

Republic of the Philippines  
**TECHNICAL EDUCATION AND SKILLS DEVELOPMENT AUTHORITY**  
East Service Road, South Luzon Expressway, Taguig City

**121<sup>st</sup> TESDA BOARD MEETING**  
09 June 2020, Tuesday, 10:00 a.m.  
**Through Teleconference Via Zoom Platform**

**Resolution No. 2020 - 23**  
**(Page 1 of 4 pages)**

**APPROVING AND PROMULGATING THE TRAINING REGULATIONS FOR  
AQUACULTURE (HATCHERY OPERATION) NC II**

**WHEREAS**, TESDA Board Resolution No. 2004-21 was issued "Approving and Promulgating the Training Regulations for Aquaculture NC II" last 09 December 2004 during the 44<sup>th</sup> TESDA Board Meeting;

**WHEREAS**, it is the policy of TESDA to review after three (3) years any Training Regulations (TRs) promulgated by the TESDA Board;

**WHEREAS**, there is a need to review the existing Training Regulations in view of the developments in technology and current trends and practices in the industry;

**WHEREAS**, the Philippine Society of Agricultural Engineers, Agricultural Machinery Manufacturers and Distributors Association (AMMDA), Inc. , Bureau of Fisheries and Aquatic Resources (BFAR), Nueva Ecija, Central Luzon State University, Philippine Association of Fish Producers, Inc.(PAFPI), Bureau of Fisheries and Aquatic Resources-Region X, Sante Science and Technology Foundation and CDO Foodsphere Inc. with the assistance of Qualifications and Standards Office (QSO) of TESDA have reviewed the existing Training Regulations in Aquaculture NC II to response to the current skills requirements of the industry with its new technologies and industry manpower set-up and, recommended amendments;

**WHEREAS**, industry experts and partners, headed by the Chair/President/Manager/Director of the Philippine Society of Agricultural Engineers, Agricultural Machinery Manufacturers and Distributors Association (AMMDA), Inc. , Bureau of Fisheries and Aquatic Resources (BFAR), Nueva Ecija, Central Luzon State University, Philippine Association of Fish Producers, Inc.(PAFPI), Bureau of Fisheries and Aquatic Resources-Region X, Sante Science and Technology Foundation and CDO Foodsphere Inc., with the technical assistance of the Qualifications and Standards Office (QSO) of TESDA endorsed the proposed revisions of the Training Regulation. The existing Training

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Regulation shall be replaced with three (3) different Training Regulations, based on the age group of the clientele;

**WHEREAS**, during the 121<sup>st</sup> Standards-Setting and Systems Development (SSSD) Committee Meeting held on 14 May 2020, the Committee deliberated upon and agreed to favorably recommend the approval and promulgation of the Training Regulations for Aquaculture (Hatchery Operation) NC II as attached in Annex "A" and made an integral part of this Resolution;

**WHEREAS**, during the 121<sup>st</sup> TESDA Board Meeting on 09 June 2020 at 10:00 a.m., the TESDA Board considered and approved the promulgation of the Training Regulations for Aquaculture (Hatchery Operation) NC II;

**NOW, THEREFORE, BE IT RESOLVED AS IT IS HEREBY RESOLVED**, that the TESDA Board in its meeting today, 09 June 2020 at 10:00 a.m., has approved and promulgated the aforementioned Training Regulations for Aquaculture (Hatchery Operation) NC II as herein appended;

**BE IT RESOLVED, FINALLY**, that:

(1) Copies of this Resolution and the abovementioned Training Regulations be published in the Official Gazette or in a newspaper of general circulation, and disseminated to all concerned, and the same shall be effective fifteen (15) days upon publication;

(2) All programs registered under the current Aquaculture NC II must comply with the requirements of the abovementioned Training Regulation. The one-year period of re-registration under this Training Regulations shall commence on the date of effectivity as indicated in the Implementing Guidelines/ TESDA Circular for the deployment of the Training Regulations to be issued by the TESDA Secretariat; and

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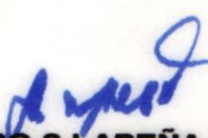
**APPROVING AND PROMULGATING THE TRAINING REGULATIONS FOR  
AQUACULTURE (HATCHERY OPERATION) NC II**

(3) Graduates of TVET programs covered by the aforementioned Training Regulations shall be required to undergo mandatory assessment under the national assessment and certification program.

