

APPENDIX B

CENTER FOR DISEASE CONTROL (CDC) and U.S. DEPARTMENT OF AGRICULTURE (USDA) SELECT AGENTS AND TOXINS¹

The CDC and USDA define biological agents and toxins that have the potential to pose a severe threat to public health and safety as “Select Agents and Toxins.” Because the “Select Toxins” are used as chemical biotoxins in laboratories, these substances are included in this chemical hygiene plan for informational purposes. The “Select Agents” (organisms) are not included in this chemical hygiene plan.

Exclusions for limited quantities of these toxins does not require registration as a Select Agent or Toxin. Researchers must not exceed the excluded quantities under any circumstances and must contact EHS for disposal of unwanted quantities.

Toxins

1. Abrin
2. Conotoxins (Short, paralytic alpha conotoxins containing the following amino acid sequence X₁CCX₂PACGX₃X₄X₅X₆CX₇)
3. Diacetoxyscirpenol
4. Ricin
5. Saxitoxin
6. Tetrodotoxin
7. Botulinum neurotoxins
8. Staphylococcal enterotoxins (subtypes A-E)
9. T-2 toxin

Genetic Elements, Recombinant Nucleic Acids, and Recombinant Organisms

The Select Toxins also include 1) any listed toxins that have been genetically modified or, 2) recombinant and/or synthetic nucleic acids that encode for the functional form(s) of any of the toxins if the nucleic acids can a) be expressed *in vivo* or *in vitro*, or b) are in a vector or recombinant host genome and can be expressed *in vivo* or *in vitro*.

Exclusions

1. Select toxins in their naturally occurring environment and have not been intentionally introduced, cultivated, collected, or otherwise extracted from its natural source.
2. Non-viable or non-functional toxins
3. Abrin (≤100 mg)
4. Botulinum neurotoxin (≤ 0.5 mg)
5. Conotoxins (≤100 mg)
6. Diacetoxyscirpenol (≤1000 mg)
7. Ricin (≤100 mg)
8. Saxitoxin (≤100 mg)
9. Staphylococcal enterotoxins (≤5 mg)
10. T-2 toxin (≤ 1000 mg)
11. Tetrodotoxin (≤100 mg)

¹ References: Electronic Code of Federal Regulations, e-CFR, (www.ecfr.gov)
Title 42 (Public Health), Code of Federal Regulations, Part 73.3, May 12, 2014
Title 7 (Agriculture), Code of Federal Regulations, Part 331.3, May 12, 2014
Title 9 (Animal and Animal Products), Code of Federal Regulations, Part 121.3,
May 12, 2014