

INDIA

NATIONAL RESIDUE CONTROL PLAN

FOR

AQUACULTURE PRODUCTS

YEAR 2014



Export Inspection Council
(Ministry of Commerce & Industry, Govt. of India)
3rd Floor, NDYMCA Cultural Centre Building,
1 Jai Singh Road, New Delhi-110001.
Tel: 0091-11-23748188, 23748189, Fax: 0091-11-23748024
E-mail: eic@eicindia.gov.in

**NATIONAL RESIDUE CONTROL PLAN OF INDIA FOR
AQUACULTURE PRODUCTS – 2014**

<i>Sl no.</i>	<i>Index</i>	<i>Page No.</i>
1	Introduction	2
2, 3, 4	Objectives, Scope & Implementation of NRCP	2
5	Aquaculture in India	2
6	Export of fish and fishery products to EU	4
7	Residue Monitoring in India	5
8	Organizations associated with implementation of NRCP	6
8.1	The Export Inspection Council of India (EIC)	5
8.2 to 8.4	Marine Products Export Development Authority(MPEDA) and the Laboratories	6
9	Group of substances/residues covered under NRCP	7
10	Sampling Procedure and Strategies	8
11	Alert information, communication of results & measures taken in the event of infringement	14
12	MRLs for Group A and B substances	15
13	Details of Analytical Methods	16
14	Information on legislation	17
15	Non-compliant Results of NRCP 2013.	18
16	<i>Annex 1-</i> Instructions for using the Residue Control Planning Template	20
17	<i>Annex. 1A</i> - Regulatory Plan Template (DG-SANCO) - Crustaceans 3 pages	22
18	<i>Annex. 1B</i> - Regulatory Plan Template (DG-SANCO) - Finfish (3 pages)	25
19	<i>Annex 2A</i> - Region wise - Parameter wise Allocation of Samples – (1 page)	28
20	<i>Annex 2B</i> - Lab wise allocation of samples for analysis (1 page)	29
21	<i>Annex 2C</i> - Region wise and Parameter wise allocation of 5% samples to EIC (1 page)	30
22	<i>Annex 3A, 3B, 3C & 3D</i> - Target / Allocation of samples (Cultured Shrimp, Scampi & Fish) to Field Offices - Group A and Group B substances (3 pages)	31
23	<i>Annex 4 (1 page) & Annex 4A</i> (3 pages) - Results of regulatory programme for control of residues in NRCP 2013	34
24	<i>Annex 4B</i> - Details of non-compliant (residue positive) results of NRCP 2013 (7 pages)	38
25	<i>Annex 5</i> - Instructions to Field Offices of MPEDA (3 pages)	45

NATIONAL RESIDUE CONTROL PLAN (NRCP) OF INDIA FOR AQUACULTURE PRODUCTS – 2014

1.	Introduction The major concern all over the world for food and feed products of animal origin including aquaculture products is the presence of residues of veterinary medicinal products, feed additives and environmental contaminants. Specifications for a residue control programme are determined by the importance of the various health risks that could be incurred by consumers of products derived from animal food products. The Govt. of India is committed to ensure safe seafood for domestic and overseas market. Keeping the above in view, the National Residue Control Plan (NRCP) has been formulated for monitoring the presence of residues of Veterinary Medicinal Products (VMPs) including Antibacterial substances, substances like dyes, aflatoxin and environmental contaminants like Pesticides, PCBs, Heavy Metals, etc. This will ensure an overall monitoring of the Aquaculture Products at different stages of production to guarantee safe products from farm to table.
2.	Objectives of NRCP ➤ To establish a system for monitoring residues of Aquaculture drugs/VMPs and Environmental contaminants etc. in shrimp, scampi, fresh water fish, hatchery seed and feed samples drawn from aquaculture farms, feed mills, hatcheries and processing establishments. ➤ To establish a system of corrective action in the event of detection of residues/contaminants higher than the prescribed limits. ➤ To ensure that the aquaculture products exported from India <u>meet the prescribed regulatory requirements</u> of the importing countries/EU.
3.	Scope of NRCP All aquaculture farms, processing establishments, feed-mills and hatcheries linked to and / or intended for export oriented production of aquaculture products and the testing and certifying laboratories are covered under the NRCP.
4.	Implementation of NRCP By exercising the powers under The Export (Quality Control & Inspection) Act, 1963, Ministry of Commerce and Industry (Govt. of India), amending the Notification S. O. 730 (E) dated 21.8.1995, vide notification No S.O. 1034(E) dated 9th September 2003, designated the Marine Products Export Development Authority (MPEDA) to carry out the residue monitoring on behalf of Export Inspection Council of India, the Indian Competent Authority.
5.	Aquaculture in India India is the 3rd largest shrimp producer and ranks 2nd largest in aquaculture production in the global scenario. The pollution free waters along the 8129 km long Indian coastline, 1.2 million hectares of brackish water area and 5.4 million hectares of fresh water area contribute to the aquaculture. In India, the aquaculture constitutes mainly freshwater and brackish water culture and is practiced in the 9 maritime states of India. Andhra Pradesh is the leading state of aquaculture which produces almost 58% of the total cultured shrimp (<i>Penaeus monodon</i>, <i>Litopenaeus vannamei</i>, <i>Penaeus indicus</i> and <i>Macrobrachium rosenbergi</i>) in India. Species-wise aquaculture production through inland and brackish water culture is given Table-1 below. <i>Presently, P.monodon and L. vannamei are the main species cultured in brackish water. This forms the bulk of exports to EU and other countries.</i>

5.1

Fresh water aquaculture. (FAO Fish Stat 2011)

Table - 1

Item / species	Production (M/T)
Fishes	
Catla catla *	2,121,360
Labeo rohita *	579,840
Cirrhinus mrigala *	117,513
Other Fishes *	1,588,385
Macrobrachium rosenbergii **	3,332
Total	4,410,430

source: * FAO Fish Stat. Plus 2011

** MPEDA - Statistics of Marine Products 2012 - 13

It can be seen from the data that Indian major carps namely catla, rohu, and mrigal are the main species which contribute major share of aquaculture production in the country, and the main crustacean species cultured in freshwater is *Macrobrachium rosenbergii* (fresh water prawn).

5.2

Brackish water Shrimp culture (MPEDA, 2012 - 13)

Table - 2

Name of species	Production (M/T)
Penaeus monodon	123,303
Penaeus indicus	--
Litopenaeus vannamei	147,516
Total	270,819

5.3

Details of State-wise production of brackish water shrimp & freshwater prawn (Scampi) during 2012-13

Among the maritime states, most of the aquaculture activities are concentrated in Andhra Pradesh. The other leading states in aquaculture production are West Bengal, Kerala, Orissa and Gujarat.

Table - 3

SI no.	State	Production (M/T)				Total
		P. monodon	P. indicus #	L. vannamei	Scampi (M. rosenbergii)	
1	West Bengal	52,581	-	0	2,446	55,027
2	Orissa	14,096	-	436	592	15,124
3	Andhra Pradesh	25,948	-	133,135	174	159,257
4	Tamil Nadu	17,220	-	8,595	54	25,815
5	Kerala	5,175	-	0	6	5,181
6	Karnataka	180	-	484	0	668
7	Goa	48	-	15	0	63
8	Maharashtra	2,010	-	1,503	60	3,513
9	Gujarat	6,045	-	3,348	0	9,393
	Total	123,303	-	147,516	3,332	274,041

	# Separate data not available.																																	
6.0	Export of fish & fishery products to EU																																	
	As like in previous years, India's export to EU during 2012-13 was mainly consisted of crustaceans, cephalopods and marine fin-fishes. The share of EU in Indian export was 17.06% and 22.15% in terms of quantity and value respectively, with a nominal increase of 2.68% in quantity and decline of 3.47% in terms of value over the corresponding previous year (2011-12).																																	
6.1	Item-wise export of marine products to EU during 2012-13:																																	
	Table - 4 <table><tr><th colspan="3">Item wise export of Marine Products to EU during 2012-13</th></tr><tr><th>Item Name</th><th>Qty (M/T)</th><th>US \$ (Mln)</th></tr><tr><td>Frozen Shrimp</td><td>63821</td><td>429.68</td></tr><tr><td>Frozen Fish</td><td>6975</td><td>23.27</td></tr><tr><td>Frozen Cuttlefish</td><td>29540</td><td>140.61</td></tr><tr><td>Frozen Squid</td><td>38867</td><td>135.91</td></tr><tr><td>Dried Items</td><td>342</td><td>2.04</td></tr><tr><td>Live Items</td><td>4</td><td>0.16</td></tr><tr><td>Chilled Items</td><td>1025</td><td>5.98</td></tr><tr><td>Others</td><td>17783</td><td>39.76</td></tr><tr><td>Total</td><td>158357</td><td>777.41</td></tr></table>	Item wise export of Marine Products to EU during 2012-13			Item Name	Qty (M/T)	US \$ (Mln)	Frozen Shrimp	63821	429.68	Frozen Fish	6975	23.27	Frozen Cuttlefish	29540	140.61	Frozen Squid	38867	135.91	Dried Items	342	2.04	Live Items	4	0.16	Chilled Items	1025	5.98	Others	17783	39.76	Total	158357	777.41
Item wise export of Marine Products to EU during 2012-13																																		
Item Name	Qty (M/T)	US \$ (Mln)																																
Frozen Shrimp	63821	429.68																																
Frozen Fish	6975	23.27																																
Frozen Cuttlefish	29540	140.61																																
Frozen Squid	38867	135.91																																
Dried Items	342	2.04																																
Live Items	4	0.16																																
Chilled Items	1025	5.98																																
Others	17783	39.76																																
Total	158357	777.41																																
6.2	Export of aquaculture products to European Union																																	
	India's export of cultured shrimp, <i>Penaeus monodon</i> , <i>Penaeus indicus</i> , <i>Litopenaeus vannamei</i> etc to EU in 2012-13 was to the tune of 29845 M/T valued at US \$ 229.29 Million. There was an increase of 23.48% by quantity and 5.20% in terms of value compared to year 2011 -12. The quantity of Scampi (<i>Macrobrachium rosenbergii</i>) and of fresh water fin fishes exported to EU during the year 2012- 13 were only 3332 MT and 450 M/T respectively. Export of aquaculture products to European Union (2012- 13) Table - 5 <table><tr><th>Species</th><th>Quantity (M/T)</th><th>Value (US \$ million)</th></tr><tr><td>Cultured Shrimp (which includes P.monodon, P.indicus & L. vannamei)</td><td>29845</td><td>229.29</td></tr><tr><td>Scampi (Fresh water Prawn) M. rosenbergii</td><td>293</td><td>3.99</td></tr><tr><td>Freshwater fishes</td><td>450</td><td>1.76</td></tr><tr><td>Total</td><td>30588</td><td>235.04</td></tr></table>	Species	Quantity (M/T)	Value (US \$ million)	Cultured Shrimp (which includes P.monodon, P.indicus & L. vannamei)	29845	229.29	Scampi (Fresh water Prawn) M. rosenbergii	293	3.99	Freshwater fishes	450	1.76	Total	30588	235.04																		
Species	Quantity (M/T)	Value (US \$ million)																																
Cultured Shrimp (which includes P.monodon, P.indicus & L. vannamei)	29845	229.29																																
Scampi (Fresh water Prawn) M. rosenbergii	293	3.99																																
Freshwater fishes	450	1.76																																
Total	30588	235.04																																
7.0	Residue monitoring in India																																	
	There are 466 (as on 31 Dec. 2013) seafood-processing establishments in India. Of which, 284 establishments have been approved for processing of fish and fishery products to EU. In addition 36 independent cold storages (as on February 2013) are also approved for storage of fish and fishery products for export to EU. Compliance with Hazard Analysis and Critical Control Point (HACCP) system has been made																																	

	mandatory for all seafood processing units in India. The residue control plan for aqua cultured animal is implemented since 1998 in India so as to comply with EU Directive 96/23/EC to ensure the safety of the fishery products exported to member states of European Union. As of now, substances like Chloramphenicol, Nitrofurans, Nitroimidazoles, Stilbenes, Steroids, Tetracyclines, Sulphonamides, oxolinic Acid, Flumequin, Anthelmintics, Mycotoxins, Organo-chlorine Pesticides, PCBs, Heavy Metals and Dyes are tested under the NRCP. ♦ The FVO missions visited India periodically and assessed the effectiveness of implementation of residue control measures. Following are the prominent EU-FVO missions visited India for assessment of the control of residues and contaminants in live animals and animal products, including controls on Veterinary medicinal products: ♦ FVO mission 14 - 22 October 2003. ♦ FVO mission 13 - 22 September 2006. ♦ FVO mission 12 - 20 May 2011 ♦ FVO Mission 3-14 March 2014 Based on the findings and recommendations made by the FVO missions, follow up actions have been taken as follows : ♦ All the relevant substance groups listed in annex II of Council Directive 96/23/EC applicable to aquaculture products (crustaceans and fresh water fishes) are monitored under NRCP plan. ♦ The sampling strategy for aquaculture crustaceans and fin-fishes to be analyzed are prepared on the basis of production / number of registered farms / total through put in export approved establishments, as applicable. ♦ The test methodologies were validated/re-validated as specified in commission decision 2002/657/EC.
8.0	Organizations associated with the implementation of NRCP:
8.1	The Export Inspection Council of India (EIC) set up under Section 3 of the Export (Quality Control and Inspection) Act 1963, is the Competent Authority (CA) for inspection and quality control of fish and fishery products meant for exports.
8.2	Registering authorities for aquaculture farms: As per provision made in notification no. S.O. 497(E) dated 10.3.2011, the Competent Authority has recognized MPEDA, CAA & State Fisheries Authorities for registering the aquaculture farms.
8.3	The Marine Products Export Development Authority (MPEDA), constituted by the Marine Products Export Development Authority Act No 13 / 1972, is the statutory body under Ministry of Commerce & Industry to promote the production and export of marine products. The functions are: 1. Registration of exporters / processing plants / storage premises / fishing vessels. 2. Quality up-gradation and modernization of seafood industry. 3. Development of infrastructure facilities. 4. Implementation of residue monitoring/control programmes such as NRCP (as per EU Directive 96/23/EC), Monitoring of Pesticide Residue at National Level (MPRNL), Monitoring of Cadmium content/residue in Cephalopods, etc. 5. Registration of farms/hatcheries/feed-mills intended for export linked production in order to ensure the code of practices for production of quality shrimp/seeds/feed. 6. Promotion of export of marine products from the country to different international markets. 7. Guidance to farmers to adopt good management practices and sustainable aquaculture.

