FOURTH MEETING OF THE FAO/OIE RINDERPEST JOINT ADVISORY COMMITTEE

OIE Headquarters, Paris, 4-5 September 2013

1. Opening

The Chairperson welcomed the Committee members and thanked them for the work accomplished since the previous meeting.

The Committee agreed that the 4th meeting should focus on moving forward with putting in place guidelines and regulatory processes needed to facilitate destruction and sequestration of rinderpest virus (RPV) – containing material.

The Committee adopted the agenda as it was proposed by the Chairperson.

2. Review minutes and action items from the previous meeting

The minutes of the previous meeting had been agreed by email exchanges and had been made publicly available on FAO’s and OIE’s websites.

Updates were provided on the actions arising from the previous meeting.

The Committee reaffirmed that a core task was to review applications for rinderpest holding facilities that had been referred to them by OIE and FAO. It was agreed that a priority should be to approve a minimum number of facilities so that Member Countries would have officially approved holding facilities for safe storage of RPV-containing material sequestrated from other laboratories, if they did not intend to destroy it. To minimize the number of applications for rinderpest holding facilities, OIE and FAO would not encourage countries to apply, but would deal with any voluntary applications on a case by case basis. FAO and OIE said that they had been approached by three countries wishing to put forward institutes for approval as rinderpest holding facilities, but as yet no full applications had been received. OIE and FAO Reference Centres for rinderpest/morbillivirus and the African Union/PanAfrican Veterinary Vaccine Centre (AU-PANVAC) also have received application forms. The African Union (AU) had nominated AU-PANVAC as a RPV-containing material holding facility for Africa, but it has not yet been approved as such by OIE and FAO. It was hoped that some complete applications would be submitted to the Committee before their next meeting in February 2014.

The Committee noted that the African Union had taken steps to reduce the number of facilities holding RPV in Africa by agreeing on a single repository for all the African Union countries to use. However this facility has not yet submitted an official application to OIE and FAO. Whilst OIE and FAO could not impose such frameworks on regions, their existence could be critical in the global preparedness plan.

One of the action items from the previous meeting had been to request FAO to gather information about vaccine stocks from all institutes known to have manufactured rinderpest vaccines. For this, FAO conducted in the previous months, a survey targeting institutes known to hold vaccine stocks, a partial response was obtained. It was observed that some countries appear reluctant to share their vaccine stocks as it is considered a national reserve. It was decided that there was value in FAO completing this task. The information gathered from these requests should be cross referenced with the annual reports provided by OIE Member Countries. When making the request it should also be important to ascertain the expiry date of existing stocks of rinderpest.
3. **Finalised outstanding documents**

The Committee agreed on standard operating procedures (SOPs) for destruction of RPV-containing material and decontamination of facilities. It was suggested that additional detailed guidance could be provided in annexes (including a list of suggested commonly available disinfectants and protocols for fumigation). Other guidance was also finalized, including a literature review summarizing the types of materials which may carry a risk for containing RPV-containing material, and guidance on site visits for approval of rinderpest holding facilities.

**Action:** The Committee would finalize the outstanding documents with identified minor modifications by the end of October 2013.

**Action:** FAO would provide more detailed information on available procedures for decontamination of facilities.

4. **Review of research proposals**

A concept note for a research proposal ‘Sequencing and destruction of historical rinderpest virus isolates’ submitted by The Pirbright Institute (UK) was reviewed by the Committee.

The Committee recognized that the above concept note should aim to reduce the risk of reoccurrence of rinderpest by destroying RPV isolates held at The Pirbright Institute whilst retaining an archive of their genetic sequence data (from which virus could be recreated in the future if needed). The Committee agreed that sequence data is publically available for eight virus strains and that additional justification should be provided for further sequencing additional isolates. Benefits of this research might include facilitating destruction of RPV-containing material by encouraging other facilities to do the same; provision of genetic data which may be useful for epidemiological/forensic investigations (should there be a reoccurrence of rinderpest), and support to *peste des petits ruminants* (PPR) vaccine development.

