







FAO/China Intensive Training Course on Tilapia Lake Virus (TiLV)

Sun Yat Sen University, Guangzhou, China 18-24 June 2018

Section 5

Import and export quarantine of aquatic animals and the products

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QUARANTINE



In 14th century, in Venice, 40 days isolation of the vessels from other countries on the port was necessary, in order to avoid the spread of cholera and malaria.

In the late 19th century, in the field of agriculture and forestry, there were some cases of disasters caused by the spread of exotic pests and pathogens. In order to protect agriculture, animal husbandry, fishery and human health, animal and plant quarantine came into being to prevent the losses caused by the transboundary spread of animal epidemics and pests.



Quarantine

means maintaining a group of aquatic animals in isolation with no direct or indirect contact with other aquatic animals, in order to undergo observation for a specified length of time and, if appropriate, testing and treatment, including proper treatment of the effluent waters.

Quarantine facility (also referred to as a "quarantine premise" or a "transitional facility") – any place approved for the quarantine of live aquatic animals.

Quarantine officer – a technically competent person authorized by the Competent Authority for purposes of inspecting and certifying compliance with the health requirements of the Competent Authority concerning the import and export of live aquatic animals.

Quarantine period – a minimum period of quarantine, typically as specified in an aquatic animal import health standard or other legally binding document (e.g. national or state regulations).



Quarantine is an important risk management measure





is all activities taken to prevent the introduction, transmission and/or spread of animal epidemics and plant pests, or to ensure the related official control.







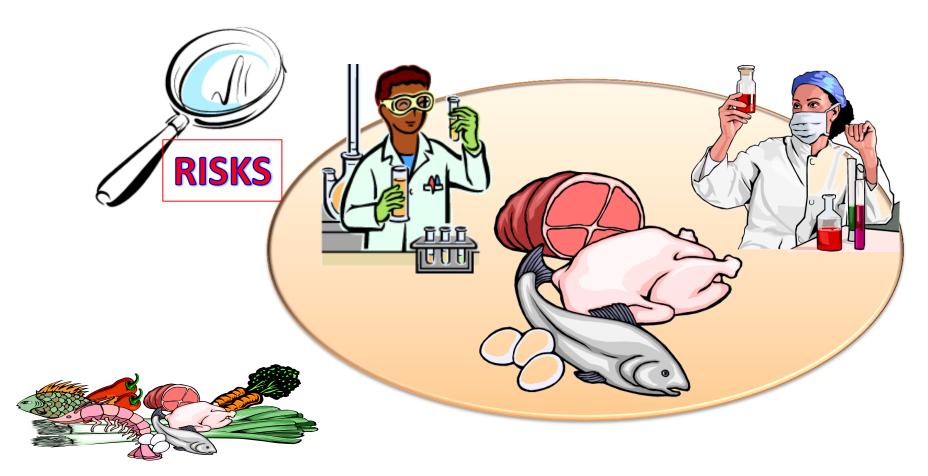




At ports in the border of one country, including sea(river) ports, air ports, highway ports and railway ports, facilities for inspection, isolation, laboratory and epidemic prevention and disinfection are basically equipped with equipment suitable for their import and export animal and plant inspection and quarantine services.



The entry and exit animal and plant inspection and quarantine has great connotation, covering a large scope. From the risk point of view, the import and export animal and plant inspection and quarantine includes both quarantine and inspection, and also involves food safety. From the point of view of the gatekeeper, the import and export of animal and plant inspection and quarantine is not only for imports, but also for exports.



