

# QUICK REFERENCE: DISPOSAL OF TRANSGENIC ANIMALS

## Animal Research Subject to NIH Guidelines

All creation, crossing, and use of **TRANSGENIC ANIMALS** is subject to the **NIH Guidelines for Research Involving Recombinant or Synthetic Nucleic Acid Molecules** (rsNA Molecules) and requires review and approval by the Institutional Biosafety Committee (IBC). rsNA includes molecules that are constructed by joining natural or synthetic nucleic acid segments. Plasmids and CRISPR/Cas9 are included among common examples of tools used to create transgenic animals.

## What are TRANSGENIC ANIMALS?

**TRANSGENIC ANIMALS** are animals possessing a modified genome. These animals may be purchased through a vendor, received from a collaborator, custom-made by a core or created in your lab. **TRANSGENIC ANIMALS** used at Penn include but are not limited to insects, nematodes, fish, amphibians, and rodents.

## NIH Guidelines must be followed when disposing of dead transgenic animals or animals treated with rsNA

As required by the *NIH Guidelines*, all dead **TRANSGENIC ANIMALS** or animals treated with rsNA must be disposed of as biohazardous waste to prevent the release of such animals or rsNA material into the environment. Disposal of any **TRANSGENIC ANIMAL** or animal part is not allowed in regular trash or sewer, with the exception of embryos!

## DISPOSAL POLICY FOR TRANSGENIC ANIMALS



- **ARTHROPODS** (flies, mosquitos, ants, and other insects)
  - Dispose of insects, captured or killed in ethanol or oil, as chemical waste. Cap waste when not in use. Request pick-up using online Chemical Waste Pick-up Request form.
  - Place dead insects (free of chemicals) in a biohazard bag labeled “Do Not Autoclave” and leave in designated infectious waste collection bins.
- **NEMATODES** (*C. elegans*, *Strongyloides spp.*, and others)
  - Autoclave culture dishes containing agar and worms. Dispose autoclaved dishes in designated infectious waste containers.
- **FISH & AMPHIBIANS** (Zebra fish and frogs)
  - Place dead adult fish or amphibian in a biohazard bag labeled “Do Not Autoclave” and leave in designated carcass cooler within ULAR facility.
  - Bleach-inactivated fish or amphibian embryos are disposed of as liquid waste. Embryos are not subject to IACUC regulation.
- **OTHER ANIMALS** (mice, rats, and other macrofauna)
  - Place dead animals in biohazard bag and leave in designated carcass cooler within ULAR



All transgenic animals must be rendered non-viable prior to disposal. Alternate methods of disposal must be approved by the Penn IBC.

Contact EHRS for details: [ehrs@ehrs.upenn.edu](mailto:ehrs@ehrs.upenn.edu) or 215.898.4453.