8.2.1	NRCP laboratories																											
	The MPEDA has 4 (four) Quality Control Laboratories (Kochi, Bhimavaram, Nellore & Bhubaneswar. The Quality Control Labs at Kochi, Bhimavaram & Nellore are involved in implementation of residue control plan for residues in aquaculture products as per EU Directive 96/23/EC. In addition to above, Export Inspection Agency-Chennai laboratory shall be utilized for testing the parameters which cannot be done by MPEDA quality control laboratories.																											
8.2.2	MPEDA Quality Control Laboratory, Kochi (Kochi)																											
	The Marine Products Export Development Authority (MPEDA), Ministry of Commerce and Industry Government of India, MPEDA House, Panampilly Avenue, Cochin – 682 036, Karalla, India. (Tel.91-484-2311979, 2311803, 2311854 Fax.91-484-2313361, E-mail: mpeda@mpeda.nic.in; web-site: http://www.mpeda.com																											
8.2.3	MPEDA Quality Control Laboratory, Bhimavaram																											
	The Marine Products Export Development Authority, Pattabhi Plaza, 2nd floor, 27/1/6, Juvalpuram Road, Bhimavaram-534 202, West Godavari Dist. Andhra Pradesh, Tel: 91-08816-226410 E-mail: mpedalab@dataone.in																											
8.2.4	MPEDA Quality Control Laboratory, Nellore																											
	The Marine Products Export Development Authority, D.No.26-1766/A-1, Srinagar colony, Mini Bypass Road, Nellore- 524 003, Andhra Pradesh. Tel: 91-08612319144, 2319344 E-mail: gqlab_nlr@dataone.in																											
8.3	Export Inspection Agency-Chennai laboratory																											
	Export Inspection Agency-Chennai 6th Floor CMDA Tower II, No: 1, Gandhi Irwin Road, Egmore, Chennai - 600 008 Tel: +91-44 - 2855 2841 / 42 Fax: + 91-44 - 2855 2840 E – mail: eia-chennai@eicindia.gov.in																											
8.4	MPEDA ELISA Screening Laboratories.																											
	Twenty (20) ELISA Screening Laboratories have been set up in the maritime states of India for screening of aquaculture produce for banned antibiotics residues under the pre harvest testing programme. Under this all aquaculture produce are tested prior to harvest. Exporters / processors have to purchase only pre harvest tested and certified material for export processing.																											
	Locations of the ELISA Screening Laboratories:																											
	Table – 6 <table><tr><th>State</th><th>No.of Labs</th><th>Locations</th></tr><tr><td>West Bengal</td><td>4</td><td>Contai, Haroa, Kharibari & Sonarpur</td></tr><tr><td>Orissa</td><td>3</td><td>Balasore, Dhamra & Bhubaneswar</td></tr><tr><td>Andhra Pradesh</td><td>7</td><td>Nellore, Ongole, Bapatla, Bhimavaram, Amalapuram, Kakinada & Machilipatnam.</td></tr><tr><td>Tamil Nadu</td><td>2</td><td>Nagapattinam & Pattukottai</td></tr><tr><td>Kerala</td><td>1</td><td>Payannur</td></tr><tr><td>Karnataka</td><td>1</td><td>Kumta</td></tr><tr><td>Maharastra</td><td>1</td><td>Palghar</td></tr><tr><td>Gujarat</td><td>1</td><td>Valsad</td></tr></table>	State	No.of Labs	Locations	West Bengal	4	Contai, Haroa, Kharibari & Sonarpur	Orissa	3	Balasore, Dhamra & Bhubaneswar	Andhra Pradesh	7	Nellore, Ongole, Bapatla, Bhimavaram, Amalapuram, Kakinada & Machilipatnam.	Tamil Nadu	2	Nagapattinam & Pattukottai	Kerala	1	Payannur	Karnataka	1	Kumta	Maharastra	1	Palghar	Gujarat	1	Valsad
State	No.of Labs	Locations																										
West Bengal	4	Contai, Haroa, Kharibari & Sonarpur																										
Orissa	3	Balasore, Dhamra & Bhubaneswar																										
Andhra Pradesh	7	Nellore, Ongole, Bapatla, Bhimavaram, Amalapuram, Kakinada & Machilipatnam.																										
Tamil Nadu	2	Nagapattinam & Pattukottai																										
Kerala	1	Payannur																										
Karnataka	1	Kumta																										
Maharastra	1	Palghar																										
Gujarat	1	Valsad																										
8.5	Level of competence of the MPEDA Laboratories involved in residue monitoring.																											
	The MPEDA Quality Control Laboratory at Kochi was established in 1976 with the objective to																											

	ensure that the products exported from India meet the international standards. At its inception, apart from testing for microbiological parameters such as TPC, Coliform, Staphylococcus aureus, Salmonella, Vibrio cholerae in seafoods, the laboratory was monitoring heavy metals like mercury, cadmium and pesticide residues in shrimp, water, etc. The MPEDA QC Laboratories at Bhimavaram and Nellore in Andhra Pradesh were established in 2004. All these Laboratories are accredited as per ISO/IEC 17025 standard by the National Accreditation Board for Testing and Calibration Laboratories (NABL), member of International Laboratory Accreditation Co-operation(ILAC). The scope of accreditation covers testing of fish and fishery products for chemical residues. All the MPEDA QC Laboratories are approved by the EIC for testing of fish and fishery products intended for export (commercial samples). The Labs have also ISO 9001:2008 certification. The laboratories are equipped with high precision sophisticated equipments like Ultra Performance Liquid Chromatography Tandem Mass Spectrometer (UPLC MS MS), High performance Liquid Chromatography Tandem Mass Spectrometer (LC MS MS), Inductively Coupled Plasma - Optical Emission Spectroscopy (ICP-OES) / Atomic Absorption Spectrometer (AAS), High Performance Liquid Chromatograph(HPLC), Gas Chromatograph(GC), Gas Chromatograph - Mass Spectrometer (GC-MS) / GC-MSMS, ELISA Reader and all necessary supporting equipment/instruments. At present all the laboratories carry out analysis for: (1) Anti microbial/bacterial substances like Tetracyclines (TC/OTC/CTC with 4-epimers), Sulphonamides, & Oxolinic acid. (2) Organo-chlorine pesticides such as BHCs(α, β & γ), Aldrin, DDTs, Dieldrin, Endrin, Heptachlor, Chlordane & HCB, Polychlorinated Bi-phenyls(PCBs) and (3) Heavy metals such as Mercury, Cadmium, Arsenic, Copper, Lead, Nickel, Zinc, Chromium and (4) Steroids (Progesterone, Oestradiol, (5) Stilbenes(Diethyl Stilbestrol), (6) Anthelmintics (Ivermectin) and (7) Dyes (Malachite Green & Leuco-Malachite Green) and banned substances/drugs like Nitrofurans, Chloramphenicol, Nitroimidazoles, etc.
8.5.1	Participation in PT programs:
	The MPEDA Laboratories (Kochi, Nellore & Bhimavaram) participate regularly in Proficiency Testing programmes conducted by international PT providers like FAPAS(CSL) and LGC Promochem, UK to prove the competency in testing of various parameters under the scope of accreditation. The Laboratories have successfully participated in several PT programmes for analysis of Nitrofurans metabolites, Chloramphenicol, Tetracyclines, Chemical Elements, Organochlorine pesticides, Quinolones (Oxolinic Acid/Nalidixic Acid), Dyes(Malachite green and Leucomalachite green).
9.0	Group of residues covered under NRCP 2014:
	The National Residue Control Plan - 2014 will cover the following: (ref: Annexure I and II of Council Directive 96/23/EC). <u>Group A – Substances having anabolic effect and unauthorized substances.</u> ➤ Stilbenes, Stilbene derivatives and their salts and esters – Diethyl stilbestrol ➤ Steroids – Estradiol. ➤ Compounds included in Annex IV to Council Regulation (EEC) No.2377/90 – Chloramphenicol, Nitrofurans and Nitroimidazoles. <u>Group B - Veterinary drugs and Environmental contaminants.</u> ➤ Antibacterial substances, including sulphonamides, Quinolones – Tetracyclines, Sulphonamides, Oxolinic acid, Nalidixic acid, etc. ➤ Other Veterinary drugs: Anthelmintics (Ivermectin) ➤ Environmental contaminants: - Organo-chlorine compounds including DDTs, BHC Isomers, Aldrin, Dieldrin, Heptachlor, Chlordane, Endrine, HCB, etc - PCBs and DL PCBs. - Chemical Elements –Hg, Cd, As, Pb

	➤ Mycotoxins – Aflatoxin B1 & B2 ➤ Dyes –Malachite green & Leuco-malachite green
10.	Sampling
10.1	Sampling procedure
	Samples are taken in accordance with to Council Directive 96/23/EC chapter 3 (1) of annexure IV. Accordingly Shrimp samples are collected by the designated Residue Monitoring Officers of MPEDA from the farms registered by the designated authority. Sampling at farm level are in such a way that at least 10.5% of registered sites of production is covered in the yearly plan. There shall not be excess drawing of samples from one unit or farm in order to ensure that maximum number of farms are covered. Samples are collected at variable intervals spread over the whole year depending on the culture period / harvest season / availability from farms, fish processing plants and hatcheries, which varies from region to region in India. Definite sampling strategy, target/schedule and no. of samples under different substance groups have been assigned to all the regional centers/offices of MPEDA. The collection of sample are unforeseen, unexpected and effected at no fixed time and on no particular day of the week and the sample collection is done as per the guidelines on sample acceptance criteria. The number of samples to be collected from the processing plants is based on the production capacity and/or actual production. Multiple samples are collected from plants on the same day, provided the farms from where the processing plant has purchased the raw material are different, not exceeding two in a day. The farms reported with residue positive cases and processing plants reported with rejections are subjected to frequent sampling for a period of at least one year. In the case of farm samples, the farmer or his representative sign the original sampling report which is kept in the field offices with proper care that unauthorized persons cannot access the original report.
10.2	Personnel responsible for collection of samples
	The MPEDA has sufficient number of field offices (Regional/Sub-regional Offices/Centres) located in each maritime state of India where the aquaculture is carried out. The Residue Monitoring Officers of MPEDA field offices (who are designated for sample collection and other field/follow up activities related to NRCP) at different regions visit the farms, processing plants, hatcheries and feed mixing plants and collect the targeted samples as per the monthly target/ schedule assigned to different regions/states and forward the same to the laboratories of MPEDA at Cochin, Nellore and Bhimavaram. Similarly, they visit the processing plants without prior intimation and draw samples. The sampling official records the nature, source, the date and place of sampling and other relevant information. A signed copy of the sample format accompanies each sample to the designated laboratory. Trainings / work-shops are conducted for the Residue Monitoring Officers every year to evaluate the implementation of NRCP with regard to sampling procedure and strategies, collection of samples & follow-up samples, follow-up investigation on non-compliant (residue positive) cases, etc.
10.3	No. of samples for NRCP 2014
10.3.1	Crustaceans:
10.3.1.1	Shrimps (<i>Penaeus monodon</i>, <i>Penaeus indicus</i>, <i>Litopenaeus vannamei</i>, etc)
	The annual production of the Shrimp during the 2012-13 was 270819 M/T. As per the sampling ratio

	of 1:100, the total number of the samples to be analyzed works out to only 2708. Based on the number of farms enrolled with MPEDA as 32891 (as on October 2013), the number of samples to be drawn and analysed works out to 3289 (ie; 10% of registered sites of production). During NRCP 2014, the number of samples to be drawn from farms for shrimps and scampi shall be 3256 and 33 respectively.																																																														
10.3.1.2	Scampi (<i>M. rosenbergii</i>)																																																														
	The scampi samples shall be taken based on the production figure of 3332 MT (2012-13), which works out to 33 (1:100).																																																														
10.3.2	Fresh water Fishes																																																														
	Total production of fresh water fishes in India during the year 2011 was 4407098 Million tones. The export of fresh-water fishes to EU in 2012-13 was only 450 MT and the total export of fresh-water fishes by the EU approved processing/export establishments were 3904 MT (2012-13) and their throughput is estimated as 5072 MT . The number of NRCP samples at 1:100 ratio works out to 51 for analysis of different parameters.																																																														
10.3.3	Feed:																																																														
	In India there are 12 feed mills under operation. It is proposed to monitor all of the registered feed-mills and the number of samples to be analysed has been decided as 24 (two samples from each feed mill).																																																														
10.3.4	Hatchery Samples:																																																														
	Presently (as on Dec. 2013) there 188 Hatcheries registered with MPEDA are in operation and the number of samples to be analysed in NRCP 2014 is fixed as 188 (one sample per hatchery).																																																														
10.4	Number of Samples to be analysed under NRCP 2014 :																																																														
10.4.1	Table – 7 <table><tr><th>Type of sample</th><th>No. of farms registered/enrolled with MPEDA</th><th>Aqua-culture Production (M/T)</th><th>Total throughput of EU approved processing plants (RM)</th><th>No. of hatcheries in operation & feed mills</th><th>No. of samples to be analysed</th><th>Criteria for sampling/sample no.</th></tr><tr><td><i>P. monodon</i>, <i>P. indicus</i> & <i>L. vannamei</i></td><td rowspan="2">32891</td><td>274041</td><td>--</td><td>--</td><td>3256</td><td>Based on 10% of registered farms</td></tr><tr><td><i>M. rosenbergi</i></td><td>3332</td><td>--</td><td>--</td><td>33</td><td>1 sample per every 100 MT of production</td></tr><tr><td>Freshwater fishes</td><td>--</td><td>--</td><td>5072</td><td>--</td><td>51</td><td>based on throughput in approved export(EU) establishments (1:100)</td></tr><tr><td colspan="5">TOTAL</td><td>3340</td><td></td></tr><tr><td colspan="7">Hatchery & Feed Samples</td></tr><tr><td>Feed from feed-mills</td><td>-</td><td>-</td><td>-</td><td>12</td><td>24</td><td>2 samples from each feed-mill.</td></tr><tr><td>Hatchery Seed</td><td>-</td><td>-</td><td>-</td><td>188</td><td>188</td><td>1 sample per every registered hatchery.</td></tr><tr><td colspan="5">GRAND TOTAL</td><td>3552</td><td></td></tr></table>	Type of sample	No. of farms registered/enrolled with MPEDA	Aqua-culture Production (M/T)	Total throughput of EU approved processing plants (RM)	No. of hatcheries in operation & feed mills	No. of samples to be analysed	Criteria for sampling/sample no.	<i>P. monodon</i> , <i>P. indicus</i> & <i>L. vannamei</i>	32891	274041	--	--	3256	Based on 10% of registered farms	<i>M. rosenbergi</i>	3332	--	--	33	1 sample per every 100 MT of production	Freshwater fishes	--	--	5072	--	51	based on throughput in approved export(EU) establishments (1:100)	TOTAL					3340		Hatchery & Feed Samples							Feed from feed-mills	-	-	-	12	24	2 samples from each feed-mill.	Hatchery Seed	-	-	-	188	188	1 sample per every registered hatchery.	GRAND TOTAL					3552	
Type of sample	No. of farms registered/enrolled with MPEDA	Aqua-culture Production (M/T)	Total throughput of EU approved processing plants (RM)	No. of hatcheries in operation & feed mills	No. of samples to be analysed	Criteria for sampling/sample no.																																																									
<i>P. monodon</i> , <i>P. indicus</i> & <i>L. vannamei</i>	32891	274041	--	--	3256	Based on 10% of registered farms																																																									
<i>M. rosenbergi</i>		3332	--	--	33	1 sample per every 100 MT of production																																																									
Freshwater fishes	--	--	5072	--	51	based on throughput in approved export(EU) establishments (1:100)																																																									
TOTAL					3340																																																										
Hatchery & Feed Samples																																																															
Feed from feed-mills	-	-	-	12	24	2 samples from each feed-mill.																																																									
Hatchery Seed	-	-	-	188	188	1 sample per every registered hatchery.																																																									
GRAND TOTAL					3552																																																										
	Altogether 3552 samples covering shrimp, scampi, freshwater fish, feed and hatchery are proposed to be collected and analyzed during the NRCP 2014.																																																														

