Export of genetic elements*, nucleic acids**, DNA, recombinant DNA

If you wish to ship to a colleague outside of the USA, please complete this questionnaire and sent to Marcia Finucane, UK Biological Safety Officer, 505 Oldham Court, Lexington, KY 40502-0473, or fax: (859) 323-3838, or scan and email to mfinu2@uky.edu, or call (859) 257-1049.

| | | Yes | No | |
|---|--|---------|-------------|--|
| 1. Genetic elements contain nucleic acid sequences associated with the pathogenicity of microorganisms (1C351.a – c, 1C352, 1C354, 1C360) | | | | |
| 2. Genetic elements contain nucleic acid sequences coding for any of the "toxins" controlled by 1C351.d or "sub-unites of toxins" thereof | | | | |
| 3. Genetically modified organisms that contain nucleic acid sequences associated with the pathogenicity of microorganisms controls by 1C351.a to .c, 1C352, 1C354, or 1C360 | | | | |
| 4. Genetically modified organisms that contain nucleic acid sequences coding for any of the "toxins" controlled by 1C351.d or "sub-units of toxins" thereof. | | | | |
| 5. Do have any reason to suspect that the genetic material to be exported could pose | | | | |
| a significant hazard to human, animal or plant health? | | | | |
| | | | | |
| 7. Gene Name: | | | | |
| 8. Gene Source: | | | | |
| 9. Gene Function: | | | | |
| 10. Address of | | | | |
| Shipment Destination: | | | | |
| Destination Contact | | | | |
| Person Information: | | | | |
| 12. Institutional and/or | | | | |
| Corporate Affiliation: | | | | |
| 13. Purpose this person will use material for (Attach Statement of Intent) | | | | |
| | | | | |
| * "Genetic elements" in | clude, inter alia, chromosomes, genomes, plasmids, trans | posons, | and vectors | |

"Nucleic acid sequences associated with the pathogenicity of any of the microorganisms controlled by 1C351.a to .c, 1C352, 1C354, or 1C360 means any sequence specific to the relevant controlled microorganism that: a. In itself or through its transcribed or translated products represents a significant **hazard to human, animal or plant health; or b. Is known to enhance the ability of a microorganism controlled by 1C351.a to .c, 1C352, 1C354, or 1C360, or any other organism into which it may be inserted or otherwise integrated, to cause **serious harm** to human, animal or plant health. See Commerce Department lists attached (1C351.a to .c, 1C352, 1C354, or 1C360).

I affirm that to the best of my knowledge this information is correct.

| Print Name | Signature | Date |
|------------|-----------|------|

^{* &}quot;Genetic elements" include, inter alia, chromosomes, genomes, plasmids, transposons, and vectors, whether genetically modified or unmodified.

Commerce Control List Supplement No. 1 to Part 774 Category 1—page 55-64

http://www.access.gpo.gov/bis/ear/pdf/ccl1.pdf; May 7, 2007

1C351 Human and zoonotic pathogens and "toxins", as follows

a. Viruses, as follows:

- a.1. Chikungunya virus;
- a.2. Congo-Crimean haemorrhagic fever virus
- (a.k.a. Crimean-Congo haemorrhagic fever virus);
- a.3. Dengue fever virus;
- a.4. Eastern equine encephalitis virus;
- a.5. Ebola virus;
- a.6. Hantaan virus;
- a.7. Japanese encephalitis virus;
- a.8. Junin virus;
- a.9. Lassa fever virus
- a.10. Lymphocytic choriomeningitis virus;
- a.11. Machupo virus;
- a.12. Marburg virus;
- a.13. Monkey pox virus;
- a.14. Rift Valley fever virus;
- a.15. Tick-borne encephalitis virus (Russian Spring-Summer encephalitis virus);
- a.16. Variola virus;
- a.17. Venezuelan equine encephalitis virus;
- a.18. Western equine encephalitis virus;
- a.19. White pox;
- a.20. Yellow fever virus:
- a.21. Kyasanur Forest virus;
- a.22. Louping ill virus;
- a.23. Murray Valley encephalitis virus;
- a.24. Omsk haemorrhagic fever virus:
- a.25. Oropouche virus;
- a.26. Powassan virus;
- a.27. Rocio virus:
- a.28. St. Louis encephalitis virus;
- a.29. Hendra virus (Equine morbillivirus);
- a.30. South American haemorrhagic fever(Sabia, Flexal, Guanarito);
- a.31. Pulmonary and renal syndromehaemorrhagic fever viruses (Seoul, Dobrava, Puumala,
- Sin Nombre); or
- a.32. Nipah virus.

b. Rickettsiae, as follows:

- b.1. Bartonella quintana (Rochalimeaquintana, Rickettsia quintana);
- b.2. Coxiella burnetii;
- b.3. Rickettsia prowasecki (a.k.a. Rickettsiaprowazekii); or
- b.4. Rickettsia rickettsii.

c. Bacteria. as follows:

- c.1. Bacillus anthracis;
- c.2. Brucella abortus;
- c.3. Brucella melitensis;
- c.4. Brucella suis:
- c.5. Burkholderia mallei (Pseudomonasmallei);
- c.6. Burkholderia pseudomallei(Pseudomonas pseudomallei);
- c.7. Chlamydia psittaci;

- c.8. Clostridium botulinum;
- c.9. Francisella tularensis:
- c.10. Salmonella typhi;
- c.11. Shigella dysenteriae;
- c.12. Vibrio cholerae;
- c.13. Yersinia pestis;
- c.14. Clostridium perfringens, epsilon toxin producing types; or
- c.15. Enterohaemorrhagic Escherichia coli, serotype O157 and other verotoxin producing serotypes.

