

INDIA

NATIONAL RESIDUE CONTROL PLAN

FOR

AQUACULTURE PRODUCTS

YEAR 2024



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**NATIONAL RESIDUE CONTROL PLAN OF INDIA**  
**FOR AQUACULTURE PRODUCTS – 2024**

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**NATIONAL RESIDUE CONTROL PLAN (NRCP) OF INDIA**  
**FOR AQUACULTURE PRODUCTS – 2024**

<b>1.</b>	<p><b>Introduction</b></p> <p>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 programs are determined by the importance of the various health risks that could be incurred by consumers of products derived from animal food products.</p> <p>The Govt. of India is committed to ensure safe seafood for the domestic and overseas market. Keeping the above in view, the National Residue Control Plan (NRCP) of India for Aquaculture products has been formulated for monitoring the presence of residues of Veterinary Medicinal Products (VMPs) including antimicrobial and other veterinary/aquaculture medicinal substances like anthelmintics, growth promoters, substances like dyes, other unauthorized substances and environmental contaminants such as Plant Protectants &amp; Biocides, Organochlorine compounds including Pesticides, PCBs (Dioxins/Furans, Dioxin like PCBs &amp; Non Dioxin like PCBs) and Chemical elements (heavy metals) etc.</p>
<b>2.</b>	<p><b>Objectives of NRCP</b></p> <ul style="list-style-type: none"> <li>➤ To establish a system for monitoring the 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 and hatcheries.</li> <li>➤ To establish a system of corrective action in the event of detection of residues/contaminants higher than the prescribed limits.</li> <li>➤ To ensure that the aquaculture products exported from India meet the prescribed regulatory requirements of the importing countries / European Union (EU)/ Great Britain (GB).</li> </ul>
<b>3.</b>	<p><b>Scope of NRCP</b></p> <p>All aquaculture farms, 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, in order to ensure an overall monitoring of the aquaculture products at different stages of production to guarantee safe products from farm to table.</p>
<b>4.</b>	<p><b>Implementation of NRCP</b></p> <p>By exercising the powers under the Export (Quality Control &amp; Inspection) Act, 1963, Ministry of Commerce and Industry (Govt. of India), amending the Notification S.O. 730(E) dated 21.08.1995, vide notification No. S.O. 1034(E) dated 09.09.2003, designated the Marine Products Export Development Authority (MPEDA) to carry out the residue monitoring on behalf of Export Inspection Council (EIC), the Competent Authority.</p>
<b>5.</b>	<p><b>Aquaculture in India</b></p> <p>India is one of the largest suppliers of shrimp to the world and ranks 2<sup>nd</sup> highest in aquaculture production in the global scenario. The Country has a long coastline of 8118 km, 1.24 million hectares of brackish water area and 5.4 million hectares of fresh water area which contributes to the aquaculture (Handbook on Fisheries Statistics, 2022, Ministry of Fisheries, Animal Husbandry &amp; Dairying, Govt. of India).</p>

In India, the aquaculture constitutes mainly freshwater and brackish water culture and is practiced in the 9 maritime states / 4 union territories of India. Andhra Pradesh is the leading state of aquaculture which produces about 78.59% of the total cultured crustaceans (*Litopenaeus vannamei*, *Penaeus monodon* and *Macrobrachium rosenbergii*) in India. Species-wise aquaculture production through inland and brackish water culture is given below in Table-1.

Presently, *L. vannamei* and *P.monodon* are the main shrimp species cultured in brackish water. This forms the bulk of shrimp exports to EU/GB and other countries.

### 5.1 Brackish water / Fresh water Shrimp/Prawn culture

**Table – 1**

Name of species	Production (MT)
Shrimp ( <i>L. vannamei</i> , <i>P. monodon</i> & <i>P. indicus</i> )	11,61,163
Scampi ( <i>Macrobrachium rosenbergii</i> )	21,862
<b>Total</b>	<b>11, 84, 025</b>

Source: MPEDA, 2022 -23

### 5.2 Details of State-wise production of brackish water shrimp & freshwater prawn (Scampi) during 2022-23:

Among the maritime states, most of the aquaculture activities are concentrated in Andhra Pradesh. The other leading states in aquaculture production are West Bengal, Gujarat, Odisha and Tamil Nadu (MPEDA, 2022-23). The aquaculture production of crustaceans (shrimp & scampi) in the country is given in Table-2 below.

**Table – 2**

State	<i>L. vannamei</i> & <i>P. monodon</i>	% (production)	<i>M. rosenbergii</i> (Scampi)	% (production)	TOTAL Production (MT)
	Production(MT)		Production(MT)		
Andhra Pradesh	9,30,056	80.14	45	0.19	9,30,101
Gujarat and Daman & Diu	62,590	5.39	1,470	6.43	64,060
Karnataka & Goa	2,703	0.23	0	0.00	2,703
Kerala	1,826	0.15	0	0.00	1,826
Maharashtra	4,440	0.38	715	3.13	5,155
Odisha	48,748	4.20	1,442	6.31	50,190
Tamil Nadu	39,623	3.41	37	0.16	39,660
West Bengal	70,366	6.06	5,215	22.81	75,581
Telangana	170	0.01	13,937	60.96	14,107
<b>Total</b>	<b>11,60,522</b>		<b>22,861</b>		<b>11,83,383</b>

**5.3 Details of State-wise production of freshwater fish during 2022-23:**

Among the maritime states, most of the aquaculture activities are concentrated in Andhra Pradesh. The other leading states in aquaculture production are Tamil Nadu, West Bengal, and Maharashtra (MPEDA, 2022-23). The aquaculture production of Fishes (Seabass, Tilapia, Pangasius) in the country is given below in Table – 2.1:

**Table -2.1**

State	Fishes (Seabass, Tilapia, Pangasius)	% (Production)
	Production(MT)	
Andhra Pradesh	1,16,851	74.70
Gujarat and Daman & Diu	295	0.19
Kerala	674	0.43
Maharashtra	2,462	1.57
Odisha	346	0.22
Tamil Nadu	11,110	7.10
West Bengal	616	0.39
Telangana	24,074	15.39
<b>Total</b>	<b>1,56,428</b>	

**5.4 Enrollment of Aquaculture Farms by MPEDA:**

In order to identify the aquaculture farms producing material for export intended production, the aqua farms producing shrimps, are enrolled by MPEDA. The details of aqua farms were collected through special campaigns conducted in the farming clusters by representatives of MPEDA. The information collected is digitized into several attributes of aqua farms database. Each farm enrolled is physically verified to obtain the Geo-spatial information through capturing co-ordinates of the aqua farm with the help of GPS instrument and the centroid of the farm is created by its latitude and longitude. Other required details/information on the farms is also collected by the representative of MPEDA. Each farm enrolled is recognized by a unique identification number of 8 characters.

**5.5 Aquaculture Farms, Feed-mills & Hatcheries**

The number of aquaculture farms, hatcheries enrolled with MPEDA and the functional feed-mills manufacturing aqua feeds are as shown in Table-3 below.

**Table: 3**

<i>Number of Aquaculture Farms, Feed-mills &amp; Hatcheries enrolled/registered under MPEDA</i>			
<i>Region/State</i>	<i>Farms</i>	<i>Feed-mills (functional)</i>	<i>Shrimp Hatcheries (functional)</i>
Andhra Pradesh	51,516	21	169
Chattisgarh	0	1	0
Gujarat	1,345	2	4
Karnataka & Goa	566	0	2
Kerala	2,497	0	10
Maharashtra	431	0	0
Odisha	8,634	1	20
Tamil Nadu	2,711	4	53
West Bengal	12,891	3	2
Telangana	16	0	0
<b>Total</b>	<b>80,607</b>	<b>32</b>	<b>260</b>

5.6	<b>Export of fish and fishery products (Shrimp and Fish) by EU/GB approved export establishments:</b>
	During the year 2022-23, a total quantity of 7,11,099 MT of shrimp/products and 3,685 MT of fish/products exported by EU/GB approved establishments to EU/GB and non-EU countries.
6.0	<b>National Residue Monitoring in India</b>
	<p>There are 673 land based processing establishments in India. Of which, 433 and 474 establishments have been approved for processing of fish and fishery products to EU and GB respectively. In addition, 69 and 87 independent cold storages are also approved for storage of fish and fishery products for export to EU and GB respectively.</p> <p>Compliance with the Hazard Analysis and Critical Control Point (HACCP) system has been made mandatory for all seafood processing establishments in India.</p> <p>The residue control plan for aquaculture animal is implemented since 1998 in India, presently complying with Regulation (EU) 2017/625 of the European Parliament and of the Council of 15 March 2017 and Regulation (EU) 2022/1644 of 7 July 2022 to ensure the safety of aquaculture products exported to member states of the European Union/GB.</p> <p>National Residue Control Plan (NRCP) is prepared on a risk basis, the criteria for selecting specific combinations of substance groups is based on Annex II to Commission Delegated Regulation (EU) 2022/1644 for both group A and group B. The criteria considered for contaminants are based on Annex I to Commission Delegate Regulation (EU) 2022/931, and for pesticides, the criteria considered are outlined in Article 1 of Commission Implementing Regulation (EU) 2021/1355.</p> <p>Substances like Chloramphenicol, Nitrofurans and it's metabolites, Nitroimidazoles, Stilbenes, Steroids, Tetracyclines, Sulphonamides, Quinolones/Fluroquinolones, Anthelmintics, Organo-chlorine Pesticides, PCBs, Dioxins, Heavy Metals, Dyes, methyl Testosterone etc. are monitored under NRCP.</p>
7.0	<b>Organizations associated with the implementation of NRCP:</b>
	The Export Inspection Council (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.
7.1	<b>Registering authorities for aquaculture farms:</b>
	<p>As per provision made in notification no. S.O. 497(E) dated 10.3.2011, the approved establishments shall procure aquaculture products only from farms registered with authorities authorized / designated by the Competent Authority.</p> <p>The Coastal Aquaculture Authority (CAA) registers aquaculture farms and hatcheries in salt and brackish waters in coastal areas (i.e. within two kilometers of the high tide lines of the coast and rivers). Registration of other aquaculture farms (e.g. inland freshwater farms) fall under the responsibility of the respective State Fisheries Authorities (SFAs). The MPEDA is one of the designated authorities for the enrolment of farms supplying aquaculture products for export, as well as of hatcheries and feed mills supplying feed to exporting aquaculture farms.</p>

7.2	<p><b>The Marine Products Export Development Authority (MPEDA)</b>, a statutory body under Ministry of Commerce &amp; Industry (Govt. of India) was constituted by the Marine Products Export Development Authority Act No 13 / 1972, to promote the production and export of marine products.</p> <p>Following are the major functions of MPEDA:</p> <ol style="list-style-type: none"> <li>1. Registration of exporters, processing establishments, storage premises &amp; fishing vessels.</li> <li>2. Quality up-gradation and modernization of marine products industry.</li> <li>3. Development of infrastructure facilities.</li> <li>4. Implementation of residue monitoring/control programmes such as NRCP (as per EC Regulation 2017/625 &amp; 2022/1644), Monitoring of Pesticide Residue at National Level (MPRNL) etc.</li> <li>5. Enrolment of farms, hatcheries &amp; feed-mills intended for export linked production in order to ensure the code of practices for producing quality aquaculture products, hatchery seeds &amp; aqua feed.</li> <li>6. Promotion of export of marine products from the country to different international markets.</li> <li>7. Guidance to farmers to adopt good management practices for sustainable aquaculture.</li> </ol>
7.3	<p><b>NRCP laboratories</b></p>
	<p>The MPEDA has set up a network of 5 (five) Quality Control Laboratories at Kochi, Bhimavaram, Nellore, Bhubaneswar &amp; Porbandar, are involved in implementation of the National Residue Control Plan for aquaculture products, as per EU Regulation 2017/625 and its subsequent amendments.</p> <p>In addition to above, Export Inspection Agency-Chennai laboratory shall be utilized for testing the parameters like dioxin and furans.</p>
7.3.1	<p><b>MPEDA Quality Control Laboratory, Kochi (Cochin)</b></p>
	<p>MPEDA House – 5<sup>th</sup> Floor, Panampilly Avenue, Cochin – 682 036, Kerala, India. Tel.91-484- 2321811 / 2311033. Fax.91-484-2313361, E-mail: <a href="mailto:lab.koc@mpeda.gov.in">lab.koc@mpeda.gov.in</a></p>
7.3.2	<p><b>MPEDA Quality Control Laboratory, Bhimavaram</b></p>
	<p>27/1/6 - Pattabhi Plaza, 2nd floor, Juvalpalem Road, Bhimavaram-534 202, West Godavari Dist. Andhra Pradesh, Tel: 91-8816-226410 / 227076. E-mail: <a href="mailto:lab.bhi@mpeda.gov.in">lab.bhi@mpeda.gov.in</a></p>
7.3.3	<p><b>MPEDA Quality Control Laboratory, Nellore</b></p>
	<p>D.No.26-1766/A-1, Srinagar colony, Mini Bypass Road, Nellore- 524 003, Andhra Pradesh. Tel: 91-861- 2319144 / 2319344 E-mail: <a href="mailto:lab.nel@mpeda.gov.in">lab.nel@mpeda.gov.in</a></p>
7.3.4	<p><b>MPEDA Quality Control Laboratory, Bhubaneswar</b></p>
	<p>2<sup>nd</sup> Floor, Raptani Bhavan, Near ID Market, IRC Village, Nayapalli, Bhubaneswar-751 015, Odisha Tel: 91-674-2362365, E-mail: <a href="mailto:lab.bhu@mpeda.gov.in">lab.bhu@mpeda.gov.in</a></p>