10.4.2	Sampling Strategy:
10.4.2.1	1. Shrimps (<i>P.monodon</i>, <i>P. indicus</i>, <i>L.vannamei</i>, etc): based on the quantity of production and the number of registered farms and samples from/covering at least 10% of the registered sites of production. 2. Scampi (<i>M. rosenbergii</i>): At least one sample per every 100 M/T of production. 3. Fin-fishes: based on throughput in the approved export establishments (approved for export to EU) - at least one sample per every 100 M/T of production. 4. Feed samples: two samples per each feed-mill. 5. Hatchery seed: at least one sample from each registered hatchery.
10.4.2.2	Additional 5 % joint sampling by EIA & MPEDA
	As like in the previous year, additional 5% of the aquaculture samples under each category shall be drawn jointly by the EIC/EIA and MPEDA and these samples shall be analysed separately by the EIA and MPEDA Laboratories. The test results of these samples shall be sent by MPEDA to respective EIAs for necessary comparison. If any deviation is observed by EIAs, then it shall be reported to EIC along with the suitable recommendations, for further necessary action. EIAs shall prepare the consolidated report as per the EIC preforma and send to EIC on quarterly basis.
10.4.3	The objectives of monitoring are:
	1. to detect all illegal treatment (reference Directive 96/23/EC) of Veterinary drugs listed in Annex I and III of Council Regulation and maximum levels of pesticides in Annex II of Council Directive 86/363/EEC or National regulations on environmental contaminants. 2. to ensure compliance with the MRL for residues (Council Regulation 2377/90/EC). 3. survey and trace out the reasons for residues in animal food. To achieve these objectives, sampling shall be carried out randomly spread over the whole year from hatcheries, aquaculture farms and processing plants. In addition to shrimp and fish samples, hatchery (seed) and feed samples are also monitored to check the presence of prohibited substances/residues.

10.5 Type of samples and break up of samples for Group A & B Substances:**Table – 8**

Type of Sample	Total number of samples to be tested	Break up of samples proposed to be tested				
		Group A substances			Group B substances	
		Farms	Hatchery	Factories/ Feed mills	Farms	Factories
Shrimp	3256	1086	--	--	1104	1066
Scampi	33	11	--	--	14	8
Fish	51	18	--	--	24	9
Sub Total	3340	1115	--	--	1142	1083
Feed	24	12	--	12	--	--
Hatchery Seed	188	--	188	--	--	--
TOTAL	3552	1127	188	12	1142	1083

10.6 Break up of samples for analysis of Group A substances

The number of samples at different levels will be as follows:

Table - 9

Samples for analysis of Group-A substances:				
Species	No. of samples for Group A Substances	Stilbenes	Steroids	NF + CAP + Nitroimidazoles
Cultured shrimp	1086	-	-	1086
Scampi	11	-	-	11
Fish	18	6	6	6
Sub total	1115	6	6	1103
Feed	24	-	-	(NF + CAP) 24
Hatchery sample	188	--	--	(NF + CAP) 188
Grand Total	1327	6	6	1315

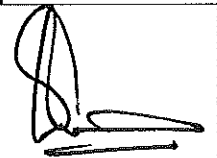
10.7	Break up of samples for Analysis of Group B substances.																																																																									
	Table - 10 <table><tr><th rowspan="2">Species /item</th><th rowspan="2">No. of samples</th><th colspan="7">No. of samples</th></tr><tr><th>Samples taken from</th><th>Anthel- mintics</th><th>Antibac- terial Substa- nces</th><th>Pesti- cides + PCBs</th><th>Chemical Elements</th><th>Myco- toxin</th><th>Dyes</th></tr><tr><td rowspan="2">Cultured shrimp</td><td rowspan="2">2170</td><td>From farms</td><td>230</td><td>548</td><td>113</td><td>111</td><td>39</td><td>61</td></tr><tr><td>From Proc. plants</td><td>203</td><td>538</td><td>116</td><td>111</td><td>40</td><td>58</td></tr><tr><td rowspan="2">Cultured Fresh water prawn (Scampi)</td><td rowspan="2">22</td><td>From farms</td><td>3</td><td>7</td><td>2</td><td>1</td><td>0</td><td>1</td></tr><tr><td>From Proc. plants</td><td>1</td><td>4</td><td>1</td><td>1</td><td>1</td><td>0</td></tr><tr><td rowspan="2">Cultured Fresh water Fish</td><td rowspan="2">33</td><td>From farms</td><td>2</td><td>14</td><td>3</td><td>2</td><td>3</td><td>4</td></tr><tr><td>From Proc. plants</td><td>3</td><td>0</td><td>1</td><td>2</td><td>1</td><td>0</td></tr><tr><td>Total</td><td>2225</td><td>--</td><td>442</td><td>1111</td><td>236</td><td>228</td><td>84</td><td>124</td></tr></table>	Species /item	No. of samples	No. of samples							Samples taken from	Anthel- mintics	Antibac- terial Substa- nces	Pesti- cides + PCBs	Chemical Elements	Myco- toxin	Dyes	Cultured shrimp	2170	From farms	230	548	113	111	39	61	From Proc. plants	203	538	116	111	40	58	Cultured Fresh water prawn (Scampi)	22	From farms	3	7	2	1	0	1	From Proc. plants	1	4	1	1	1	0	Cultured Fresh water Fish	33	From farms	2	14	3	2	3	4	From Proc. plants	3	0	1	2	1	0	Total	2225	--	442	1111	236	228	84	124
Species /item	No. of samples			No. of samples																																																																						
		Samples taken from	Anthel- mintics	Antibac- terial Substa- nces	Pesti- cides + PCBs	Chemical Elements	Myco- toxin	Dyes																																																																		
Cultured shrimp	2170	From farms	230	548	113	111	39	61																																																																		
		From Proc. plants	203	538	116	111	40	58																																																																		
Cultured Fresh water prawn (Scampi)	22	From farms	3	7	2	1	0	1																																																																		
		From Proc. plants	1	4	1	1	1	0																																																																		
Cultured Fresh water Fish	33	From farms	2	14	3	2	3	4																																																																		
		From Proc. plants	3	0	1	2	1	0																																																																		
Total	2225	--	442	1111	236	228	84	124																																																																		
10.8	e-NRCP The complete NRCP program is computerized and all documentation activities like sample collection, identification and dispatch, sample acceptance by lab, sample decoding, sample allocation and job order, test results and test reports, alert notice on non-compliant samples, reporting of follow-up investigation, follow-up samples and their test results/reports, etc are done fully online. All test reports/results are generated on-line (automatic transmission) on posting of the analytical results by each MPEDA Laboratory. Separate alert notice/information on non-compliant samples/results are generated immediately on posting of the test results and transmitted automatically to the concerned field centers/offices of MPEDA and EIAs.																																																																									
10.9	Collection and transportation of samples Approximately 500 gms of samples (whole prawns / fish) are taken from aquaculture farms and processing plants so as to get 250 gms of meat for analysis in duplicate. Samples from hatchery, 25 to 30 gm of juveniles (excluding water) are collected from the larval and post-larval rearing tanks in polythene bags, sealed and transported in thermocole box packed with dried/ wet ice. In case of feed, 500 gms of feed samples are taken from farms and feed mills. Shrimp / fish samples collected in polythene bags and covered in aluminum foil, affixed with code numbers, to maintain sample integrity and traceability. The container / packing must be officially sealed and packed in thermocole boxes are dispatched along with the sampling report, with sufficient dry ice in the case of long duration transport and with wet ice in the case of short distance transport. Feed samples are taken in polythene bags. The samples are forwarded to the concerned laboratories within 3 days of its collection so as to reach MPEDA Laboratories within 30 hours (transit time) of its dispatch.																																																																									

	Instructions issued to the field offices of MPEDA on sample collection, packing & transportation and follow-up action to be taken on residue positive samples. (<i>Annexure-V</i>)			
10.10	Handling of sample in the Laboratory			
	Immediately on receipt, the samples are decoded and stored in deep freezer at -18°C ($\pm 2^{\circ}\text{C}$). The samples are then homogenized and divided into two equal portions and stored in deep freezer. One portion is used for the analysis, while the remaining portion is retained in the deep freezer. The samples are analyzed by the respective laboratories at the earliest not more than 15 days from the receipt of the samples. If the initial test shows positive, the remaining sample will be tested for confirmation of the results. The samples are disposed only on completion of 90 days after analysis. The test reports are received by the Field Offices & EIAs electronically (online).			
11.0	Alert information, communication of results & measures taken in the event of infringement:			
	a) In the case of positive test results (non-compliant samples), the alert information along with test results is transmitted to the concerned field offices of MPEDA and EIA. b) On receipt of such information EIA & MPEDA shall undertake the joint inspection of the facility to trace the origin / source of contamination. c) The EIA & MPEDA officials collect follow up samples from the same premises for the further analysis at MPEDA laboratory. A joint inspection report shall be prepared & be available at EIA & MPEDA. d) If the sample is found positive, on repeated analysis the results shall be communicated by MPEDA to EIAs and the defaulting facility will be issued show cause notice by EIAs. e) Based on the reply received from the facility, the EIA shall take the action as deemed fit. f) A monthly summary of the samples drawn, tested and results (including positive and negative), shall be communicated to the Competent Authority by MPEDA. g) EIAs shall send the monthly report of action taken on non-compliance results to EIC. h) The farms reported with non-compliant results are subjected to more stringent checks for a period of at least twelve months by EIAs. i) A Committee headed by the In-charge of the EIA reviews regularly the non-compliant (residue positive) cases for appropriate follow-up guidelines and actions			
12.0	MRLs for Group A and Group B Substances of Veterinary Drugs and Environmental Contaminants			
12.1	MRLs for Group A Substances			
	Substance group	Substances	Substance monitored	MRL
	Group: A (1)	Stilbenes and its derivatives	Diethyl Stilbestrol	Nil (MRPL-1.0 ppb)
	A (3)	Steroids	Progesteron / Estradiol	Nil (MRPL-1.0 ppb)
	A (6)	Compounds included in Council Regulation No.37/2010.	(i) Chloramphenicol	Nil (MRPL-0.3 ppb)
			(ii) Nitrofurans Metabolites (AOZ, AMOZ, SEM & AHD)	Nil (MRPL-1.0 ppb)
			(iii) Nitrofurans (parent compounds, in case of feed samples)	Nil (Working MRPL 1.0 ppb)
			(iv) Nitroimidazoles (Metronidazole, Dimetridazole, Iprnidazole, Ronidazole, HMMNI, Iprnidazole-OH, Metronidazole-OH)	Nil (MRPL- 3.0 ppb)

12.2	MRLs for Group B substances of Veterinary Drugs and Environmental Contaminants.				
	Substance group	Substances	Substance monitored	MRL	
	Group: B	Veterinary Drugs and Contaminants			
	B (1)	Antibacterial substances Quinolones	Oxolinic acid Nalidixic acid Flumequin	100 ppb	
		Tetracyclines	Tetracycline, Oxytetracyline, Chlortetracycline & their 4-Epimers	100 ppb	
		Sulfonamides	Sulfadiazine, Sulfamethoxazole, Sulfamethoxypyridine, Sulfamethzole, Sulfamethazine, Sulfamerazine, Sulfapyridine, Sulfadimethxine, sulfachloropyradizine, Sulfathiazole- freeacid.	100 ppb	
	B-2(a)	Anthelmintics	Ivermectin	Nil	
	B-3(a)	Other substances & environmental contaminants (i) Organochlorine compounds	α BHC	0.20 ppm	
			β BHC	0.10 ppm	
			γ BHC	0.02 ppm	
			Aldrin	0.20 ppm	
			DDT	1.00 ppm	
			Dieldrin	0.20 ppm	
			Endrin	0.05 ppm	
			Heptachlor	0.20 ppm	
			HCB	0.20 ppm	
			Chlordane	0.05 ppm	
			(ii) PCBs & DL PCBs	PCBs (6 compounds)	75.0 ppb
			Dioxin like PCBs (12 compounds)	6.5 ppt	
	B-3(c)	Chemical Elements	Mercury	0.50 ppm	
Cadmium			0.50 ppm		
Arsenic			1.0 ppm		
Lead			0.50 ppm		
B-3(d)	Mycotoxins *	Aflatoxin B1& B2	Nil *		
B-3(e)	Dyes	Malachite green & Leuco-malachite green	Nil (MRPL 2.0 ppb)		
* Since there is no EU MRL fixed for Mycotoxin in aquaculture products, 2ppb is considered as the working MRL for Aflatoxins B1 and B2 individually and as 4 ppb for B1 and B2 total value.					
13.	DETAILS OF ANALYTICAL METHODS				
	Unless otherwise mentioned elsewhere the methods described in the Manual/Journal of Association of Official Analytical Chemists and methodology followed in the EU Community Referral Laboratories(CRLs) are followed using the equipment mentioned against the substances as given below.				
13.1	Group A – substances having anabolic effect and unauthorized substances				
		Group as per Directive	Residue	Method	Equipment
		Group A.1	Stilbenes, Stilbene derivatives and their salts and esters	Immuno Assay/ Liquid Chromatography Mass Spectrometry	ELISA Reader with test kits/ LC MS MS