Adopted this 09<sup>th</sup> day of June 2020.

  
**ATTY. MARICHELLE D. DE GUZMAN**  
Board Secretary VI

Attested by:

  
**SEC. ISIDRO S. LAPEÑA, PhD, CSEE**  
Designated Chairperson, TESDA Board  
Director General, TESDA

(Original Signed)  
**USEC. RENATO L. EBARLE**  
Department of Labor and Employment

(Original Signed)  
**USEC. DIOSDADO M. SAN ANTONIO**  
Department of Education

(Original Signed)  
**USEC. RAFAELITA M. ALDABA**  
Department of Trade and Industry

(Original Signed)  
**USEC. BRENDA L. NAZARETH-MANZANO**  
Department of Science & Technology



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**APPROVING AND PROMULGATING THE TRAINING REGULATIONS FOR  
AQUACULTURE (HATCHERY OPERATION) NC II**

*(Original Signed)*  
**MR. ISIDRO ANTONIO C. ASPER**  
Board Member, Labor Sector

*(Original Signed)*  
**ATTY. BAYANI G. DIWA**  
Board Member, Labor Sector

*(Original Signed)*  
**MR. RENE LUIS M TADLE**  
Board Member, Labor Sector

*(Original Signed)*  
**MR. RAMON R. DE LEON**  
Board Member, Labor Sector

*(Original Signed)*  
**MR. ROGELIO J. CHAVEZ, JR.**  
Board Member, Labor Sector

*(Original Signed)*  
**DR. LEONIDA BAYANI-ORTIZ**  
Board Member, Employer Sector

*(Original Signed)*  
**PROF. RANDOLPH I. NONATO**  
Board Member, Employer Sector

## AMENDMENT ON TRAINING REGULATIONS FOR AQUACULTURE (HATCHERY OPERATION) NC II

Existing Promulgated Training Regulations (Board Resolution No. 2004-21)	Amendments
<b>Qualification Title</b>	
Aquaculture NC II	Aquaculture (Hatchery Operation) NC II
<b>SECTION 1 – Definition of the Qualification</b>	
<p>The <b>AQUACULTURE NC II</b> Qualification consists of competencies that a person must achieve to assist in aquaculture operations, prepare and maintain aquaculture facilities, operate fish nursery, perform fish or shrimp grow-out operations and grow seaweeds.</p>	<p>The <b>AQUACULTURE (HATCHERY OPERATION) NC II</b> Qualification consists of competencies that a person must achieve to operate an aquaculture hatchery with the following species: milk fish (bangus), carp, silver perch (apahap), snapper, freshwater prawn (ulang), tiger shrimp, and pompano. It consists of preparing culture tanks and hatchery facilities, chlorinating and dechlorinating filtered sea water, conducting ozonation and UV treatment, sourcing and acquiring starter culture, scaling-up culture, harvesting brachionus, separating nauplii, sourcing broodstock, collecting eggs, feeding broodstock, practicing health management, introducing natural foods and artificial feeds, monitoring morphological features, transferring and harvesting fry, disposing fry and restoring workplace.</p>
<b>Job Title</b>	
<ul style="list-style-type: none"> <li>• Aquaculture Farm Caretaker</li> <li>• Aquaculture Farm Aide</li> <li>• Aquaculture Facilities Repair and Maintenance Worker</li> <li>• Fish Nursery Worker</li> <li>• Shrimp and Fish Grow Out Worker</li> <li>• Prawn Farm Cultivator</li> </ul>	<ul style="list-style-type: none"> <li>• Hatchery farm worker</li> <li>• Hatchery operator</li> <li>• Hatchery technician</li> </ul>
<b>SECTION 2: Competency Standards</b>	
<p><b><u>Basic Competencies</u></b></p> <ol style="list-style-type: none"> <li>1. Participate in workplace communication</li> <li>2. Work in a team environment</li> <li>3. Practice career professionalism</li> <li>4. Practice occupational health and safety procedures</li> </ol>	<p><b><u>Basic Competencies</u></b></p> <ol style="list-style-type: none"> <li>1. Participate in workplace communication</li> <li>2. Work in team environment</li> <li>3. Solve/address general workplace problems</li> <li>4. Develop career and life decisions</li> <li>5. Contribute to workplace innovation</li> <li>6. Present relevant information</li> <li>7. Practice occupational safety and health policies and procedures</li> <li>8. Exercise efficient and effective sustainable practices in the workplace</li> <li>9. Practice entrepreneurial skills in the workplace</li> </ol>