<b>7.3.5</b>	<b>MPEDA Quality Control Laboratory, Porbandar</b>
	2 <sup>nd</sup> Floor, SHANTI Complex, 3, Wadi Plot, Opp: TACON Complex, Porbandar- 360575, Gujarat, Tel: +91 286 2210074, E-mail: <a href="mailto:lab.por@mpeda.gov.in">lab.por@mpeda.gov.in</a>
<b>7.3.6</b>	<b>Export Inspection Agency-Chennai laboratory</b>
	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: <a href="mailto:eia-chennai@eicindia.gov.in">eia-chennai@eicindia.gov.in</a>
<b>8.0</b>	<b>Level of competence of the MPEDA Laboratories and EIA-Chennai Laboratory involved in residue monitoring:</b>
	The MPEDA QC Laboratories and EIA-Chennai Laboratory are equipped with high precision sophisticated equipments like Liquid Chromatography Tandem Mass Spectrometer (LC-MS/MS), Inductively Coupled Plasma - Mass Spectrometer (ICP-MS), Atomic Absorption Spectrometer (AAS), High Performance Liquid Chromatograph (HPLC) with PDA, FLD detectors, Gas Chromatograph - Mass Spectrometer (GC-MS/MS), Automatic ELISA Analyser etc. and all necessary supporting equipment/instruments. The EIA-Chennai Laboratory is also equipped with the GC-HRMS.
<b>8.1</b>	<b>Accreditation / approvals of Laboratories:</b>
	MPEDA QC Laboratories & EIA Chennai Laboratory are accredited by accreditation body of India which is member of International Laboratory Accreditation Co-operation (ILAC), as per the ISO/IEC 17025:2017 Standard.  The scope of accreditation covers testing of fish and fishery products for chemical residues. The laboratories are also approved by the Export Inspection Council for testing of fish and fishery products intended for export.
<b>8.2</b>	<b>Proficiency Test &amp; Inter-laboratory comparisons:</b>
	MPEDA QC Laboratories & EIA Chennai Laboratory participate regularly in Proficiency Testing programmes organized by international PT providers like FAPAS, EIA PTP and other PT providers in India for compliance to ISO 17043 to prove the competency in testing of various parameters under the scope of accreditation.  The Laboratories have successfully participated in the PT programmes for analysis of Chloramphenicol, Nitrofurans metabolites, Tetracyclines, Quinolones, Sulphonamides, Beta-lactams, Chemical Elements, Organochlorine Pesticides, Dioxin like PCBs, PCBs, Anthelmintics and Dyes etc. and also regularly organize as well as participate in Inter-laboratory Testing/Comparison programmes.
<b>9.0</b>	<b>Personnel responsible for collection of samples:</b>
	The MPEDA has a number of field offices (Regional/Sub-regional Divisions) located in different maritime states 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, hatcheries and feed mills 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, Bhimavaram, Bhubaneswar and Porbandar. The sampling official, records the nature, source, the date and place of sampling and other relevant



	information.  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 action, etc.																			
<b>10.0</b>	<b>Sampling Strategy:</b>																			
	(As per Annex-I of EU Commission Regulation 2022/1646 – for Group A, Group B, Pesticides and other Contaminants)  (i) <b>Shrimps</b> ( <i>Litopenaeus vannamei</i> , <i>Penaeus monodon</i> & <i>P. indicus</i> ), <b>Scampi</b> ( <i>Macrobrachium rosenbergii</i> ) and <b>Fin-fishes</b> : one sample per 300 tonnes of annual production of aquaculture for the first 60,000 tonnes of production and then one additional sample for each additional 2,000 tonnes (for Group A&B substances)  (ii) For the group Pesticides and Contaminants: Followed risk based sampling i.e. one sample per 2,000 tonnes of production.  (iii) <b>Feed samples</b> : One sample per two registered feed-mill (50%).  (iv) <b>Hatchery sample</b> (Shrimp seed): At least one sample from each hatchery under operation.																			
<b>10.1</b>	<b>Number of Aquaculture Samples to be collected and analyzed under NRCP 2024 :</b>																			
	<b>Table 4 - Number of aquaculture samples to be collected and analysed under NRCP 2024 for Group A &amp; B Substances:</b>																			
	<table border="1"> <thead> <tr> <th>Type of sample</th> <th>Aqua-culture Production (MT) (2022-23)</th> <th>No. of samples to be analysed for Group A Substances</th> <th>No. of samples to be analysed for Group B Substances</th> <th>Criteria for sampling</th> </tr> </thead> <tbody> <tr> <td><b>1. Crustaceans</b> (i) <i>L. vannamei</i> (ii) <i>P. monodon</i> (iii) <i>P. indicus</i> &amp; (iv) <i>M. rosenbergii</i></td> <td>11,84,025</td> <td>762</td> <td>762</td> <td rowspan="2">1 sample per 300 tonnes of annual production of aquaculture for the first 60,000 tonnes of production and then 1 additional sample for each additional 2,000 tonnes.</td> </tr> <tr> <td><b>2. Freshwater Fin-fishes</b> (i) <i>P. pangasius</i> (ii) <i>O. niloticus</i> (iii) <i>L. calcarifer</i></td> <td>1,56,428</td> <td>248</td> <td>248</td> </tr> <tr> <td colspan="2" style="text-align: center;"><b>Total samples</b></td> <td><b>1010</b></td> <td><b>1010</b></td> <td></td> </tr> </tbody> </table>	Type of sample	Aqua-culture Production (MT) (2022-23)	No. of samples to be analysed for Group A Substances	No. of samples to be analysed for Group B Substances	Criteria for sampling	<b>1. Crustaceans</b> (i) <i>L. vannamei</i> (ii) <i>P. monodon</i> (iii) <i>P. indicus</i> & (iv) <i>M. rosenbergii</i>	11,84,025	762	762	1 sample per 300 tonnes of annual production of aquaculture for the first 60,000 tonnes of production and then 1 additional sample for each additional 2,000 tonnes.	<b>2. Freshwater Fin-fishes</b> (i) <i>P. pangasius</i> (ii) <i>O. niloticus</i> (iii) <i>L. calcarifer</i>	1,56,428	248	248	<b>Total samples</b>		<b>1010</b>	<b>1010</b>	
Type of sample	Aqua-culture Production (MT) (2022-23)	No. of samples to be analysed for Group A Substances	No. of samples to be analysed for Group B Substances	Criteria for sampling																
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<b>2. Freshwater Fin-fishes</b> (i) <i>P. pangasius</i> (ii) <i>O. niloticus</i> (iii) <i>L. calcarifer</i>	1,56,428	248	248																	
<b>Total samples</b>		<b>1010</b>	<b>1010</b>																	

**Table 5 - Number of aquaculture samples to be collected and analysed under NRCP 2024 for Contaminants:**

<i>Type of sample</i>	<i>Aqua-culture Production (M/T) (2022-23)</i>	<i>No. of samples to be analysed for Contaminants</i>	<i>Criteria for sampling</i>
<b>1. Crustaceans</b> (i) <i>L. vannamei</i> (ii) <i>P. monodon</i> (iii) <i>P. indicus</i> & (iv) <i>M. rosenbergii</i>	<b>11,84,025</b>	592	Risk based sampling followed - 1 sample per 2000 tonnes of production.
<b>2. Freshwater Fin-fishes</b> (i) <i>P. pangasius</i> (ii) <i>O. niloticus</i> (iii) <i>L. calcarifer</i>	<b>1,56,428</b>	134	1 sample per 700 tonnes of annual production of aquaculture for the first 60 000 tonnes of production and then 1 sample for each additional 2 000 tonnes
<b>Total samples</b>		<b>726</b>	

**Table 6 - Number of aquaculture samples to be collected and analysed under NRCP 2024 for Pesticides:**

<i>Type of sample</i>	<i>Aqua-culture Production (M/T) (2022-23)</i>	<i>No. of samples to be analysed for Pesticides</i>	<i>Criteria for sampling</i>
<b>1. Crustaceans</b> (i) <i>L. vannamei</i> (ii) <i>P. monodon</i> (iii) <i>P. indicus</i> & (iv) <i>M. rosenbergii</i>	<b>11,84,025</b>	592	Risk based sampling followed - 1 sample per 2000 tonnes of production.
<b>2. Freshwater Fin-fishes</b> (i) <i>P. pangasius</i> (ii) <i>O. niloticus</i> (iii) <i>L. calcarifer</i>	<b>1,56,428</b>	78	Risk based sampling followed - 1 sample per 2000 tonnes of production.
<b>Total samples</b>		<b>670</b>	

## 10.2 NRCP 2024 - Break up of samples for analysis of Group A substances

Table 7:

Type of Sample	A1c Steroids	A2a Chloramphenicol	A2b Nitrofurans	A2c Nitroimidazoles	A2d other A2 substances	A3a Dyes	A3b Plant protection products & biocides	A3c unauthorised antimicrobials	No. of samples for Group A Substances
Aquaculture Crustaceans	--	180	180	80	102	50	90	80	762
Aquaculture Fin-fishes	15	80	80	15	15	15	15	13	248
<b>Total</b>	<b>15</b>	<b>260</b>	<b>260</b>	<b>95</b>	<b>117</b>	<b>65</b>	<b>105</b>	<b>93</b>	<b>1010</b>

## 10.3 NRCP 2024 - Break up of samples for Analysis of Group B substances, Contaminants and Pesticides:

Table 8:

Type of Sample	Group B substances		Pesticides	Contaminants		Total
	B1a Anti microbials	B1b Anthelmintics	Organo-chlorinated compounds	PCBs	Heavy Metals (As, Pb, Hg & Cd)	
Aquaculture Crustaceans	550	212	592	118	474	1946
Aquaculture Fin-fishes	178	70	78	27	107	460
<b>Total</b>	<b>728</b>	<b>282</b>	<b>670</b>	<b>145</b>	<b>581</b>	<b>2406</b>

## 10.4 NRCP 2024 – Number of Feed Samples to be monitored: Hatchery and Feed Samples:

Table 9:

Sl no.	Item	Parameter	No. of Hatcheries / Feed-mills in operation	No. of samples to be analysed	Criteria for sampling
1	Feed	NF + CAP	32	16	Samples from 50% of registered feed mills
2	Hatchery Seed	NF + CAP	260	260	Samples from 100% of operational Hatcheries

10.5	<b>Total number of Samples proposed under NRCP 2024:</b>																													
	<p><b>Table 10:</b></p> <table border="1"> <thead> <tr> <th data-bbox="236 392 359 459"><i>Sl no.</i></th> <th data-bbox="359 392 1145 459"><i>Item / species</i></th> <th data-bbox="1145 392 1513 459"><i>No. of Samples to be tested by MPEDA Labs</i></th> </tr> </thead> <tbody> <tr> <td data-bbox="236 459 359 593" rowspan="3">1</td> <td data-bbox="359 459 1145 504">Crustaceans</td> <td data-bbox="1145 459 1513 593" rowspan="3">2708</td> </tr> <tr> <td data-bbox="359 504 1145 548">(i) Shrimp (<i>L. vannamei</i> / <i>P. monodon</i>/ <i>P. indicus</i>)</td> </tr> <tr> <td data-bbox="359 548 1145 593">(ii) Scampi (<i>M. rosenbergii</i>)</td> </tr> <tr> <td data-bbox="236 593 359 739" rowspan="4">2</td> <td data-bbox="359 593 1145 638">Fresh water Fin-fishes</td> <td data-bbox="1145 593 1513 739" rowspan="4">708</td> </tr> <tr> <td data-bbox="359 638 1145 683">(i) <i>P. pangasius</i></td> </tr> <tr> <td data-bbox="359 683 1145 728">(ii) <i>O. niloticus</i></td> </tr> <tr> <td data-bbox="359 728 1145 739">(iii) <i>L. calcarifer</i></td> </tr> <tr> <td colspan="2" data-bbox="997 739 1513 795" style="text-align: right;"><b>Sub Total</b></td> <td data-bbox="1436 739 1513 795"><b>3416</b></td> </tr> <tr> <td data-bbox="236 795 359 840">3</td> <td data-bbox="359 795 1145 840">Hatchery seed</td> <td data-bbox="1436 795 1513 840">260</td> </tr> <tr> <td data-bbox="236 840 359 884">4</td> <td data-bbox="359 840 1145 884">Feed</td> <td data-bbox="1436 840 1513 884">16</td> </tr> <tr> <td colspan="2" data-bbox="997 884 1513 918" style="text-align: right;"><b>Sub Total</b></td> <td data-bbox="1436 884 1513 918"><b>276</b></td> </tr> <tr> <td colspan="2" data-bbox="236 918 1513 952"><b>GRAND TOTAL</b></td> <td data-bbox="1436 918 1513 952"><b>3692</b></td> </tr> </tbody> </table>	<i>Sl no.</i>	<i>Item / species</i>	<i>No. of Samples to be tested by MPEDA Labs</i>	1	Crustaceans	2708	(i) Shrimp ( <i>L. vannamei</i> / <i>P. monodon</i> / <i>P. indicus</i> )	(ii) Scampi ( <i>M. rosenbergii</i> )	2	Fresh water Fin-fishes	708	(i) <i>P. pangasius</i>	(ii) <i>O. niloticus</i>	(iii) <i>L. calcarifer</i>	<b>Sub Total</b>		<b>3416</b>	3	Hatchery seed	260	4	Feed	16	<b>Sub Total</b>		<b>276</b>	<b>GRAND TOTAL</b>		<b>3692</b>
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11.0	<b>Collection and Transportation of Samples</b>																													
	<p>500gms of samples (whole prawns/fish) shall be taken from farms for analysis. In case of samples from hatchery, 20 to 25 gm of juveniles (excluding water) are collected from the larval and post-larval rearing tanks in polythene bags, officially sealed using tamper proof seal and transported in thermocol box packed with dried/ wet ice. In case of feed, 500 gms of feed samples are taken in polythene bags from farms and feed mills.</p> <p>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 with tamper proof seal and packed in thermocol 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.</p> <p>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.</p> <p>Instructions issued to the field offices of MPEDA on sample collection, packing &amp; transportation and follow-up action to be taken on residue positive samples. (Annexure-5)</p>																													
12.0	<b>Handling of Sample in the Laboratory</b>																													
	<p>Immediately on receipt, the samples are decoded and stored in deep freezer at <math>-18^{\circ}\text{C}</math> (<math>\pm 2^{\circ}\text{C}</math>). 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.</p>																													

	<p>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 (retained sample) will be tested for confirmation of the results. The samples are disposed only on completion of 90 days after analysis.</p> <p>The test reports are generated and received by the Field Offices of MPEDA &amp; EIAs electronically (online).</p>
13.0	<p><b>Alert information, communication of results &amp; measures taken in the event of infringement:</b></p>
	<ol style="list-style-type: none"> <li>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 EIA, MPEDA and CAA*.</li> <li>b) On receipt of such information EIA, MPEDA and CAA* shall undertake the joint inspection of the facility to trace the origin / source of contamination.</li> <li>c) The EIA, MPEDA and CAA officials collect follow up samples from the same premises for the further analysis at MPEDA laboratory. A joint inspection report shall be prepared &amp; be available at EIA, MPEDA and CAA*.</li> <li>d) If the sample is found positive, on repeated analysis the results shall be communicated by MPEDA to EIAs/CAA* and the defaulting facility will be issued show cause notice by EIAs/CAA*.</li> <li>e) Based on the reply received from the facility, the EIA shall take the action as deemed fit. In case of hatcheries falling under jurisdiction of CAA*, shall take actions as deemed fit as per the provisions of the CAA Act.</li> <li>f) A monthly summary of the samples drawn, tested and results (including positive and negative), shall be communicated to the Competent Authority by MPEDA.</li> <li>g) EIAs shall send the monthly report of action taken on non-compliance results to EIC. CAA* shall inform the outcome of the investigation to the EIA and MPEDA.</li> <li>h) The farms reported with non-compliant results are subjected to more stringent checks for a period of at least twelve months by EIAs.</li> <li>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.</li> </ol> <p>*In case of positive test results (non-compliant samples) from the hatcheries falling under the jurisdiction of CAA.</p>

