

**FDA/JIFSAN Train-the-Trainers Good Aquaculture Practices Program
Sample Training Course Agenda**

Monday, _____

8:00 am Registration

8:30 am Welcome and Opening Remarks

- Dignitaries from the host country
- Brett Koonse, U.S. Food and Drug Administration
- Tom Rippen, UM/JIFSAN

9:30 am Section I - The Importance of Training for Improving the Safety and Quality of Aquaculture products

Overview of Aquaculture Public Health Issues (Jahncke)

- Aquaculture Product Safety and Consumer Health
- Real and perceived risks (consumer perceptions) and impact on demand. Expectations of commercial buyers
- Traceability, Trends

Trade and Aquaculture Products (Koonse)

- Impact of Aquaculture Product Safety on Trade
- Safety Hazards in Aquaculture Products
- What has been found in Aquacultured Products by U.S. FDA and the results
- Need for GAQPs

10:30 am Break

10:45 am Host Country Food Laws and Regulations on GAQPs Aquaculture

Speaker: A representative of the host country

11:15 am Section II – HACCP Application in Shrimp Hatchery Operations (Jahncke)

12:00 noon Lunch

- 1:00 pm Section III – Hatchery Infrastructure and Operations (Lazur)**
- Design Criteria
 - Sanitation procedures
 - Water Quality Management
 - Influent treatment
 - System filtration
 - WQ Parameters
 - Measurement – frequency, equipment, and record keeping
 - Summary of Broodstock Management GAQP's
- 2:00 pm Section III – Grow-out Pond and Water Quality Management (Lazur)**
- Site Selection
 - Treatment options
 - Measuring Source Water Quality
 - Water Quality Management
 - Summary of Grow-out/Pond Water Quality GAQP's
- 3:00 pm Break**
- 3:15 pm Section III (Cont) - Grow-out/Pond Management (Lazur)**
- Pond Design Criteria
 - Water Quality Management
 - Predator Control
 - Summary of Grow-out/Pond Management GAQP's
- 5:00 pm Questions and Wrap-up**

Tuesday

- 8:30 am Section IV – Traceability: From Farm to Table (Jahncke)**
- Traceability Issues
- 9:00 am Section IV – Prerequisite Programs; GMP's (Rippen)**
- Importance of potable water and ice
 - Water used to wash product
 - Buying ice
 - Chipping block ice
 - Storing and handling ice
 - Dry storage of product totes, cartons
 - Protection from soils and water
 - Protection from pests (birds, insects, vermin)
 - Protection from chemical contaminants
 - Dedicate equipment for pond-side use (e.g. do not use a livestock farm wagon to haul boxes of shrimp)
 - Clean and store product handling equipment in an area protected from the environment, chemicals and pests
 - Adequate toilet facilities for worker use
 - Adequate waste water conveyance from farm

- Facility Sanitation
- Packing, Storage and Transportation
- Animal Exclusion and Pest Control
- Worker Health and Hygiene
- Summary

10:00 am Break

10:15 am Section IV – Prerequisite Programs; GMP’s (cont.) (Rippen)

11:00 am Section IV – Cleaning and Sanitizing Basics (Johnson-Diversey)

12:00 noon Lunch

1:00 pm Section V – Food Laws and Regulations (Koonse)

- The U.S. Food Safety System
- International Food Laws and Regulations

1:30 pm Section VI- The Use of Chemotherapeutics (Jahncke)

- The Implications of Using Unapproved or Misusing Drugs
- What is “Approved”
- How it Gets Approved
- Record Keeping
- Summary

2:30 pm Food Law and the use of Chemotherapeutic Drugs: A Host Country Perspective

Speaker: An official from the host country

3:00 pm Break

3:15 pm Self Auditing: What to Look for on the Field Trip (Lazur, Jahncke).

- Explain the field trip
- Organize into teams
- Explain what will be expected from each team

4:15 pm Exercise: Handwashing (Practical; J-D rep., Rippen)

Wednesday _____

Trip to Aquaculture Facility

Schedule determined by host country

8:00 am Leave Hotel

9:00 am	Farm Visits; demonstrations of washing, sanitation
1:00 pm	Lunch
2:30 pm	Farm Visits
5:00 pm	Return to Hotel

During the farm visits, participants will be organized into teams, and each team will work with FDA/JIFSAN Trainers.

Teams will be expected to observe and note the practices in place at each farm, through transportation, and into packing house.

Observations will be discussed on the following day and presented on Friday morning.

Thursday

8:30 am Section VII – Implementing GAqP’s, GMP’s, and HACCP on the Aquaculture Farm

Standard Operating Procedures (Rippen)

- Development of Written SOP’s

Use of HACCP Principles to Control Antibiotic Residues in Aquacultured Products (Jahncke)

- Implementation of GAqP’s
- Use of HACCP as a Management Tool
- Employee Training Programs

10:15 am Break

10:30 am Section VIII – HACCP and Other Things Farmers Should Know (Koonse)

- Documentation required from Aquaculture farms
- GAqP program – Integrating Mandatory HACCP requirements
- U.S. Importer Requirements
- Quality Issues (e.g., decomposition)

12:00 noon Lunch

1:00 pm Exercise: Cross-contamination (Practical; Rippen)

1:15 pm Section IX - Effective Training (Rippen)

- Planning for effective training: Identifying needs and setting objectives
- Preparing and organizing the training content.
- Conducting and evaluating the course.

3:00 pm Break

3:15 pm Discussion and Preparation of Farm Evaluations

Friday

8:30 am Presentation of Farm Evaluations

Training Program Participants

10:15 am Break

10:30 am Course Evaluation

11:00 am Exam

12:00 noon Lunch

1:00 pm Return Exams and Discuss

2:00 pm Presentation of Certificates and Closing Remarks

Representatives from host country and members of FDA/JIFSAN Training Team

3:00 pm Adjourn