## AMENDMENT ON TRAINING REGULATIONS FOR AQUACULTURE (HATCHERY OPERATION) NC II

Existing Promulgated Training Regulations (Board Resolution No. 2004-21)	Amendments
<b><u>Common Competencies</u></b> <ol style="list-style-type: none"> <li>1. Apply safety measures in farm operations</li> <li>2. Use farm tools and equipment</li> <li>3. Perform estimation and calculations</li> </ol>	<b><u>Common Competencies</u></b> <ol style="list-style-type: none"> <li>1. Apply safety measures in farm operations</li> <li>2. Use farm tools and equipment</li> <li>3. Perform estimation and basic calculation</li> </ol>
<b><u>Core Competencies</u></b> <ol style="list-style-type: none"> <li>1. Conduct pre-operations aquaculture activities</li> <li>2. Prepare and maintain aquaculture facilities</li> <li>3. Operate fish nursery</li> <li>4. Perform fish or shrimp grow-out operations</li> </ol>	<b><u>Core Competencies</u></b> <ol style="list-style-type: none"> <li>1. Conduct preparatory activities</li> <li>2. Produce natural foods</li> <li>3. Conduct broodstock management and spawning</li> <li>4. Manage feeding and maintain good health of stock</li> <li>5. Complete hatchery operation</li> </ol>
<b>SECTION 3: Training Standards</b>	
<b>3.1 Curriculum Design:</b>  Nominal Training Hours: <b>1,276 Hours</b>	Nominal Training Duration: 37 Hours (Basic Competencies) 72 Hours (Common Competencies) 77 Hours (Core Competencies) <b>186</b> <b>80 SIL</b> <b>266 TOTAL HOURS</b>
<b>Course Description</b>  This course is designed to enhance the knowledge, desirable skills and attitudes of aquaculture NC II in accordance with industry standards. It covers core competencies in <i>assisting in aquaculture operations, preparing and maintaining aquaculture facilities, operating fish nursery, performing fish or shrimp grow-out operations, and growing seaweeds.</i>	This course is designed to develop and enhance the knowledge, desirable attitudes and skills of a conduct pre-hatchery operation, produce natural foods, conduct broodstock management and spawning, manage, health, feeding, water quality, and stock, and complete hatchery operation.
<b>3.2 Training Delivery</b>  The delivery of training should adhere to the design of the curriculum. Delivery should be guided by the 10 basic principles of competency-based TVET. <ul style="list-style-type: none"> <li>• The training is based on curriculum developed from the competency standards;</li> <li>• Learning is modular in its structure;</li> <li>• Training delivery is individualized and self-paced;</li> <li>• Training is based on work that must be performed;</li> </ul>	<b>1. The delivery of training shall adhere to the design of the curriculum. Delivery shall be guided by the principles of competency-based TVET.</b> <ol style="list-style-type: none"> <li>a. Course design is based on competency standards set by the industry or recognized industry sector; (Learning system is driven by competencies written to industry standards)</li> <li>b. Training delivery is learner-centered</li> </ol>

**AMENDMENT ON TRAINING REGULATIONS FOR  
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Existing Promulgated Training Regulations (Board Resolution No. 2004-21)	Amendments
	and should accommodate