14.0	<i>List of substances/residues and their RPA /MMPR/MRL/ML:</i>			
14.1	<b>Group A Substances</b>			
	Substance group	Substances	Substance monitored	
	A1c	Steroids	Progesterone	No limits established**
			Medroxyprogesterone (acetate)	MMPR- 1 µg/kg
			17-β Oestradiol	MMPR- 1 µg/kg
			17-alpha-methyl Testosterone	MMPR- 1 µg/kg
	A2a	Chloramphenicol	Chloramphenicol	RPA: 0.15 µg/kg
	A2b	Nitrofurans	Nitrofuran Metabolites (AOZ, AMOZ, SEM, AHD & DNSH)	RPA: 0.5 µg/kg (each metabolite)
			Nitrofurans (parent compounds, in case of feed samples)	No limits established**
	A2c	Nitroimidazoles	Nitroimidazoles (Metronidazole, Dimetridazole & Ronidazole, Iprnidazole and their hydroxyl compounds )	MMPR- 1.0 µg/kg
	A2d	other A2 substance	Dapsone	MMPR - 1 µg/kg
	A3a	Dyes	Malachite Green and Leucomalachite Green	RPA: 0.5 µg/Kg (sum)
			Crystal Violet and Leucocrystal Violet	MMPR – 0.5 µg/Kg (sum)
	A3b	Protection products & biocides	2,5-dichlorobenzoic acid methyl ester (sum of 2,5-dichlorobenzoic acid and its ester)	MRL-10 µg/kg* as per EU Regulation 396/2005
	A3c	Other unauthorised antimicrobials	Norfloxacin	No limits established**
			Nalidixic acid	No limits established**
			Cefalexin	No limits established**
		Cefapirin	No limits established**	
<p>* Limit of analytical determination  ** Working Limit (ALARA) is determined by each Lab</p>				

**Group B substances/residues:**

<i>B1a</i>	Antimicrobials	MRL	
	1. Quinolones/ Fluoro-quinolones	Oxolinic acid	100 µg/kg
		Difloxacin	300 µg/kg
		Sarafloxacin	30 µg/kg
		Enrofloxacin (sum of Enrofloxacin & Ciprofloxacin)	100 µg/kg
		Danofloxacin	100 µg/kg
		Flumequine - Fin-fish	600 µg/kg
		Flumequine - Other species	200 µg/kg
	2. Tetracyclines	Tetracycline & its 4-epimer	100 µg/kg
		Oxytetracycline & its 4-epimer	100 µg/kg
		Chlortetracycline & its 4-epimer	100 µg/kg
		Doxycycline	100 µg/kg
	3. Sulfonamides	Sulfadiazine, Sulfamethoxazole, Sulfamethoxypyridine, Sulfamethizole, Sulfamethazine, Sulfamerazine, Sulfapyridine, Sulfadimethoxine, Sulfachloropyradizine, Sulfathiazole, Sulfadoxine	100 µg/kg (MRL - sum of all Sulfonamides)
	4. Macrolides	Erythromycin A	200 µg/kg
		Tilmicosin	50 µg/kg
		Tylosin	100 µg/kg
	5. Beta Lactams	Lincomycin	100 µg/kg
		Ampicillin	50 µg/kg
		Benzyl Penicillin	50 µg/kg
		Dicloxacillin	300 µg/kg
		Oxacillin	300 µg/kg
		Cloxacilin	300 µg/kg
		Amoxicillin	50 µg/kg
	6. Polypeptides	Colistin A & B	150 µg/kg
	7. Diaminopyrimidines	Trimethoprim	50 µg/kg
	8. Aminoglycosides	Neomycin B	500 µg/kg
		Spectinomycin	300 µg/kg
	<i>B1b</i>	Anthelmintics	Emamectin
Ivermectin			No limits established**

**Pesticides:**

Pesticides	Organochlorine compounds	Substances monitored	MRL
		$\alpha$ BHC	Default MRL of 0.01 mg/kg for each compound (as per EU Regulation 396/2005)
		$\beta$ BHC	
		$\gamma$ BHC	
		Aldrin	
		2,4 DDT	
		4,4 DDT	
		2,4 DDE	
		4,4 DDE	
		2,4 DDD	
		4,4 DDD	
		Heptachlor	
		Heptachlor Epoxide	
		Dieldrin	
		Endrin	
		HCB	
		Cis-Chlordane	
		Trans-Chlordane	
		Oxy-Chlordane	

\*\* Working Limit (ALARA) is determined by each Lab

**Contaminants:**

Contaminants	Substances monitored		ML
<b>Halogenated persistent organic pollutants</b>	PCBs	PCBs ( PCB 28, PCB 52, PCB 101, PCB 138, PCB 153, PCB 180 )	0.075 mg/kg (sum of PCBs)
	Dioxins/Furans and dioxin like PCBs	Dioxins / Furans (17 compounds) & dioxin like PCBs (12 compounds)	Sum of all Dioxins (WHO-PCDD/F-TEQ) 3.5pg/g and Sum of all Dioxins & dioxin like PCBs (WHO-PCDD/F-TEQ) 6.5 pg/g
<b>Metals</b>	Chemical Elements	Mercury	0.5 mg/kg
		Cadmium (Crustaceans) -do- (Fish muscle)	0.5 mg/kg 0.05 mg/kg
		Arsenic (Fish muscle)	No ML*
		Lead (Crustaceans) -do- (Fish muscle)	0.5 mg/kg 0.3 mg/kg

\* LOD & LOQ is determined as working limit by individual laboratory



15.0	<b>DETAILS OF ANALYTICAL METHODS</b>																																							
	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.																																							
15.1	<b>Group-A Substances:</b>																																							
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Group as per Directive	Residue	Technique	Equipment																																					
A1c (Steroids)	Progesterone Medroxy Progesterone (acetate) 17-β Oestradiol 17-alpha-methyl Testosterone	Liquid Chromatography Tandem Mass Spectrometry	LC-MSMS																																					
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A3c Other un-authorized antimicrobials	Norfloxacin Nalidixic acid	Liquid Chromatography Tandem Mass Spectrometry	LC-MSMS																																					

<b>15.2 Group B Substances, Pesticides &amp; Metals</b>			
<i>Group as per Directive</i>	<i>Residue</i>	<i>Technique</i>	<i>Equipment</i>
B1a Antimicrobials 1. Quinolones/ Fluoro-quinolone	Oxolinic acid Difloxacin Sarafloxacin Enrofloxacin (sum of Enrofloxacin & Ciprofloxacin) Danofloxacin Flumequine	Liquid Chromatography Tandem Mass Spectrometry	LC- MSMS
2. Tetracyclines	Tetracycline & its 4-epimer Oxytetracycline & its 4-epimer Chlortetracycline & its 4-epimer	Liquid Chromatography Tandem Mass Spectrometry	LC- MSMS
3. Sulfonamides	Sulfadiazine, Sulfamethoxazole, Sulfamethoxypyridine, Sulfamethizole, Sulfamethazine, Sulfamerazine, Sulfapyridine, Sulfadimethoxine Sulfachloropyradizine, Sulfathiazole, Sulfadoxine	Liquid Chromatography Tandem Mass Spectrometry	LC- MSMS
4. Macrolides	Erythromycin A Tilmicosin Tylosin	Liquid Chromatography Tandem Mass Spectrometry	LC- MSMS
5. Beta Lactams	Lincomycin Ampicillin Benzyl Penicillin Dicloxacillin Oxacillin Cloxacilin Amoxicillin	Liquid Chromatography Tandem Mass Spectrometry	LC- MSMS
6. Polypeptides	Colistin A & B	Liquid Chromatography Tandem Mass Spectrometry	LC- MSMS
7. Diaminopyrimidines	Trimethoprim	Liquid Chromatography Tandem Mass Spectrometry	LC- MSMS
8. Aminoglycosides	Neomycin-B, Spectinomycin	Liquid Chromatography Tandem Mass Spectrometry	LC- MSMS
B1b Anthelmintics	Emamectin Ivermectin	Liquid Chromatography Tandem Mass Spectrometry	LC- MSMS

Pesticides Organochlorine compounds	$\alpha$ BHC, $\beta$ BHC, $\gamma$ BHC, Aldrin, 2,4 DDT, 4,4 DDT, 2,4 DDE, 4,4 DDE, 2,4 DDD, 4,4 DDD, Heptachlor, Heptachlor Epoxide Dieldrin, Endrin, HCB, Cis-Chlordane, Trans-Chlordane, Oxy-Chlordane	Gas Chromatography Tandem Mass Spectrometry	GC MSMS
Contaminants Halogenated persistent organic pollutants PCBs	PCBs (PCB-28, PCB-52, PCB-101, PCB-138, PCB-153, PCB-180)	Gas Chromatography Tandem Mass Spectrometry	GC – HRMS /GC-MSMS
	Dioxins / Furans (17 compounds) & dioxin like PCBs (12 compounds)	Gas Chromatography Tandem Mass Spectrometry	GC – HRMS /GC-MSMS
Heavy Metals: Chemical Elements	Mercury Cadmium Lead Arsenic	Inductively Coupled Plasma-Mass Spectrometry	ICP MS

**16.0 Non-compliant (residue positive) samples of NRCP 2023 :****16.1 Shrimp, Scampi & Fin-fishes:**

Under NRCP 2023, against the target/plan of 3260 samples (shrimp, scampi and fin-fishes), a total of 3346 samples were analyzed.

The number of non-compliant (residue positive) samples detected were 3 under Group-A due to residues of Chloramphenicol and Nitrofurantoin Metabolite - AOZ (shrimp: 1+ fin-fish: 2)

**16.2 Feed & Hatchery Samples:**

In case of hatchery seed and feed samples, against the target/plan of 18 feed and 260 hatchery samples, 18 feed and 249 hatchery samples were analysed. There were no non-compliant feed samples, while 16 seed samples from shrimp hatcheries were non – compliant due to the presence of residues of Group-A substances such as Chloramphenicol and Nitrofurantoin Metabolite – AOZ.

**Details of the non- compliant samples are given at Annexure- 4A, 4B & 4C**



Dr. J. S. Reddy  
Additional Director  
Export Inspection Council  
26 April, 2024

## Annex-1

Note	Instructions for completion of risk-based residue control plans for Group A and Group B substances, pesticides and contaminants
1	<p><b>Templates to be completed.</b> For each commodity for which the country is already listed in Annex -I to Regulation (EU) 2021/405, or for which residue plan approval and listing is sought, the competent authority is requested to fill in four templates for Group A substances, Group B substances, pesticides and contaminants. There are 60 (numbered) templates in this Excel file and these are listed for ease of reference in tab b. of this file along with a hyperlink which will take you straight to the template in question.</p> <p>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 (i.e. production figures - for automatic calculation of sample numbers - see note 2 below - and planned sample numbers for each substance group) should be entered in those cells shaded light yellow.</p>
2	<p><b>Sample numbers</b> (as laid down in EU legislation). The tables are set up to calculate the required sample numbers for Group A and Group B on the basis of the sampling frequencies laid down in Annex I to Commission Implementing Regulation (EU) 2022/1646 (and included in this Excel file in tab d.). For contaminants the basis for sample number calculation is Annex I to Regulation (EU) 2022/932. For pesticides, no minimum frequency of sampling is laid down in EU legislation (Regulation (EU) 2021/1355).</p> <p>Data in cells shaded light blue are automatically calculated when the production data cell (Cell \$C\$7) is completed (cell \$B\$7 for contaminants). The total minimum number of samples is displayed in cell \$C\$9 shaded blue (cell \$B\$9 for contaminants).</p>
3	<p><b>Basis of the calculation of sample numbers - annual production or split/segregated production system.</b> 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 national production data should be entered in cell \$C\$7 (or cell \$B\$7 for contaminants).</p> <p>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 or segregated system), the proportion of animals sampled is relative to that defined (sub)population. In this case the production data entered in cell \$C\$7 (or \$B\$7 for contaminants) is either the total number of animals slaughtered or the total throughput in tonnes of the EU-approved establishments (listed in the Commission's TRACES-NT database, regardless of the actual export volumes to the EU).</p>
4	<p><b>Substances to be tested for.</b> Pharmacologically active substances are divided into two main substance groups - Group A and Group B - and are listed in Annex I to Commission Delegated Regulation (EU) 2022/1644 (and included in tab c. of this Excel file for ease of reference). The substance sub-groups within Group A which must be included in the risk based plan for each commodity are laid down in Annex II to Commission Delegated Regulation (EU) 2022/1644 (and included in tab c. of this Excel file for ease of reference). For</p>

Note	Instructions for completion of risk-based residue control plans for Group A and Group B substances, pesticides and contaminants
	<p>Group B, it is left to the discretion of the competent authority to decide which of the sub-groups listed in Annex I to Regulation (EU) 2022/1644 are included in the plan on the basis of their risk-assessment. The criteria for substance selection are described in Point A of Annex II to Regulation (EU) 2022/1644 for Group A and Point B of Annex II B to said Regulation for Group B.</p> <p>For pesticides and contaminants the selection of analytes to be tested for should be on the basis of risk. The list of tested pesticides should be representative of the pesticides used in the third country. Particular attention should be paid to those pesticides which are authorised in the third country but which are not authorised in the EU.</p> <p>For contaminants, the combination of contaminant groups per commodity are specified in Annex I to Regulation (EU) 2022/931. The selection of contaminants should take into account the risks from animal feed and the environment, as well those contaminants for which maximum limits have been set in the EU for edible products of animal origin.</p>
5	<p><b>Matrices and analytical methods.</b> Matrices are typically edible tissues and materials (e.g. muscle, liver, kidney, fat, milk, honey, eggs) for substances for which an EU Maximum Residue Limit (MRL) has been established (Group B substances). This is also the case for testing for pesticides and contaminants for which EU Maximum Residue Levels (MRLs) and Maximum Levels (MLs) have been established, respectively.</p> <p>For substances which do not have MRLs (e.g. banned Group A substances) non-edible materials are preferable for testing (e.g. urine, blood, bile, faeces, hair) because testing these matrices maximises the chances of detecting the abuse or misuse of the substances concerned.</p> <p>Methods: for screening and confirmatory methods, please indicate whether they are validated (i.e. demonstrated to be fit for the intended purpose) and enter the analytical principle of method (Examples include ELISA, TLC, plate test [microbial growth inhibition test] for screening and HPLC-UV, HPLC-FL, HPLC-DAD, GC-MS, GC-MS/MS, LC-MS, LC-MS/MS for confirmation, AAS and ICP-MS for metals, GC-MS for pesticides etc).</p>
6	<p><b>Detection limits and levels of action.</b> Typically the limit of detection (LoD) of a screening test should be set at 50% of the MRL, if one is established. The LoD of the confirmatory test should always be lower than the MRL. If the confirmatory method LoD exceeds the MRL, the method is not fit for purpose. The level of action is usually the MRL (if there is an MRL) or, for a banned substance, any detectable concentration of the substance at which regulatory and enforcement action would be taken by the competent authority. The European Union Reference Laboratories have established non-binding Minimum Method Performance Requirements (MMPRs) for the detection of banned substances and third countries should strive to meet these. The latest document on MMPRs is available at: <a href="https://sitesv2.anses.fr/en/minisite/eurl-fougeres/mmpr-%E2%80%93eurl-guidance-eurl-guidance-minimum-method-performance-requirements">https://sitesv2.anses.fr/en/minisite/eurl-fougeres/mmpr-%E2%80%93eurl-guidance-eurl-guidance-minimum-method-performance-requirements</a>.</p>