		Group A.3	Steroids	Immuno Assay	ELISA reader with Test Kits
		Group A.6	Chloramphenicol, Nitrofurans Metabolites and Nitroimidazoles	Liquid Chromatography Mass Spectrometry	LC MS MS / UPLC MS MS
13.2	Group B -Antibacterial substances, Pesticides and Chemical elements.				
		Group as per Directive	Residue	Method	Equipment
		Group B.1	Tetracyclines, Quinolones and Sulphonamides	Liquid Chromatography	HPLC with PDA/Fluorescence detector
		Group B.2(a)	Anthelmintics-Ivermectin	Immuno Assay/ Liquid Chromatography	ELISA reader with Test Kits/ HPLC
		PGroup B.3(a)	Organochlorine compounds	Gas Chromatography	GC-ECD
			PCBs & DL PCBs	Gas Chromatography/ Mass Spectrometry	GC-MSMS / GC-HRMS
		Group B.3(c)	Chemical elements	Atomic Absorption/Emission Spectrophotometry	AAS/ ICP-OES
		Group B.3(d)	Mycotoxin - Aflatoxin	Liquid Chromatography	HPLC with Fluorescence Detector.
		Group B.3(e)	Dyes	Liquid Chromatography Mass Spectrometry	LC-MSMS
14.0	INFORMATION ON LEGISLATION				
	a) Vide Order No SO 792(E) dtd.17/08/2001 and SO/722(E) dated 10/07/2002, the Ministry of Commerce and Industry (M o C& I), Govt. of India, has issued two notifications (1) Fixing residual limits of antibiotics, pesticides and heavy metals relating to fresh, frozen and processed fish and fishery products and (2) Prohibiting the use of antibiotic residues like nitrofurans, chloramphenicol, and pharmacologically active substances. The above two notifications specify the limit for various antibiotics, pesticides and heavy metal residues in seafood products. b) Further, vide order SO 1227(E) dated 23rd October 2003, MoCI issued a notification prohibiting the use of unauthorized substances in the culture of, or in any hatchery for producing the juveniles or larvae or nauplii or any unit of manufacturing feed or in any unit processing shrimp, scampi or any variety of fish. MoCI Notification SO 464(E) dated 24.4.2003 regarding MRL for Dioxins in fish and fishery products. c) Min. of Health & Family Welfare (Dept. of Health) notification dt.29th September 2003 has amended the prevention of food adulteration rules (PFA Act.) and prohibited the use of the substances to ensure that the prohibited drugs are not sold by Drug Stores to manufacturers of aquaculture field or to seafood processing unit or to Aquaculture farmers or to shrimp hatchery owners. d) Vide circular No. F 15-33/2003 – DC dated. 13th Jan 04, the Drug controller of India has advised all the State Drug controllers to keep a strict check against the sale of antibiotics and pharmacologically active substances that are banned for use in seafood industry at hatchery, farm, processing plants, etc. e) Govt of India - Ministry of Health and Family Welfare, vide notification no. GSR 28(E) dated 17 Jan 2012 has specified the withdrawal period for veterinary medicines in fish meat as 500 degree days. f) Government of India - Ministry of Commerce and Industry, notification no. SO 497(E) dated 10.3.2011 (amendment to principal notification no. SO 730(E) dated 21.8.1985) under section 17 of the export (Quality Control & Inspection Act 1963) stipulates the rules for primary productions intended for export linked productions.				
15.0	Non-compliant (residue positive) samples of NRCP 2013 :				

15.1	No. of non-compliant (residue positive) samples:
	Under NRCP 2013, against the total target/plan for 3030 samples, 3021 samples were received and analyzed by the Labs. The total number of non-compliant (residue positive) samples detected was 241 under group-A and group-B substances. (234 samples for Group A-6 and 2 samples for Group B-1 antibacterial substances and 5 samples for Group B3c Chemical Elements). Details of non-compliant samples are given at Annex- 4A and B .
15.2	Steps taken by MPEDA to control residues in Aquaculture products :
	(i) All test reports/results are generated on-line (automatic transmission) on entering the analytical results by the concerned MPEDA Laboratory. Separate alert notice/ information on non-compliant samples/results are also generated on-line and received by the concerned field centers/offices immediately on posting of the test results. On receiving the alert information on non-compliant samples, the field offices conduct the investigation/inspection and also collect follow-up samples, where ever available. (ii) Apart from this, the monthly reports of NRCP-2013 are informed to Export Inspection Council of India. Monthly summary of all test results including non-compliant cases, are informed to the EIC (Competent Authority) and the Directorate General Health Service (MoH&FW, Govt. of India). (iii) The results of the non-compliant samples are informed to the regional offices of Export Inspection Agency (EIA) / EIC (Competent Authority). (iv) As was done in previous years, during the year 2013 also, the field centers of MPEDA conducted a series of awareness campaigns in the aqua farming areas of the maritime states of the country against the misuse/abuse of unauthorized drugs and chemicals. A committee constituted at Head Quarters reviewed the positive cases and follow up actions taken. Details of antibiotic campaign and farmers meet / seminars conducted by Regional and sub-regional offices of MPEDA during 2012 - 13 by the field centers are as shown below: Pamphlets (in vernacular languages) were distributed to the participants. Several meetings were held with hatchery operators also at different areas. A total of 294 awareness campaigns were conducted against the use of Antibiotics in Shrimp / Scampi farms which were attended by the aqua farmers in the coastal districts of maritime states. The extension arms of MPEDA viz; NaCSA and NETFISH working at the level of primary producers like farmers / fishermen also carried out intensive programmes aiming at complete stoppage of use of antibiotics in respective areas.

	Centers (Region/state)	No. of Antibiotic awareness campaigns (2012-13)	No. of Farmers' meet (2012-13)	
	RC Valsad (Gujarat)	15	3	
	RC Panvel (Maharashtra)	15	2	
	SRC Karwar (Karnataka)	15	3	
	RC Kochi & SRC Kannur (Kerala)	11	2	
	RC Nagapattinam (Tamil Nadu)	50	3	
	RC Vijayawada (Andhra Pradesh)	86	3	
	SRC Bhimavaram (Andhra Pradesh)	100	0	
	RC Bhubaneswar (Orissa)	40	3	
	SRC Kolkata (West Bengal)	20	2	
	TOTAL	352	21	
	 Dr. S. K. Saxena Director, (Insp. & Quality Control) Export Inspection Council of India 24th March 2014			

Note	INSTRUCTIONS	Annex 1C
1	The competent authority is requested to fill in each sheet (for the relevant commodity). Numerical data should only be included for those commodities currently being exported to the European Union (EU) or which the third country intends to export to the EU. Numerical data should be entered in those cells shaded light yellow thus:	
2	Basis of the calculation: The tables are set up to calculate the required sample numbers on the basis of Directive 96/23/EC and Commission Decision 97/747/EC. Data in cells shaded light blue are automatically calculated when the production data cell (Cell C8) is completed (see note 4 below). In the case of milk, eggs, farmed game and wild game , the minimum numbers of samples to be taken have already been entered in the blue cells and are independent of the production volumes.	
3	In order to ensure that all samples are tested and to facilitate the allocation of the balance of samples between groups (as is required for several commodities), explanations are given at the foot of each individual Excel worksheet.	
4	It is important that for those countries where animals and products from any farm are eligible to be exported to the EU, the proportion of animals sampled should be taken relative to the annual national production figures . [IN THIS CASE THE ANNUAL PRODUCTION DATA SHOULD BE ENTERED IN CELL C8]. For those countries where only a defined population of animals are eligible for export to the EU, and where there is a system in place guaranteeing that only those animals from those farms are eligible for export (i.e. a split system), it is permissible that the proportion of animals sampled is relative to that defined population. [IN THIS CASE THE EU EXPORT DATA ONLY SHOULD BE ENTERED IN CELL C8].	
5	With regard to the selection of residues to be analysed , guidance is given on this web page and is summarised in Table 2 below. The European Community considers that certain substances are 'essential' for monitoring. These are indicated in the table as 'E' and must be monitored for . Other substances are designated as 'highly desirable – HD' and the Community expects that these substances will be included in all residue monitoring plans of third countries. However, deviations concerning HD substances may be acceptable. In this case arguments based on an analysis of the risk of residues remaining in food are to be submitted by the third country. These arguments should demonstrate that, for example, because of the production conditions in that third country it is not necessary to test for the substance. When selecting individual substances in the HD groups, third countries should consider what veterinary medicines or feed additives are authorised and used legally in the country in each of the production sectors and what contamination might occur e.g. via feed and water or directly through the environment. Consideration should also be given to the possibility of illegal or unauthorised use.	
6	The reduced number of substances to be looked for in live equidae exported for direct slaughter to the EU presupposes that there is no slaughter of horses in that third country, hence the substances chosen may be looked for in body fluids (i.e. blood and urine) which can be sampled from live horses. It is stressed that if there is slaughter of horses in the third country and only live horses are exported for direct slaughter, <i>sampling should be based on the slaughtered animals</i> and take account of the wider range of substances that can be checked.	

REGULATORY PROGRAMME FOR CONTROL OF RESIDUES IN FOOD

COUNTRY		India		
YEAR OF PLAN IMPLEMENTATION				
ANIMAL SPECIES / PRODUCT		AQUACULTURE CRUSTACEANS		
NATIONAL PRODUCTION DATA - in TONNES (referring to the previous year)		274041	EU EXPORT DATA in TONNES (referring to the previous year) 63821 MT	
PRODUCTION DATA in TONNES for calculation of SAMPLE NUMBERS. (referring to previous year's production)		274041	See Instruction sheet, note 4. If a split system is in place for exports to the EU, actual export data may be entered in this cell. If there is no split system, and FARMED SHRIMP from ALL FARMS are eligible for export to the EU, national production data must be entered in this cell. For a more detailed description of the options see hyperlink	
NUMBER OF SAMPLES †		ACCORDING TO EU REQUIREMENTS		ACCORDING TO CODEX ALIMENTARIUS
MINIMUM		2740		OTHER
PLAN		3289		

GROUP OF SUBSTANCES TO BE MONITORED	NUMBER OF SAMPLES		COMPOUND or MARKER RESIDUE	MATRIX ANALYSED	SCREENING METHOD	CONFIRMATORY METHOD	SCREEN.METH. DETECTION LIMIT [µg/Kg]	CONFIR.METH. DETECTION LIMIT [µg/Kg]	LEVEL OF ACTION (i.e. concentration above which a result is deemed non-compliant) [µg/Kg]	LABORATORY
	MIN	PLAN								
A6	Chloramphenicol + Nitrofurans+ Nitroimidazoles	904	1097							
	CHLORAMPHENICOL									
	NITROFURANS									
	Nitrofurantoin metabolite									
	Furalfadone metabolite									
	Furazolidone metabolite									
Nitrofurazone metabolite										
NITROIMIDAZOLES										

A6

Sampling levels and frequencies

DATE:	2013 December 30	For official use	50.72
-------	------------------	------------------	-------

COUNTRY	India
YEAR OF PLAN IMPLEMENTATION	
ANIMAL SPECIES / PRODUCT	AQUACULTURE FIN FISH
National PRODUCTION DATA - in TONNES (referring to the previous year)	Annexe I (B)
PRODUCTION DATA in TONNES for calculation of SAMPLE NUMBERS. (referring to previous year's production / through-put)	5072
NUMBER OF SAMPLES †	ACCORDING TO EU REQUIREMENTS
MINIMUM #	51
PLAN	51

EU EXPORT DATA in TONNES (referring to the previous year)	EU: 450 MT Total: 3804 MT
--	---------------------------------

See Instruction sheet, note 4.
EU actual export data may
system, and farmed FINFISH
the EU, national production of the op
detailed description of the op

See Instruction sheet, note 4. If a split system is in place for exports to the EU, actual export data may be entered in this cell. If there is no split system, and farmed FINFISH from ALL FARMS are eligible for export to the EU, national production data must be entered in this cell. For a more detailed description of the options see hyperlink [_____](#) ↑

Sampling levels and frequencies

[illegible]

[illegible]

[illegible]

† A sample is one or more fish. The minimum number of samples to be collected each year must be at least 1 per 100 tonnes of annual production.
The following breakdown must be respected: **Group A: one third of the total samples.**

All of these samples must be taken at farm level, on fish at all stages of farming, including fish which is ready to be placed on the market for consumption.

Group B: two thirds of the total samples.

This sampling should be carried out: (a) preferably at the farm, on fish ready to be placed on the market for consumption;

(b) either at the processing plant, or at wholesale level, on fresh fish, on condition that tracing-back to the farm of origin, in the event of positive results, can be done.

In order to facilitate this breakdown and ensure that the correct number of samples are tested, the spreadsheet has made the following calculations distributing samples between each of the (sub) groups in the following way:

- Of the samples to be tested for in Groups A1, A3 and A6, one third of the total Group A samples are allocated to each of the three subgroups.

- - Of the samples to be tested for Group B, 50% of these have been allocated to Group B1, 20% to Group B2 and 30% to Group B3. It is essential that dyes are tested for.

For very small production volumes (e.g. < 500 tonnes) where the spreadsheet would calculate < 1 sample per substance group, a minimum of one sample per compound group has been assigned.

MARINE PRODUCTS EXPORT DEVELOPMENT AUTHORITY, KOCHI - 35
NRCP - 2014 - FIELD OFFICE WISE SAMPLE ALLOCATION

Parameter	SRC Bhuvanapuram to Lab Bhuvanapuram	RC Vijayawada to Lab Bhuvanapuram	RO Vizag to Lab Bhuvanapuram	RO Vizag to Lab Nellore	RC Vijayawada to Lab Nellore	RC Valsad to Lab Kochi	RO Vernal to Lab Kochi	RC Panvel to Lab Kochi	RO Mumbai to Lab Kochi	SRC Karwar to Lab Kochi	SRC Mangalore to Lab Kochi	RC Kochi to Lab Kochi	SRC Kannur to Lab Kochi	RO Kochi to Lab Kochi	SRC Kollam to Lab Kochi	RC Nagapattanam to Lab Kochi	RO Chennai to Lab Kochi	SRO Tuticorin to Lab Kochi	RC Bhubaneswar to Lab Kochi	SRO Bhubaneswar to Lab Kochi	SRC Kollata to Lab Kochi	TOTAL
CAP + NF + Nitro-Imidazoles	284	36	0	0	317	33	0	17	0	8	0	20	7	0	0	95	0	0	131	0	138	1086
Antibacterial B	137	17	155	150	167	17	16	8	9	5	4	13	4	7	3	47	13	35	64	67	69	1086
Anthelmintics	55	7	66	60	68	7	6	4	2	2	1	5	2	2	1	23	4	11	28	25	25	433
Pesticides	28	3	35	31	36	3	3	1	2	2	2	2	0	2	1	10	3	8	14	14	14	229
Chemical Elements	28	4	32	32	35	3	3	1	2	2	1	2	1	2	0	10	3	8	14	13	13	224
Mycotoxins	10	1	11	10	12	0	1	0	1	0	0	1	0	1	0	4	1	3	4	5	7	79
Dyes	15	2	16	15	18	1	2	1	1	0	1	2	1	1	0	4	1	5	9	9	8	119
Sub Total	557	70	325	298	653	64	31	32	17	19	9	45	15	15	5	193	25	70	264	133	278	3258
CAP + NF + Nitro-Imidazoles	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2	0	7	11
Antibacterial B	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	4	11
Anthelmintics	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	4
Pesticides	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	3
Chemical Elements	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2
Mycotoxins	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Dyes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Sub Total	0	0	0	0	2	0	0	1	0	0	0	0	0	0	0	1	0	0	5	1	16	33
CAP + NF + Nitro-Imidazoles	3	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Silbans	1	1	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	6
Steroids	1	1	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	6
Antibacterial B	3	1	0	0	3	1	0	2	3	0	0	1	0	1	0	0	0	0	2	0	0	17
Anthelmintics	2	0	0	0	2	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	6
Pesticides	1	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	3
Chemical Elements	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
Mycotoxins	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2
Dyes	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Sub Total	15	4	0	0	12	1	0	2	7	0	0	2	0	2	0	2	0	0	2	0	2	51
TOTAL	572	74	325	298	667	65	31	35	24	19	9	47	15	17	5	196	25	70	271	134	296	3340
FEED CAP & NF	5	0	0	0	5	2	0	1	0	0	0	2	0	0	0	3	0	0	4	0	2	24
HATCHERY CAP & NF	58	0	0	0	58	4	0	0	0	2	0	16	0	0	0	40	0	0	10	0	0	188
GRAND TOTAL (Inclusive of Feed & Hatchery)	635	74	325	298	730	71	31	36	24	21	9	65	15	17	5	239	25	70	285	134	298	3552