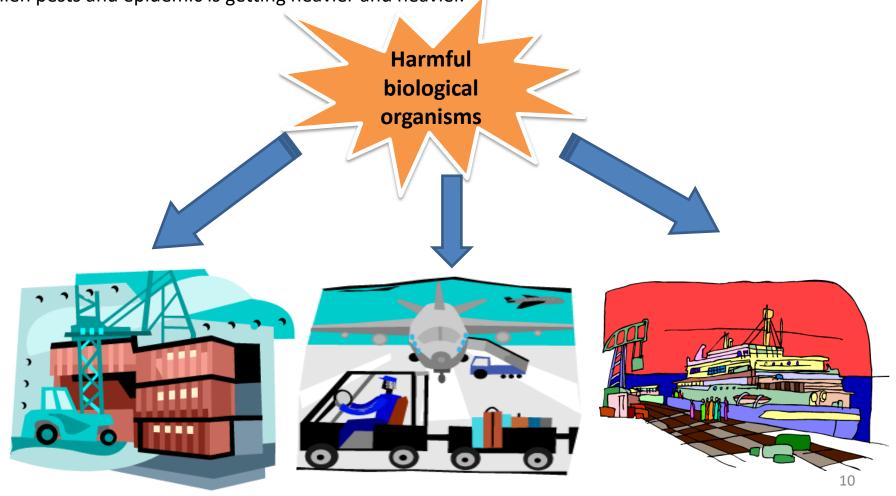
Import and export animal and plant inspection and quarantine covers all aspects of animals, animal products, plants, plant products, means of transportation, containers, passenger carrying and mailing items, inspection of biological species resources, and laboratory testing.



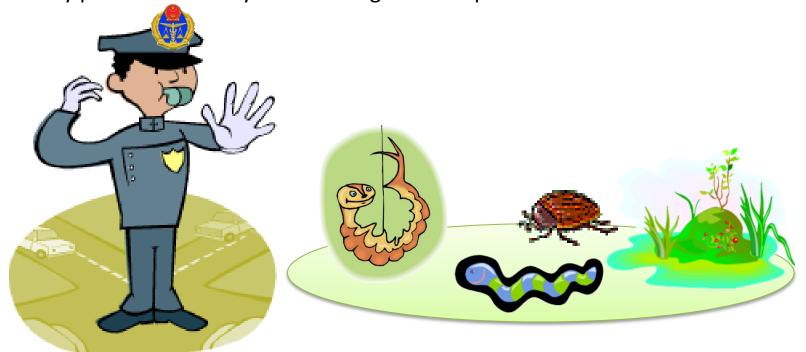




To protect ecological security. The protection of ecological safety is to protect our human survival spce. In recent years, with the acceleration of globalization, the international flow of human flow and logistics exchanges are becoming more frequent. The opening of port terminals and airports in China is expanding, especially the frequent outbreak of epidemic situation at home and abroad. Harmful organisms may invade multiple directions from sea, land and air. The task of prevention and control of alien pests and epidemic is getting heavier and heavier.



To protect the safety of agricultural and forestry production. In China, The first article of the People's Republic of China entry and exit animal and plant quarantine law clearly expounds the purpose of national legislation, which is to prevent animal infectious diseases, parasitic diseases and plant dangerous venereal diseases, insects, weeds and other harmful organisms to be introduced and spread out of the country, and to protect agriculture, forestry, animal husbandry, fishery production and human health, and promote the promotion of human health. The development of external economic and trade. Therefore, as a "National Guard", people working in this field have the mission to effectively protect the safety of China's agricultural production.





Equestrian Quarantine Emergency Training For Asian Games



Routine Inspection and Quarantine Supervision

From the point of view of working conditions, the import and export animal and plant inspection and quarantine can be divided into routine inspection and quarantine supervision under normal conditions, special safeguards under major international activities, and emergency treatment in the event of major emergencies.



Emergency management on an outbreak of animal diseases

International Trade of imported and exported aquatic and aquatic animal products in P. R. China

- 2017 For imported, 110851 batches, 4.09 thousands tons and 8497 million US Dollars
- 2017 For exported, 308187 batches, 4.11 thousands tons and 2.22 billion US Dollars











Import quarantine for aquatic animals (IQAA)

1. Import quarantine admittance

zones

- 1.1 IRA
- 1.2 Assessment on health system of export country
- 1.3 MOU, Protocol and health certificate

- 1.4 Formulation, adjust and publish the export countries and
 - 1.5 Registration of exported enterprises
 - 1.6 On-site audit on the registered enterprises

2. Pre-border Quarantine

- 2.1 Supervision by the CA
- 2.2 Contingency measures and notification
- 2.3 Isolation quarantine
- 2.4 Packing, checking, transportation and certification

3. Border and post-border quarantine

- 3.1 Entrance through the designated ports
- 3.2 Import permission application
- 3.3 Declaration, document review and quantitative verification