Note	Instructions for completion of risk-based residue control plans for Group A and Group B substances, pesticides and contaminants
7	<p><b>EU Maximum residue limits - MRLs - (for residues of pharmacologically active substances), Maximum Residue Levels - MRLs - (for pesticides), Maximum Levels - MLs - (for contaminants) and the corresponding national MRI.s and ML.s.</b></p> <p>To expedite the assessment of the plans for Group B substances, pesticides and contaminants, competent authorities should list both their national MRL/ML for each analyte (if established) and the corresponding EU MRL/ML (if established). [This is not required for the Group A plan since there are no EU MRLs in place for those substances as they are banned from use in food-producing animals; any confirmed concentration is deemed to be non-compliant].</p> <ul style="list-style-type: none"> <li>- For pharmacologically active substances (veterinary medicines), MRLs are laid down in Table 2 of the Annex to Regulation (EU) No 37/2010.</li> <li>- For coccidiostat residues in non-target species due to carry over in feed, Regulation (EC) No 124/2009 lists the applicable MRLs.</li> <li>- EU MRLs for pesticides are laid down in Regulation (EC) No 396/2005.</li> <li>- EU MLs for contaminants are laid down in Regulation (EC) No 1881/2006.</li> </ul> <p>In cases where the national MRL/ML is much greater than the EU MRL/ML, the competent authority should inform those food business operators who are eligible to export food to the EU about those differences and advise them that any detection of a residue above the EU MRL/ML at the EU border would result in rejection of the consignment. If testing carried out under the residue control plan identifies cases where an EU MRL/ML is exceeded (but the result complies with a national MRL/ML), the competent authority should inform the operator. It is the responsibility of the operator to take the necessary steps ensure that the non-EU compliant consignment does not enter the EU food chain.</p>
8	<p>Detailed guidance on residue controls can be found on the website of the European Commission at the following hyperlink:  <a href="https://food.ec.europa.eu/document/download/a2661e60-c1cc-4b0f-98bc-ee5edcf17c9c_en">https://food.ec.europa.eu/document/download/a2661e60-c1cc-4b0f-98bc-ee5edcf17c9c_en</a></p>



Annexure IA- Substance groups A & B

1	See Annex I to Regulation (EU) 2022/1644	See Annex I to Regulation (EU) 2022/1644
Group A	Prohibited or unauthorised pharmacologically active substances in food-producing animals	Group B
1	Substances with hormonal and thyrostatic action and beta agonists the use of which is prohibited under Council Directive 96/22/EC:	Pharmacologically active substances authorised for use in food-producing animals
(a)	Stilbenes;	Pharmacologically active substances listed in Table 1 of the Annex to Regulation (EU) No 57/2010
(b)	Antithyroid agents;	ANTHRAQUINONE DERIVATIVES
(c)	Steroids;	ANTHRAQUINONE DERIVATIVES
(d)	Resorcylic acid lactones, including zeranol;	ANTHRAQUINONE DERIVATIVES
(e)	Beta-agonists.	ANTHRAQUINONE DERIVATIVES
2	Prohibited substances listed in Table 2 of the Annex to Regulation (EU) No 37/2010:	2
(a)	chloramphenicol;	Glycofloristats and histomonostats authorised according to Union legislation for which maximum levels and maximum residue limits are set under Union legislation
(b)	Nitrofurans;	
(c)	Dimetridazole, metronidazole, foudiazole and other nitroimidazole;	
(d)	Other substances;	
3	Pharmacologically active substances not listed in Table 1 of the Annex to Regulation (EU) No 57/2010 or substances not authorised for use as feed for food-producing animals in the Union according to Regulation (EU) No 1831/2003 of the European Parliament and of the Council;	
(a)	Pharmacologically active substances not listed in Table 1 of the Annex to Regulation (EU) No 57/2010 or substances not authorised for use as feed for food-producing animals in the Union according to Regulation (EU) No 1831/2003 of the European Parliament and of the Council;	
(b)	Pharmacologically active substances not listed in Table 1 of the Annex to Regulation (EU) No 57/2010 or substances not authorised for use as feed for food-producing animals in the Union according to Regulation (EU) No 1831/2003 of the European Parliament and of the Council;	
(c)	Pharmacologically active substances not listed in Table 1 of the Annex to Regulation (EU) No 57/2010 or substances not authorised for use as feed for food-producing animals in the Union according to Regulation (EU) No 1831/2003 of the European Parliament and of the Council;	
(d)	Pharmacologically active substances not listed in Table 1 of the Annex to Regulation (EU) No 57/2010 or substances not authorised for use as feed for food-producing animals in the Union according to Regulation (EU) No 1831/2003 of the European Parliament and of the Council;	
(e)	Pharmacologically active substances not listed in Table 1 of the Annex to Regulation (EU) No 57/2010 or substances not authorised for use as feed for food-producing animals in the Union according to Regulation (EU) No 1831/2003 of the European Parliament and of the Council;	
(f)	Pharmacologically active substances not listed in Table 1 of the Annex to Regulation (EU) No 57/2010 or substances not authorised for use as feed for food-producing animals in the Union according to Regulation (EU) No 1831/2003 of the European Parliament and of the Council;	
(g)	Pharmacologically active substances not listed in Table 1 of the Annex to Regulation (EU) No 57/2010 or substances not authorised for use as feed for food-producing animals in the Union according to Regulation (EU) No 1831/2003 of the European Parliament and of the Council;	
(h)	Pharmacologically active substances not listed in Table 1 of the Annex to Regulation (EU) No 57/2010 or substances not authorised for use as feed for food-producing animals in the Union according to Regulation (EU) No 1831/2003 of the European Parliament and of the Council;	
(i)	Pharmacologically active substances not listed in Table 1 of the Annex to Regulation (EU) No 57/2010 or substances not authorised for use as feed for food-producing animals in the Union according to Regulation (EU) No 1831/2003 of the European Parliament and of the Council;	
(j)	Pharmacologically active substances not listed in Table 1 of the Annex to Regulation (EU) No 57/2010 or substances not authorised for use as feed for food-producing animals in the Union according to Regulation (EU) No 1831/2003 of the European Parliament and of the Council;	
(k)	Pharmacologically active substances not listed in Table 1 of the Annex to Regulation (EU) No 57/2010 or substances not authorised for use as feed for food-producing animals in the Union according to Regulation (EU) No 1831/2003 of the European Parliament and of the Council;	
(l)	Pharmacologically active substances not listed in Table 1 of the Annex to Regulation (EU) No 57/2010 or substances not authorised for use as feed for food-producing animals in the Union according to Regulation (EU) No 1831/2003 of the European Parliament and of the Council;	
(m)	Pharmacologically active substances not listed in Table 1 of the Annex to Regulation (EU) No 57/2010 or substances not authorised for use as feed for food-producing animals in the Union according to Regulation (EU) No 1831/2003 of the European Parliament and of the Council;	
(n)	Pharmacologically active substances not listed in Table 1 of the Annex to Regulation (EU) No 57/2010 or substances not authorised for use as feed for food-producing animals in the Union according to Regulation (EU) No 1831/2003 of the European Parliament and of the Council;	
(o)	Pharmacologically active substances not listed in Table 1 of the Annex to Regulation (EU) No 57/2010 or substances not authorised for use as feed for food-producing animals in the Union according to Regulation (EU) No 1831/2003 of the European Parliament and of the Council;	

**Annexure 1 B- Group A substances to be tested**

Group A Substances (see tab c. in this Excel sheet)	Commodity Group									
	Bovine, ovine and caprine	Porcine	Equine	Poultry	Aquaculture (finfish, crustaceans and other aquaculture products)	Raw bovine, ovine and caprine milk	Hen eggs and other eggs	Rabbits and farmed game	Honey	Casings
A(1)(a)	X	X						X		
A(1)(b)	X	X	X							
A(1)(c)	X	X	X							
A(1)(d)	X	X			X <sup>(2)</sup>					
A(1)(e)	X	X	X	X						
A(2)	X	X	X	X	X	X	X	X	X	X
A(3)(a)					X					
A(3)(b)	X	X	X	X	X	X	X	X	X	
A(3)(c)	X	X	X	X	X	X	X	X	X	
A(3)(d)	X	X		X			X			
A(3)(e)										
A(3)(f)	X	X	X	X	X	X	X	X	X	
A(3)(g)										

<sup>(2)</sup> Relevant only for finfish





A2b	Nitrofurans	38	180	AOZ	Shrimps & Scampi	NA	LC-MS/MS	NA	NA	RPA=0.5	0.33; 0.512; 0.36; 0.401 & 0.13	Bhimavaram, Bhubaneswar & Porbandar MPEDA QC Laboratory, Kochi, Nellore, Bhimavaram, Bhubaneswar & Porbandar				
				AMOZ	Shrimps & Scampi	NA	LC-MS/MS	NA	NA	RPA=0.5	0.106; 0.507; 0.36; 0.405 & 0.12	MPEDA QC Laboratory, Kochi, Nellore, Bhimavaram, Bhubaneswar & Porbandar				
				AHD	Shrimps & Scampi	NA	LC-MS/MS	NA	NA	RPA=0.5	0.24; 0.506; 0.37; 0.408 & 0.12	MPEDA QC Laboratory, Kochi, Nellore, Bhimavaram, Bhubaneswar & Porbandar				
				SEM	Shrimps & Scampi	NA	LC-MS/MS	NA	NA	RPA=0.5	0.443; 0.513; 0.38; 0.401 & 0.14	MPEDA QC Laboratory, Kochi, Nellore, Bhimavaram, Bhubaneswar & Porbandar				
				DNSH	Shrimps & Scampi	NA	LC-MS/MS	NA	NA	RPA=0.5	0.26; 0.27; 0.17; 0.249 & 0.15	MPEDA QC Laboratory, Kochi, Nellore, Bhimavaram, Bhubaneswar & Porbandar				
				A2c	Nitroimidazoles	38	80	Metamidazole	Shrimps & Scampi	NA	LC-MS/MS	NA	NA	MMPR=1	0.63; 0.32; 0.96	MPEDA QC Laboratory, Kochi, Bhimavaram & Bhubaneswar.
								Metamidazole-OH	Shrimps & Scampi	NA	LC-MS/MS	NA	NA	MMPR=1	0.39; 0.33; 0.96	MPEDA QC Laboratory, Kochi, Bhimavaram & Bhubaneswar.
								Ipronidazole	Shrimps & Scampi	NA	LC-MS/MS	NA	NA	MMPR=1	0.17; 0.6	MPEDA QC Laboratory, Kochi, Bhimavaram & Bhubaneswar.
								Ipronidazole-OH	Shrimps & Scampi	NA	LC-MS/MS	NA	NA	MMPR=1	0.27; 0.32; 0.95	MPEDA QC Laboratory, Kochi, Bhimavaram & Bhubaneswar.
								Dimetronidazole	Shrimps & Scampi	NA	LC-MS/MS	NA	NA	MMPR=1	0.34; 0.31; 0.96	MPEDA QC Laboratory, Kochi, Bhimavaram & Bhubaneswar.
Ronidazole	Shrimps & Scampi	NA	LC-MS/MS					NA	NA	MMPR=1	0.39; 0.32; 0.96	MPEDA QC Laboratory, Kochi, Bhimavaram & Bhubaneswar.				





The minimum number of samples to be checked each year for all group A residues and substances must at least equal 1 sample per 300 tonnes for the first 60,000 tonnes of annual production of aquaculture crustaceans and 1 sample per additional 2000 tonnes.

- Sampling should be performed at any relevant stage in the life cycle of the animals.

- Each sub-group in Group A (with the exception of A3(f)) must be checked each year using a minimum of 5 % of the total number of samples to be collected for Group A. The competent authority should attribute the remaining samples to each sub-group according to risk, ensuring that the total sample number for all A sub-groups meets or exceeds the minimum required.

- When substances from Group A and Group B are analysed in one sample from a single group of animals, this sample can be taken into account towards the minimum sampling frequency for both groups (Group A and Group B) provided that it can be documented, and that the risk criteria for Group A and Group B are the same.

In the event that the minimum number of samples would, on the basis of the production volumes, result in less than five samples per year, sampling may be carried out once per two years.

If within a two year period, production corresponding to a minimum of one sample is not reached, a minimum of one sample once per two years shall be analysed provided that there is production for the species or product in question.

The 'unauthorised' substance groups specified above refer to substances unauthorised in the EU for use in food-producing animals.