In conclusion, the Committee agreed that, in principle, the technical concept was acceptable, and that the biosecurity risk of the work was low. The Committee requested that the Principal Investigator provide more detail on the scientific justification, merit of the research and the scientific impact of the research. Detailed information regarding the domain of the publicly available database and budget for carrying out the work should also be provided. The Committee highlighted the importance of making any RPV sequence data publicly available.

**Action:** The Committee would give feedback to OIE and FAO requesting additional information from the principal investigator.

5. **Update on progress with PPR vaccine research project**

The Committee was informed that work on the PPR vaccine research project ‘Testing the potential for protecting cattle against rinderpest using attenuated PPR virus vaccine’, was approved during the previous Committee meeting, was due to start in October 2013 and that the contractual agreement between OIE and the Pirbright Institute had been finalized.

6. **Smallpox experience for holding facilities (WHO)**

A representative from the WHO presented the lessons learned following smallpox eradication. After the global eradication of smallpox the number of facilities holding the virus was reduced from 75 to two. The last case of smallpox was a laboratory acquired infection; this high profile incident served as a disincentive for laboratories to maintain stocks of the variola virus. WHO teams inspected approved smallpox holding facilities to assess compliance with biorisk management standards every two years and inspection reports were published in the public domain. Although WHO would provide oversight to approval of facilities, it was the legal responsibility of the laboratory (not WHO) to ensure safe storage of the virus. In 2013 two WHO approved centers for storing variola virus (CDC (US) and Vector (Russia)); South Africa still held cloned fragments of variola virus.

7. **Mandate of rinderpest holding facilities**

FAO and OIE had acknowledged that approved rinderpest holding facilities must have a mandate defining their responsibilities, as a national facility, to the international community and to OIE and FAO. The mandate would also lay out technical requirements, and actions needed to support safe storage and destruction of
remaining stocks of RPV-containing material. The Committee was asked to comment on a preliminary draft of this mandate. The Committee recognized that the role of a holding facility was not the same as that of a Reference Laboratory, and that facilities holding live virus had a different function and requirements from those holding vaccines.

**Action:** OIE and FAO to finalize and agree on the mandate for rinderpest holding facilities.

### 8. International preparedness and response

A schematic showing the main components of an international response plan was presented to the Committee for discussion.

It was agreed that if there was a reoccurrence of rinderpest, resources should be immediately made available so that the disease was contained and eliminated quickly and effectively. To enable this, rinderpest should stay high on political agendas ensuring that key decision makers could mobilize resources in the event of a new case. It was suggested that FAO and OIE could work with donors and other partners, to establish a global contingency fund which would be mobilized if there was a reoccurrence of rinderpest.

In accordance with FAO resolution 4/2011 and OIE Resolution 18 (May 2011) to put in place and update national contingency plans, FAO developed a template to assist countries in developing national contingency plans for rinderpest outbreaks. The Committee suggested that the template be widely accessible to Member Countries. The Committee also agreed that training in national contingency planning should be generic rather than disease specific.

The Committee felt that the international response is the responsibility of FAO and OIE. The Committee would provide technical support if needed.

**Action:** FAO to disseminate and make freely available the template for rinderpest national contingency plans.

In May 2013, a new **OIE Terrestrial Animal Health Code** chapter on ‘infection with rinderpest virus’ was adopted by the OIE World Assembly. The Chapter describes case definitions for suspect and confirmed cases of rinderpest, the international actions that need to be taken in the event of a reoccurrence, and the reporting requirements of countries; it is a core component of the international response plan. Representatives from the OIE Code Commission joined this meeting to review this Chapter and to discuss the implications on manufacture and handling of rinderpest vaccines.

