



Animal Bedding Disposal

Purpose

This protocol specifies the requirements for the proper disposal of animal bedding waste to ensure compliance with all applicable legislation.

Scope

The protocol applies to animal bedding waste, generated from animal facilities and laboratories at UBC Point Grey campus. The animal bedding waste for disposal may include: non-contaminated beddings, beddings contaminated with Risk Group 1 and Risk Group 2 Biohazards, and bedding contaminated with toxic substances.

Background

All animal beddings are considered **biomedical waste** as defined by the BC Hazardous Waste Regulation, unless a “*medical or infection control professional has certified that the waste does not contain a virus or agent listed in Risk Group 2*”. Other regulatory restrictions also apply. The protocol is based on the following regulations:

1. BC Hazardous Waste Regulation (definitions)
 - Part 1- Biomedical Waste (b), (d), (g) (i) and (p)
 - Part 1- Hazardous Waste (a) (i), (ii) and (b.1)
2. Transportation of Dangerous Goods (TDG) regulations Part 2.31
3. Metro Vancouver Tipping Fee Solid Waste Regulation Bylaw

Procedure

Responsibility for Classification and Certification

- It is the responsibility of the area supervisor or Principal Investigator (PI) and the waste generator to classify waste prior to disposal.
- Area supervisors must certify **that each load of bedding generated, to be disposed as solid waste, is NOT biohazardous.**
- Additionally, each facility generating animal bedding waste must submit an annual declaration to Safety & Risk Services, at the beginning of each calendar year.
- See samples at the end of this procedure: “Non-Contaminated Waste Certification Log” and “UBC Animal Bedding Waste Declaration”.
- Contact the Environmental Protection Advisor at 604-822-9840 for more information.

A. Uncontaminated Beddings

- After the area supervisor signs the certification log, dispose as solid waste. For more information contact UBC Building Operations Service Centre (604-822-2173) or UBC Waste Management at 604-822-9619.

B. Toxic Substances Contaminated Beddings

- Depending on the toxicity level of the contaminating chemicals (e.g. pharmaceutical drugs, including cytotoxics), these beddings may need to be disposed as toxic waste through the Environmental Services Facility (ESF).
- Review the product Safety Data Sheet (SDS). Implement the following calculation if:
 - i) The chemical or drug is listed as a TDG class 6.1 substance (toxic)
 - ii) The chemical or drug LD₅₀ is ≤ 1000 mg/kg (1000 mg/kg is the toxic limit as per TDG Regulation sec. 2.31)



Assess the level of contamination:

- Find the chemical's LD₅₀ value in the SDS
- Estimate the total weight of the chemicals in the bedding (mixture of substances)
- Estimate the total weight of the beddings batch to be disposed
- Calculate the LD₅₀ value of the mixture of substances with the following equation:

$$LD_{50} \text{ (mixture)} = \frac{LD_{50} \text{ (chemical)}}{\text{mass fraction of chemical in bedding}}$$

- If the resulted LD₅₀ > 1000 mg/kg the mixture is not considered toxic waste (TDG class 6.1) and can be disposed as solid waste
- If the resulted LD₅₀ ≤ 1000 mg/kg the mixture should be treated as toxic waste, and disposed as hazardous (chemical) waste via ESF.
- In order to be accepted, the detailed calculation must be submitted as part of the request for disposal approval.
- Contact ESF at 604-822-1285 for more information.

C. Risk Group 1 (RG1) Contaminated Beddings

- After certification logs are signed by area supervisors, dispose as solid waste.

D. Risk Group 2 (RG2) Contaminated Beddings

- All beddings contaminated with Risk Group 2 agents **MUST** be autoclaved prior to disposal.
- If the bedding cannot be autoclaved, inform ESF (604-827-5389) and make special disposal arrangements.
- To ensure and demonstrate autoclave efficiency, quality assurance testing (i.e. using both chemical and biological indicators) must be routinely performed and related records must be kept, as per the most recent Canadian Biosafety Standards and Guidelines, published by the Public Health Agency of Canada. Refer to the "Biohazardous Waste" disposal procedure for details.
- After area supervisors certify the autoclaved waste, it can be disposed as solid waste into a specially designated compactor at each facility.
- Bedding waste is picked up by UBC Building Operations for disposal via an external waste contractor. Contact Waste Management (604-822-9619) for questions regarding compactor pick-up.

Landfill Disposal

- Animal bedding waste is NOT currently accepted for disposal through the Metro Vancouver composting facilities.
- Large quantities of animal bedding waste (e.g. collected in waste compactors) are not accepted for disposal via Metro Vancouver landfills. While currently small quantities of animal beddings waste can be disposed via local landfills, certain landfill restrictions may result in future landfill refusal to accept this bedding waste.
- Refer to Metro Vancouver's Disposal Ban Program (Banned Hazardous and Operational Impact Materials).
- Consequently, alternative disposal arrangements have been evaluated and implemented at the UBC Point Grey campus. Most of the animal bedding waste is currently disposed of in a secure landfill in Alberta, via UBC's external hazardous waste contractor.



Non-Contaminated Waste Certification Log - "Facility"

I, _____

(add your name/position, print clearly) certify that the bedding disposed per description below contained **no** Risk Group 2, 3, or 4 virus or agent.

Date of Disposal	Waste Description	Estimated Weight	Area Supervisor Initials



THE UNIVERSITY OF BRITISH COLUMBIA

UBC Animal Bedding Waste Declaration “Current Year”

Current Date

To UBC Safety & Risk Services & Waste Disposal Contractor (Sumas Environmental)

I, ADD YOUR NAME, certify that our facility is disposing of **Animal Bedding Waste** at the University of British Columbia Point Grey campus, and that controls are in place to ensure that every load meets the following conditions:

1. The load of soiled animal bedding originates **ONLY** from the UBC facility indicated below.
2. The animal bedding waste has been assessed according to the UBC Animal Bedding Disposal Protocol - all certification logs and relevant calculations are kept on file for 2 years.
3. The animal bedding does **NOT** contain any radioactive materials.
4. As per requirements of the BC Hazardous Waste Regulation, the animal bedding waste does **NOT** contain a virus or agent listed in Risk Group 2, 3 or 4, as defined in the federal transportation of dangerous goods regulations.
5. The animal bedding load is **NOT** considered hazardous toxic waste, class 6.1, as defined in the federal transportation of dangerous goods regulations.

Signature

Name
Job Title (Animal Facility Manager or Veterinarian)
Facility
Building (if applicable)
Address
Work Phone
Email



Bedding Disposal Decision Making Chart