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Existing Promulgated Training Regulations (Board Resolution No. 2004-21)	Amendments
<ul style="list-style-type: none"> <li>• Training materials are directly related to the competency standards and the curriculum modules;</li> <li>• Assessment is based in the collection of evidence of the performance of work to the industry required standard;</li> <li>• Training is based both on and off-the-job components;</li> <li>• Allows for recognition of prior learning (RPL) or current competencies;</li> <li>• Training allows for multiple entry and exit; and</li> <li>• Approved training programs are nationally accredited.</li> </ul> <p>The competency-based TVET system recognizes various types of delivery modes, both on and off-the-job as long as the learning is driven by the competency standards specified by the industry. The following training modalities may be adopted when designing training programs:</p> <ul style="list-style-type: none"> <li>• The dualized mode of training delivery is preferred and recommended. Thus programs would contain both in school and in-industry training or fieldwork components. Details can be referred to the Dual Training System (DTS) Implementing Rules and Regulations.</li> <li>• Modular/self-paced learning is a competency-based training modality wherein the trainee is allowed to progress at his own pace. The trainer facilitates the training delivery</li> <li>• Peer teaching/mentoring is a training modality wherein fast learners are given the opportunity to assist the slow learners.</li> <li>• Supervised industry training or on-the-job training is an approach in training designed to enhance the knowledge and skills of the trainee through actual experience in the workplace to acquire specific competencies prescribed in the training regulations.</li> <li>• Distance learning is a formal education process in which majority of the instruction occurs when the students and instructor are not in the same place. Distance learning may</li> </ul>	<ul style="list-style-type: none"> <li>c. individualized and self-paced learning strategies;</li> <li>d. Training can be done on an actual workplace setting, simulation of a workplace and/or through adoption of modern technology.</li> <li>e. Assessment is based in the collection of evidence of the performance of work to the industry required standards;</li> <li>f. Assessment of competency takes the trainee's knowledge and attitude into account but requires evidence of actual performance of the competency as the primary source of evidence.</li> <li>g. Training program allows for recognition of prior learning (RPL) or current competencies;</li> <li>h. Training completion is based on satisfactory performance of all specified competencies.</li> </ul> <p><b>2. The competency-based TVET system recognizes various types of delivery modes, both on-and off-the-job as long as the learning is driven by the competency standards specified by the industry. The following training modalities and their variations/components may be adopted singly or in combination with other modalities when designing and delivering training programs:</b></p> <p><b>2.1 School/Institution- Based:</b></p> <ul style="list-style-type: none"> <li>• Dual Training System (DTS)/Dualized Training Program (DTP) which contain both in-school and in-industry training or fieldwork components. Details can be referred to the Implementing Rules and Regulations of the DTS Law and the TESDA Guidelines on the DTP;</li> <li>• Distance learning is a formal education process in which majority of the instruction occurs when the students and instructor are not in the same place. Distance learning may employ correspondence study, audio, video, computer technologies or other modern technology that can be used to</li> </ul>



**AMENDMENT ON TRAINING REGULATIONS FOR  
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Existing Promulgated Training Regulations (Board Resolution No. 2004-21)	Amendments
	facilitate learning and formal and non-formal



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<b>Existing Promulgated Training Regulations (Board Resolution No. 2004-21)</b>	<b>Amendments</b>
<ul style="list-style-type: none"> <li>• employ correspondence study, or audio, video or computer technologies.</li> <li>• Project-Based Instruction is an authentic instructional model or strategy in which students plan, implement and evaluate projects that have real world applications.</li> </ul>	<ul style="list-style-type: none"> <li>• training. Specific guidelines on this mode shall be issued by the TESDA Secretariat.</li> <li>• Supervised Industry Training (SIT) or on-the-job training (OJT) is an approach in training designed to enhance the knowledge and skills of the trainee through actual experience in the workplace to acquire specific competencies as prescribed in the training regulations. It is imperative that the deployment of trainees in the workplace is adhered to training programs agreed by the institution and enterprise and status and progress of trainees are closely monitored by the training institutions to prevent opportunity for work exploitation.</li> <li>• The classroom-based or in-center instruction uses of learner-centered methods as well as laboratory or field-work components.</li> </ul> <p><b>2.2 Enterprise-Based:</b></p> <ul style="list-style-type: none"> <li>• Formal Apprenticeship – Training within employment involving a contract between an apprentice and an enterprise on an approved apprenticeable occupation.</li> <li>• Informal Apprenticeship - is based on a training (and working) agreement between an apprentice and a master craftsperson wherein the agreement may be written or oral and the master craftsperson commits to training the apprentice in all the skills relevant to his or her trade over a significant period of time, usually between one and four years, while the apprentice commits to contributing productively to the work of the business. Training is integrated into the production process and apprentices learn by working alongside the experienced craftsperson.</li> </ul>