It was agreed that attenuated strains of RPV used for vaccine manufacture should be considered as rinderpest virus – they are included in the definition of RPV-containing material and accidental inoculation of animals with rinderpest vaccines may result in a confirmed case of rinderpest according to the **OIE Terrestrial Animal Health Code** definition. Accidental inoculation may occur through contamination of a vaccine against another disease or misuse of existing rinderpest vaccine. Therefore strict regulations of remaining rinderpest vaccines are crucial in maintaining global freedom.

The Committee agreed that although banks of rinderpest vaccine were part of an international contingency plan there was no global vaccine bank or international strategy to mobilize vaccines. The Guidelines for Rinderpest Virus Sequestration (Annexed to the OIE Resolution 2011 and endorsed by the OIE Biological Standards Commission) stated that RPV-containing material (excluding packaged and manufactured vaccine) should only be handled in facilities which had a bio-containment level equivalent to at least BSL3. This criterion would create practical difficulties for manufacturing vaccine because some vaccine manufacturing plants would not operate at BSL3. The Committee agreed that guidance should be amended with a derogation allowing the regulated movement of attenuated vaccine seed stock out of a BSL3 facility to an FAO-OIE approved facility. The Committee agreed to draft suggestions for consideration by FAO and OIE. Any amendments to the Guidelines for Rinderpest Virus Sequestration would need to be considered by the OIE Biological Standards Commission.

**Action:** The Committee would draft text and a justification to amend the current Guidelines for Rinderpest Virus Sequestration. This would be discussed by the OIE Biological Standards Commission.
In conclusion, it was clear that some components of an international contingency plan were in place, others were being developed, and some were deficient. The Committee agreed that the schematic (Annex 3) should be reorganized into a network chart describing the interactions between different components of the response plan. They also suggested that it might be useful to consider a table top exercise as a way of testing an international response plan.

Action: Secretariat to re-organize the schematic into a network chart.

Action: FAO and OIE to consider organizing an international table-top exercise to identify gaps and further develop the international response plan.

9. Review applications for holding facilities

A template for facilities wishing to apply for approval to become an FAO-OIE rinderpest holding facility (Annex 4) had been agreed by the Committee by email exchange between the 3rd and 4th Committee meetings. Neither OIE nor FAO had received a complete application for rinderpest holding facilities therefore no applications were reviewed for approval at the 4th Committee meeting.

OIE and FAO however received formal ‘expressions of interest’ for making an application to hold RPV-containing material from three countries. The Committee agreed on a proposed procedure for reviewing applications. Completed paper dossiers would be referred by FAO and OIE to the Committee for technical review. There would be an option for a representative from the applicant facility to present the application in person. On the basis of this initial review, the Committee would recommend whether the facility should be further evaluated by an inspection team. The report from the inspection team would be shared with the country in which the applicant facility is located and reviewed by FAO and OIE for a final decision. The composition of the inspection team would include an OIE and an FAO representative, a biocontainment laboratory engineer, a biosafety officer, biocontainment animal health expert and an observer from WHO. The status of rinderpest holding facilities should be regularly reviewed.

Action: OIE and FAO would finalize their administrative procedures for approving rinderpest holding facilities before the Committee meeting in February 2014.

10. Strategy for advocating destruction and sequestration

The Committee agreed that a key component of the strategy to facilitate destruction and sequestration of RPV-containing material would be to advocate that the disadvantages and burden of holding remaining stocks of virus far outweighed any benefits. Countries should also be reminded that they had already committed themselves to destroying or sequestering remaining stocks on adoption of OIE Resolution 18 in May 2011 and FAO Resolution 4/2011.

