitions
- A “soiled vehicle” has carried non-sanitized (or used) materials/supplies or any animals.
- A “clean vehicle” has carried only sanitized materials / supplies; or a vehicle that was cleaned and sanitized more than 7 days, but not longer than 30 days, prior.
- A “sanitized vehicle” has carried neither materials nor animals and has been fully cleaned and sanitized and stored securely within the last 7 days, but at least 30 minutes before use.

Vehicle Use and Sanitary Status
- Transport bedding, feed, equipment, materials and animals within the cargo compartment only and not within a cab compartment.
- Healthy / Immunocompetent Animals must be transported in a “clean vehicle.”
- Immunocompromised Animals must be transported in a “sanitized vehicle.” If you are unsure as to immune status, contact the AV.
- Clean (unused) bedding, feed, equipment or materials must be transported in a “clean vehicle.”
- Sanitized equipment or materials must be transported in a “sanitized vehicle.”
- Sterilized bedding, feed, equipment or materials must be transported in a sterilized secondary enclosure inside a “sanitized vehicle.”
- Used bedding, feed, equipment, materials may be transported in any vehicle definition, but that vehicle is then a “Soiled vehicle” and should be immediately cleaned and sanitized.
- Animals should not be transported together with any bedding, feed, equipment or materials other than with those required to achieve the animal transportation and immediate transport-associated care.
- Animals should never be transported with used bedding, feed, equipment, or materials.
Animals should never be transported with bedding, feed, equipment, or materials intended for OTHER animals (even if those materials were clean before transport, they are contaminated by co-transport with animals).

Sanitation Rules
- If a “soiled vehicle” needs to be used for a clean function, clean and sanitize it at least 30 minutes prior to use.
- If any vehicle is used for a soiled function, clean and sanitize it immediately after use.
- If a “clean vehicle” must be used for a sanitized function, sanitize it 30 minutes prior to use.
- Clean the interior cargo compartment of any vehicle after each delivery of debris, feed or bedding by vacuuming or sweeping, followed by proper disposal of any spillage.
- Clean and sanitize the interior of the cargo compartment immediately (within 24 hours) after transport of any animals.
- If a vehicle has not been cleaned and sanitized for more than 30 days, it must be cleaned and sanitized prior to the transport of animals.

Cleaning and Sanitization of the Cargo Compartment:

A. Sanitize the trucks by scrubbing and/or pressure spray washing all cargo compartment surfaces with a suitable disinfectant (e.g. bleach/water solution [1:10 to 1:128], or quaternary ammonium compound [e.g. PV-15 @ 1/2 oz. / gallon of water]).
B. NOTE: Bleach solutions require at least 10 minutes of contact time with pre-cleaned surfaces for adequate disinfection prior to thoroughly rinsing with clean water. For other disinfectants follow manufacturer's instructions for contact time.
C. Take care to prevent excessive amounts of the disinfectant solution from entering areas that house electrical components within the cargo compartment to prevent damage after repeated use. During cold weather (below 32° F) if it is not possible to pressure spray wash because of water freezing, scrub surfaces with a sponge or sponge mop frequently dipped in disinfectant solution followed by the wiping of all surfaces with another sponge or sponge mop frequently dipped in warm, clean water.

Cleaning of Non-cargo Compartment Surfaces:

D. Clean the vehicle exterior and the interior cab as needed so as to maintain a neat and professional appearance.
E. Clean the vehicle exterior by pressure spray washing the entire exterior of both the cab and cargo compartments with a detergent / water solution mix followed by a thorough pressure spray rinsing with water.
F. If exterior surfaces have been contaminated with animal waste or tissues, scrub the exterior vehicle surfaces with a sponge or sponge mop soaked in a detergent/water solution so as to remove dirt and debris not dislodged by the pressure spray washing prior to rinsing.
G. Clean the cab compartment interior by vacuuming any dirt and debris, removing and cleaning floor mats, wiping appropriate surfaces with a regular household cleaner and shampooing of any dirty textile surfaces.
Vans

H. Cover the cargo compartment surfaces with impermeable material (plastic, tarp, or cargo carrier) to allow for protection of the vehicle, particularly if carpeted.
I. Transport animals in a transport container and place the container in cargo compartment.
J. Secure the transport container appropriately to prevent motion of the container and the potential for injury to the animals during transport.
K. After animal transport, clean the impermeable cover and spray or scrub all surfaces with a disinfectant solution. NOTE: Bleach solutions require at least 10 minutes of contact time with clean surfaces for adequate disinfection prior to thoroughly rinsing with clean water. For other disinfectants follow manufacturer’s instructions for contact time.
L. Clean the rest of the vehicle immediately after the transport of animals.

Horse Trailers

M. Clean the trailer immediately after transport of healthy animals.
N. Clean and disinfect the trailer immediately after transport of animals at risk of carrying infectious diseases (e.g. sick horses or horses from an outside herd). At a minimum, clean and disinfect transport compartment yearly.
O. Horses should always be appropriately restrained or tied, depending upon the trailer design and restraint function.

Livestock Truck / Trailers

P. Clean the trailer immediately after transport of healthy animals.
Q. Clean and disinfect the trailer immediately after transport of animals at risk of carrying infectious diseases (e.g. sick animals or animals from an outside herd). At a minimum, clean and disinfect transport compartment yearly.
R. Livestock should always be appropriately restrained, depending upon the trailer design and restraint function. In some cases, sections of the trailer should be closed to condense the herd in the trailer for safer transport.

Other Vehicles

S. If other vehicles, either university-owned or private vehicles, are used to transport animals, the surface beneath the animal carrier must be covered in plastic or other impermeable material (e.g. plastic tarp).
T. After transport, either discard the material, or sanitize it with a disinfectant.
U. Clean the rest of the vehicle immediately after the transport of animals.

Other Materials

V. The insulated grocery bags used as a secondary container for transport of rodents must be processed through the facility laundry.
6. Personnel Safety

W. Medical Emergencies: CALL 911.
X. When working with animals wear appropriate PPE, observe proper hygiene, and be aware of allergy, zoonosis, and injury risks. Contact Research Compliance for Occupational Health and Safety information.

7. Animal Related Contingencies

Y. Post contact information for emergency assistance in a conspicuous location within the animal facility.
Z. Emergency veterinary care is available at all times including after working hours and on weekends and holidays by calling the AV.
AA. Non-emergency veterinary questions & requests for animal care, email Texas A&M-Commerce Research Compliance at researchcompliance@tamuc.edu.

8. References


9. History

Version 01
Author: Petra Collyer