- 3.4 Destruction and return
- 3.5 Sampling and Testing
 - 3.6 Isolation

1. Import quarantine admittance

1.1 Import risk assessment (IRA)

风险评估

Risk

assessment

入境评估 Entry assessment

暴露评估 Exposure assessment



后果评估 Consequence assessment

> 风险估算 Risk estimation



1. Import quarantine admittance

1.2 Assessment on health system of export country

- Collect the information from related website or public publication;
- Send the questionnaire to export countries;
- On-site conformance assessment or on-site retrospective assessment



questionnaire

- 1.Information (Location of CA, farms and laboratories, related trade)
- 2.Infrastructure of CA (central and local)
- 3. Laws and regulations
- 4. Notification
- 5.Surveillence
- 6. Contigency measures
- 7.Zoning and Compartalizaiotn
- 8.Official supervision
- 9. Qualification and capability of the
- laboratories
- 10.Treacibilities
- 11.Import quarantine protocol

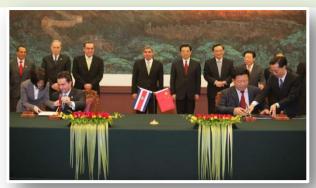
On-site conformance

- 1.Central CA meeting
- 2.Local CA meeting and records
- 3.CA supervision and records
- 4.On-site visit to the farms or processors on biosecurity conditions
- 5.On-site visit to the laboratories (original records, standards, accreditation, PT & RT)

1. Import quarantine admittance

1.3 MOU, Protocol and health certificate

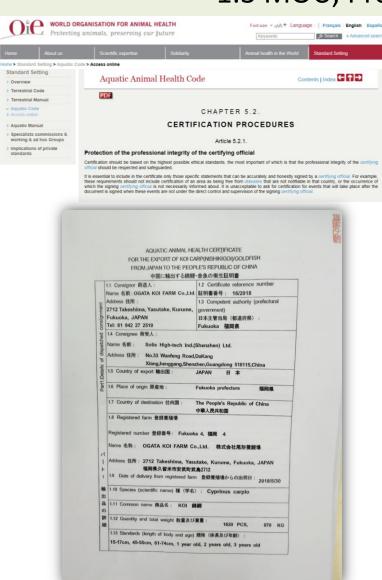






1. Import quarantine admittance

1.3 MOU, Protocol and health certificate



Responsibilities of the importing country

- The import requirements included in the international aquatic animal health certificate should assure that commodities introduced into the importing country comply with OIE standards;
- ➤ The international aquatic animal health certificate should not include requirements for the exclusion of pathogenic agents or aquatic animal diseases that are present in the importing country and are not subject to any official control programme.

1. Import quarantine admittance

1.3 MOU, Protocol and health certificate



Responsibilities of the importing country

- The international aquatic animal health certificate should not include measures against pathogenic agents or diseases that are not OIE listed, unless the importing country has demonstrated through an import risk analysis, carried out in accordance with Section 2, that the pathogenic agent or disease poses a significant risk to the importing country.
- ➤ The transmission of the requirements of the importing country or certificates from the Competent Authority of the importing country and the communication of import requirements to persons other than the Competent Authority of another country necessitates that copies of these documents be also sent to the Competent Authority of the exporting country.

1. Import quarantine admittance

1.4 Formulation, adjust and publish the export countries and zones

			欧洲	
384			Calappa	
385		甲壳类	Canappa	
386		甲冗矣		黄道蟹属
387			Homarus	<u> </u>
388			Crassostrea	巨蛎属
389	爱尔兰		Ensis	刀蛏属
390		软体类	Solen	竹蛏属
391			Mytilus	贻贝属
392			Ostrea	牡蛎属
393		棘皮类	Paracentrotus	拟球海胆属
394			Eriocheir	绒螯蟹属
395		甲壳类	Paralithodes	拟石蟹属
396	俄罗斯		Petalomera	板蟹属
397		软体类	Pecten	扇贝属
398		两栖类	Aana	林蛙属
399			Calappa	馒头蟹属
400			Cancer	黄道蟹属
401			Homarus	鳌龙虾属
402		甲壳类	Nephrops	海螯虾属
403			Palinurus	真龙虾属
404 405			Maja	蜘蛛蟹属
406	注国		Panulirus	龙虾属