FAO presented non-official data from the latest communication with countries holding RPV-containing material at low biosecurity laboratories and those potentially holding manufactured vaccines, with the objectives of offering assistance in destruction and sequestration and obtaining the most updated counts on the number of vaccine doses and their expiry dates. The results of the survey were that approximately 50% of countries contacted responded to the questionnaire, some countries confirmed maintaining virus stocks in their facility, a few others indicated the virus was destroyed, and no countries claimed to hold vaccine manufactured stocks. FAO continues to follow up with countries that did not respond to the questionnaire. The FAO strategy is to conduct two regional meetings (Africa and Asia) with participation of the decision makers from countries that are known to keep the virus and those who have no intention to get rid of their stocks. At the regional meeting, the facility requirements, the mandate for holding the virus and the economic impact from the unlikely event of the rinderpest recurrence will be presented. The Committee suggested to collaborate with OIE and to invite a representative from the African Union to participate in the regional meeting in Africa, with the advantage to remind countries of their obligation to the AU Resolution in 2010, in which the virus destruction and sequestration were enforced and signed by the Heads of the States.

FAO also mentioned that they would develop a disease spread model for rinderpest to assist in determining the geographic location of the strategic vaccine reserves. OIE had also launched a communications campaign which focused on an animated movie advocating RPV destruction. This movie was available on YouTube and had also been shown at several high level meetings including the OIE General Session, the Biologic and Toxin Weapons Convention, and at G8 Global Partnership meetings. The movie had been distributed to media outlets in Africa, Middle East and Asia.

OIE would use the results from Member Countries’ annual reports on status of RPV-containing material to encourage transparency and to facilitate destruction and sequestration of RPV-containing material.
11. **Country reporting on rinderpest virus containing material**

To date there were no official data on the global distribution of remaining stocks of RPV-containing material. The Committee was informed that following adoption of the new OIE Code Chapter, all OIE Member Countries should report on the status of RPV-containing material in their countries to OIE annually (in November). To facilitate this OIE had developed a secure web-based electronic rinderpest reporting system. The Committee reviewed the on-line template for collecting data and made some suggestions. The OIE representative reminded the Committee that OIE would be sharing the data with FAO. The Committee suggested that OIE could include in their reporting system a question asking whether countries need support on virus destruction and sequestration, and decontamination of facilities, in which case FAO could offer support.

12. **Mitigating risks from synthetic biology**

It was noted that whole genome sequences for rinderpest virus were in the public domain and that rinderpest virus could be synthesized using this information. The OIE Resolution adopted in May 2011 aimed to address the risks posed by synthetic biology by only permitting the synthesis of partial or whole genome sequences of RPV if the work had first been approved as necessary research by OIE and FAO.

It was recognized that not all synthetic biologists (including commercial and amateur entities) would be aware of the Resolution forbidding unapproved RPV research and that it should be important to develop a strategy to raise awareness amongst these stakeholders.

It was agreed that there would be advantages in collaborating with the Biologic and Toxin Weapons Convention to develop a strategy to minimize potential risks from synthetic biology and that rinderpest would serve as a good example.

**Action**: Secretariat would contact the Biological Weapons Convention (BWC) and investigate ways to minimize risks from synthetic biology.

13. **Newsletter**

Members of the Committee were asked to make contributions to the Committee Newsletter; a draft of which had been circulated prior to the meeting.

14. **Roadmap**

A work plan describing activities to be carried out by FAO, OIE and the Committee had been presented at the 3rd Committee meeting; this was updated in the light of the work carried out between the two meetings and activities identified during the 4th meeting.

15. **Next meeting**

The next meeting of the rinderpest joint advisory committee would take place at FAO Headquarters in Rome 25-26 February 2014.
Annex 1

4th Meeting of the FAO-OIE Rinderpest Joint Advisory Committee
OIE Headquarters, Paris, 4-5 September 2013
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Agenda

1. Introductions
2. Review minutes and action items from the previous meeting
3. Finalize outstanding documents
   a. SOP decontamination of decontamination of facilities
   b. SOP for destruction of virus
   c. Guidance on inspecting facilities
   d. Materials containing RPV (joined by rep from Code Commission)
4. Review of any research proposals received by OIE/FAO
5. Update on progress with PPR vaccine research project
6. Small pox experience for holding facilities (WHO)
7. Mandate of rinderpest holding facilities
8. International preparedness and response:
   a. Vaccine strategy
   b. Reference Laboratories
   c. OIE Code Chapter (joined by rep from Code Commission)
   d. Guidance on national contingency plans
   e. Communication
   f. Regional surveillance
9. Review applications for holding facilities
10. Strategy for advocating destruction and sequestration
11. Country reporting on rinderpest virus containing material
12. Newsletter
13. Road map
14. Mitigating risks from synthetic biology