Annexure 1D-Aquaculture finfish (Group B)

Regulatory programme for the control of veterinary drug residues in food - Group B samples

Country	INDIA	DATE	28-12-2023	Crustaceans	1184025	1184025	As per Annex I to Reg (EU) 2022/1646	As per Codex Alimentarius (CAC/GL 71-2009)	Other	Validated (Y/N)	CONFRMATORY METHOD	Validated (Y/N)	SCREEN MET (Y/N)	DETECTION LIMIT (µg/kg)	National MRL (if applicable)	EU MRL (if applicable)	concentration above which a result is deemed non-	LABORATOR Y NAME	Return to Template List	
																			Sum of all samples	Planned
Basis for number of samples	Calculated minimum number of samples for Group B (based on cell C7)	762																		
	Planned number of samples	762																		
Groups of substances to be controlled	Antimicrobials	550	Tetracyclines with its 4-epimers	Shrimps & Scampi	NA	NA	NA	NA	NA	Y	LC-MS/MS	Y	NA	25	100			VVEDA CC Laboratory, Kochi, Nellore, Bhuvanavaram, Bhuvanavaram & Porandrar		
<p>If there is a split or segregated system in place for exports to the EU, this is only possible from a number of establishments. For total annual production only, those establishments may be entered in cell C7 regardless of the proportion of that production which was exported to the EU. If there is no split system, and confirmed establishments from ALL FARMs are eligible for export to the EU, national production data must be entered in cell C7</p>																				







Sulphachloropyridazine	Shrimps & Scampi	NA	NA	LC-MS/MS	Y	NA	5	111.40 (Kochi) 106.06(Bhimavaram) 110.9 (Bhubaneswar) & 115.5 (Porbandar)	MPEDA QC Laboratory, Kochi, Nellore, Bhimavaram, Bhubaneswar & Porbandar
Sulphadoxine	Shrimps & Scampi	NA	NA	LC-MS/MS	Y	NA	5	116.2(Kochi) 105.23(Bhimavaram) 111.0 (Bhubaneswar) & 114.2 (Porbandar)	MPEDA QC Laboratory, Kochi, Nellore, Bhimavaram, Bhubaneswar & Porbandar
Sulphadimethoxine	Shrimps & Scampi	NA	NA	LC-MS/MS	Y	NA	5	115.72 (Kochi) 106.78(Bhimavaram) 110.8 (Bhubaneswar) & 112.1 (Porbandar)	MPEDA QC Laboratory, Kochi, Nellore, Bhimavaram, Bhubaneswar & Porbandar
Sulphamethoxyypyridazine	Shrimps & Scampi	NA	NA	LC-MS/MS	Y	NA	5	111.40 (Kochi) 106.06(Bhimavaram) 110.9 (Bhubaneswar) & 110.1(Porbandar)	MPEDA QC Laboratory, Kochi, Nellore, Bhimavaram, Bhubaneswar & Porbandar
Sulphamethizole	Shrimps & Scampi	NA	NA	LC-MS/MS	Y	NA	5	111.52 (Kochi) 108.68(Bhimavaram) 110.8 (Bhubaneswar) & 110.6 (Porbandar)	MPEDA QC Laboratory, Kochi, Nellore, Bhimavaram, Bhubaneswar & Porbandar
Erythromycin A	Shrimps & Scampi	NA	NA	LC-MS/MS	Y	NA	10	223	MPEDA QC Laboratory, Kochi
Colistin	Shrimps & Scampi	NA	NA	LC-MS/MS	Y	NA	10	CCo168(CollistinA) CCo164(CollistinB)	MPEDA QC Laboratory, Kochi
Cloxacillin	Shrimps & Scampi	NA	NA	LC-MS/MS	Y	NA	10	327.6	MPEDA QC Laboratory, Kochi
Dicloxacillin	Shrimps & Scampi	NA	NA	LC-MS/MS	Y	NA	10	338	MPEDA QC Laboratory, Kochi
Oxacillin	Shrimps & Scampi	NA	NA	LC-MS/MS	Y	NA	10	327.4	MPEDA QC Laboratory, Kochi
Trimethoprim	Shrimps & Scampi	NA	NA	LC-MS/MS	Y	NA	10	53.7	MPEDA QC Laboratory, Kochi
Ampicillin	Shrimps & Scampi	NA	NA	LC-MS/MS	Y	NA	10	53.8	MPEDA QC Laboratory, Kochi
Amoxicillin	Shrimps & Scampi	NA	NA	LC-MS/MS	Y	NA	10	54	MPEDA QC Laboratory, Kochi
Tylosin A	Shrimps & Scampi	NA	NA	LC-MS/MS	Y	NA	10	117.7	MPEDA QC Laboratory, Kochi
Lincromycin	Shrimps & Scampi	NA	NA	LC-MS/MS	Y	NA	10	12.9	MPEDA QC Laboratory, Kochi



The minimum number of samples to be checked each year for all kinds of residues and substances must at least equal 1 sample per 300 tonnes for the first 60,000 tonnes of annual production of aquaculture crustaceans and 1 sample per additional 2000 tonnes. This applies equally to Group A and B.

- Samples should be taken at the point of harvest.
  - Within the aquaculture group, samples shall be taken from fresh and seawater aquaculture species, taking into account their relative production volume.
  - The competent authority should attribute the samples to each sub-group according to risk, ensuring that the total sample number for all B sub-groups meets or exceeds the minimum required.
  - When substances from Group A and Group B are analysed in one sample from a single group of animals this sample can be taken into account towards the minimum sampling frequency for both groups (Group A and Group B) provided that it can be documented, and that the risk criteria for Group A and Group B are the same.
- In the event that the minimum number of samples would, on the basis of the production volumes, result in less than five samples per year, sampling may be carried out once per two years.
- If within a two year period, production corresponding to a minimum of one sample is not reached, a minimum of one sample once per two years shall be analysed provided that there is production for the species or product in question.

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Annexure 1E- Aquaculture finfish (Pesticides)

Risk-based regulatory programme for the control of pesticides in food										RETURN TO TEMPLATE LIST			
Country	INDIA	DATE	MATRIX ANALYSED	SCREENING METHOD	Validated (Y/N)	CONFIRMATORY METHOD	Validated (Y/N)	SCREEN METH. DETECTION LIMIT [µg/kg]	CONFIRM METH. DETECTION LIMIT [µg/kg]	National MRL (if applicable) [µg/kg]	EU MRL (if applicable) [µg/kg]	LEVEL OF ACTION (i.e. concentration above which a result is deemed non-compliant) [µg/kg]	LABORATORY NAME
Year of plan implementation	2024	28-12-2023											
Animal species or product	Finfish												
Planned no of samples (no. minimum)	134												
Groups of pesticides to be controlled	Planned number of SAMPLES	COMPOUND or MARKER RESIDUE	MATRIX ANALYSED	SCREENING METHOD	Validated (Y/N)	CONFIRMATORY METHOD	Validated (Y/N)	SCREEN METH. DETECTION LIMIT [µg/kg]	CONFIRM METH. DETECTION LIMIT [µg/kg]	National MRL (if applicable) [µg/kg]	EU MRL (if applicable) [µg/kg]	LEVEL OF ACTION (i.e. concentration above which a result is deemed non-compliant) [µg/kg]	LABORATORY NAME
Organochlorinated compounds	134	Alpha BHC	Finfishes	NA	NA	GC-MS/MS	Y	NA	10				MPEDA QC Laboratory, Bhimavaram / Kochi
		Beta BHC	Finfishes	NA	NA	GC MS/MS	Y	NA	10				MPEDA QC Laboratory, Bhimavaram / Kochi
		Gamma BHC	Finfishes	NA	NA	GC-MS/MS	Y	NA	10				MPEDA QC Laboratory, Bhimavaram / Kochi
		HCB	Finfishes	NA	NA	GC-MS/MS	Y	NA	10				MPEDA QC Laboratory, Bhimavaram / Kochi
		Heptachlor	Finfishes	NA	NA	GC-MS/MS	Y	NA	10				MPEDA QC Laboratory, Bhimavaram / Kochi

No MRL applicable. Default value of 10 µg/kg for each compound (as per FL Regulation 396/2005) is taken as reporting limit.

Heptachlor epoxide	Finfishes	NA	NA	NA	GC-MS/MS	Y	NA	10		MPEDA QC Laboratory, Bhimavaram / Kochi
Aldrin	Finfishes	NA	NA	NA	GC-MS/MS	Y	NA	10		MPEDA QC Laboratory, Bhimavaram / Kochi
cis-chlordane	Finfishes	NA	NA	NA	GC-MS/MS	Y	NA	10		MPEDA QC Laboratory, Bhimavaram / Kochi
trans-chlordane	Finfishes	NA	NA	NA	GC-MS/MS	Y	NA	10		MPEDA QC Laboratory, Bhimavaram / Kochi
oxy Chlordane	Finfishes	NA	NA	NA	GC-MS/MS	Y	NA	10		MPEDA QC Laboratory, Bhimavaram / Kochi
Dieldrin	Finfishes	NA	NA	NA	GC-MS/MS	Y	NA	10		MPEDA QC Laboratory, Bhimavaram / Kochi
Endrin	Finfishes	NA	NA	NA	GC-MS/MS	Y	NA	10		MPEDA QC Laboratory, Bhimavaram / Kochi
2,4'-DD'	Finfishes	NA	NA	NA	GC-MS/MS	Y	NA	10		MPEDA QC Laboratory, Bhimavaram / Kochi
4,4'DDI	Finfishes	NA	NA	NA	GC-MS/MS	Y	NA	10		MPEDA QC Laboratory, Bhimavaram / Kochi
2,4'DDE	Finfishes	NA	NA	NA	GC-MS/MS	Y	NA	10		MPEDA QC Laboratory, Bhimavaram / Kochi
4,4'DDE	Finfishes	NA	NA	NA	GC-MS/MS	Y	NA	10		MPEDA QC Laboratory, Bhimavaram / Kochi
2,4'DDD	Finfishes	NA	NA	NA	GC-MS/MS	Y	NA	10		MPEDA QC Laboratory, Bhimavaram / Kochi
4,4'DDD	Finfishes	NA	NA	NA	GC-MS/MS	Y	NA	10		MPEDA QC Laboratory, Bhimavaram / Kochi



Annexure 1F- Aquaculture finfish (Contaminants)

Risk-based regulatory programme for the control of contaminants in food		Check table	RETURN TO TEMPLATE LIST	LABORATORY NAME
Country	DATE			
INDIA	2024	12/28/2023	134	134
Year of plan implementation				
Animal species or product	Finfish			
National PRODUCTION DATA in TONNES (referring to the previous year)	156428			
PRODUCTION DATA in TONNES for calculation of SAMPLE NUMBERS, (referring to previous year's production)	156428			
Basis for number of samples	As per Annex I to Reg (EU) 2022/932			
Calculated minimum number of samples (based on cell B7)	134			
Planned number of samples	134			
Groups of contaminants to be controlled (cf. Annex I to Regulation (EU) 2022/932)				

  

GROUPS OF CONTAMINANTS TO BE CONTROLLED (cf. ANNEX I TO REGULATION (EU) 2022/932)	PLANNED NUMBER OF SAMPLES	COMPOUND OR MARKER RESIDUE	MATRIX ANALYSED	SCREENING METHOD	Validated (Y/N)	CONFIRMATORY METHOD	Validated (Y/N)	SCREENING METHOD	TH	CONFIRMATORY METHOD	TH	DETECTION LIMIT	National MRL (if applicable)	EU MRL (if applicable)	LEVEL OF PROTECTION ABOVE	LABORATORY NAME
If there is a sampling and/or residue system in place for exports to the EU, this is only possible from a restricted number of establishments. This total annual production of only those establishments may be entered in cell B7, regardless of the proportion of total production that is exported to the EU. If there is no such system implemented in the country, the program from which samples are taken should be identified. If the national product or data must be entered in cell B7, this should be entered in cell B7.																





PCB 123	Finfishes	NA	NA	GC-MS/MS	Y	NA	0.00017	PCRs (WHO-PCDD/F-TEQ) 6.5 pg/g	like PCBs (WHO-PCDD/F-TEQ) 6.5 pg/g
PCB 118	Finfishes	NA	NA	GC-MS/MS	Y	NA	0.00016		
PCB 114	Finfishes	NA	NA	GC-MS/MS	Y	NA	0.00017		
PCB 105	Finfishes	NA	NA	GC-MS/MS	Y	NA	0.00017		
PCB 167	Finfishes	NA	NA	GC-MS/MS	Y	NA	0.00017		
PCB 156	Finfishes	NA	NA	GC-MS/MS	Y	NA	0.00017		
PCB 157	Finfishes	NA	NA	GC-MS/MS	Y	NA	0.00018		
PCB 189	Finfishes	NA	NA	GC-MS/MS	Y	NA	0.00017		
Metals	Cadmium	NA	NA	ICP-MS	Y	NA	2	50	MPEDA QC Laboratory, Kochi & Poriyandur
	Mercury	NA	NA	ICP-MS	Y	NA	33	500	MPEDA QC Laboratory, Kochi & Poriyandur
	Lead	NA	NA	ICP-MS	Y	NA	27	300	MPEDA QC Laboratory, Kochi & Poriyandur
	Arsenic	NA	NA	ICP-MS	Y	NA	NA	No MRL	MPEDA QC Laboratory, Kochi & Poriyandur
Others									

The minimum number of samples of unprocessed aquaculture fishery products (excluding crustaceans) to be checked each year for contaminants is 1 sample per 700 tonnes of annual production of aquaculture for the first 60 000 tonnes of production and then 1 sample for each additional 2 000 tonnes (cf Annex I to Regulation (EU) 2022/932). Unprocessed muscle should be sampled. Third countries should decide on a risk basis what substances they test for in each substance group and should be in a position to justify their decisions to include and exclude substances, the range of substances included in each substance group and the number of samples tested. There is no minimum number of samples required for any substance group.

Annexure 1G- Aquaculture crustaceans (Group A)

Regulatory programme for the control of <u>veterinary drug residues</u> in food - Group A samples												RETURN TO TEMPLATE LIST		
Country	INDIA	DATE	12/28/2023	Crustaceans	1184025	1017012	1184025	As per Annex 1g Req (EU) 2022/1848	OTHER	As per Codex Alimentarius (CAC/GL 71-2009)	762	762	Sum of all samples	762
														Planned number
Year of plan implementation	2024												762	762
Animal species or product	Crustaceans													
National PRODUCTION DATA in TONNES (referring to the previous year)	1184025													
PRODUCTION DATA in TONNES for calculation of SAMPLE NUMBERS. (referring to previous year's production)	1184025													
Basis for number of samples	As per Annex 1g Req (EU) 2022/1848													
Calculated minimum no. of samples for Group A. (based on cell C7)	762													
Planned number of samples	762													
Groups of substances to be controlled	NUMBER OF SAMPLES		COMPOUND or MARKER RESIDUE	MATRIX ANALYSED	SCREENING METHOD	CONFIRMATORY METHOD	SCREEN.METH. DETECTION LIMIT (µg/kg)	CONFIRM.METH. DETECTION LIMIT (µg/kg)	LEVEL OF ACTION (i.e. concentration above which a result is deemed non-compliant) (µg/kg)	LABORATORY NAME	762	762	Sum of all samples	762
	MIN	PLAN												
A2a Chloramphenicol	38	180	Chloramphenicol	Shrimps & Scampi	NA	LC-MS/MS	NA	RPA=0.15	0.06; 0.13; 0.07; 0.1 & 0.06	MPEDA QC Laboratory, Kochi, Nellore, Bhimavaram, Bhuvanesarwar & Porbandar	762	762	762	762
A2b Nitrofurans	35	180	AOZ AMOZ	Shrimps & Scampi Shrimps & Scampi	NA NA	LC-MS/MS LC-MS/MS	NA NA	RPA=0.5 RPA=0.5	0.333; 0.512; 0.36; 0.401 & 0.13	MPEDA QC Laboratory, Kochi, Nellore, Bhimavaram, Bhuvanesarwar & Porbandar	762	762	762	762
<p><b>NOTE:</b> If there is a split or segregated system in place for exports to the EU, the consignments only possible from a number of establishments, the total annual production of only those establishments may be entered in cell C7 regardless of the proportion of that production which was exported to the EU. If there is no split system and all named crustaceans from AEP FARMS are eligible for export to the EU, national production data must be entered in cell C7.</p>														





A3f	Unauthorised anti-inflammatory, sedatives, and other pharmacologically active substances																		
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The minimum number of samples to be checked each year for all group A residues and substances must at least equal 1 sample per 300 tonnes for the first 60,000 tonnes of annual production of aquaculture crustaceans and 1 sample per additional 2000 tonnes.