Live aquatic animals for consumption of human being

1. Import quarantine admittance

1.4 Formulation, adjust and publish the export countries and zones

909			Characidae	脂鲤科
910			Cottidae	杜父鱼科
911			Cyprinidae	鲤科
912			Dasyatidae	紅科
913			Diodontidae	二齿鲀科
914			Ginglymostomatidae	绞口鲨科
915			Gobiidae	鰕虎鱼科
916			Gymnuridae	燕魟科
917			Haemulidae	石鲈科
918			Labridae	隆头鱼科
919			Lamnidae	鼠鲨科
920		鱼类	Lophiidae	鮟鱇科
921		当 类	Microdesmidae	蚓鰕虎科
922			Mobulidae	蝠鲼科
923			Molidae	翻车鲀科
924			Monacanthidae	单棘鲀科
925			Monocentridae	松毬鱼科
926			Myliobatidae	鲼科
927			Ophichthidae	蛇鳗科
928			Pomacanthidae	盖刺鱼科
929			Pomacentridae	雀鲷科
930			Pomatomidae	扁鰺科
931			Potamotrygonidae	江魟科
932	葡萄牙		Priacanthidae	大眼鲷科
933			Pristiophoridae	锯鲨科
934			Rajidae	艦科
935			Rhinidae	圆犁头鳐科
936	▶ 編制说明 / 食用		Rhinobatidae	型头鳐科

Live ornamental aquatic animals

1. Import quarantine admittance

1.4 Formulation, adjust and publish the export countries and zones

36			北美洲	
37	加拿大	鱼类	Anguilla rostrata	美洲鳗鲡
38	加拿大	世	Oncorhynchus keta	大马哈鱼
39		甲壳类	Penaeus vannamei Boone (Litopenaeus vannamei)	南美白对虾
40		鱼类	Clupea pallasi	
41			Alosa sapidissima	美洲鲥
42			Sternotherus odoratus	麝香龟
43			Kinosternon suhrubrum	头盔泥龟
44			Staurotypus triporcatus	三弦巨型鹰嘴龟
45	美国		Phrynops geoffroanus	花面龟
46			Chelus fimbriatus	枯叶龟
47			Pseudemys concinna	甜甜圈龟
48			Malacochersus tornieri	黄泽泥龟
49		爬行类	Kinosternon baurii	果核泥龟
50			Sternotherus carinatus	屋顶龟
51			Rhinoclemmys pulcherrima	红头木纹龟
52			Chrysemys picta	锦龟
53			Trachemys scripta	红耳龟
54			Kinosternon scorpioides	红脸蛋龟
55			Claudius angustatus	鹰嘴龟

Semen, fertilized eggs and broodstock for propagation and aquaculture

1. Import quarantine admittance

1.5 Registration of exported enterprises

国家质量监督检验检疫总局动植物检疫 General Administration of Quality Supervision, Inspection and Quarantine of the People's R	
当前位置:首页>服务导航>企业名单>动物及产品>国外企业名单	/2017_12_14\>
□ 允许回中国出口动物遗传物质国外企业名里(2018年3月23日更新) □ 准许向中国出口龙虾的牙买加企业名单	<2017-12-14> <2018-03-26>
□ 推圩門中国出口龙町的才关加正亚名单 □ 允许向中国出口加工用驴皮的巴西加工企业名单(2018年3月19日更新)	<2018-03-20>
■ 元月月午国出口加工用录及的已经加工企业名单(2018年3月19日史新) ■ 泰国输华甲鱼注册企业名单(2018年1月26日更新)	<2018 03 207 <2018-01-26>
新西兰输华日龄雏鸡和种蛋注册登记企业名单(截止至2018年1月26日)	<2018-01-26>
場外违规企业名单(2018年1月17日更新)	<2018-01-17>
# 允许向中国出口的意大利动物源性肥料企业名单(2017年10月12日更新)	<2017-10-28>
☆ 允许向中国出口牛羊皮的约旦加工企业名单(2017年10月12日更新)	<2017-10-12>
₩ 2017年第四季度韩国出口中国注册养殖场名单(共501家)	<2017-10-12>
₩ 允许向中国出口工业用烘干鹿角、骨的俄罗斯企业名单(2017年10月10日更新)	<2017-10-10>
₩ 埃塞俄比亚输华加工用灰驴皮注册登记企业名单201708	<2017-09-22>
□ 贝宁输华加工用驴皮注册登记企业名单201708	<2017-09-20>
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1. Import quarantine admittance