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4th Meeting of the FAO-OIE Rinderpest Joint Advisory Committee/September 2013

Annex 2

4th MEETING OF THE RINDERPEST JOINT ADVISORY COMMITTEE
OIE Headquarters, Paris, 4-5 September 2013

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Annex 3

Draft schematic on core elements for international global response to an outbreak of rinderpest

- Up to date OIE Terrestrial Animal Health Code Chapter
- Communication strategy
- International Reference Laboratories
- Guidance on developing and implementing a national contingency plan
- International and regional vaccine strategy and capacity
- Regional contingency plan
- International assistance with response
Annex 4

Approval of Laboratories and Other Facilities Holding
Rinderpest Virus Containing Materials

1. The World Assembly of the OIE Delegates at the 79th General Session (May 2011) and the 37th FAO Conference (June 2011) declared the world free from rinderpest infection. The OIE Resolution No. 18 ‘Declaration of global eradication of rinderpest and implementation of follow-up measures to maintain world freedom from rinderpest’ adopted by the World Assembly requested the Director General of the OIE to establish, jointly with FAO, an advisory body that assists both Organisations in (i) the approval of facilities for holding rinderpest virus-containing material and of facilities that produce and/or hold rinderpest vaccines, (ii) the approval of requests for research and other manipulations of the rinderpest virus, (iii) reviewing the plans and results of regular site visits of virus repositories, and (iv) planning and implementing other rinderpest-related activities as required; and to ensure that Member Countries are informed of the status of rinderpest virus sequestration and research involving rinderpest virus. The same Resolution urged Member Countries to destroy, under the supervision of the Veterinary Authority, rinderpest virus-containing materials (RVCM) or assure the storage or use of these materials in a biosecure facility in their country or, where applicable, assure the safe transfer to an approved laboratory in another country in agreement with the Veterinary Authority of the receiving country and complying with the standards of the OIE Manual of Diagnostic Tests and Vaccines for Terrestrial Animals and the Guidelines elaborated by the FAO/OIE rinderpest Joint Advisory Committee (JAC);

2. In accordance with the above Resolutions, FAO and the OIE established the JAC in June 2012.

3. Now that rinderpest virus (RPV) infection has been eradicated, herd immunity to RPV is absent and there is potential for rapid spread of infection from an index case. Extensive surveillance has demonstrated no evidence of wildlife reservoirs for RPV and the most likely source for re-introduction of the infection is perceived to be accidental or intentional release from a laboratory. The most likely sequence of events leading to such a release would involve laboratory use of RVCM or a breach in biosecurity at an institute storing RVCM.

4. The risk of a reoccurrence of rinderpest will be significantly reduced if remaining stocks of RVCM are stored in only a minimum number of FAO/OIE approved high biocontainment facilities world-wide. These approved facilities must have in place physical and risk management measures to ensure that RVCM is not accidentally released or illicitly removed. Approved institutes must also provide assurances that they will share information on the status of their RVCM inventory by regularly reporting to an international database managed by the OIE (all information will be shared between the OIE and FAO), and when requested by FAO/OIE, by sharing RVCM with other FAO/OIE approved institutes for justified scientific and other reasons.

