

Security Precautions

- Select agents must be secure at all times, even when in storage prior to disposal.
- Destruction of source material must be witnessed by an Environmental Health and Safety (EHS) staff member. Contact EHS at 746-6201 or ehs@med.cornell.edu to arrange a destruction meeting.

Safety Precautions

- Destruction procedures should be performed in a chemical hood or a biological safety cabinet depending on the agent. At a minimum, personal protective equipment for all procedures should include:
 - Disposable long-sleeved protective clothing (gown, coverall or similar garment)
 - Appropriate gloves
 - Eye protection

Initial Disposal/Deactivation Procedures

- **Bacteria and viruses:** For destruction of bacteria and viruses, use steam sterilization procedures.
- **Tetrodotoxin, Staphylococcus Enterotoxin B, Ricin, Aflatoxin:** Destroy the aforementioned agents in full-strength Chlorox bleach (4-6% sodium hypochlorite) using the following steps:
 1. In a chemical hood place plastic backed absorbent paper on the bottom of the hood.
 2. Lower the sash to the lowest possible working level.
 3. The Select Agent should be in solution in a primary container.
 4. Place the primary container in a secondary container, such as a beaker.
 5. Slowly dispense an equal volume of full strength bleach into the Select Agent solution.
 6. Do not place the cap on the primary container.
 7. Allow 30 minutes exposure time.
- **Staphylococcus Enterotoxin B, Ricin, Botulinum:** Use autoclave for heat destruction including the following steps:
 1. In a chemical hood or biological safety cabinet, loosen cap of primary container.
 2. Place primary container into secondary container, such as a beaker.
 3. Place container into a biohazard autoclave bag.
 4. Place bag into autoclavable tray.
 5. Autoclave at 121°C for 45 minutes on liquid cycle (slow exhaust).
 6. After autoclaving, allow time for material to cool before handling.

Final Disposal Procedures

- After destruction of the Select Agent, seal the top to the primary container and place into a zip-lock plastic bag.
- Complete the EHS Hazardous Material Transfer Request. EHS personnel will collect inactivated Select Agent for ultimate disposal.

References

- Morin, R.S., and Kozlovac, J.P. 2000. Biological Select Agents, p. 261-272. In D.O. Fleming, and D. L. Hunt (ed.), *Biological Safety, Principles and Practices*. ASM Press, Washington, D.C.
- Slein, M.W., and Sansone, E.B. 1980. *Degradation of Chemical Carcinogens, An Annotated Bibliography*. Van Nostrand Reinhold Company, New York, N.Y.
- Lunn, George and Sansone, Eric B., 1994, *Destruction of Hazardous Chemicals in the Laboratory*, 2nd Edition, Wiley, New York, N.Y.
- Armour, Margaret-Ann, 1996, *Hazardous Laboratory Chemicals Disposal Guide*, Second Edition, Lewis Publishers, Boca Raton, FL

Complete this form for the final destruction of Select Agent stocks. Before destroying select agents, contact Environmental Health and Safety (EHS) to verify the procedure and arrange for an EHS witness. Per 42 CFR 73.7(h) and 73.21, the U.S. Department of Health and Human Services must be notified in writing of any destruction for the purpose of discontinuing activities of a non-exempt registered Select Agent five business days prior to destruction. Please contact EHS at 746-6201 or ehs@med.cornell.edu if you have any questions about this process.

Principal Investigator:		Phone:	
Department/Division:		Laboratory Location (Building & Room):	
Select Agent Description:			
Use: <input type="checkbox"/> Biomedical Research <input type="checkbox"/> Medical <input type="checkbox"/> Vaccine (inactivated form) <input type="checkbox"/> Clinical specimen <input type="checkbox"/> Other—please describe ⇒		Exemption Status: <input type="checkbox"/> 42 CFR 73 Exempt <input type="checkbox"/> 42 CFR 73 Non-exempt Registration: <input type="checkbox"/> 42 CFR 73 Registered <input type="checkbox"/> Not registered	
Destruction Procedure (see below or describe alternative procedure and provide reference):			
Destroyed By (Print Name):		EHS Witness (Print Name):	
Destroyed By (Signature):		EHS Witness (Signature):	
I certify that the agent is accurately described (attach Material Safety Data Sheet if available) and that it is no longer in my possession or in possession of persons who work under my direction.			
Signature of Principal Investigator:		Date Destroyed:	
After destruction, dispose of residue via Environmental Health and Safety.			
Serial # of EHS Hazardous Material Transfer Request:	Transfer Request Date:	Date of EHS Collection:	

After completion, please forward this form to EHS and keep a copy for your records.