- Sampling should be performed at any relevant stage in the life cycle of the animals.
- **Each sub-group** in Group A (with the exception of A3(f)) must be checked each year using a minimum of 5 % of the total **number of samples** to be collected for Group A. The competent authority should attribute the remaining samples to each sub-group according to risk, ensuring that the total sample number for all A sub-groups meets or exceeds the minimum required.
- When substances from Group A and Group B are analysed in one sample from a single group of animals, this sample can be taken into account towards the minimum sampling frequency for **both groups** (Group A and Group B) provided that it can be documented, and that the risk criteria for Group A and Group B are the same.

In the event that the minimum number of samples would, on the basis of the production volumes, result in less than five samples per year, sampling may be carried out once per two years.

If within a two year period, production corresponding to a minimum of one sample is not reached, a minimum of one sample once per two years shall be analysed provided that there is production for the species or product in question.

The 'unauthorised' substance groups specified above refer to substances unauthorised in the EU for use in food-producing animals.

Annexure 1H- Aquaculture crustaceans (Group B)

Regulatory programme for the control of veterinary drug residues in food - Group B samples				RETURN TO TEMPLATE LIST												
Country	INDIA	DATE	The total number of samples taken should at least be equal to the minimum number of samples for Group B in total (in Cell C9)													
Year of plan implementation	2024	12/28/2023	Sum of all samples	762												
Animal species or product	Crustaceans		Planned number	762												
National PRODUCTION DATA in TONNES (referring to the previous year)	1184025		Minimum no reqd	762												
<b>PRODUCTION DATA in IONNES for calculation of SAMPLE NUMBERS.</b> (referring to previous year's production)	1184025		<p><b>if there is a split or segregated system</b> in place for exports to the EU (i.e. this is only possible from a number of establishments, the total annual production of only those establishments may be entered in cell C7 (regardless of the proportion of that production which was exported to the EU). <b>If there is no split system, and farmed crustaceans from ALL FARMS are eligible for export to the EU, national production data must be entered in cell C7.</b></p>													
Basis for number of samples	As per Annex I to Reg (EU) 2022/1646	As per Codex Alimentarius (C.A.C./GI 71-2009)	Other													
Calculated minimum number of samples for Group B (based on cell C7)	762															
Planned number of samples	762															
Groups of substances to be controlled	Planned number of samples	COMPOUND OF MARKER RESIDUE	MATRIX ANALYSED	SCREENING METHOD	Validated (Y/N)	CONFIRMATORY METHOD	Validated (Y/N)	SCREENING METHOD	Validated (Y/N)	DETECTION LIMIT (µg/kg)	CONFIRMATION METHOD	DETECTION LIMIT (µg/kg)	NATIONAL MRL (if applicable)	EU MRL (if applicable)	Concentration above which a result is deemed	LABORATORY NAME
B1a	Antimicrobials	550	Shrimps & Scampi	NA	NA	LC-MS/MS	Y	NA	NA	25	100	100	100	100	100	MPEDA OC Laboratory, Kochi, Nellore, Bhuvanagiri & 111.0 Porbandar



Antibiotic	Shrimps & Scampi	NA	NA	LC-MS/MS	Y	NA	5	100 (5 Litre)	MPEDA QC Laboratory (Kochi) 106.14 (106.72 (Bhimavaram) 110.7 (Bhubaneswar) & 113 (Porbandar))	MPEDA QC Laboratory (Kochi) 106.27 (105.88 (Bhimavaram) 110.7 (Bhubaneswar) & 111.5 (Porbandar))	MPEDA QC Laboratory (Kochi) 331.79 (313.31 (Bhimavaram) 336.4 (Bhubaneswar) & 332.2 (Porbandar))	MPEDA QC Laboratory (Kochi) 106.27 (106.87 (Bhimavaram) & 112.9 (Porbandar))
<b>Enrofloxacin</b>	Shrimps & Scampi	NA	NA	LC-MS/MS	Y	NA	5	100 (5 Litre)	MPEDA QC Laboratory (Kochi) 106.14 (106.72 (Bhimavaram) 110.7 (Bhubaneswar) & 113 (Porbandar))	MPEDA QC Laboratory (Kochi) 106.27 (105.88 (Bhimavaram) 110.7 (Bhubaneswar) & 111.5 (Porbandar))	MPEDA QC Laboratory (Kochi) 331.79 (313.31 (Bhimavaram) 336.4 (Bhubaneswar) & 332.2 (Porbandar))	MPEDA QC Laboratory (Kochi) 106.27 (106.87 (Bhimavaram) & 112.9 (Porbandar))
<b>Ciprofloxacin</b>	Shrimps & Scampi	NA	NA	LC-MS/MS	Y	NA	5	100 (5 Litre)	MPEDA QC Laboratory (Kochi) 106.14 (106.72 (Bhimavaram) 110.7 (Bhubaneswar) & 113 (Porbandar))	MPEDA QC Laboratory (Kochi) 106.27 (105.88 (Bhimavaram) 110.7 (Bhubaneswar) & 111.5 (Porbandar))	MPEDA QC Laboratory (Kochi) 331.79 (313.31 (Bhimavaram) 336.4 (Bhubaneswar) & 332.2 (Porbandar))	MPEDA QC Laboratory (Kochi) 106.27 (106.87 (Bhimavaram) & 112.9 (Porbandar))
<b>Difloxacin</b>	Shrimps & Scampi	NA	NA	LC-MS/MS	Y	NA	5	100 (5 Litre)	MPEDA QC Laboratory (Kochi) 106.14 (106.72 (Bhimavaram) 110.7 (Bhubaneswar) & 113 (Porbandar))	MPEDA QC Laboratory (Kochi) 106.27 (105.88 (Bhimavaram) 110.7 (Bhubaneswar) & 111.5 (Porbandar))	MPEDA QC Laboratory (Kochi) 331.79 (313.31 (Bhimavaram) 336.4 (Bhubaneswar) & 332.2 (Porbandar))	MPEDA QC Laboratory (Kochi) 106.27 (106.87 (Bhimavaram) & 112.9 (Porbandar))
<b>Danofloxacin</b>	Shrimps & Scampi	NA	NA	LC-MS/MS	Y	NA	5	100 (5 Litre)	MPEDA QC Laboratory (Kochi) 106.14 (106.72 (Bhimavaram) 110.7 (Bhubaneswar) & 113 (Porbandar))	MPEDA QC Laboratory (Kochi) 106.27 (105.88 (Bhimavaram) 110.7 (Bhubaneswar) & 111.5 (Porbandar))	MPEDA QC Laboratory (Kochi) 331.79 (313.31 (Bhimavaram) 336.4 (Bhubaneswar) & 332.2 (Porbandar))	MPEDA QC Laboratory (Kochi) 106.27 (106.87 (Bhimavaram) & 112.9 (Porbandar))



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MPEDA QC Laboratory, Kochi, Nellore, Bhimavaram, Bhuvaneshwar & Porbandar	109.59 (Kochi) 108.70 (Nellore) 106.41(Bhimavaram) 110.8 (Bhuvaneshwar & 111 (Porbandar )													
MPEDA QC Laboratory, Kochi, Nellore, Bhimavaram, Bhuvaneshwar & Porbandar	113.05(Kochi) 106.69(Bhimavaram) 111.0 (Bhuvaneshwar) & 113.5 (Porbandar )													
MPEDA QC Laboratory, Kochi, Nellore, Bhimavaram, Bhuvaneshwar & Porbandar	106.60 (Kochi) 105.72(Bhimavaram) 110.8 (Bhuvaneshwar) & 111 (Porbandar )	100 (sum)												
MPEDA QC Laboratory, Kochi, Nellore, Bhimavaram, Bhuvaneshwar & Porbandar	109.14 (Kochi) 103.37(Bhimavaram) 111.2 (Bhuvaneshwar) & 111.9 (Porbandar )													
MPEDA QC Laboratory, Kochi, Nellore, Bhimavaram, Bhuvaneshwar & Porbandar	109.15 (Kochi) 104.60(Bhimavaram) 110.8 (Bhuvaneshwar) & 110.5 (Porbandar )													
Sulphadiazine	NA	NA	NA	NA	LC-MS/MS	Y	NA	NA	NA	Shrimps & Scampi	Y	NA	NA	NA
Sulphapyridine	NA	NA	NA	NA	LC-MS/MS	Y	NA	NA	NA	Shrimps & Scampi	Y	NA	NA	NA
Sulphamerazine	NA	NA	NA	NA	LC-MS/MS	Y	NA	NA	NA	Shrimps & Scampi	Y	NA	NA	NA
Sulphathiazole	NA	NA	NA	NA	LC-MS/MS	Y	NA	NA	NA	Shrimps & Scampi	Y	NA	NA	NA







B1d	NSAIDs, corticosteroids and glucocorticoids					
B1e	Other pharmacologically active substances					
B2	Authorised coccidiostats and histomonostats					

The minimum number of samples to be checked each year for all kinds of residues and substances must at least equal 1 sample per 300 tonnes for the first 60,000 tonnes of annual production of aquaculture crustaceans and 1 sample per additional 2000 tonnes. This applies equally to Group A and B.

- Samples should be taken at the point of harvest.
  - Within the aquaculture group, samples shall be taken from fresh and seawater aquaculture species, taking into account their relative production volume.
  - The competent authority should attribute the samples to each sub-group according to risk, ensuring that the total sample number for all B sub-groups meets or exceeds the minimum required.
  - When substances from Group A and Group B are analysed in one sample from a single group of animals, this sample can be taken into account towards the minimum sampling frequency for both groups (Group A and Group B) provided that it can be documented, and that the risk criteria for Group A and Group B are the same.
- In the event that the minimum number of samples would, on the basis of the production volumes, result in **less than five samples per year**, sampling may be carried out once per two years.
- If within a two year period, production corresponding to a **minimum of one sample is not reached**, a minimum of one sample once per two years shall be analysed provided that there is production for the species or product in question.





Pyrethroids												
Others												



Annexure 1J- Aquaculture crustaceans (Contaminants)

Risk-based regulatory programme for the control of contaminants in food													
Country	INDIA	DATE											
Year of plan implementation	2024	12/28/2023											
Animal species or product	Crustaceans												
Planned no of samples (no minimum set)	592												
Groups of contaminants to be controlled (cf. Annex to Regulation (EU) 2022/931)	Planned number of SAMPLES	COMPOUND or MARKER RESIDUE	MATRIX ANALYSED	SCREENING METHOD	Validated (Y/N)	CONFIRMATORY METHOD	Validated (Y/N)	SCREEN.METH. DETECTION LIMIT [µg/kg]	CONFIRMATION DETECTION LIMIT [µg/kg]	National MRL (if applicable) [µg/kg]	EU MRL (if applicable) [µg/kg]	LEVEL OF ACTION (i.e. concentration above which a result is deemed non-compliant) [µg/kg]	LABORATORY NAME
Halogenated persistent organic pollutants	118	PCB-28	Shrimps & Scampi	NA	NA	GC-MS/MS	Y	NA	4			76 (Sum of 6 NDL-PCBs)	MPEDA QC Laboratory, Bhimavaram & Kochi
		PCB-52	Shrimps & Scampi	NA	NA	GC-MS/MS	Y	NA	4			75 (Sum of 6 NDL-PCBs)	MPEDA QC Laboratory, Bhimavaram & Kochi
		PCB-101	Shrimps & Scampi	NA	NA	GC-MS/MS	Y	NA	4				MPEDA QC Laboratory, Bhimavaram & Kochi
		PCB-138	Shrimps & Scampi	NA	NA	GC-MS/MS	Y	NA	4				MPEDA QC Laboratory, Bhimavaram & Kochi
		PCB-153	Shrimps & Scampi	NA	NA	GC-MS/MS	Y	NA	4				MPEDA QC Laboratory, Bhimavaram & Kochi
		PCB-180	Shrimps & Scampi	NA	NA	GC-MS/MS	Y	NA	4				