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Existing Promulgated Training Regulations (Board Resolution No. 2004-21)	Amendments
	<ul style="list-style-type: none"> <li>Enterprise-based Training- where training is implemented within the company in accordance with the requirements of the specific company. Specific guidelines on this mode shall be issued by the TESDA Secretariat.</li> </ul> <p><b>2.3 Community-Based</b> – short term program conducted by non-government organizations (NGOs), LGUs, training centers and other TVET providers which are intended to address the specific needs of a community. Such programs can be conducted in informal settings such as barangay hall, basketball courts, etc. These programs can also be mobile training program (MTP).</p>
<p><b>3.3 Trainee Entry Requirements</b></p> <p>Trainees or students wishing to enroll in this course should possess the following requirements:</p> <ul style="list-style-type: none"> <li>Able to read and write</li> <li>With good moral character;</li> <li>Ability to communicate, both oral and written</li> <li>Physically fit and mentally healthy as certified by a Public Health Officer</li> </ul>	<p>Trainees or students who would like to enroll in this course should possess the following requirements:</p> <ul style="list-style-type: none"> <li>Able to read and write</li> <li>Able to communicate, both orally and in writing</li> <li>Able to perform simple computations</li> </ul> <p>This list does not include specific institutional requirements such as educational attainment, appropriate work experience, and others that may be required of the trainees by the school or training center delivering the TVET program.</p>
<p><b>3.4 List of Tools, Equipment and Materials</b></p> <p>Recommended list of tools, equipment and materials for the training of 25 trainees for Aquaculture NC II.</p>	<p>Recommended list of tools, equipment and materials for the training of 25 trainees for Aquaculture (Hatchery Operation) NC II.</p> <p>Up-to-date tools, materials, and equipment of equivalent functions can be used as alternatives. This also applies in consideration of community practices and their availability in the local market.</p>



## AMENDMENT ON TRAINING REGULATIONS FOR AQUACULTURE (HATCHERY OPERATION) NC II

Existing Promulgated Training Regulations (Board Resolution No. 2004-21)				Amendments	
TOOLS		EQUIPMENT		MATERIALS	
QTY		QTY		QTY	
5 pcs	DO meters	1	Surveying equipment	1	Manpower Resources
5 pcs	Flow rate meter	1	motorized boat	1	Learning Materials
25 pcs	Laboratory thermometer	1	generator	1	R.A. 8550
10 pcs	Shovel	2	Microscope	1	Reference book
5 pcs	Water depth gauge	1	Plankton counter	1	Instructional manual
5 pcs	Digging blades	1	Welding machine	1	Reference book
5 sets	Electrical tools	5	G.I. pipe	1	Brochures
	Lumber	2	Puddle wheel	1	Local map
2 sets	Masonry tools	1	Water pump	1	Tide calendar
2 sets	Carpentry tools	1	Hauling containers	1	Model of different pond design
5 pcs	Cultivator / rake	1	vehicle	1	List of species for cultivation
	Lime	1	oxygen tank	1	List of culture system
	Net	1	Storage/tool cabinet	1	Drawing materials
	P.E. rope	1	Feed storage	1	Tide indicators
10 pcs	Pail, plastic	1	filled oxygen tank	1	Copy of financial statement
5 pcs	Running board	1	Chilling tank	1	Lay-out plan
5 pcs	Weighing scale	1	Guard house	1	List of dealers
10 pcs	Welding rod				
5 pcs	Cutting tools			1	Price list
5 rolls	Tying materials			1	Production size
5	Floats		Supplies and Materials	1	Illustration of different design and shape of pen and cages
25 pcs	Safety shoes	5	Live specimens	1	List of framing materials
25 pcs	Pencil	5	Normal fish, samples	1	List of materials available in the area
25 pcs	Ruler	5	Infected fish, samples	1	List of farm facilities
5 rolls	Tracing paper	1 gal.	Therapeutic chemicals	1	Supporting documents for procurements
5 pcs	Sinkers	1 bottl	disinfectants	1	Construction manual
5 pcs	Eckman Dredge	2 gal	cleaning materials	1	Installation manual
5 pcs	Secchi disc	5 packs	Bag net	1	Instructional manual for aerators/agitators
5 sets	Water quality test kit	5	Scoop net	1	Micro-laboratory for feed analysis
5 pcs	pH meter	5	Serie net	1	Water quality test kits
5 pcs	Soil tester	5	Gill net	1	CD