SAMPLES FOR ANALYSIS BY **QC LAB KOCHI** - NRCP - 2014

Sl No.	Parameter	Field Office															Total	
		RC Valsad	RO Veraval	RC Panvel	RO Mumbai	SRC Karwar	SRO Mangalore	RC Kochi	SRC Kannur	RO Kochi	SRO Kollam	RC Nagapattanam	RO Chennai	SRO Tuticorin	RC Bhubaneswar	SRC Kolkata		RO Kolkata
1	CAP, NF & Nitroimidazoles	33	0	18	0	8	0	20	7	0	0	95	0	0	133	0	0	459
2	Steroids	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	2
3	Silbines	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	2
4	Antibiotic Group B	18	16	10	12	5	4	14	4	8	3	48	13	35	67	73	72	470
5	Antelmintics	7	6	4	3	2	1	5	2	2	1	24	4	11	29	31	26	183
6	Pesticides & PCBs	3	3	1	2	2	2	3	0	3	1	10	3	8	15	15	16	101
7	Chemical Elements	3	3	1	3	2	1	2	1	2	0	11	3	8	14	14	16	97
8	Mycotoxin	0	1	0	1	0	0	1	0	1	0	4	1	3	4	5	8	36
9	Dyes	1	2	1	1	0	1	2	1	1	0	4	1	5	9	9	7	54
SUB-TOTAL		65	31	35	24	19	9	47	15	17	5	196	25	70	271	296	145	1404
Feed Hatchery		2	0	1	0	0	0	2	0	0	0	3	0	0	4	2	0	14
		4	0	0	0	2	0	16	0	0	0	40	0	0	10	0	0	72
Total (including Feed & Hatchery)		71	31	36	24	21	9	65	15	17	5	239	25	70	285	298	145	1490
																		3552

Annex. 2 B

SAMPLES FOR ANALYSIS BY **QC LAB BHIMAVARAM** - NRCP - 2014

Sl No.	Parameter	Field Office			Total
		SRC Bhimavaram	RC Vijayawada	RO Vijayawada	
1	CAP, NF & Nitroimidazoles	287	37	0	324
2	Strioids	1	1	0	2
3	Silberos	1	1	0	2
4	Antibiotic Group B	140	18	165	323
5	Anthelmintics	57	7	66	130
6	Pesticides & PCBs	29	3	35	67
7	Chemical Elements	29	4	32	65
8	Mycotoxin	11	1	11	23
9	Dyes	17	2	16	35
TOTAL		572	74	325	971
Feed Hatchery		5	0	0	5
TOTAL (including Feed & Hatchery)		635	74	325	1034

Note: Feed and Hatchery samples are analysed only for CAP & NF

SAMPLES FOR ANALYSIS BY **QC LAB NELLORE** - NRCP - 2014

Sl No.	Parameter	Field Office		Total
		RC Vijayawada	RO Vizag	
1	CAP, NF & Nitroimidazoles	320	0	320
2	Strioids	2	0	2
3	Silberos	2	0	2
4	Antibiotic Group B	171	150	321
5	Anthelmintics	70	60	130
6	Pesticides & PCBs	36	31	67
7	Chemical Elements	35	32	67
8	Mycotoxin	12	10	22
9	Dyes	19	15	34
TOTAL		667	298	965
Feed Hatchery		5	0	5
TOTAL (including Feed & Hatchery)		730	298	1028

NRCP - 2014 - ALLOCATION OF 5% SAMPLES TO EIC

Type	Paramoor	SRC Bhimavaram to Bhimavaram	RC Vijaywada to Bhimavaram	RO Viaz to Bhimavaram	RC Vijaywada to Nellore	RO Viaz to Nellore	RC Valad	RO Veral	RC Parvel	RO Mumbal	SRC Karwar	SRO Mangalore	RC Kochi	SRC Kannur	RO Kochi	SRO Kolam	RC Nagapattinam	RO Chennai	SRO Tuticorin	RC Bhubaneswar	SRO Bhubaneswar	SRC Kolkata	RO Kolkata	Total	Grand Total
CULTURED SHRIMP	NF, CAP & Nitroimidazoles	14	2	0	0	16	2	0	0	0	1	0	1	1	0	0	5	0	0	7	0	6	0	55	163
	Anti. Bact. B	7	1	8	7	8	1	1	0	1	0	0	1	0	0	0	2	1	2	3	3	4	4	54	
	Anthelmintics	3	0	3	3	3	1	0	0	0	0	0	0	0	1	0	1	0	1	1	2	1	1	21	
	Pesticides & NDL-PCBs	1	0	2	1	2	0	0	1	0	0	0	0	0	0	0	1	0	0	1	1	1	1	12	
	CE	1	0	2	2	2	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	1	11	
	Mycotoxins	1	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	
	Dyes	1	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	6	
	Sub Total	28	3	17	15	33	4	1	1	1	1	0	2	1	1	0	10	1	4	13	7	13	7	163	
	NF, CAP & Nitroimidazoles	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2
	Anti. Bact. B	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	
	Anthelmintics	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Pesticides & NDL-PCBs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	CE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Mycotoxins	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Dyes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Sub Total	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	
	NF, CAP & Nitroimidazoles	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3
	Steroids	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Stilbenes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Anti. Bact. B	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
	Anthelmintic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Pesticides	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	CE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Mycotoxins	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Dyes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Sub Total	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	
EIC (5% samples) TOTAL		31	3	17	16	34	4	1	1	1	1	0	2	1	1	0	10	1	4	13	7	15	7	168	168

MARINE PRODUCTS EXPORT DEVELOPMENT AUTHORITY, KOCHI - 35
NRCP - 2014 - STATEWISE SAMPLE ALLOCATION OF CULTURED SHRIMP

Parameter	Andhra Pradesh										Tamil Nadu				Orissa		West Bengal		TOTAL
	SRC Bhimavaram to Lab Bhimavaram	RC Vijayawada to Lab Bhimavaram	RO Vizag Lab to Nellore	RC Vijayawada to Lab Nellore	RC Valad to Lab Kochi	RO Vemvelo to Lab Kochi	RC Panvel to Lab Kochi	RC Panvel to Lab Kochi	SRC Kanwar to Lab Kochi	SRC Kanwar to Lab Kochi	RC Kochi to Lab Kochi	SRC Kanwar to Lab Kochi	RC Kochi to Lab Kochi	SRC Kanwar to Lab Kochi	RC Kochi to Lab Kochi	SRC Kanwar to Lab Kochi	RC Kochi to Lab Kochi	SRC Kanwar to Lab Kochi	
CAP + NF + Nitroimidazoles	284	36	0	0	317	33	0	17	0	8	0	20	7	0	0	0	131	0	1086
Antibacterial B	137	17	165	150	167	17	16	8	9	5	4	13	4	7	3	35	64	67	1086
Antibacterials	55	7	66	60	68	7	6	4	2	2	1	5	2	2	1	11	28	25	433
Pesticides	28	3	35	31	36	3	3	1	2	2	2	0	2	2	1	8	14	14	229
Chemical Elements	28	4	32	32	35	3	3	1	2	2	1	2	1	2	0	8	14	13	224
Mycotoxins	10	1	11	10	12	0	1	0	1	0	0	1	0	1	0	3	4	5	79
Dyes	15	2	16	15	18	1	2	1	1	0	1	2	1	1	0	5	9	8	119
Sub total	557	70	325	298	653	64	31	32	17	19	9	45	15	15	5	70	264	133	3256
STATEWISE TOTAL	1903										288				397		416		3256

Annex 3B

STATEWISE SAMPLE ALLOCATION OF CULTURED SCAMPI

Parameter	Andhra Pradesh										Tamil Nadu				Orissa		West Bengal		GRAND TOTAL
	SRC Bhimavaram to Lab Bhimavaram	RC Vijayawada to Lab Bhimavaram	RO Vizag Lab to Nellore	RC Vijayawada to Lab Nellore	RC Valad to Lab Kochi	RO Vemvelo to Lab Kochi	RC Panvel to Lab Kochi	RC Panvel to Lab Kochi	SRC Kanwar to Lab Kochi	SRC Kanwar to Lab Kochi	RC Kochi to Lab Kochi	SRC Kanwar to Lab Kochi	RC Kochi to Lab Kochi	SRC Kanwar to Lab Kochi	RC Kochi to Lab Kochi	SRC Kanwar to Lab Kochi	RC Kochi to Lab Kochi	SRC Kanwar to Lab Kochi	
CAP + NF + Nitroimidazoles	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	2	0	7	11
Antibacterial B	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1	4	11
Antibacterials	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	4
Pesticides	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	3
Chemical Elements	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2
Mycotoxins	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Dyes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Sub Total	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0	5	1	16	33
STATEWISE TOTAL	2										1				6		23		33

Annex. 3 C

MARINE PRODUCTS EXPORT DEVELOPMENT AUTHORITY, KOCHI - 36
NRCP - 2014 - STATEWISE SAMPLE ALLOCATION OF FISH

Parameter		Andhra Pradesh				Gujarat		Maharashtra		Karnataka		Kerala				Tamil Nadu			Orissa		West Bengal		TOTAL
		SRC Bhimavaram to Lab Bhimavaram	RC Vijayawada to Lab Bhimavaram	RO Vizag to Lab Bhimavaram	RO Vizag Lab to Melore	RC Valisad to Lab Kochi	RO Veraval	RC Panvel	RO Mumbai	SRC Karwar	SRO Mangalore	RC Kochi	SRC Kanur	RO Kochi	SRO Kollam	RC Nagapattinam	RO Chennai	SRO Tuticorin	RC Bhubaneswar	SRO Bhubaneswar	SRC Kolkata	RO Kolkata	
FISH	CAP + NF + Nitroimidazoles	3	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	Silbers	1	1	0	0	2	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	6	
	Stenoids	1	1	0	0	2	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	6	
	Antibacterial B	3	1	0	0	3	1	0	2	3	0	1	0	1	0	0	0	2	0	0	0	17	
	Anthelmintics	2	0	0	0	2	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	6	
	Pesticides	1	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	3	
	Chemical Elements	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2	
	Mycotoxins	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2	
	Dyes	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	
	Total	15	4	0	0	12	1	2	7	0	0	2	0	2	0	2	0	0	2	0	2	0	51
STATEWISE TOTAL		31				1		9		0		4				2			2		2		51

NRCP - 2014 - STATEWISE SAMPLE ALLOCATION OF FEED & HATCHERY SAMPLES

STATE	Andhra Pradesh				Gujarat		Maharashtra		Karnataka		Kerala				Tamil Nadu			Orissa		West Bengal		TOTAL
	SRC Bhimavaram to Lab Bhimavaram	RC Vijayawada to Lab Bhimavaram	RO Vizag Lab Bhimavaram	RC Vijayawada to Lab Nellore	RC Valad to Lab Kochi	RO Veraval	RC Panvel	RO Mumbai	SRC Kanwar	SRC Mangalore	RC Kochi	SRC Kanur	RO Kochi	SRC Kollam	RC Nagapattinam	RO Chennai	SRO Tuticorin	RC Bhuvanagar	SRO Bhuvanagar	SRC Kolkata	RO Kolkata	
FEED CAP & NF	5	0	0	0	5	2	0	1	0	0	2	0	0	0	3	0	0	4	0	2	0	24
HATCHERY CAP & NF	68	0	0	0	48	4	0	0	2	0	16	0	0	0	40	0	0	10	0	0	0	188
SUBTOTAL	73	0	0	0	53	6	0	1	2	0	18	0	0	0	43	0	0	14	0	2	0	212
STATEWISE TOTAL	126				7		0		2		18				43			14		2		212

Annex 4

MARINE PRODUCTS EXPORT DEVELOPMENT AUTHORITY, KOCHI - 36

NRCP-2013 - Non-Compliant Samples - Summary

Item/species	Substance	No. of samples			Residue substance(s)
		Target	Analysed	Non compliant	
Shrimp	Group A6	876	895	145	CAP / NF
	Group B1	937	946	1	OTC
	Group B2a Anth	370	372		
	Group B3a OCP	188	191		
	Group B3c CE	182	186	5	Arsenic
	Group B3d Myco	65	68		
	Group B3e Dyes	117	117		
Scampi	Group A6	15	10	5	NF / CAP
	Group B1	11	3		
	Group B2a Anth	6	3		
	Group B3a OCP	5	0		
	Group B3c CE	5	1		
	Group B3d Myco	1	0		
	Group B3e Dyes	1	1		
Fish	Group A1	1	1		
	Group A3	1	1		
	Group A6	18	19	2	
	Group B1	20	21	1	OTC
	Group B2a Anth	12	10		
	Group B3a OCP	1	2		
	Group B3c CE	3	3		
	Group B3d Myco	2	2		
	Group B3e Dyes	2	2		
Sub Total		2839	2854	158	

Feed	Group A6	12	12	1	CAP
Hatchery	Group A6	175	155	82	CAP / NF
TOTAL		3026	3021	241	

Page 25 of 40

B1. ANTIBACTERIAL SUBSTANCES							
GROUP OF SUBSTANCES TO BE MONITORED	COMPOUND or MARKER RESIDUE	MATRIX ANALYSED	NUMBER OF SAMPLES		NUMBER OF NON-COMPLIANT RESULTS (ABOVE LEVEL OF ACTION)	LEVEL OF ACTION (i.e. concentration above which a result is deemed non-compliant) [µg/kg]	
			PLANNED	TESTED			
Screening test	NIL	-	-	-	NA	-	
Confirmatory test	Tetracyclines with epimers	Shrimp	937	946	NIL	CCa: 104.1 (Kochi) 106.088 (Nellore) 108.88(Bhimavaram)	
		Scampi	11	3			
		Fish	20	21			
	Oxytetracycline with epimers	Shrimp	937	946	NIL	CCa: 102.8 (Kochi) 106.065 (Nellore) 107.28(Bhimavaram)	
		Scampi	11	3	NIL		
		Fish	20	21	1		
	Chlortetracycline with epimers	Shrimp	937	946	NIL	CCa: 102.6 (Kochi) 105.974 (Nellore) 107.71(Bhimavaram)	
		Scampi	11	3			
		Fish	20	21			
	Sulphadiazine	Shrimp	937	946	NIL	CCa: 103.1 (Kochi) 103.65 (Nellore) 112.36(Bhimavaram)	
		Scampi	11	3			
		Fish	20	21			
	Oxolinic Acid	Shrimp	937	946	NIL	CCa: 102.01 (Kochi) 104.205 (Nellore) 112.97(Bhimavaram)	
		Scampi	11	3			
		Fish	20	21			
	B2a. ANTHELMINTICS	Ivermectin (screening test)	Shrimp	370	372	NIL	CCB: 57.02 (Kochi) 106.545 (Nellore) 57.02 (Bhimavaram)
			Scampi	6	3		
			Fish	12	10		
B2f. (Other Pharmacologically active substances)					NIL		
B3a. ORGANOCHLORINE COMPOUNDS INCLUDING PCBs (i) Organochlorine Pesticides	Aldrin	Shrimp	188	191	NIL	ML: 200	
		Scampi	5	0			
		Fish	1	2			
	Dieldrin	Shrimp	188	191	NIL	ML: 200	
		Scampi	5	0			
		Fish	1	2			
	Chloradane	Shrimp	188	191	NIL	ML: 50	
		Scampi	5	0			
		Fish	1	2			
	DDT	Shrimp	188	191	NIL	ML: 1000	
		Scampi	5	0			
		Fish	1	2			
	Endrin	Shrimp	188	191	NIL	ML: 50	
		Scampi	5	0			
		Fish	1	2			
	Heptachlor	Shrimp	188	191	NIL	ML: 200	
		Scampi	5	0			
		Fish	1	2			
	Hexachloro Benzene	Shrimp	188	191	NIL	ML: 200	
		Scampi	5	0			
		Fish	1	2			
	Alpha HCH	Shrimp	188	191	NIL	ML: 200	
		Scampi	5	0			
		Fish	1	2			
	Beta HCH	Shrimp	188	191	NIL	ML: 100	
		Scampi	5	0			
		Fish	1	2			
	Gamma HCH	Shrimp	188	191	NIL	ML: 20	
		Scampi	5	0			
		Fish	1	2			