1.6 On-site audit on the registered enterprises









2.1 Supervision by the CA

- Exported enterprises and related fishing area should be compliance with the laws and regulations of the export country;
- Exported enterprises and related fishing area should be under the supervision of CA
 of the export country;
- Surveillence should be carried out in exported enterprises which will export aquatic animals for manipulation, culture and ornament, for more than 2 years and no pathogens has bee tested;
- Surveillence should be carried out in exported enterprises which will export aquatic animals for human consumption and the test results meet the requirements of the bilateral protocol, mandatory standards or the government;

2.2 Contingency measures and notification

When outbreak of specific diseases happen, or mortality is very high in the exported enterprises and fishing area, the CA of export country should actively stopped exporting trade and notify the CA in import country;



2.3 Isolation quarantine

- Fertilized eggs and milt should be from health broodstocks;
- Isolation sites should be approved by CA or local CA;
- No contact with other aquatic animals during the period of isolation;
- Basic biosecurity condition and disease prevention and control system should be maintained in the registered enterprises and isolate sites, in order to avoid the intrusion of the aquatic animals from other waters and keep the security and healthy of exported aquatic animals;
- If necessary, the CA of import country can send officials to export country or zone to assist the isolation and quarantine before export;

2.4 Packing, checking, transportation and certification

- Aquatic animals from different farms and fishing areas should be packed separately.
 Different species should be packed independently, satisfying the animal survival and welfare. The package material should be new or have been disinfected, and be avoid of leakage. The internal package should be transparent feasible for check;
- Water, ice and bedding materials used in the transportation should meet the
 requirement of safety and sanity, and should not contain the pathogenic
 microorganisms, harmful substances and any aquatic biological organisms which may
 destroy the environment;
- No clinical signs of infectious diseases or parasite disease can be observed during the
 48 hrs before transportation. If necessary, approved drugs can be used for disinfection
 and expelling;
- Health certification should be signed by officials of CA.

3. Border and post-border Quarantine

3.1 Entrance through the designated ports

(此件公开发布



国家质量监督检验检疫总局公告

2018 年第 20 号

质检总局关于公布全国进境食用水生动物 指定口岸名单的公告

根据《进境水生动物检验检疫监督管理办法》(质检总局 2016 年 183 令)和《质检总局关于实施进境食用水生动物指定口岸制度的公告》(质检总局 2016 年第 74 号公告)的有关规定,质检总局近期组织对申报的有关口岸进行了材料申核和现场评估,现公布第三批进境食用水生动物指定口岸名单(附

件 1)。今后,质检总局将不定期者核和动态调整指定口岸名单,并在质检总局网站更新《全国进境食用水生动物指定口岸名单》(附件2)。
本公告自发布之日起实施。

附件:1. 第三批进境食用水生动物指定口岸名单
2. 全国进境食用水生动物指定口岸名单

附件2

全国讲境食用水生动物指定口岸名单 口岸名称 口岸查验点 允许进境类别 (市/ 类别 区) 鱼类、甲壳类、软 北京市 首都机场口岸 首都机场查验点 鱼类、甲壳类、软 沈阳桃仙国际机场口岸查 沈阳桃仙国际机场口岸 鱼类、甲壳类、软 大连国际机场口岸 大连国际机场口岸查验点 鱼类、甲壳类、软 辽宁丹东港口岸 辽宁丹东港口岸查验点 В 辽宁省 鱼类、甲壳类、软 辽宁旅顺新港口岸 辽宁旅顺新港口岸查验点 В 1.辽宁大连港杂货码头查 鱼类、甲壳类、软 辽宁大连港口岸 В 体类 2.辽宁大连湾新港查验点

3. Border and post-border Quarantine

3.2 Import permission application



3. Border and post-border Quarantine

3.3 Declaration, document review and quantitative verification

- The consignee should declare to the local CA before or during the entrance holding the documents (health certificate, import permit, trade tract, lading bill, packing list and invoice of the commodity;
- CA officials review all of the documents and verify the amount of the commodities;
- On-site check is implemented by the CA officials, including the information, package, label and observation of clinical signs;
- Disinfect the external package, conveyance and loading & unloading sites;