A. FULL QUALIFICATION	
TOOLS	
QTY	DESCRIPTION
5 pcs	Calculator
5 pcs	Containers glass or clear polycarbonate, 1 Liter cap.
5 pcs	Containers glass or clear polycarbonate, 1 gallon cap.
5 pcs	Containers glass or clear polycarbonate, 20 Liter cap.
5 pcs	Containers glass or clear polycarbonate, 500 Liter cap.
5 pcs	Scissors
5 pcs	Pail with handle, 16 L cap.
5 pcs	Beakers, 500 ml cap.
5 pcs	Beaker, 200ml cap.
5 pcs	Plastic scoop
5 pcs	Plastic basin
5 pcs	Dipper
5 pcs	Plastic bowl

EQUIPMENT	
QTY	DESCRIPTION
1 unit	Breeding tank, 100-tons cap.
1 unit	Aeration system
2 units	DO meter
2 units	pH meter
2 units	Refractometer
1unit	Ozonator
1unit	UV filter
2 units	Weighing scale, .01 readability, 1 Kg cap.
2 units	Weighing scale, .01 readability, 10 Kg cap.
5 units	Microscope
5 units	Counting chamber
5 pcs	Tally counter
5 units	1-ton mass culture tank, PE
1 unit	Conical tank, 300L cap.
2 cans	Artemia cyst
1 unit	Digital microscope
2 units	Hemocytometer

MATERIALS	
QTY	DESCRIPTION
5 Kg	Calcium hypochlorite
5 Kg	Sodium thiosulfate
1 unit	Rapid sand filter
½ Kg	EDTA
2 units	Chlorine test kit
5 pcs	Goggles
25 pairs	Gloves
5 L	Micro-algae
5 L	Brachionus
1 gal	Nutrients solution
500 g	Potassium nitrate
50 g	Disodium phosphate
15 g	Ferric chloride
5 g	Disodium silicate
1 pc	Clean bench
2 units	Daylight lamp-40watts
1 unit	Alcohol lamp
24 Kg	Urea 46-0-0
12 Kg	Ammonium phosphate 16-20-0
60 Kg	Ammonium sulfate 21-0-0
2 meters	60-micron mesh nylon bolting cloth
1 Kg	Live fish
5 sets	Dextrose hose, 5 meter
1 box	Glass slide
1 vial	MS 222
	Plastic bag
5 pcs	Syringe, 5ml cap.
2 pcs	PVC pipe, 10cm x 3m
6 pcs	Elbow, 10cm
1 pc	Lady stockings
1,000 Kg	½ million eggs
5 pcs	Notebooks
25 Kg	Broodstock pellet

## AMENDMENT ON TRAINING REGULATIONS FOR AQUACULTURE (HATCHERY OPERATION) NC II

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### 3.5 Training Facilities



## AMENDMENT ON TRAINING REGULATIONS FOR AQUACULTURE (HATCHERY OPERATION) NC II

## Existing Promulgated Training Regulations (Board Resolution No. 2004-21)

Based on a class size of 25 students/trainees.