RESULTS OF REGULATORY PROGRAMME FOR CONTROL OF RESIDUES IN FOOD

COUNTRY	INDIA				DATE	16.01.2014
YEAR OF IMPLEMENTATION OF THE RESIDUE PLAN	2013					
ANIMAL SPECIES/PRODUCT	AQUACULTURE - CRUSTACEANS & FINFISH					

GROUP OF SUBSTANCES TO BE MONITORED	COMPOUND or MARKER RESIDUE	MATRIX ANALYSED	NUMBER OF SAMPLES		NUMBER OF NON-COMPLIANT RESULTS (ABOVE LEVEL OF ACTION)	LEVEL OF ACTION (i.e. concentration above which a result is deemed non-compliant) [µg/kg]
			PLANNED	TESTED		
B1. ANTIBACTERIAL SUBSTANCES						
Screening test	NIL	-	-	-	NA	-
Confirmatory test	Tetracyclines with epimers	Shrimp	937	946	Nil	CCa: 104.1 (Kochi) 106.088 (Nellore) 108.88(Bhimavaram)
		Scampi	11	3		
		Fish	20	21		
	Oxytetracycline with epimers	Shrimp	937	946	Nil	CCa: 102.8 (Kochi) 106.065 (Nellore) 107.28(Bhimavaram)
		Scampi	11	3	Nil	
		Fish	20	21	1	
	Chlortetracycline with epimers	Shrimp	937	946	Nil	CCa: 102.6 (Kochi) 105.974 (Nellore) 107.71(Bhimavaram)
		Scampi	11	3		
		Fish	20	21		
	Sulphadiazine	Shrimp	937	946	Nil	CCa: 103.1 (Kochi) 103.65 (Nellore) 112.36(Bhimavaram)
		Scampi	11	3		
		Fish	20	21		
	Oxolinic Acid	Shrimp	937	946	Nil	CCa: 102.01 (Kochi) 104.205 (Nellore) 112.97(Bhimavaram)
		Scampi	11	3		
		Fish	20	21		
B2a. ANTHELMINTICS	Ivermectin (screening test)	Shrimp	370	372	Nil	CCB: 57.02 (Kochi) 106.545 (Nellore) 57.02 (Bhimavaram)
		Scampi	6	3		
		Fish	12	10		
B2f. (Other Pharmacologically active substances)					NIL	
B3a. ORGANOCHLORINE COMPOUNDS INCLUDING PCBs (I) Organochlorine Pesticides	Aldrin	Shrimp	188	191	Nil	ML: 200
		Scampi	5	0		
		Fish	1	2		
	Dieldrin	Shrimp	188	191	Nil	ML: 200
		Scampi	5	0		
		Fish	1	2		
	Chloradane	Shrimp	188	191	Nil	ML: 50
		Scampi	5	0		
		Fish	1	2		
	DDT	Shrimp	188	191	Nil	ML: 1000
		Scampi	5	0		
		Fish	1	2		
	Endrin	Shrimp	188	191	Nil	ML: 50
		Scampi	5	0		
		Fish	1	2		
	Heptachlor	Shrimp	188	191	Nil	ML: 200
		Scampi	5	0		
		Fish	1	2		
	Hexachloro Benzene	Shrimp	188	191	Nil	ML: 200
		Scampi	5	0		
		Fish	1	2		
	Alpha HCH	Shrimp	188	191	Nil	ML: 200
		Scampi	5	0		
		Fish	1	2		
	Beta HCH	Shrimp	188	191	Nil	ML: 100
		Scampi	5	0		
		Fish	1	2		
	Gamma HCH	Shrimp	188	191	Nil	ML: 20
		Scampi	5	0		
		Fish	1	2		

RESULTS OF REGULATORY PROGRAMME FOR CONTROL OF RESIDUES IN FOOD

COUNTRY	INDIA
YEAR OF IMPLEMENTATION OF THE RESIDUE PLAN	2013
ANIMAL SPECIES/PRODUCT	AQUACULTURE - CRUSTACEANS & FINFISH

DATE	16.01.2014
------	------------

GROUP OF SUBSTANCES TO BE MONITORED	COMPOUND or MARKER RESIDUE	MATRIX ANALYSED	NUMBER OF SAMPLES		NUMBER OF NON-COMPLIANT RESULTS (ABOVE LEVEL OF ACTION)	LEVEL OF ACTION (i.e. concentration above which a result is deemed non-compliant) [$\mu\text{g/kg}$]
			PLANNED	TESTED		
(ii) B3a. PCBs	PCBs (6 compounds)	Shrimp	188	191	Nil	ML: 75 Sum of all
		Scampi	5	0		
		Fish	1	2		
B3c. CHEMICAL ELEMENTS	Mercury	Shrimp	182	186	Nil	ML:500
		Scampi	5	1		
		Fish	3	3		
	Cadmium	Shrimp	182	186	Nil	ML:500
		Scampi	5	1		
		Fish	3	3		
	Arsenic	Shrimp	182	186	5	ML:1000
		Scampi	5	1	Nil	
		Fish	3	3	Nil	
	Lead	Shrimp	182	186	Nil	ML:500
		Scampi	5	1		
		Fish	3	3		
B3d. MYCOTOXINS	Aflatoxin B1	Shrimp	65	68	Nil	LOQ: 0.5 (Kochi) LOD:0.25 (Bhimavaram)
		Scampi	1	0		
		Fish	2	2		
	Aflatoxin B2	Shrimp	65	68	Nil	LOQ: 0.5 (Kochi) LOD:0.25 (Bhimavaram)
		Scampi	1	0		
		Fish	2	2		
B3e. DYES	Malachite green	Shrimp	117	117	Nil	CC α : 0.33 (Kochi) 0.72 (Nellore) 0.5(Bhimavaram)
		Scampi	1	1		
		Fish	2	2		
	Leuco-malachite green	Shrimp	117	117	Nil	CC α : 0.22(Kochi) 0.20 (Nellore) 0.42 (Bhimavaram)
		Scampi	1	1		
		Fish	2	2		

1. Quality Control Laboratory, KOCHI

Sl.no.	Item / Species	Residue detected	Test result µg/kg (ppb)	Region / State	Sample ID	
SHRIMP						
1	1	<i>P monodon</i>	Arsenic	3852.68	West Bengal	09/S1/P1/0015/2013
2	2	<i>P monodon</i>	Chloramphenicol	1.7	Orissa	24/S1/P1/0060/2013
3	3	<i>P monodon</i>	Chloramphenicol	4.65	Orissa	24/S1/P1/0062/2013
4	4	<i>P monodon</i>	Chloramphenicol	0.95	Orissa	24/S1/P1/0064/2013
5	5	<i>P monodon</i>	Chloramphenicol	47.06	Orissa	24/S1/P1/0066/2013
6	6	<i>P monodon</i>	Chloramphenicol	8.57	Orissa	24/S1/P1/0067/2013
7	7	<i>P monodon</i>	Chloramphenicol	73.24	Orissa	24/S1/P1/0068/2013
8	8	<i>P monodon</i>	Chloramphenicol	7.3	Orissa	24/S1/P1/0070/2013
9	9	<i>P monodon</i>	Chloramphenicol	41.05	Orissa	24/S1/P1/0072/2013
10	10	<i>P monodon</i>	Chloramphenicol	7.77	Orissa	24/S1/P1/0073/2013
11	11	<i>P monodon</i>	Chloramphenicol	35.24	Orissa	24/S1/P1/0074/2013
12	12	<i>L.vannameli</i>	Chloramphenicol	6.34	Orissa	24/S1/Q1/0078/2013
13	13	<i>L.vannameli</i>	Chloramphenicol	35.39	Orissa	24/S1/Q1/0080/2013
14	14	<i>L.vannameli</i>	Chloramphenicol	3.76	Orissa	24/S1/Q1/0082/2013
15	15	<i>P monodon</i>	Chloramphenicol	1.52	Kerala	15/S1/P1/0011/2013
16	16	<i>P monodon</i>	Chloramphenicol	0.45	Orissa	24/S1/P1/0140/2013
17	17	<i>L.vannameli</i>	Nitrofurantoin Metabolite-SEM	0.96	Orissa	24/S1/Q1/0151/2013
18	18	<i>L.vannameli</i>	Chloramphenicol	1.54	Orissa	24/S1/Q1/0155/2013
19	19	<i>P monodon</i>	Chloramphenicol	0.59	Orissa	24/S1/P1/0166/2013
20	20	<i>P monodon</i>	Arsenic	1365.21	West Bengal	26/S1/P1/0094/2013
21	21	<i>P monodon</i>	Arsenic	2063.72	West Bengal	26/S1/P1/0095/2013
22	22	<i>P monodon</i>	Arsenic	2283.3	Orissa	10/S1/P1/0044/2013
23	23	<i>L.vannameli</i>	Chloramphenicol	0.25	Karnataka	19/S1/Q1/0020/2013
24	24	<i>P monodon</i>	Arsenic	3170	Orissa	24/S1/P1/0294/2013

SCAMPI						
25	1	<i>M rosenbergi</i>	Nitrofurantoin Metabolite-SEM	1.06	West Bengal	26/S2/P3/0009/2013
26	2	<i>M rosenbergi</i>	Chloramphenicol	0.12	Kerala	15/S2/P3/0040/2013
27	3	<i>M rosenbergi</i>	Nitrofurantoin Metabolite-SEM	1.02	Kerala	15/S2/P3/0044/2013
28	4	<i>M rosenbergi</i>	Nitrofurantoin Metabolite-SEM	1.13	Kerala	15/S2/P3/0045/2013
29	5	<i>M rosenbergi</i>	Nitrofurantoin Metabolite-SEM	2.79	Orissa	24/S2/P3/0330/2013

Sl.no.	Item / Species	Residue detected	Test result $\mu\text{g/kg}$ (ppb)	Region / State	Sample ID
--------	----------------	------------------	------------------------------------	----------------	-----------

2. Quality Control Laboratory, NELLORE

SHRIMP						
30	1	<i>L.vannamei</i>	Chloramphenicol	0.33	Andhra Pradesh	16/S1/Q1/0046/2013
31	2	<i>L.vannamei</i>	Chloramphenicol	0.24	Andhra Pradesh	16/S1/Q1/0144/2013
32	2	<i>L.vannamei</i>	Chloramphenicol	0.64	Andhra Pradesh	16/S1/Q1/0117/2013
			Nitrofurantol Metabolite- SEM	11.16		
33	4	<i>P.monodon</i>	Nitrofurantol Metabolite- SEM	8.38	Andhra Pradesh	16/S1/P1/0129/2013
34	5	<i>L.vannamei</i>	Nitrofurantol Metabolite- SEM	2.88	Andhra Pradesh	16/S1/Q1/0131/2013
35	6	<i>L.vannamei</i>	Nitrofurantol Metabolite- SEM	3.33	Andhra Pradesh	16/S1/Q1/0143/2013
35	7	<i>L.vannamei</i>	Chloramphenicol	0.37	Andhra Pradesh	16/S1/Q1/0147/2013
36	8	<i>L.vannamei</i>	Oxytetracycline	578.05	Andhra Pradesh	16/S1/Q1/0240/2013
37	9	<i>L.vannamei</i>	Chloramphenicol	1.15	Andhra Pradesh	16/S1/Q1/0354/2013
38	10	<i>L.vannamei</i>	Chloramphenicol	2.03	Andhra Pradesh	16/S1/Q1/0386/2013
39	11	<i>L.vannamei</i>	Chloramphenicol	0.26	Andhra Pradesh	16/S1/Q1/0510/2013
40	12	<i>L.vannamei</i>	Nitrofurantol Metabolite- AMOZ	1.00	Andhra Pradesh	16/S1/Q1/0638/2013
41	13	<i>L.vannamei</i>	Nitrofurantol Metabolite- AOZ	0.94	Andhra Pradesh	16/S1/Q1/0643/2013
42	14	<i>L.vannamei</i>	Nitrofurantol Metabolite- AOZ	0.96	Andhra Pradesh	16/S1/Q1/0694/2013
43	15	<i>L.vannamei</i>	Nitrofurantol Metabolite- AMOZ	1.22	Andhra Pradesh	16/S1/Q1/0698/2013
FISH						
44	1	<i>Labeo rohita</i>	Nitrofurantol Metabolite- AOZ	14.19	Andhra Pradesh	16/S3/P6/0118/2013

3. Quality Control Laboratory, BHIMAVARAM

SHRIMP						
45	1	<i>L.vannamel</i>	Chloramphenicol	5.99	Andhra Pradesh	25/S1/Q1/0005/2013
46	2	<i>L.vannamel</i>	Nitrofurantol Metabolite- SEM	3.18	Andhra Pradesh	25/S1/Q1/0009/2013
47	3	<i>L.vannamel</i>	Chloramphenicol	0.23	Andhra Pradesh	25/S1/Q1/0074/2013
48	4	<i>L.vannamel</i>	Chloramphenicol	0.43	Andhra Pradesh	25/S1/Q1/0076/2013
49	5	<i>L.vannamel</i>	Chloramphenicol	0.18	Andhra Pradesh	25/S1/Q1/0083/2013
50	6	<i>L.vannamel</i>	Chloramphenicol	0.27	Andhra Pradesh	25/S1/Q1/0084/2013