3. Border and post-border Quarantine

3.4 Destruction and return

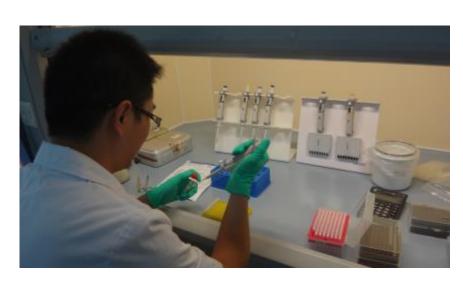
- ◆ Not listed in the list of import aquatic animal species and import countries;
- Not holding valid import permission;
- Not holding valid health certificate signed by CA or local CA of export countries;
- Not the same consignee in the health certificate and import permission;
- From the enterprises not registered;
- Commodity is not conform to the documents;
- Abnormal mortality or showing suspect clinical signs;
- Very high mortality;

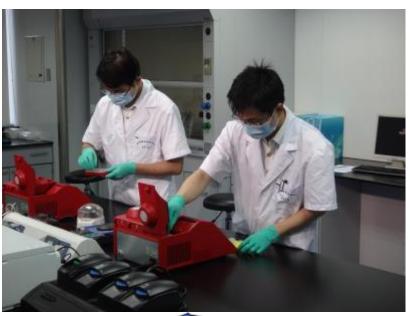


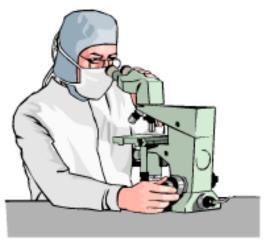


3. Border and post-border Quarantine

3.5 Sampling and Testing









IQAA 3. Border and post-border Quarantine

3.6 Isolation

Location of Isolation facilities (case by case): not in the vicinity of private or government fish hatcheries, aquaculture facilities, watercourses or areas subject to frequent flooding;

General requirement: not be used for other purpose, be a secure and lockable buildings surrounded by a lockable person-proof security fence, sterilization equipment, back-up systems for essential components (such as electricity, water circulation, aeration, temperature control, filtration etc.);

3. Border and post-border Quarantine

3.6 Isolation

Specific construction and equipment requirement:

- Windows should be screened to prevent the entry of insects;
- Floor and walls construction (material, smooth, disinfection, sealing the junctions/gaps/cracks;
- Lighting;
- Floor drainage with a plug or other mechanism to prevent the escape of aquatic animals or uncontrolled release of water;
- Doors be equipped with self-closing mechanisms to remain shut after entry;
- A personnel entrance with the facilities to wash hands, chance clothing;
- A footbath containing disinfectants at the entrance door;
- Water recirculation system is permissible but not advisable;
- Entry and exit with the quarantine sing highly visible;
- A trough used for cleaning and disinfecting equipment

3. Border and post-border Quarantine

3.6 Isolation

Specific construction and equipment requirement:

- ➤ Holding tanks, with permanent numbers, with lids or coverings, water intake lines equipped with automatic shut-off valves, an access and corridors for inspections, adequate viewing, own set of nets/buckets/beakers and other items;
- A refrigerator or freezer for the storage and preservation of dead aquatic animals;
- Disinfection wastewater equipments;
- Secure storage facilities for food;

3. Border and post-border Quarantine

3.6 Isolation

Operation standards:

- ➤ Holding tanks, with permanent numbers, with lids or coverings, water intake lines equipped with automatic shut-off valves, an access and corridors for inspections, adequate viewing, own set of nets/buckets/beakers and other items;
- A refrigerator or freezer for the storage and preservation of dead aquatic animals;
- Disinfection wastewater equipments;
- Secure storage facilities for food;

3. Border and post-border Quarantine



3. Border and post-border Quarantine



3. Border and post-border Quarantine





3. Border and post-border Quarantine



3. Border and post-border Quarantine



3. Border and post-border Quarantine





3. Border and post-border Quarantine







3. Border and post-border Quarantine





3. Border and post-border Quarantine



3. Border and post-border Quarantine



3. Border and post-border Quarantine



3. Border and post-border Quarantine



3. Border and post-border Quarantine

3.6 Isolation (Case 3: Big size ornamental animals)





3. Border and post-border Quarantine



Export quarantine for aquatic animals (EQAA)