SPACE REQUIREMENT	SIZE IN METERS	AREA IN SQ. METERS	TOTAL AREA IN SQ. METERS
<b>A. Building (permanent)</b>			170.30
• Student/Trainee Working Space	2.00 x 2.00 per student/trainee	4.00 per student	100.00
• Learning Resource Center	3.00 x 5.00	15.00	15.00
• Facilities/Equipment/ Circulation Area (30% of teaching accommodation)		0	39.30
• Store Room	4.00 x 4.00	16.00	16.00
<b>B. Experimental Fish Farm</b>			250.00

## Amendments

### AQUACULTURE (HATCHERY OPERATION) NC II

The size of the hatchery operation workshop must be suited on the requirements of the competencies. The class size of 25 students/trainees is reserved for the teaching/ learning and circulation areas as follows:

SPACE REQUIREMENT	SIZE IN METERS	AREA IN SQ. METERS	GRAND TOTAL AREA IN SQ. METERS
<b>A. Building (permanent)</b>			295.20
• Student/Trainee Working Space	2.00 x 2.00 per student/trainee	4.00 per student	100.00
• Learning Resource Center	3.00 x 5.00	15.00	15.00
• Activity Room			180.20
- Wash room	10X15	150.00	
- Store room	4X4	16.00	
- Rest room		14.20	
Male	3.7		
Female	5.2		
PWD	5.3		
<b>B. Demo Farm</b>			4,750.00
Pond		3,000.00	
Artificial incubation system		500.00	
Conditioning pond		1,200.00	
Tanks		50.00	
<b>TOTAL</b>			<b>5,045.20</b>

NOTE: Access to and use of equipment /facilities can be provided through cooperative arrangements or MOA with other partner- companies/institutions.

### 3.6 Trainer's Qualification

#### AQUACULTURE NC II

##### TRAINER QUALIFICATION (TQ II)

- Must be a holder of Aquaculture NC Iil or its equivalent qualification
- Must have undergone training on Training Methodology II (TM II)
- Must be computer literate
- Must be physically and mentally fit
- \*Must have at least 2 years job/industry experience
- Must be a civil service eligible (for government position or appropriate professional license issued by the Professional Regulatory Commission)

\*Optional. Only when required by the hiring institution.

Reference: TESDA Board Resolution No. 2004 03

#### AQUACULTURE (HATCHERY OPERATION) NC II

- Must be a holder of NTTC I (NC + TM1) in AQUACULTURE (HATCHERY OPERATION) NC II
- Must have at least 2 years' industry experience within the last five (5) years

## AMENDMENT ON TRAINING REGULATIONS FOR AQUACULTURE (HATCHERY OPERATION) NC II

Existing Promulgated Training Regulations (Board Resolution No. 2004-21)	Amendments
<b>3.7 Institutional Assessment</b> Institutional Assessment is to be undertaken by the learner who enrolled in a structured learning program to determine the achievement of competencies. It is administered by the trainer/assessor at end of each learning module.	Institutional Assessment is gathering of evidences to determine the achievements of the requirements of the qualification to enable the trainer make judgement whether the trainee is competent or not competent.
<b>SECTION 4. National Assessment and Certification Arrangements</b>	
<p>4.1. To attain the National Qualification of Aquaculture NC II, the candidate must demonstrate competence in all the units listed in Section 1. Successful candidates shall be awarded a National Certificate signed by the TESDA Director General.</p> <p>4.2. The qualification of Aquaculture NC II may be attained through:</p> <p>4.2.1. Accumulation of Certificates of Competency (COCs) in the following areas:</p> <p>4.2.1.1. Prepare and maintain aquaculture facilities</p> <p>4.2.1.2. Operate Fish Nursery</p> <p>4.2.1.2.1. Conduct Pre-Operation Aquaculture activities</p> <p>4.2.1.2.2. Operate Fish Nursery</p> <p>4.2.1.3. Perform shrimp and fish grow-out operations</p> <p>4.2.1.3.1. Conduct Pre-operation aquaculture activities</p> <p>4.2.1.3.2. Perform shrimp and fish grow-out operations</p>	<p><i>Competency Assessment</i> is the process of collecting evidence and making judgments whether competency has been achieved. The purpose of assessment is to confirm that an individual can perform to the standards expected at the workplace as expressed in relevant competency standards.</p> <p>The assessment process is based on evidence or information gathered to prove achievement of competencies. The process may be applied to a full qualification or employable unit(s) of competency in partial fulfillment of the requirements of the national qualification.</p> <p><b>4.1. NATIONAL ASSESSMENT AND CERTIFICATION ARRANGEMENTS</b></p> <p>4.1.1 A National Certificate (NC) is issued when a candidate has demonstrated competence on all units of competency in a qualification with a promulgated Training Regulations.</p> <p>4.1.2 A Certificate of Competency (COC) is issued by the Authority to individuals who were assessed as competent in a single unit or cluster of related units of competency.</p>