5. In accordance with OIE Resolution No. 18 (May 2011) “rinderpest virus-containing materials (RVCM) is defined as field and laboratory strains of RPV; vaccine strains of RPV including valid and expired vaccine stocks; tissues, sera and other clinical material from infected or suspect animals; and diagnostic material containing or encoding live virus. Recombinant morbilliviruses (segmented or non-segmented) containing unique rinderpest virus nucleic acid or amino acid sequences are considered to be rinderpest virus. Full length genomic material including virus RNA and cDNA copies of virus RNA is considered to be RVCM. Sub-genomic fragments of morbillivirus nucleic acid that are not capable of being incorporated in a replicating morbillivirus or morbillivirus-like virus are not considered as RVCM.”

6. The complete list of FAO/OIE approved facilities is published by the OIE and FAO on a regular basis. FAO and OIE jointly regulate all use and storage of RVCM, and its use and storage requires prior permission from the two organizations.

7. This document is publicly available.
Application Form
(to be completed by applicant)

INSTRUCTIONS

The decision to approve or not approve a facility for holding RVCM (see definition on page 1), will depend on the demonstrated ability of that facility to safely store and manipulate the material; the regional and global need for approving that facility; the geographic distribution of existing facilities holding RVCM; and the scientific and technical expertise held within that facility. The final approval of a facility may also involve a site visit carried out by an expert team designated by FAO and OIE and/or following the provision of a certificate of inspection by internationally-recognized certification body. Site visits will be carried out at the cost of the applicant institute.

All approved facilities should report to OIE and FAO annually or on request, on the stocks, status of RVCM held at their institute, or status of RVCM activities (diagnostics/research/vaccine production). Approved facilities should maintain up to date records of the inventory and RVCM tracking system. Institutes should reapply for approved status every three years.

If there is a significant change to the facility, the OIE and FAO may request the facility to resubmit an application.

FAO and OIE uphold the right to conduct a regular visit to approved institutes. The facility must fully cooperate with OIE/FAO during such site visits.

FAO and OIE retain the right to withdraw the facility’s approved status at any time.

Questions should be answered in full. If a question is not applicable please indicate with ‘n/a’.

Please submit application and associated documents by email to GRPP-secretariat@fao.org and rinderpest@oie.int.
QUESTIONNAIRE

1. Facility details
   a. Name of facility:
   b. Address:
   c. Website:
   d. Name and title of responsible official:
   e. Email of responsible official:
   f. Contact phone number:
   g. Fax number:
   h. Type of facility:
      ☐ Government    ☐ Academic    ☐ Commercial
      ☐ Other (please specify)
   i. Funding source(s) of facility:
   j. Profit or not for profit:
   k. Name of institute Director/Chief Executive, if different from above:
   l. Name and title of biosafety officer:
   m. Is this institute already designated as, or hosting, an OIE or FAO Reference Centre?
      ☐ Yes       ☐ No
      If so, for which topic(s) or disease(s)?

2. Category/ies of application (please indicate as appropriate - multiple categories may be relevant for some applications)
   ☐ Facilities storing and manipulating RVCM, and/or those having a capability for confirmatory diagnosis of rinderpest [Category A]
   ☐ Facilities involved in rinderpest vaccine production, quality control (except for potency and efficacy testing) or maintaining vaccine seed virus [Category B]
   ☐ Facilities maintaining and storing packaged or manufactured stockpiles of rinderpest vaccine [Category C]
   ☐ Facilities storing, manipulating or using live rinderpest virus for scientifically legitimate experimental research purposes [Category D]

3. Nature of application
   a. Do you already hold stores of rinderpest virus containing material (RVCM)?
      ☐ Yes       ☐ No
   b. Specify the nature of RVCM to be stored at your facility (indicating whether it includes live RPV, vaccine seed strains, manufactured and packaged vaccines, or other potentially RPV infectious material)

........
c. Do you intend to manipulate/handle RVCM?

☐ Yes ☐ No

If yes, then please provide details

........

d. Do the high level responsible government officials in your country support this application, for example the OIE Delegate, the Chief veterinary Officer, or Minister of Agriculture?

☐ Yes ☐ No ☐ Don’t know

If yes, please provide a copy of their letter of support

4. Country situation

a. Has your country ever experienced an outbreak of rinderpest? If so, when was the last outbreak?