Sl.no.	Item / Species	Residue detected	Test result $\mu\text{g/kg}$ (ppb)	Region / State	Sample ID
51	7	L.vannamei	Chloramphenicol 7.04	Andhra Pradesh	25/S1/Q1/0093/2013
			Nitrofurantol Metabolite- AOZ 77.09		
52	8	L.vannamei	Chloramphenicol 0.25 $\mu\text{g/kg}$	Andhra Pradesh	25/S1/Q1/0100/2013
53	9	L.vannamei	Chloramphenicol 0.65	Andhra Pradesh	25/S1/Q1/0103/2013
54	10	L.vannamei	Chloramphenicol 0.23	Andhra Pradesh	25/S1/Q1/0105/2013
55	11	L.vannamei	Chloramphenicol 0.14	Andhra Pradesh	25/S1/Q1/0113/2013
56	12	L.vannamei	Chloramphenicol 0.42	Andhra Pradesh	25/S1/Q1/0114/2013
57	13	L.vannamei	Chloramphenicol 0.12	Andhra Pradesh	25/S1/Q1/0117/2013
58	14	L.vannamei	Chloramphenicol 0.68	Andhra Pradesh	25/S1/Q1/0129/2013
59	15	L.vannamei	Nitrofurantol Metabolite- AOZ 2.19	Andhra Pradesh	25/S1/Q1/0147/2013
60	16	L.vannamei	Nitrofurantol Metabolite- AOZ 3.83	Andhra Pradesh	25/S1/Q1/0203/2013
61	17	L.vannamei	Chloramphenicol 0.37	Andhra Pradesh	25/S1/Q1/0210/2013
62	18	L.vannamei	Chloramphenicol 0.37	Andhra Pradesh	25/S1/Q1/0223/2013
63	19	L.vannamei	Chloramphenicol 1.77	Andhra Pradesh	25/S1/Q1/0224/2013
64	20	L.vannamei	Chloramphenicol 3.92	Andhra Pradesh	25/S1/Q1/0225/2013
65	21	L.vannamei	Chloramphenicol 2.34	Andhra Pradesh	25/S1/Q1/0226/2013
66	22	L.vannamei	Chloramphenicol 0.37	Andhra Pradesh	25/S1/Q1/0228/2013
67	23	L.vannamei	Chloramphenicol 3.23	Andhra Pradesh	25/S1/Q1/0232/2013
68	24	L.vannamei	Chloramphenicol 0.87	Andhra Pradesh	25/S1/Q1/0234/2013
69	25	L.vannamei	Chloramphenicol 0.48	Andhra Pradesh	25/S1/Q1/0235/2013
70	26	L.vannamei	Chloramphenicol 0.58	Andhra Pradesh	25/S1/Q1/0237/2013
71	27	L.vannamei	Chloramphenicol 1.39	Andhra Pradesh	25/S1/Q1/0239/2013
72	28	L.vannamei	Chloramphenicol 0.85	Andhra Pradesh	25/S1/Q1/0240/2013
			Nitrofurantol Metabolite- AOZ 1.19		
73	29	L.vannamei	Chloramphenicol 0.62	Andhra Pradesh	25/S1/Q1/0241/2013
74	30	L.vannamei	Chloramphenicol 0.77	Andhra Pradesh	25/S1/Q1/0243/2013
75	31	L.vannamei	Chloramphenicol 1.55	Andhra Pradesh	25/S1/Q1/0244/2013
76	32	L.vannamei	Chloramphenicol 0.86	Andhra Pradesh	25/S1/Q1/0245/2013
77	33	L.vannamei	Chloramphenicol 4.4	Andhra Pradesh	25/S1/Q1/0246/2013
78	34	L.vannamei	Chloramphenicol 0.34	Andhra Pradesh	25/S1/Q1/0249/2013
79	35	L.vannamei	Chloramphenicol 0.51	Andhra Pradesh	25/S1/Q1/0259/2013
			Nitrofurantol Metabolite- AOZ 6.06		
80	36	L.vannamei	Chloramphenicol 2.03	Andhra Pradesh	25/S1/Q1/0265/2013
81	37	L.vannamei	Chloramphenicol 1.59	Andhra Pradesh	25/S1/Q1/0267/2013
82	38	L.vannamei	Chloramphenicol 1.54	Andhra Pradesh	25/S1/Q1/0269/2013
83	39	L.vannamei	Chloramphenicol 8.62	Andhra Pradesh	25/S1/Q1/0273/2013
84	40	L.vannamei	Chloramphenicol 1.16	Andhra Pradesh	25/S1/Q1/0274/2013
85	41	L.vannamei	Chloramphenicol 1.52	Andhra Pradesh	25/S1/Q1/0275/2013
86	42	L.vannamei	Chloramphenicol 1.03	Andhra Pradesh	25/S1/Q1/0276/2013
87	43	L.vannamei	Chloramphenicol 0.33	Andhra Pradesh	25/S1/Q1/0278/2013
88	44	L.vannamei	Chloramphenicol 4.19	Andhra Pradesh	25/S1/Q1/0283/2013
89	45	L.vannamei	Chloramphenicol 1.02	Andhra Pradesh	25/S1/Q1/0289/2013
90	46	L.vannamei	Chloramphenicol 0.43	Andhra Pradesh	25/S1/Q1/0290/2013
91	47	L.vannamei	Chloramphenicol 0.5	Andhra Pradesh	25/S1/Q1/0290/2013
92	48	L.vannamei	Chloramphenicol 2.99	Andhra Pradesh	25/S1/Q1/0306/2013

	Sl.no.	Item / Species	Residue detected	Test result µg/kg (ppb)	Region / State	Sample ID
93	49	L.vannamei	Chloramphenicol	0.67	Andhra Pradesh	25/S1/Q1/0311/2013
84	50	L.vannamei	Chloramphenicol	0.4	Andhra Pradesh	25/S1/Q1/0318/2013
95	51	L.vannamei	Chloramphenicol	0.38	Andhra Pradesh	25/S1/Q1/0335/2013
96	52	L.vannamei	Chloramphenicol	0.34	Andhra Pradesh	25/S1/Q1/0337/2013
97	53	L.vannamei	Chloramphenicol	0.18	Andhra Pradesh	25/S1/Q1/0340/2013
98	54	L.vannamei	Chloramphenicol	0.12	Andhra Pradesh	25/S1/Q1/0344/2013
99	55	L.vannamei	Chloramphenicol	0.38	Andhra Pradesh	25/S1/Q1/0346/2013
100	56	L.vannamei	Chloramphenicol	0.4	Andhra Pradesh	25/S1/Q1/0355/2013
101	57	L.vannamei	Nitrofurantol Metabolite- AOZ	3.29	Andhra Pradesh	25/S1/Q1/0390/2013
102	58	L.vannamei	Chloramphenicol	0.27	Andhra Pradesh	25/S1/Q1/0398/2013
103	59	L.vannamei	Chloramphenicol	0.25	Andhra Pradesh	25/S1/Q1/0409/2013
104	60	L.vannamei	Chloramphenicol	0.17	Andhra Pradesh	25/S1/Q1/0410/2013
105	61	L.vannamei	Chloramphenicol	0.13	Andhra Pradesh	25/S1/Q1/0411/2013
106	62	L.vannamei	Chloramphenicol	1.44	Andhra Pradesh	25/S1/Q1/0414/2013
107	63	L.vannamei	Chloramphenicol	1.01	Andhra Pradesh	25/S1/Q1/0418/2013
108	64	L.vannamei	Chloramphenicol	0.3	Andhra Pradesh	25/S1/Q1/0421/2013
109	65	L.vannamei	Chloramphenicol	7.21	Andhra Pradesh	25/S1/Q1/0426/2013
110	66	L.vannamei	Chloramphenicol	1.53	Andhra Pradesh	25/S1/Q1/0427/2013
111	67	L.vannamei	Chloramphenicol	2.47	Andhra Pradesh	25/S1/Q1/0431/2013
112	68	L.vannamei	Chloramphenicol	1.36	Andhra Pradesh	25/S1/Q1/0432/2013
113	69	L.vannamei	Chloramphenicol	3.75	Andhra Pradesh	25/S1/Q1/0436/2013
114	70	L.vannamei	Chloramphenicol	10.2	Andhra Pradesh	25/S1/Q1/0437/2013
115	71	L.vannamei	Chloramphenicol	9.49	Andhra Pradesh	25/S1/Q1/0438/2013
116	72	L.vannamei	Chloramphenicol	1.52	Andhra Pradesh	25/S1/Q1/0442/2013
117	73	L.vannamei	Chloramphenicol	1.05	Andhra Pradesh	25/S1/Q1/0444/2013
118	74	L.vannamei	Chloramphenicol	1.09	Andhra Pradesh	25/S1/Q1/0445/2013
119	75	L.vannamei	Chloramphenicol	1.45	Andhra Pradesh	16/S1/Q1/0677/2013
120	76	L.vannamei	Chloramphenicol	0.65	Andhra Pradesh	16/S1/Q1/0690/2013
121	77	L.vannamei	Chloramphenicol	2.81	Andhra Pradesh	16/S1/Q1/0691/2013
122	78	L.vannamei	Chloramphenicol	2.39	Andhra Pradesh	25/S1/Q1/0447/2013
123	79	L.vannamei	Chloramphenicol	10.1	Andhra Pradesh	25/S1/Q1/0448/2013
124	80	L.vannamei	Chloramphenicol	5.77	Andhra Pradesh	25/S1/Q1/0450/2013
125	81	L.vannamei	Chloramphenicol	0.51	Andhra Pradesh	25/S1/Q1/0462/2013
126	82	L.vannamei	Chloramphenicol	0.61	Andhra Pradesh	25/S1/Q1/0469/2013
127	83	L.vannamei	Chloramphenicol	0.86	Andhra Pradesh	25/S1/Q1/0471/2013
128	84	L.vannamei	Chloramphenicol	0.48	Andhra Pradesh	25/S1/Q1/0472/2013
129	85	L.vannamei	Nitrofurantol Metabolite- AOZ	42.46	Andhra Pradesh	25/S1/Q1/0474/2013
130	86	L.vannamei	Chloramphenicol	0.64	Andhra Pradesh	25/S1/Q1/0490/2013
131	87	L.vannamei	Chloramphenicol	1.25	Andhra Pradesh	25/S1/Q1/0492/2013
132	88	L.vannamei	Chloramphenicol	0.25	Andhra Pradesh	25/S1/Q1/0497/2013
133	89	L.vannamei	Chloramphenicol	0.49	Andhra Pradesh	25/S1/Q1/0500/2013
134	90	L.vannamei	Chloramphenicol	0.34	Andhra Pradesh	25/S1/Q1/0502/2013
135	91	L.vannamei	Chloramphenicol	0.26	Andhra Pradesh	25/S1/Q1/0507/2013
136	92	L.vannamei	Chloramphenicol	0.32	Andhra Pradesh	25/S1/Q1/0510/2013
137	93	L.vannamei	Chloramphenicol	0.15	Andhra Pradesh	25/S1/Q1/0512/2013
138	94	L.vannamei	Chloramphenicol	1.63	Andhra Pradesh	25/S1/Q1/0514/2013
139	95	L.vannamei	Chloramphenicol	0.18	Andhra Pradesh	25/S1/Q1/0515/2013
140	96	L.vannamei	Chloramphenicol	0.26	Andhra Pradesh	25/S1/Q1/0524/2013
141	97	L.vannamei	Chloramphenicol	0.63	Andhra Pradesh	25/S1/Q1/0526/2013
142	98	L.vannamei	Chloramphenicol	0.89	Andhra Pradesh	25/S1/Q1/0529/2013
143	99	L.vannamei	Chloramphenicol	0.13	Andhra Pradesh	25/S1/Q1/0532/2013
144	100	L.vannamei	Chloramphenicol	0.36	Andhra Pradesh	25/S1/Q1/0539/2013
145	101	L.vannamei	Chloramphenicol	0.12	Andhra Pradesh	25/S1/Q1/0540/2013
146	102	L.vannamei	Chloramphenicol	2.05	Andhra Pradesh	25/S1/Q1/0542/2013
147	103	L.vannamei	Chloramphenicol	6.13	Andhra Pradesh	25/S1/Q1/0543/2013
146	104	L.vannamei	Chloramphenicol	0.78	Andhra Pradesh	25/S1/Q1/0544/2013
149	105	L.vannamei	Chloramphenicol	2.56	Andhra Pradesh	25/S1/Q1/0545/2013
150	106	L.vannamei	Chloramphenicol	1.39	Andhra Pradesh	25/S1/Q1/0548/2013
151	107	L.vannamei	Chloramphenicol	0.93	Andhra Pradesh	25/S1/Q1/0549/2013
152	108	L.vannamei	Chloramphenicol	1.3	Andhra Pradesh	25/S1/Q1/0556/2013
153	109	L.vannamei	Chloramphenicol	0.35	Andhra Pradesh	25/S1/Q1/0562/2013

	Sl.no.	Item / Species	Residue detected	Test result $\mu\text{g/kg}$ (ppb)	Region / State	Sample ID
154	110	L.vannamel	Chloramphenicol	3.35	Andhra Pradesh	25/S1/Q1/0563/2013
155	111	L.vannamel	Chloramphenicol	0.87	Andhra Pradesh	25/S1/Q1/0564/2013

FISH

156	1	Fish	Chloramphenicol	17.42	Andhra Pradesh	25/S3/P0/0551/2013
157	2	Labeo rohru	Oxytetracycline	1026.86	Andhra Pradesh	16/S3/P6/0279/2013

Sl.no.	Item / Species	Residue detected	Test result $\mu\text{g/kg}$ (ppb)	Region / State	Sample ID	
SHRIMP FEED						
158	1	Feed	Chloramphenicol	21.4	Andhra Pradesh	25/S5/00/0439/2013

The Marine Products Export Development Authority,
Non-Compliant (Residue positive) Samples (cont'd.....)

Annex 4B (cont'd....)

