7012. con't.

2. Fermenters capable of cultivation of pathogenic micro-organisms, viruses or for toxin production, without the propagation of aerosols, and having a capacity equal to or greater than 100 litres;
   Technical Note:
   For the purposes of Item 7012.2., sub-groups of fermenters include bioreactors, chemostats and continuous-flow systems.

3. Centrifugal separators capable of the continuous separation of pathogenic microorganisms, without the propagation of aerosols, and having all the following characteristics:
   a. flow rate greater than 100 litres/h;
   b. component of polished steel or titanium;
   c. double or multiple sealing joints within the steam containment area; **and**
   d. capable of in-situ steam sterilisation in a closed state;
   Technical Note:
   For the purposes of Item 7012.3., centrifugal separators include decanters.
4. Cross(tangential) flow filtration equipment designed for continuous separation of pathogenic microorganisms, viruses, toxins and cell cultures without the propagation of aerosols, and having all the following characteristics:
   a. equal to or greater than 5 square metres; **and**
   b. capable of in-situ sterilization;
5. Steam sterilizable freeze-drying equipment with a condenser capacity greater than 50 kg of ice in 24 hours and less than 1000 kg of ice in 24 hours;
6. Equipment that incorporates or is contained in P3 or P4 (BL3, BL4, L3, L4, BSL3, BSL4) containment housing, as follows:
   a. Independently ventilated protective full or half suits;
   b. Class III biological safety cabinets or isolators with similar performance standards.
7. Aerosol inhalation chambers designed for aerosol challenge testing with pathogenic microorganisms, viruses or toxins and having a capacity of 1 cubic meter or greater.

7013. Materials.

Biological Weapon Agents

1. Human pathogens, as follows:
Note:
Except where the agent is in the form of a vaccine.

a. Viruses:
   1. Chikungunya virus;
   2. Congo-Crimean haemorrhagic fever virus;
   3. Dengue fever virus;
   4. Eastern equine encephalitis virus;
   5. Ebola virus;
   6. Hantaan virus;
   7. Junin virus;
   8. Lassa fever virus;
   9. Lymphocytic choriomeningitis virus;
   10. Machupo virus;
   11. Marburg virus;
   12. Monkey pox virus;
   13. Rift Valley fever virus;
   14. Tick-borne encephalitis virus (Russian Spring Summer encephalitis virus);
   15. Variola virus;
   16. Venezuelan equine encephalitis virus;
   17. Western equine encephalitis virus;
   18. White pox;
   19. Yellow fever virus;
   20. Japanese encephalitis virus;

b. Rickettsiae:
   1. Coxiella burnetii;
   2. Bartonella Qintana (Rickettsiae quintana, Rochalimea quintana);
   3. Rickettsiae prowazeki;
   4. Rickettsiae rickettsii;

c. Bacteria:
   1. Bacillus anthracis;
   2. Brucella abortus;
   3. Brucella melitensis;
   4. Brucella suis;
   5. Chlamydia psittaci;
   6. Clostridium botulinum;
   7. Francisella tularensis;
   8. Burkholderia Mallei (Pseudomonas mallei);
   9. Burkholderia pseudomallei (Pseudomonas pseudo-mallei);
   10. Salmonella typhi;
   11. Shigella dysenteriae;
   12. Vibrio cholerae;
   13. Yersinia pestis;

d. Genetically Modified Microorganisms:
   1. Genetically modified microorganisms or genetic elements that contain nucleic acid sequences associated with pathogenicity and are derived from organisms in the above list of human pathogens;
   2. Genetically modified microorganisms or genetic elements that contain nucleic acid sequences coding for any of the human toxins in the list below;

e. Toxins:
   Note:
   Excluding Immunotoxins.

   1. Botulinum toxins;
   2. Clostridium perfringens toxins;
   3. Conotoxin;
   4. Shiga toxin;
   5. Staphylococcus aureus toxins;
   6. Tretodotoxin;
   7. Verotoxin;
   8. Microcystin (Cyanginosin);
   9. Aflatoxins.

2. Animal pathogens, as follows:
Note:
Except where the agent is in the form of a vaccine.

a. Viruses:
   1. African swine fever virus;
   2. Avian influenza virus;
      Note:
      This includes only those Avian influenza viruses of high pathogenicity as defined in EC Directive 92/40/EC:
      *a. "Type A viruses with an IVPI(intravenous pathogenicity index) in 6 week old chickens of greater than 1.2; **or***
      b. Type A viruses H5 or H7 subtype for which nucleotide sequencing has demonstrated multiple basic amino acids at the cleavage site of haemegglutinin.
   3. Bluetongue virus;
   4. Foot and mouth disease virus;
   5. Goat pox virus;
   6. Herpes virus (Aujeszky's disease);