11/PCDD/Fs		Finfishes	NA	NA	GC-MS/MS	Y	NA	0.0001	Sum of all Dioxins (WHO-PCDD/F-TEQ) 3.5 pg/g	Sum of all Dioxins (WHO-PCDD/F-TEQ) 3.5 pg/g	
2378-TCDF	Finfishes	NA	NA	GC-MS/MS	Y	NA	0.0001	Sum of all Dioxins (WHO-PCDD/F-TEQ) 3.5 pg/g			Sum of all Dioxins (WHO-PCDD/F-TEQ) 3.5 pg/g
2378-TCDF	Finfishes	NA	NA	GC-MS/MS	Y	NA	0.0004				
12378-PeCDF	Finfishes	NA	NA	GC-MS/MS	Y	NA	0.00019				
23478-PeCDF	Finfishes	NA	NA	GC-MS/MS	Y	NA	0.00004				
12378-PeCDD	Finfishes	NA	NA	GC-MS/MS	Y	NA	0.0001				
123478-HxCDF	Finfishes	NA	NA	GC-MS/MS	Y	NA	0.00083				
123578-HxCDF	Finfishes	NA	NA	GC-MS/MS	Y	NA	0.00004				
234678-HxCDF	Finfishes	NA	NA	GC-MS/MS	Y	NA	0.00003				
123478-HxCDF	Finfishes	NA	NA	GC-MS/MS	Y	NA	0.00004				
123678-HxCDF	Finfishes	NA	NA	GC-MS/MS	Y	NA	0.00003				
123789-HxCDF	Finfishes	NA	NA	GC-MS/MS	Y	NA	0.00004				
123478-HxCDF	Finfishes	NA	NA	GC-MS/MS	Y	NA	0.00004				
1234678-HpCDF	Finfishes	NA	NA	GC-MS/MS	Y	NA	0.00003				
1234678-HpCDD	Finfishes	NA	NA	GC-MS/MS	Y	NA	0.00003				
1234189-HpCDF	Finfishes	NA	NA	GC-MS/MS	Y	NA	0.00004				
OCDF	Finfishes	NA	NA	GC-MS/MS	Y	NA	0.0002				
OCDF	Finfishes	NA	NA	GC-MS/MS	Y	NA	0.00003				
12 DL-PCBs									Sum of all Dioxins (WHO-PCDD/F-TEQ) 3.5 pg/g	Sum of all Dioxins (WHO-PCDD/F-TEQ) 3.5 pg/g	
PCB 81	Finfishes	NA	NA	GC-MS/MS	Y	NA	0.00018				
PCB 77	Finfishes	NA	NA	GC-MS/MS	Y	NA	0.00017				
PCB 126	Finfishes	NA	NA	GC-MS/MS	Y	NA	0.00019				
PCB 169	Finfishes	NA	NA	GC-MS/MS	Y	NA	0.00083				
PCB 123	Finfishes	NA	NA	GC-MS/MS	Y	NA	0.00017				
PCB 118	Finfishes	NA	NA	GC-MS/MS	Y	NA	0.00016				
PCB 114	Finfishes	NA	NA	GC-MS/MS	Y	NA	0.00017				
PCB 105	Finfishes	NA	NA	GC-MS/MS	Y	NA	0.00017				
PCB 167	Finfishes	NA	NA	GC-MS/MS	Y	NA	0.00017				
PCB 156	Finfishes	NA	NA	GC-MS/MS	Y	NA	0.00017				
PCB 157	Finfishes	NA	NA	GC-MS/MS	Y	NA	0.00018				
PCB 189	Finfishes	NA	NA	GC-MS/MS	Y	NA	0.00017				
12 DL-PCBs								Sum of all Dioxins (WHO-PCDD/F-TEQ) 6.5 pg/g			Sum of all Dioxins (WHO-PCDD/F-TEQ) 6.5 pg/g
PCB 81	Finfishes	NA	NA	GC-MS/MS	Y	NA	0.00018				
PCB 77	Finfishes	NA	NA	GC-MS/MS	Y	NA	0.00017				
PCB 126	Finfishes	NA	NA	GC-MS/MS	Y	NA	0.00019				
PCB 169	Finfishes	NA	NA	GC-MS/MS	Y	NA	0.00083				
PCB 123	Finfishes	NA	NA	GC-MS/MS	Y	NA	0.00017				
PCB 118	Finfishes	NA	NA	GC-MS/MS	Y	NA	0.00016				
PCB 114	Finfishes	NA	NA	GC-MS/MS	Y	NA	0.00017				
PCB 105	Finfishes	NA	NA	GC-MS/MS	Y	NA	0.00017				
PCB 167	Finfishes	NA	NA	GC-MS/MS	Y	NA	0.00017				
PCB 156	Finfishes	NA	NA	GC-MS/MS	Y	NA	0.00017				
PCB 157	Finfishes	NA	NA	GC-MS/MS	Y	NA	0.00018				
PCB 189	Finfishes	NA	NA	GC-MS/MS	Y	NA	0.00017				

CSIR-NIIST, Trivandrum

CSIR-NIIST, Trivandrum

Metals	474	Cadmium	Shrimps & Scampi	NA	NA	Y	NA	2	500	500	MPEDA QC Laboratory, Kochi & Porbandar
		Mercury	Shrimps & Scampi	NA	NA	Y	NA	9	500	500	MPEDA QC Laboratory, Kochi & Porbandar
		Lead	Shrimps & Scampi	NA	NA	Y	NA	22	500	500	MPEDA QC Laboratory, Kochi & Porbandar
		Arsenic	Shrimps & Scampi	NA	NA	Y	NA	Not applicable	NA	NA	MPEDA QC Laboratory, Kochi & Porbandar
Others											

No minimum number of samples of unprocessed aquaculture crustaceans to be checked each year for contaminants has been set in EU law. Unprocessed muscle should be sampled. Third countries should decide on a risk basis what substances they test for in each substance group and should be in a position to justify their decisions to include and exclude substances, the range of substances included in each substance group and the number of samples tested

There is no minimum number of samples required for any substance group.







The Marine Products Export Development Authority  
 NRCP 2024 - Allocation of Samples from Field Offices to MPEDA Labs at Bhimavaram & Nellore

QC Lab, Bhimavaram										QC Lab, Nellore									
	SRD Vijayawada	SRD Bhimavaram	SRD Vizag	SRD Hyderabad	TOTAL (parameter wise)	SRD Vijayawada	SRD Bhimavaram	SRD Vizag	SRD Hyderabad	SRD Nagapatnam	RD Bhuba neswar	RD Kolkata	SRD Valsad	RD Mumbai	TOTAL (parameter wise)				
CULTURED SHRIMP																			
Chloramphenicol (A2a)	0	40	1	0	41	27	50	1	0	0					78				
NF Metabolites (A2b)	0	40	1	0	41	27	50	1	0	0					78				
Nitroimidazoles (A2c)	0	40	1	0	41	0	0	0	0	0					0				
Other Substances (A2d)	0	0	0	0	0	30	50	2	0	3	4	6	6	1	102				
Dyes (A3a)	0	25	1	0	26	14	0	0	0	2					16				
Plant protection products and Biocides (A3b)	26	45	1		72	0	0	0	0	0					0				
Un- authorised Substances (A3c)	13	20	1	0	34	10	20	0	0	0					30				
Sub Total	39	210	6	0	255	108	170	4	0	5					304				
Antibiotics (B1a)	61	140	4		205	100	133	3	0	0					236				
Anthelmintics ((B1b)	0	0	0	0	0	62	105	3	0	0					170				
Sub Total	61	140	4	0	205	162	238	6	0	0					406				
Organo Chlorine Pesticides	130	293	0	0	424	0	0	0	0	0					0				
PCBs	35	59	1	0	95	0	0	0	0	0					0				
Heavy Metals	0	0	0	0	0	0	0	0	0	0					0				
Sub Total	165	353	1	0	519	0	0	0	0	0					0				
SHRIMP Total	265	703	11	0	979	270	408	10	0	5					710				

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SCAMPI		SCAMPI										FSH											
Chloramphenicol (A2a)	0											Chloramphenicol (A2a)	0										
NF Metabolites (A2b)	0											NF Metabolites (A2b)	0										
Nitroimidazoles (A2c)	0											Nitroimidazoles (A2c)	0										
Other Substances (A2d)	0											Other Substances (A2d)	0										
Dyes (A3a)	0											Dyes (A3a)	0										
Plant protection products and Biocides (A3b)	0											Plant protection products and Biocides (A3b)	0										
Un-authorized Substances (A3c)	0											Un-authorized Substances (A3c)	0										
<b>Sub Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>Sub Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Antibiotics (B1a)	0											Antibiotics (B1a)	0										
Anthelmintics ((B1b)	0											Anthelmintics ((B1b)	0										
<b>Sub Total</b>	<b>0</b>											<b>Sub Total</b>	<b>0</b>										
Organo Chlorine Pesticides	1											Organo Chlorine Pesticides	1										
PCBs	0											PCBs	0										
Heavy Metals	0											Heavy Metals	0										
<b>Sub Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>Sub Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>SCAMPI Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>SCAMPI Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>
Chloramphenicol (A2a)	20	5	0	6	31							Chloramphenicol (A2a)	25	10	0	6	0						
NF Metabolites (A2b)	20	5	0	6	31							NF Metabolites (A2b)	25	10	0	6							
Nitroimidazoles (A2c)	8	3	2	13								Nitroimidazoles (A2c)	0	0	0	0							
Other Substances (A2d)				0	0							Other Substances (A2d)	8	3	2	1							
Dyes (A3a)	0	3	0	3								Dyes (A3a)	8	0	2	1							
Plant protection products	8	3	2	0	13							Plant protection products	8	0	2	1							
<b>FSH Total</b>	<b>20</b>	<b>5</b>	<b>0</b>	<b>6</b>	<b>31</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>FSH Total</b>	<b>25</b>	<b>10</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>15</b>	
<b>Sub Total</b>	<b>20</b>	<b>5</b>	<b>0</b>	<b>6</b>	<b>31</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>Sub Total</b>	<b>25</b>	<b>10</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>11</b>	
<b>Plant protection products</b>	<b>8</b>	<b>3</b>	<b>2</b>	<b>0</b>	<b>13</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>Plant protection products</b>	<b>8</b>	<b>0</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>11</b>	<b>0</b>	





Annexure 2C

NRCP 2024 - Allocation of Samples from Field Offices to MPEDA Labs at Bhubaneswar & Porbandar											
QC Lab, Bhubaneswar					QC Lab, Porbandar						
Item / Species	Parameter	Number of Samples			TOTAL (parametwise)	Item / Species	Parameter	Number of Samples			
		RD Bhubaneswar	RD Kolkata	RD Bhubaneswar				SRD Valsad	RD Mumbai	RD Bhubaneswar	RD Kolkata
CULTURED SHRIMP	Chloramphenicol (A2a)	8	10	18	18	Chloramphenicol (A2a)	10	1			11
	NF Metabolites (A2b)	8	10	18	18	NF Metabolites (A2b)	10	1			11
	Nitroimidazoles (A2c)	3	5	8	8	Nitroimidazoles (A2c)	4	1			5
	Other Substances (A2d)	0	0	0	0	Other Substances (A2d)	0	0			0
	Dyes (A3a)	2	3	5	5	Dyes (A3a)	3	0			3
	Plant protection products and Biocides (A3b)	0	0	0	0	Plant protection products and Biocides (A3b)	0	0			0
	Un-authorised Substances (A3c)	3	5	8	8	Un-authorised Substances (A3c)	4	1			5
	Sub Total	24	33	57	57	Sub Total	31	4			35
	Antibiotics (B1a)	22	31	53	53	Antibiotics (B1a)	30	2			32
	Anthelmintics (B1b)	9	12	21	21	Anthelmintics (B1b)	0	0			0
	Sub Total	31	43	74	74	Sub Total	30	2			32
	Organo Chlorine Pesticides	0	0	0	0	Organo Chlorine Pesticides	0	0			0
	PCBs	0	0	0	0	PCBs	0	0			0
Heavy Metals	0	0	0	0	Heavy Metals	25	1	19	27	72	
Sub Total	0	0	0	0	Sub Total	25	1	19	27	72	
SHRIMP Total	55	76	131	131	SHRIMP Total	86	7	19	27	139	



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Plant protection products and Biocides (A3b)	0	0	0	0	1	1
Un-authorized Substances (A3c)	0	0	0	0	0	0
Sub Total	0	2	2	5	5	5
Antibiotics (B1a)		1	1	3	3	3
Anthelmintics ((B1b)			0	0	0	0
Sub Total	0	1	1	3	3	3
Organo Chlorine Pesticides	0	0	0	0	0	0
PCBs	0	0	0	0	0	0
Heavy Metals	0	0	0	2	2	2
Sub Total	0	0	0	2	2	2
FISH Total	0	3	3	10	10	10
<b>Total SAMPLES</b>	<b>56</b>	<b>84</b>	<b>140</b>	<b>87</b>	<b>17</b>	<b>29</b>
<b>Total SAMPLES</b>	<b>56</b>	<b>84</b>	<b>140</b>	<b>87</b>	<b>17</b>	<b>29</b>
<b>Total SAMPLES</b>	<b>56</b>	<b>84</b>	<b>140</b>	<b>87</b>	<b>17</b>	<b>29</b>

Annexure 3

The Marine Products Export Development Authority - NRCP 2024															
Allocation of Feed and Hatchery Samples															
A. Sample Allocation from Field Offices to MPEDA Lab Kochi, Nellore, Bhimavaram, Bhubaneswar & Porbandar															
Item / species	Lab, Kochi				Lab, Bhubaneswar				Lab, Bhimavaram						
	RD Kochi	SRD Nagapattinam	SRD Mangalore	Total	Item / species	Parameter	RD Bhubaneswar	RD Kolkata	Total	Item / species	Parameter	RD Vijaywada	SRD Bhimavaram	SRD Vizag	Total
Hatchery sample	10	50	2	62	Hatchery sample	CAP + NFM	20	2	22	Hatchery sample	CAP + NFM	30	20	3	80
										Feed	CAP + NFP	0	6	1	7
B. Sample Allocation from Field Offices to MPEDA Lab Nellore & Porbandar															
Item / Species	Lab, Nellore						Lab, Porbandar								
	Parameter	RD Vijaya-wada	SRD Bhimavaram	SRD Vizag	RD Bhubaneswar	SRD Nagapattinam	SRD Valsad	RD Kolkata	Total	Item / species	Parameter	SRD Valsad			
Feed	CAP + NFP	4	0	0	1	2	1	1	9	Hatchery sample	CAP + NF	4			
Hatchery sample	CAP + NFM	30	49	10	0	3	0	92							

<b>MPEDA - NRCP for Aquaculture Products - 2024</b>						
<b>THE MARINE PRODUCTS EXPORT DEVELOPMENT AUTHORITY, KOCHI - 36</b>						
<b>NRCP - 2023- Summary of Results- All LABS</b>						
<b>Item/Species</b>	<b>Substance</b>	<b>No. of Samples</b>			<b>Residue substance (s)</b>	
		<b>Received</b>	<b>Analyzed</b>	<b>Non-compliant</b>		
	Group A2a	244	244	1	Chloramphenicol	
	Group A2b	244	244	0		
	Group A2c	69	69	0		
	Group A2d	38	37	0		
	Group A3a	36	36	0		
	Group A3b	44	44	0		
	Group A3c	37	37	0		
<b>Shrimp</b>	Group B1a	474	474	0		
	Group B1b	189	189	0		
	Pesticides	573	573	0		
	PCBs	166	166	0		
	Metals	342	342	0		
	Group A2a	3	3	0		
	Group A2b	3	3	0		
	Group A2c	2	2	0		
	Group A2d	1	1	0		
	Group A3a	2	2	0		
<b>Scampi</b>	Group A3b	3	3	0		
	Group A3c	1	1	0		
	Group B1a	2	2	0		
	Group B1b	1	1	0		
	Pesticides	1	1	0		
	PCBs	1	1	0		
	Metals	7	7	0		

<b>Fish</b>	Group A1c	15	15	0	
	Group A2a	79	79	0	
	Group A2b	83	83	2	Nitrofuran Metabolites - AOZ
	Group A2c	25	25	0	
	Group A2d	24	24	0	
	Group A3a	34	34	0	
	Group A3b	22	22	0	
	Group A3c	25	25	0	
	Group B1a	200	200	0	
	Group B1b	80	80	0	
	Pesticides	110	110	0	
	PCBs	83	83	0	
	Metals	83	83	0	
		<b>Sub Total</b>	<b>3346</b>	<b>3346</b>	<b>3</b>
<b>Feed</b>	Group A2a and A2b	18	18	0	
<b>Hatchery Seed</b>	Group A2a and A2b	249	249	<b>16</b>	Chloramphenicol & Nitrofuran Metabolites - AOZ
	<b>TOTAL</b>	<b>3613</b>	<b>3613</b>	<b>19</b>	