d. "Toxins", as follows, and "subunits" thereof:

- d.1. Botulinum toxins;
- d.2. Clostridium perfringens toxins;
- d.3. Conotoxin;
- d.4. Microcystin (Cyanginosin);
- d.5. Ricin;
- d.6. Saxitoxin;
- d.7. Shiga toxin;
- d.8. Staphylococcus aureus toxins;
- d.9. Tetrodotoxin;
- d.10. Verotoxin and other Shiga-like ribosome inactivating proteins;
- d.11. Aflatoxins;
- d.12. Abrin;
- d.13. Cholera toxin;
- d.14. Diacetoxyscirpenol toxin;
- d.15. T-2 toxin;
- d.16. HT-2 toxin;
- d.17. Modeccin toxin;
- d.18. Volkensin toxin; or
- d.19. Viscum Album Lectin 1 (Viscumin).

e. "Fungi", as follows:

- e.1. Coccidioides immitis: or
- e.2. Coccidioides posadasii.

1C352 Animal pathogens, as follows

a. Viruses, as follows:

- a.1. African swine fever virus;
- a.2. Avian influenza virus that are:
- a.2.a. Defined in EC Directive 92/40/EC
- (O.J. L.16 23.1.92 p.19) as having high pathogenicity, as follows:
- a.2.a.1. Type A viruses with an IVPI (intravenous pathogenicity index) in 6 week old chickens of greater than 1.2; *or*
- a.2.a.2. Type A viruses H5 or H7 subtype for which nucleotide sequencing has demonstrated multiple basic amino acids at the cleavage site of haemagglutinin;
- a.3. Bluetongue virus;
- a.4. Foot and mouth disease virus;
- a.5. Goat pox virus;
- a.6. Porcine herpes virus (Aujeszky's disease);
- a.7. Swine fever virus (Hog cholera virus);
- a.8. Lyssa virus;
- a.9. Newcastle disease virus; a.10. Peste des petits ruminants virus;
- a.11. Porcine enterovirus type 9 (swine vesicular disease virus);
- a.12. Rinderpest virus;
- a.13. Sheep pox virus;

- a.14. Teschen disease virus:
- a.15. Vesicular stomatitis virus;
- a.16. Lumpy skin disease virus;
- a.17. African horse sickness virus.

b. Bacteria, as follows:

b.1 Mycoplasma mycoides.

1C354 Plant pathogens, as follows

a. Bacteria. as follows:

- a.1. Xanthomonas albilineans;
- a.2. Xanthomonas campestris pv. citri including strains referred to as Xanthomonas campestris pv. citri types A,B,C,D,E or otherwise classified as Xanthomonas citri, Xanthomonas campestris pv. aurantifolia or Xanthomonas campestris pv. citrumelo;
- a.3. Xanthomonas oryzae pv. oryzae (syn. Pseudomonas campestris pv. oryzae);
- a.4. Clavibacter michiganensis subspecies sepedonicus (syn. Corynebacterium michiganensis subspecies sepedonicum or Corynebacterium sepedonicum);
- a.5. Ralstonia solanacearum Races 2 and 3 (syn. Pseudomonas solanacearum Races 2 and 3 or Burkholderia solanacearum Races 2 and 3);

b. Fungi, as follows:

- b.1. Colletotrichum coffeanum var. virulans (Colletotrichum kahawae);
- b.2. Cochliobolus miyabeanus (Helminthosporium oryzae);
- b.3. Microcyclus ulei (syn. Dothidella ulei);
- b.4. Puccinia graminis (syn. Puccinia graminis f. sp. tritici);
- b.5. Puccinia striiformis (syn. Puccinia glumarum);
- b.6. Magnaporthe grisea (pyricularia grisea/pyricularia oryzae);

c. Viruses, as follows:

- c.1. Potato Andean latent tymovirus:
- c.2. Potato spindle tuber viroid.

1C360 Select agents not controlled under ECCN 1C351, 1C352, or 1C354.

a. Human and zoonotic pathogens, as follows:

- a.1. Viruses, as follows:
- a.1.a. Central European tick-borne encephalitis viruses, as follows:
- a.1.a.1. Absettarov;
- a.1.a.2. Hanzalova;
- a.1.a.3. Hypr;
- a.1.a.4. Kumlinge;
- a.1.b. Cercopithecine herpesvirus 1 (Herpes B virus);
- a.1.c. Reconstructed replication competent forms of the 1918 pandemic influenza virus containing any portion of the coding regions of all eight gene segments;

b. Animal pathogens, as follows:

b.1. Viruses, as follows:

- b.1.a. Akabane virus:
- b.1.b. Bovine spongiform encephalopathy agent;
- b.1.c. Camel pox virus;
- b.1.d. Malignant catarrhal fever virus:
- b.1.e. Menangle virus;

b.2. Mycoplasma, as follows:

- b.2.a. Mycoplasma capricolum;
- b.2.b. Mycoplasma F38;
- b.3. Rickettsia, as follows:
- b.3.a. Erhlichia ruminantium (a.k.a. Cowdria ruminantium);

c. Plant pathogens, as follows:

c.1. Bacteria, as follows:

- c.1.a. Candidatus Liberobacter africanus (a.k.a. Liberobacter africanus);
- c.1.b. Candidatus Liberobacter asiaticus (a.k.a. Liberobacter asiaticus);
- c.1.c. Xylella fastidiosa pv. citrus variegated chlorosis (CVC);

c.2. Fungi, as follows:

- c.2.a. Peronosclerospora philippinensis;
- c.2.b. Sclerophthora rayssiae var. zeae;
- c.2.c. Synchytrium endobioticum.