EQAA 1. Regsitration

1.1 Basic requirement for the farms

- Good environment and reasonable site classification with clear warning mark;
- The quality of the water used for aquaculture;
- Facilities and equipment adaptable for aquaculture, packing, epidemic prevention and medicine storage;
- Specific protocols adaptable for aquaculture, packing, epidemic prevention, medicine storage,
 waste and waste water treatment, personnel management and aquatic animal introduction;
- Professional technicians with the background of aquaculture and epidemic prevention;
- For farms with closed environment, facilities necessary for limit the entry and exit of non-staff member, such as wall, net and fence;
- Isolation facilities with independent influent;
- Every pond or tank with independent influent and drainage pipes;
- Influent and drainage pipes or channels of the farm constructed separately;

EQAA 1. Registration

1.2 Basic biosecurity requirement for the farms

- No specific diseases happened during the past two years before registration;
- Farms exporting ornamental or aquatic animals for propagation or have the ability to propagate and aquaculture with enough boodstocks and aquatic animals used for human-consumption should not be cultured in the same farm;
- Notification;
- Traceability;
- Contigency plan;

EQAA 1. Registration

1.3 Registration application

- Necessary document, including application form, aquaculture permission, map of the farms, protocols, staff qualification, et al.;
- Document review by local CA;
- Registration certificate presented with a specific registration number;
- Farms belong to one enterprises should apply for the registration separately;



- On-site audit;
- Improvement of the farms;
- Improvement confirmed by audit group;
- Approve document presented;
- Recommend to the import countries by CA headquarters;

EQAA 2. Supervision and quarantine

2.1 Supervision

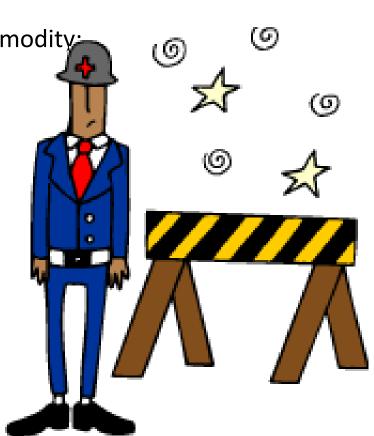
- Surveillence on the farm organized by local CA;
- Self check and self control system set up by the farms;
- A set of culture records, detailed describing the information of water quality, introduction, disease occurrence and control, medicine usage, disinfection, et al.;
- Introduction assessment protocol;
- On-site check

EQAA

2. Supervision and quarantine

2.2 Quarantine

- Declaration to the local CA by the farms with necessary documents;
- Documents review by the local CA;
- Check the species and amount of the commodity:
- Check the package;
- Sign the health certificate by local CA;
- Seal the commodity;



Import quarantine for aquatic animals products (IQAAP)

Article 10.6.3.

Importation or transit of aquatic animals and aquatic animal products for any purpose regardless of the infectious haematopoietic necrosis status of the exporting country, zone or compartment

- Competent Authorities should not require any conditions related to IHN, regardless of the IHN status of the
 exporting country, zone or compartment, when authorising the importation or transit of the following aquatic animal
 products from the species referred to in Article 10.6.2. which are intended for any purpose and which comply with
 Article 5.4.1.:
 - heat sterilised, hermetically sealed fish products (i.e. a heat treatment at 121°C for at least 3.6 minutes or any time/temperature equivalent);
 - pasteurised fish products that have been subjected to a heat treatment at 90°C for at least ten minutes (or any time/temperature equivalent which has been demonstrated to inactivate IHNV);
 - mechanically dried, eviscerated fish (i.e. a heat treatment at 100°C for at least 30 minutes or any time/temperature equivalent which has been demonstrated to inactivate IHNV);
 - d) fish oil;
 - e) fish meal;
 - f) fish skin leather.
- When authorising the importation or transit of aquatic animals and aquatic animal products of a species referred to in Article 10.6.2., other than those referred to in point 1 of Article 10.6.3., Competent Authorities should require the conditions prescribed in Articles 10.6.7. to 10.6.12. relevant to the IHN status of the exporting country, zone or compartment.
- 3) When considering the importation or transit of aquatic animals and aquatic animal products of a species not covered in Article 10.6.2. but which could reasonably be expected to pose a risk of spread of IHN, the Competent Authority should conduct a risk analysis in accordance with the recommendations in Chapter 2.1. The Competent Authority of the exporting country should be informed of the outcome of this assessment.

THANKS FOR YOUR ATTENTION

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