1. Quality Control Laboratory, KOCHI

HATCHERY SAMPLES						
1	1	Shrimp seed	Nitrofurantol Metabolite- AOZ	193.57	Tamil Nadu	23/S4/01/0006/2013
2	2	Shrimp seed	Chloramphenicol	0.95	Orissa	24/S4/01/0003/2013
			Nitrofurantol Metabolite- AOZ	23.3		
3	3	Shrimp seed	Chloramphenicol	110.3	Orissa	24/S4/01/0004/2013
			Nitrofurantol Metabolite- AOZ	26.6		
4	4	Shrimp seed	Chloramphenicol	1.38	Orissa	24/S4/01/0005/2013
5	5	Shrimp seed	Chloramphenicol	2.51	Orissa	24/S4/01/0006/2013
6	6	Shrimp seed	Chloramphenicol	1.7	Tamil Nadu	23/S4/01/0012/2013
7	7	Shrimp seed	Nitrofurantol Metabolite- AOZ	63.61	Orissa	24/S4/01/0008/2013
8	8	Shrimp seed	Nitrofurantol Metabolite- AOZ	22.4	Orissa	24/S4/01/0010/2013
9	9	Shrimp seed	Nitrofurantol Metabolite- AOZ	33.08	Kerala	15/S4/01/0009/2013
10	10	Shrimp seed	Nitrofurantol Metabolite- AOZ	152.27	Kerala	15/S4/01/0010/2013
11	11	Shrimp seed	Nitrofurantol Metabolite- AOZ	1562.29	Tamil Nadu	23/S4/01/0080/2013
12	12	Shrimp seed	Nitrofurantol Metabolite- AOZ	391.72	Tamil Nadu	23/S4/01/0083/2013
13	13	Shrimp seed	Chloramphenicol	1.77	Gujarat	14/S4/01/0032/2013
			Nitrofurantol Metabolite- AOZ	56.42		
14	14	Shrimp seed	Nitrofurantol Metabolite- AOZ	1.21	Tamil Nadu	23/S4/01/0108/2013
15	15	Shrimp seed	Chloramphenicol	0.71	Tamil Nadu	23/S4/01/0109/2013 Regional Centre Thanjavur
			Nitrofurantol Metabolite- AOZ	10.83		
16	16	Shrimp seed	Chloramphenicol	1.38	Tamil Nadu	23/S4/01/0110/2013
			Nitrofurantol Metabolite- AOZ	25.66		
17	17	Shrimp seed	Chloramphenicol	7.01	Tamil Nadu	23/S4/01/0112/2013
			Nitrofurantol Metabolite- AOZ	908.68		
18	18	Shrimp seed	Chloramphenicol	0.54	Orissa	24/S4/01/0171/2013
			Nitrofurantol Metabolite- AOZ	18.49		
19	19	Shrimp seed	Chloramphenicol	11.21	Orissa	24/S4/01/0172/2013
			Nitrofurantol Metabolite- AOZ	1.55		
20	20	Shrimp seed	Nitrofurantol Metabolite- AOZ	2.3	Kerala	15/S4/01/0029/2013
21	21	Shrimp seed	Nitrofurantol Metabolite- AOZ	5.1	Tamil Nadu	23/S4/01/0158/2013
22	22	Shrimp seed	Nitrofurantol Metabolite- AOZ	1.44	Tamil Nadu	23/S4/01/0159/2013
23	23	Shrimp seed	Nitrofurantol Metabolite- AOZ	0.97	Tamil Nadu	23/S4/01/0160/2013
24	24	Shrimp seed	Nitrofurantol Metabolite- AOZ	269.58	Orissa	24/S4/01/0262/2013
25	25	Shrimp seed	Chloramphenicol	1.78	Kerala	15/S4/01/0033/2013
			Nitrofurantol Metabolite- AOZ	2.42		
26	26	Shrimp seed	Chloramphenicol	0.87	Orissa	24/S4/01/0263/2013
			Nitrofurantol Metabolite- AOZ	299.72		
27	27	Shrimp seed	Chloramphenicol	0.5	Kerala	15/S4/01/0036/2013
			Nitrofurantol Metabolite- AOZ	1.48		
28	28	Shrimp seed	Nitrofurantol Metabolite- AOZ	1.06	Kerala	15/S4/01/0042/2013
29	29	Shrimp seed	Nitrofurantol Metabolite- AOZ	26.23	Kerala	15/S4/01/0043/2013
			Nitrofurantol Metabolite- AOZ	17.87		
30	30	Shrimp seed	Nitrofurantol Metabolite- AOZ	17.48	Kerala	15/S4/01/0055/2013
			Nitrofurantol Metabolite- SEM	0.98		

Sl.no.	Item / Species	Residue detected	Test result $\mu\text{g/kg}$ (ppb)	Region / State	Sample ID
--------	----------------	------------------	------------------------------------	----------------	-----------

2. Quality Control Laboratory, NELLORE

HATCHERY SAMPLES						
31	1	Shrimp seed	CAP	0.09	Andhra Pradesh	16/S4/01/0054/2013
32	2	Shrimp seed	Chloramphenicol	0.1	Andhra Pradesh	16/S4/01/0056/2013
33	3	Shrimp seed	Nitrofurantol Metabolite- AOZ	1.77	Andhra Pradesh	16/S4/01/0093/2013
34	4	Shrimp seed	Nitrofurantol Metabolite- AOZ	1.51	Andhra Pradesh	16/S4/01/0106/2013
35	5	Shrimp seed	Chloramphenicol	1.35	Andhra Pradesh	16/S4/01/0292/2013
			Nitrofurantol Metabolite- AOZ	14.97		
36	6	Shrimp seed	Nitrofurantol Metabolite- AMOZ	1.99	Andhra Pradesh	16/S4/01/0485/2013
37	7	Shrimp seed	Nitrofurantol Metabolite- AMOZ	2.03	Andhra Pradesh	16/S4/01/0487/2013
38	8	Shrimp seed	Nitrofurantol Metabolite- AHD	1.95	Andhra Pradesh	16/S4/01/0727/2013
39	9	Shrimp seed	Chloramphenicol	0.13	Andhra Pradesh	16/S4/01/0738/2013

3. Quality Control Laboratory, BHIMAVARAM

HATCHERY SAMPLES						
40	1	Shrimp seed	Chloramphenicol -	0.13	Andhra Pradesh	25/S4/01/0036/2013
			Nitrofurran Metabolite (AOZ)	1.67		
41	2	Shrimp seed	Chloramphenicol	0.38	Andhra Pradesh	25/S4/01/0037/2013
			Nitrofurran Metabolite(AOZ)	1.66		
42	3	Shrimp seed	Nitrofurran Metabolite (AOZ)	182.3	Andhra Pradesh	25/S4/01/0038/2013
43	4	Shrimp seed	Nitrofurran Metabolite(AOZ)	44.2	Andhra Pradesh	25/S4/01/0039/2013
44	5	Shrimp seed	Chloramphenicol -	1.34	Andhra Pradesh	25/S4/01/0088/2013
			Nitrofurran Metabolite (AOZ)	59.97		
45	6	Shrimp seed	Chloramphenicol	1.15	Andhra Pradesh	25/S4/01/0090/2013
46	7	Shrimp seed	Chloramphenicol	1.9	Andhra Pradesh	25/S4/01/0091/2013
47	8	Shrimp seed	Chloramphenicol	0.95	Andhra Pradesh	25/S4/01/0092/2013
48	9	Shrimp seed	Chloramphenicol -	0.92	Andhra Pradesh	25/S4/01/0094/2013
			Nitrofurran Metabolite (AOZ)	442.93		
49	10	Shrimp seed	Chloramphenicol	4.04	Andhra Pradesh	25/S4/01/0095/2013
50	11	Shrimp seed	Chloramphenicol -	12.83	Andhra Pradesh	25/S4/01/0096/2013
			Nitrofurran Metabolite (AOZ)	189.02		
51	12	Shrimp seed	Chloramphenicol	0.7	Andhra Pradesh	25/S4/01/0098/2013
52	13	Shrimp seed	Chloramphenicol	0.54	Andhra Pradesh	25/S4/01/0118/2013
53	14	Shrimp seed	Nitrofurran Metabolite (AOZ)	4.44	Andhra Pradesh	25/S4/01/0119/2013
54	15	Shrimp seed	Chloramphenicol	0.94	Andhra Pradesh	25/S4/01/0120/2013
55	16	Shrimp seed	Chloramphenicol	0.83	Andhra Pradesh	25/S4/01/0121/2013
56	17	Shrimp seed	Chloramphenicol	0.46	Andhra Pradesh	25/S4/01/0122/2013
57	18	Shrimp seed	Chloramphenicol -	2.87	Andhra Pradesh	25/S4/01/0123/2013
			Nitrofurran Metabolite (AOZ)	1.59		
58	19	Shrimp seed	Nitrofurran Metabolite (AOZ)	20.09	Andhra Pradesh	25/S4/01/0220/2013
59	20	Shrimp seed	Nitrofurran Metabolite (AOZ)	3.15	Andhra Pradesh	25/S4/01/0221/2013
60	21	Shrimp seed	Chloramphenicol	10.71	Andhra Pradesh	25/S4/01/0222/2013 (Follow up for 25/S4/01/0090/2013)
61	22	Shrimp seed	Chloramphenicol	5.8	Andhra Pradesh	25/S4/01/0251/2013
62	23	Shrimp seed	Chloramphenicol	0.66	Andhra Pradesh	25/S4/01/0253/2013
63	24	Shrimp seed	Chloramphenicol -	0.27	Andhra Pradesh	25/S4/01/0254/2013
			Nitrofurran Metabolite (AOZ)	52.75		
64	25	Shrimp seed	Nitrofurran Metabolite (AOZ)	1.13	Andhra Pradesh	25/S4/01/0255/2013
65	26	Shrimp seed	Nitrofurran Metabolite (AOZ)	108.81	Andhra Pradesh	25/S4/01/0256/2013
66	27	Shrimp seed	Nitrofurran Metabolite (AOZ)	132.16	Andhra Pradesh	25/S4/01/0257/2013
67	28	Shrimp seed	Chloramphenicol	11.75	Andhra Pradesh	25/S4/01/0264/2013
68	29	Shrimp seed	Chloramphenicol	15	Andhra Pradesh	25/S4/01/0301/2013
69	30	Shrimp seed	Chloramphenicol	1.22	Andhra Pradesh	25/S4/01/0302/2013
70	31	Shrimp seed	Chloramphenicol	9.71	Andhra Pradesh	25/S4/01/0303/2013
71	32	Shrimp seed	Chloramphenicol	6.71	Andhra Pradesh	25/S4/01/0304/2013
72	33	Shrimp seed	Chloramphenicol	5.1	Andhra Pradesh	25/S4/01/0305/2013
73	34	Shrimp seed	Chloramphenicol	0.13	Andhra Pradesh	25/S4/01/0339/2013
74	35	Shrimp seed	Chloramphenicol	7.73	Andhra Pradesh	25/S4/01/0343/2013
75	36	Shrimp seed	Chloramphenicol	0.44	Andhra Pradesh	25/S4/01/0375/2013

Sl.no.	Item / Species	Residue detected	Test result $\mu\text{g/kg}$ (ppb)	Region / State	Sample ID
76	37	Shrimp seed	Chloramphenicol 0.26	Andhra Pradesh	25/S4/01/0403/2013
77	38	Shrimp seed	Chloramphenicol 0.94	Andhra Pradesh	25/S4/01/0404/2013
78	39	Shrimp seed	Chloramphenicol 1.51	Andhra Pradesh	25/S4/01/0405/2013
79	40	Shrimp seed	Chloramphenicol 0.49	Andhra Pradesh	25/S4/01/0413/2013
80	41	Shrimp seed	Chloramphenicol 12.15	Andhra Pradesh	25/S4/01/0505/2013
81	42	Shrimp seed	Chloramphenicol 37.9	Andhra Pradesh	25/S4/01/0538/2013
			Nitrofurantol Metabolite - AOZ 65.44		
82	43	Shrimp seed	Chloramphenicol 5.15	Andhra Pradesh	25/S4/01/0553/2013
83	43	Shrimp seed	Chloramphenicol 5.15	Andhra Pradesh	25/S4/01/0553/2013

The Marine Products Export Development Authority
(Ministry of Commerce & Industry, Govt. of India)

Kochi – 682 036

No. Lab/HO/2/2014

Date: 01st January, 2014

NRCP – Instructions to Field Offices:

1. The target given to each RC/SRC/RO/SRO is in consideration of registered site/export from their jurisdiction. The sample target for RC/SRC is fixed on the basis of district-wise registration of farms and according to the aquaculture production and the month-wise targets for the RCs/ SRCs are also based on the various stages of production. Similarly, the month-wise targets for sampling from processing plants will be in such a way that the total number of samples will tally with the target fixed for the RO/SRO.
2. The shrimp samples under NRCP should be collected by the designated residue monitoring officers (RMOs) only from farms registered by/under the Marine Products Export Development Authority (MPEDA).
3. The collection of sample shall be unforeseen, unexpected and effected at no fixed time and on no particular day of the week and the sample collection must be done as per the guidelines on sample acceptance criteria.
4. The number of samples to be collected from the processing plants under the RO/SRO will be based on the production capacity and/or actual production of each processing plant.
5. The farms reported with residue positive cases and processing plants reported with rejections/quality complaints have to be closely monitored and subjected to stringent and frequent sampling.
6. The sampling procedure/strategy shall be as per the instruction contained in Annex III to the EU Directive 96/23/EC. The sampling level for RO/SRO/RC/SRC is being communicated to you separately. However, if further clarity is required please see annex IV to the EU Directive 96/23/EC for the sampling level and frequency.
7. Sampling at farm level shall be in such a way that a minimum 10% of registered sites of production is covered in the yearly Plan, as all the registered farms in a State need to be covered over a period of time. In other words, there shall not be excess drawl of samples from one unit or farm and similarly no unit or farm will be left uncovered.
8. In case of farms situated in areas reported/suspected with presence/use of unknown chemicals/substances or indications of fraudulent activities, disease out breaks etc, more samples may be drawn.
9. Sampling levels:
 - Shrimp (black tiger) farms : 60 - 90 days & 15 days prior to harvest.
 - Scampi farms : 60-90 days, 90-120 days & 15 days prior to harvest.

- Fish farms : at any stage of production & 15 days prior to harvest.
10. When collecting samples from the farm, the details of medication within the last 4 weeks before sampling should be collected and indicated in the register as well as the packing slip that will accompany each sample.
 11. In respect of processing plants, multiple samples can be collected on the same day for analysis of different parameters provided the farms from which the Processing Plant has purchased the raw material are different.
 12. Samples must be collected in Polythene bags and properly labeled to maintain the sample integrity and traceability. The container/packing must prevent the substitution, cross contamination and degradation of sample. The container/packing must be officially sealed. The designated officers for sample collection have to be provided with official seals by the concerned field offices.
 13. In the case of on farm sampling, the farmer or his representative has to sign the original sampling report. The original sampling report has to be kept with the field office to guarantee that unauthorized persons cannot access the original report.
 14. As already in practice, the RO/SRO and RC/SRC shall maintain a register of samples collected and dispatched to the respective Laboratory. Needless to mention, in respect of RC/SRC, the column relating to "Name of Processing Plant" will be left blank. RO/SRO will note the name of the farm in respect of each sample drawn from a processing plant. This should be collected from the records of the processing plant. The RO/SRO has also to note the name of the farm as well as the identification / registration number obtained from the MPEDA.
 15. The actual drawl of samples from the processing plant should be done by the residue monitoring officer of MPEDA himself. This task should not be entrusted to any personnel of the Processing Plant.
 16. In respect of farms, while the netting may be done by the employees of the farm, the supervision of the netting and actual selection of the samples shall be done by the MPEDA officer himself and not by the farm representative. When sample is drawn from the aquaculture farm, netting should be done at least in 4 to 5 positions of the pond. Sample netting may be done in each pond at equidistant places on four sides and the centre.
 17. While collecting the hatchery samples (seed), a minimum of 20 - 25 gm (excluding water) should be drawn. The seed sample should be collected in polythene bags, sealed and transported in thermo-cole box packed with dry/wet ice.
 18. The quantity (net weight) of sample drawn shall be 500 gm in case of farm / processing plant and 20 - 25 gm in case of hatchery seed.
 19. The samples shall be forwarded to the respective MPEDA Laboratory with in 3(three) days of its collection so as to reach the laboratory with in 30(thirty) hours of dispatch.

Annex V

20. All RCs/SRCs/ROs/SROs shall ensure that the samples are collected and delivered to the QC Lab concerned before 20th of every month as per their monthly target/allocation.
21. The results of the tests communicated from the respective laboratory should be recorded in the specified columns in the register.
22. Wherever non-compliant (residue positive) results are reported, the EIAs and MPEDA RC/SRC/RO/SRO concerned may take action as per clause 11.0 of NRCP-2014.