☐ Yes ☐ No

Date of the last outbreak: ........

b. Does your country have a livestock or wildlife population susceptible to rinderpest virus infection, nationwide, and in the region where your facility is located?

☐ Yes ☐ No

c. Does your country have a national contingency plan in the event that there is a reoccurrence of rinderpest?

☐ Yes ☐ No

If yes, please attach a copy.

d. Does your country have diagnostic services to accurately detect rinderpest virus infection according to OIE Standards?

☐ Yes ☐ No

e. Does your country hold stocks of rinderpest vaccine or have capacity to manufacture them if there is a reoccurrence of disease?

☐ Yes ☐ No

If yes, how many doses are currently available?

........

f. Does your country hold stocks of PPR vaccine or have capacity to manufacture them?

☐ Yes ☐ No

If yes, how many doses are currently available?

........

g. Is your country a State Party to the Biological and Toxin Weapons Convention (BWC)?

☐ Yes ☐ No

If yes, please provide the details of your BWC focal point (name, title, and department)

........
5. **Biosecurity/ bio-containment**

a. Rinderpest is a risk group 3 pathogen. Is your facility certified to store and handle pathogens in risk groups 3 (according to the OIE *Manual of Diagnostic Tests and Vaccines for Terrestrial Animals*, Chapter 1.1.3)?

   - [ ] Yes
   - [ ] No

   Is your institute able to comply?
   
   [http://www.oie.int/fileadmin/Home/eng/Health_standards/tahm/1.01.03_BIOSAFETY.pdf](http://www.oie.int/fileadmin/Home/eng/Health_standards/tahm/1.01.03_BIOSAFETY.pdf)

   - [ ] Yes
   - [ ] No

   If yes, please provide details of biocontainment certification

   —

   If no, your facility is not eligible for application to categories A and D

b. Has this facility been accredited by the relevant national *Veterinary Authority* to store or handle dangerous pathogens?

   - [ ] Yes
   - [ ] No

   If yes, please provide details

   —

c. Please describe the measures used to prevent intentional or non-intentional release of stored RVCM from your facility? (Include a description of physical barriers, management practices, and security)

   —

d. Is your facility vulnerable to natural disasters (for example earthquake, volcanic eruption, severe weather, extreme maritime events)?

   - [ ] Yes
   - [ ] No

   If yes, what measures are in place to prevent the release of biological agents should one of these events occur?

   —

e. Does your facility follow biosecurity guidelines documented in the international literature?

   - [ ] Yes
   - [ ] No

   If yes, please indicate which guidelines

   —

f. What is the estimated distance (miles or km) to the nearest rinderpest-susceptible livestock or wildlife?

   —

g. Does your facility implement a personal quarantine rule for restricting staff from coming in to close direct or indirect contact with susceptible livestock and wildlife after handling or being exposed to the animal pathogens?

   - [ ] Yes
   - [ ] No
If yes, please provide a copy of the facility biosafety manual details, specifying also how long staff are restricted from coming into contact from susceptible animals after laboratory work.

h. Please describe the facilities/procedures you have in place for the destruction of live pathogens and contaminated material

i. Does your facility have certified animal facilities to carry out in-vivo experiments with rinderpest virus?
   - Yes
   - No

If yes, please provide details on the level of biocontainment

j. Please provide a copy of your biosafety manual

6. Management

a. Do you have a Laboratory Information Management System (LIMS), including a virus inventory?
   - Yes
   - No

If yes, please provide details on the functionality and security of the LIMS

If not, how would you catalogue stocks of RVCM?

b. Will your institute designate a separate bio-secure area for storing RVCM?
   - Yes
   - No

c. Do you undertake to report to OIE and FAO, through your national veterinary services/OIE Delegate, on an at least annual basis the stocks held in your facility and the status of these stocks?
   - Yes
   - No

d. Do you undertake and intend to enter information about the status of RVCM into an international viral tracking database?
   - Yes
   - No