## AMENDMENT ON TRAINING REGULATIONS FOR AQUACULTURE (HATCHERY OPERATION) NC II

Existing Promulgated Training Regulations (Board Resolution No. 2004-21)	Amendments
<p>Successful candidates shall be awarded Certificates of Competency (COCs) bearing the signature of the Regional Director and Chair of the recognized local industry body.</p> <p>4.2.2. Demonstration of competence through project-type assessment covering all required units of the qualification.</p> <p>4.3. Assessment shall focus on the core units of competency. The basic and common units shall be integrated or assessed concurrently with the core units.</p> <p>4.4. The following are qualified to apply for assessment and certification:</p> <p>4.3.1 Graduates of formal, non-formal and informal including enterprise-based training programs</p> <p>4.3.2 Experienced Workers (wage employed or self-employed)</p> <p>4.5. The guidelines on assessment and certification are discussed in detail in the Procedures Manual on Assessment and Certification and Guidelines on the Implementation of the Philippine TVET Qualification and Certification System (PTQCS).</p>	<p><b>COC1: Produce natural foods</b></p> <ul style="list-style-type: none"> <li>• Conduct preparatory activities</li> <li>• Produce natural foods</li> </ul> <p><b>COC2: Conduct broodstock management and spawning</b></p> <ul style="list-style-type: none"> <li>• Conduct preparatory activities</li> <li>• Conduct broodstock management and spawning</li> </ul> <p><b>COC3: Manage feeding and maintain good health of stock</b></p> <ul style="list-style-type: none"> <li>• Conduct preparatory activities</li> <li>• Manage feeding and maintain good health of stock</li> </ul> <p><b>COC4: Complete hatchery operation</b></p> <p>4.1.3 Upon accumulation of the COCs acquired, an individual shall be issued the corresponding National Certificate for the Qualification.</p> <p>4.1.4 Individuals wanting to be certified will have to be assessed in accordance with the requirements identified in the relevant unit/s of competency.</p> <p>4.1.5 The industry shall determine assessment and certification requirements for each qualification with promulgated Training Regulations. It includes the following:</p> <p>a. Entry requirements for candidates</p>

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	<p>b. b.Evidence gathering methods c. c. Qualification requirements of competency assessors d. d. Specific assessment and certification arrangements as identified by industry</p> <p>4.1.6 Recognition of Prior Learning (RPL). Candidates who have gained competencies through informal training, previous work or life experiences may apply for recognition in a particular qualification through a recognition/assessment process.</p> <p>4.1.7 A candidate who fails the assessment for two (2) consecutive times shall be advised to go through a refresher course before taking another assessment.</p> <p><b>4.2. COMPETENCY ASSESSMENT REQUISITE</b></p> <p>4.2.1 Self-Assessment Guide. The self-assessment guide (SAG) is accomplished by the candidate prior to actual competency assessment. SAG is a pre-assessment tool to help the candidate and the assessor determine what evidence is available, where gaps exist, including readiness for assessment.</p> <p>This document can:</p> <ul style="list-style-type: none"> <li>a) Identify the candidate's skills and knowledge</li> <li>b) Highlight gaps in candidate's skills and knowledge</li> <li>c) Provide critical guidance to the assessor and candidate on the evidence that need to be presented</li> <li>d) Assist the candidate to identify key areas in which practice is needed or additional information or skills that should be gained prior to assessment</li> </ul>



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	<p>4.2.2 Accredited Assessment Center. Only Assessment Center accredited by TESDA is authorized to conduct competency assessment. Assessment centers undergo a quality assured procedure for accreditation before they are authorized by TESDA to manage the assessment for National Certification.</p> <p>4.2.3 Accredited Competency Assessor. Only accredited competency assessor is authorized to conduct assessment of competence. Competency assessors undergo a quality assured system of accreditation procedure before they are authorized by TESDA to assess the competencies of candidates for National Certification.</p>