If so, please provide details of the focal point responsible for this

e. Do you undertake to apply to OIE and FAO before manipulating RVCM for the purposes of research or any other purposes, or before shipping RVCM to other institutes?
   - Yes
   - No
f. Is your facility regularly inspected for handling dangerous pathogens?
   ☐ Yes ☐ No

   If yes, please indicate when the last inspection took place and attach the most recent inspection report

........

g. Is your facility accredited by an ISO or other international management standard?
   ☐ Yes ☐ No

   If yes, please provide details

........

h. Does your institute have dedicated funding for storage and handling RVCM?
   ☐ Yes ☐ No

7. Infrastructure

   a. Please describe the conditions (physical conditions, protocols and management) under which the RVCM will be stored?

........

   b. What facilities are in place to ensure that the storage conditions remain viable and secure should there be a power failure?

........

   c. Do you have facilities to full genome sequence RVCM?
      ☐ Yes ☐ No

8. Sample shipment

   a. Do you currently receive biological material?
      ☐ Yes ☐ No

   b. Do you currently send biological material within your national borders?
      ☐ Yes ☐ No

   c. Do you currently send biological material beyond your national borders?
      ☐ Yes ☐ No

   d. If your answer to at least one of the questions b) or c) is yes, does this include pathogens in risk groups 3?
      ☐ Yes ☐ No

   e. Are your staff trained and certified to IATA standards for shipment of dangerous pathogens?
      ☐ Yes ☐ No
If yes, provide the date of the most recent IATA certification: ........

f. What is the distance to your closest international airport: ........

g. Will it accept / receive consignments of hazardous biological materials?
   □ Yes    □ No

9. Personnel

a. Please provide a short CV or resume including relevant training for each of the staff members who will be handling RVCM

b. Please provide a CV for your biosafety officer, including details of relevant training and certification

10. Diagnostics for rinderpest virus (Category A) – Please check (question 2) if the application is for Category A

Please check applicable

□ The facility has a diagnostic capability and maintains a quality assurance system

□ The facility produces diagnostic reagents for rinderpest assays

□ The facility has expertise in assay development and validation

□ The facility has capacity to determine full length genomic sequences of rinderpest viruses

□ Is the facility also making an application to become an OIE Reference Centre for rinderpest or an FAO Reference Centre for morbillivirus?

11. Vaccine manufacture and storage of vaccine seed strains (only for applicants in Category B) – Please check (question 2) if the application is for Category B

a. Did your facility produce rinderpest virus vaccine in the past?
   □ Yes    □ No

   If yes, which vaccine virus strain was used for production?
   ........

b. Does your facility agree to participate in the production of rinderpest vaccines?
   □ Yes    □ No

   If yes, provide details of agreement(s)
   ........

c. Does your facility comply with manufacturing standards (for example GLP/GMP or OIE Standards)?
   □ Yes    □ No

   If yes, please provide supporting documents, and certification (if available)
d. Does your facility have the expertise to conduct quality control testing on rinderpest vaccine or vaccine seed strains?

- [ ] Yes
- [ ] No

e. Does your facility hold vaccines stocks to be deployed in case of emergencies? If so, where?

- [ ] International
- [ ] Regional
- [ ] National (your country only)

If international and regional, which countries?

12. Storage of manufactured and packaged rinderpest virus vaccine stocks (Category C) – Please check (question 2) if the application is for Category C

- [ ] The facility has a separate and designated storage space for rinderpest vaccine outside of biocontainment
- [ ] The designated storage space is under biosecurity and biosafety international guidelines
- [ ] The facility has capability and procedures in place to ship rinderpest vaccine outside of the country

13. Experimental research using rinderpest virus (D)

- [ ] The facility participates in applied and academic research activities spanning various aspects of the diseases

Please provide details of your research activities and a list of publications on rinderpest in peer reviewed journals

# # #