Results of Regulatory Programme for Control of Residues in Food									
Country	India								
Year of Implementation of The Residue Plan	2023								
Animal Species/ Product	Aquaculture - Crustaceans & Finfish								
Group of Substances to be monitored	Compound Or Marker Residue	Matrix Analysed	Number Of Samples		Level Of Action (I.E. Concentration Above Which A Result Is Deemed Non-Compliant) [ug/kg]	Number of Non Compliant Results (Above Level of Action)			
			Planned	Tested					
A1c. Steroids	17-Beta Estradiol	Fish	15	15	Cca: 0.20(Kochi)	Nil			
	Progesterone	Fish	15	15	Cca: 0.20(Kochi)	Nil			
	Medroxy Progesterone Acetate	Fish	15	15	Cca: 0.11(Kochi)	Nil			
	17-alpha-methyl Testosterone	Fish	15	15	LOQ: 0.5 (Kochi)	Nil			
A2a. Chloramphenicol	Chloramphenicol	Shrimp	243	243	Cca: 0.06(Kochi)	1			
		Scampi	7	3	0.13 (Nellore)	Nil			
		Fish	80	79	0.07(Bhimavaram) 0.1(Bhubaneswar) & 0.06 (Porbandar)	Nil			
A2b Nitrofurans Metabolites	AHD	Shrimp	242	244	Cca: 0.240 (Kochi) 0.506 (Nellore)	Nil			
		Scampi	8	3	0.37(Bhimavaram)	Nil			



	Fish	80	81	0.408 (Bhubaneswar) & 0.12(Porbandar)	Nil
AMOZ	Shrimp	242	244	Cca: 0.186 (Kochi) 0.507 (Nellore) 0.36(Bhimavaram) 0.405( Bhubaneswar) & 0.12(Porbandar)	Nil
	Scampi	8	3		Nil
	Fish	80	81		Nil
	Shrimp	242	244		Nil
AOZ	Scampi	8	3	Cca: 0.333 (Kochi) 0.512 (Nellore) 0.36(Bhimavaram) 0.401 ( Bhubaneswar) & 0.13(Porbandar)	Nil
	Fish	80	81		2
	Shrimp	242	244		Nil
Semicarbazide	Shrimp	242	244	Cca: 0.443 (Kochi) 0.513 (Nellore) 0.38(Bhimavaram) 0.401( Bhubaneswar) & 0.14(Porbandar)	Nil
	Scampi	8	3		Nil
	Fish	80	81		Nil
DNSH	Shrimp	242	244	Cca: 0.26(Kochi) 0.27 (Nellore) 0.17(Bhimavaram) 0.249( Bhubaneswar) & 0.15(Porbandar)	Nil
	Scampi	8	3		Nil
	Fish	80	81		Nil
Ronidazole	Shrimp	48	69	Cca: 0.39(Kochi) 0.32(Bhimavaram) 0.96( Bhubaneswar)	Nil
	Scampi	3	2		Nil
	Fish	25	25		Nil
A2c Nitroimidazoles	Shrimp	48	69	Cca : 0.63(Kochi) 0.32(Bhimavaram)	Nil
	Scampi	3	2		Nil

	Fish	25	25	0.96( Bhubaneswar)	Nil
Dimetronidazole	Shrimp	48	69	Cca: 0.34(Kochi) 0.31(Bhimavaram) 0.96( Bhubaneswar)	Nil
	Scampi	3	2		Nil
	Fish	25	25		Nil
Ipronidazole-OH	Shrimp	48	69	Cca: 0.27(Kochi) 0.32(Bhimavaram) 0.95( Bhubaneswar)	Nil
	Scampi	3	2		Nil
	Fish	25	25		Nil
Ipronidazole	Shrimp	48	69	Cca : 0.17(Kochi) 0.6( Bhubaneswar)	Nil
	Scampi	3	2		Nil
	Fish	25	25		Nil
Metronidazole-OH	Shrimp	48	69	Cca : 0.39(Kochi) 0.33(Bhimavaram) 0.96( Bhubaneswar)	Nil
	Scampi	3	2		Nil
	Fish	25	25		Nil
HMMNI	Shrimp	48	69	Cca : 0.53(Kochi) 0.32(Bhimavaram) 0.96( Bhubaneswar)	Nil
	Scampi	3	2		Nil
	Fish	25	25		Nil
Dapsone	Shrimp	33	37	Cca: 1.43 (Nellore)	Nil
	Scampi	2	1		Nil
	Fish	15	24		Nil
Malachite Green	Shrimp	32	36	Cca: 0.17(Nellore) 0.37 (Bhimavaram) 0.24(Bhubaneswar)	Nil
	Scampi	3	2		Nil
	Fish	25	34		Nil
Leucomalachite Green	Shrimp	32	36	Cca: 0.16(Nellore) 0.24 (Bhimavaram) 0.39(Bhubaneswar)	Nil
	Scampi	3	2		Nil
	Fish	25	34		Nil
A2d Other A2 Substances	Shrimp	33	37	Cca: 1.43 (Nellore)	Nil
	Scampi	2	1		Nil
	Fish	15	24		Nil
A3a Dyes	Shrimp	32	36	Cca: 0.16(Nellore) 0.24 (Bhimavaram) 0.39(Bhubaneswar)	Nil
	Scampi	3	2		Nil
	Fish	25	34		Nil

A3b Plant Protectants	Crystal Violet	Shrimp	32	36	Cca: 0.41 (Bhimavaram) 0.23(Bhubaneswar)	Nil
		Scampi	3	2		Nil
		Fish	25	34		Nil
A3c Unauthorized Antimicrobials	Leucocrystal Violet	Shrimp	32	36	Cca: 0.49 (Bhimavaram) 0.35(Bhubaneswar)	Nil
		Scampi	3	2		Nil
		Fish	25	34		Nil
A3b Plant Protectants	2,5 Dichloromethyl benzoic acid methyl ester	Shrimp	33	44	LOQ 3.00 (Kochi)	Nil
		Scampi	2	3		Nil
		Fish	15	22		Nil
A3c Unauthorized Antimicrobials	Norfloxacin	Shrimp	33	38	Cca: 10.73 (Kochi) 35.25 (Nellore) 18.54(Bhimavaram) 8(Bhubaneswar) & 33.5 (Porbandar)	Nil
		Scampi	2	1		Nil
		Fish	25	25		Nil
A3c Unauthorized Antimicrobials	Nalidixic acid	Shrimp	33	38	Cca: 10.54 (Kochi) 32.96 (Nellore) 16.89(Bhimavaram) 8( Bhubaneswar) & 31.9 (Porbandar)	Nil
		Scampi	2	1		Nil
		Fish	25	25		Nil
B1a. Antibacterial Substances	Cefalexin	Shrimp	33	38	Cca: 228.0 (Kochi)	Nil
		Scampi	2	1		Nil
		Fish	25	25		Nil
B1a. Antibacterial Substances	Cefaprin	Shrimp	33	38	Cca: 54.4 (Kochi)	Nil
		Scampi	2	1		Nil
		Fish	25	25		Nil
Tetracyclines With 4-Epimers	Tetracycline	Shrimp	488	474	Cca: 104.1 (Kochi) 109.80 (Nellore) 105.94(Bhimavaram) 111.1( Bhubaneswar)	Nil
		Scampi	12	2		Nil
		Fish	200	200		Nil

4-Epi Tetracycline	Shrimp	488	474	Cca: 103.6 (Kochi) 115.0 (Nellore) 107.96(Bhimavaram) 111.0 ( Bhubaneswar)	Nil	
	Scampi	12	2			Nil
	Fish	200	200			Nil
Oxytetracycline	Shrimp	488	474	Cca: 102.8 (Kochi) 111.5 (Nellore) 107.29(Bhimavaram) 110.9( Bhubaneswar)	Nil	
	Scampi	12	2			Nil
	Fish	200	200			Nil
4-Epi Oxytetracycline	Shrimp	488	474	Cca: 103.2 (Kochi) 111.3 (Nellore) 110.62(Bhimavaram) 110.9( Bhubaneswar)	Nil	
	Scampi	12	2			Nil
	Fish	200	200			Nil
Chlortetracycline	Shrimp	488	474	Cca: 102.6 (Kochi) 107.2 (Nellore) 106.47(Bhimavaram) 110.8 ( Bhubaneswar)	Nil	
	Scampi	12	2			Nil
	Fish	200	200			Nil
4-Epi Chlortetracycline	Shrimp	488	474	Cca: 103.1 (Kochi) 107.2 (Nellore) 106.54(Bhimavaram) 110.9( Bhubaneswar)	Nil	
	Scampi	12	2			Nil
	Fish	200	200			Nil
Sulphadiazine	Shrimp	488	474	Cca: 109.59 (Kochi) 108.70 (Nellore) 106.44(Bhimavaram) 110.8( Bhubaneswar)	Nil	
	Scampi	12	2			Nil
	Fish	200	200			Nil
Sulfapyridine (Spd)	Shrimp	488	474	Cca: 113.05(Kochi) 106.69(Bhimavaram) 111.0( Bhubaneswar)	Nil	
	Scampi	12	2			Nil
	Fish	200	200			Nil
<b>Sulfonamides</b>	Shrimp	488	474	Cca: 113.05(Kochi) 106.69(Bhimavaram) 111.0( Bhubaneswar)	Nil	
	Scampi	12	2			Nil
	Fish	200	200			Nil

Sulfamethoxazole(Smtx)	Shrimp	488	474	Cca: 110.99 (Kochi) 107.02(Bhimavaram) 110.7( Bhubaneswar)	Nil	
	Scampi	12	2			Nil
	Fish	200	200			Nil
Sulfathiazole(Stz)	Shrimp	488	474	Cca: 109.15 (Kochi) 104.60(Bhimavaram) 110.8( Bhubaneswar)	Nil	
	Scampi	12	2			Nil
	Fish	200	200			Nil
Sulfamerazine(Smr)	Shrimp	488	474	Cca: 109.14 (Kochi) 103.37(Bhimavaram) 111.2( Bhubaneswar)	Nil	
	Scampi	12	2			Nil
	Fish	200	200			Nil
Sulfamethizole(Smtz)	Shrimp	488	474	Cca: 111.52 (Kochi) 108.68(Bhimavaram) 110.8 ( Bhubaneswar)	Nil	
	Scampi	12	2			Nil
	Fish	200	200			Nil
Sulfamethazine(Smt)	Shrimp	488	474	Cca: 106.60 (Kochi) 105.72(Bhimavaram) 110.8( Bhubaneswar)	Nil	
	Scampi	12	2			Nil
	Fish	200	200			Nil
Sulfamethoxypyridazine(Smp)	Shrimp	488	474	Cca: 111.40 (Kochi) 106.06(Bhimavaram) 110.9( Bhubaneswar)	Nil	
	Scampi	12	2			Nil
	Fish	200	200			Nil
Sulfadimethoxine(Sdm)	Shrimp	488	474	Cca: 115.72 (Kochi) 106.78(Bhimavaram) 110.8( Bhubaneswar)	Nil	
	Scampi	12	2			Nil
	Fish	200	200			Nil
Sulfadoxine(Sd)	Shrimp	488	474	Cca:	Nil	

<b>Quinolones /Fluroquinolones</b>	Scampi	12	2	116.21(Kochi) 105.23(Bhimavaram) 111.0 ( Bhubaneswar)	Nil	
		Fish	200		200	Nil
	Sulfachloropyridazine(Scp)	Shrimp	488	474	Cca: 111.25(Kochi) 109.21(Bhimavaram) 111.2 ( Bhubaneswar)	Nil
		Scampi	12	2		Nil
		Fish	200	200		Nil
		Shrimp	488	474		Nil
	Oxolinic Acid	Scampi	12	2	Cca: 106.27 (Kochi) 106.50 (Nellore) 106.00(Bhimavaram) 111.0( Bhubaneswar)	Nil
		Fish	200	200		Nil
		Shrimp	488	474		Nil
		Scampi	12	2		Nil
	Flumequine (Flu)	Fish	200	200	Cca: 215.48 (Kochi) 216.50(Bhimavaram) 224.7( Bhubaneswar)	Nil
		Shrimp	488	474		Nil
		Scampi	12	2		Nil
		Fish	200	200		Nil
	Ciprofloxacin (Cip)	Shrimp	488	474	Cca: 106.27 (Kochi) 105.88(Bhimavaram) 110.7(Bhubaneswar)	Nil
		Scampi	12	2		Nil
		Fish	200	200		Nil
		Shrimp	488	474		Nil
	Enrofloxacin (Enr)	Scampi	12	2	Cca: 106.14 (Kochi) 106.72(Bhimavaram) 110.7 (Bhubaneswar)	Nil
		Fish	200	200		Nil
Shrimp		488	474	Nil		
Scampi		12	2	Nil		
Sarafloxacin (Sar)	Fish	200	200	Cca: 31.91(Kochi) 32.19(Bhimavaram) 33.09(Bhubaneswar)	Nil	
	Shrimp	488	474		Nil	
	Scampi	12	2		Nil	
	Fish	200	200		Nil	
Difloxacin (Dif)	Shrimp	488	474	Cca: 331.79 (Kochi) 313.31(Bhimavaram)	Nil	
	Scampi	12	2		Nil	

		Fish	200	200	336.4(Bhubaneswar)	Nil
<b>Macrolides</b>	Danofloxacin (Dan)	Shrimp	488	474	Cca: 109.29 (Kochi) 106.27(Bhimavaram) 110.8(Bhubaneswar)	Nil
		Scampi	12	2		Nil
		Fish	200	200		Nil
		Shrimp	488	474		Nil
	Erythromycin A	Scampi	12	2	Cca : 223 (Kochi)	Nil
		Fish	200	200		Nil
		Shrimp	488	474		Nil
	Tilmicosin	Scampi	12	2	Cca : 55.6 (Kochi)	Nil
		Fish	200	200		Nil
		Shrimp	488	474		Nil
	Tylosin	Scampi	12	2	Cca : 117.7 (Kochi)	Nil
		Fish	200	200		Nil
Shrimp		488	474	Nil		
Ampicillin	Scampi	12	2	Cca : 53.8 (Kochi)	Nil	
	Fish	200	200		Nil	
	Shrimp	488	474		Nil	
Benzyl Penicillin	Scampi	12	2	Cca : 56.5 (Kochi)	Nil	
	Fish	200	200		Nil	
	Shrimp	488	474		Nil	
Dicloxacillin	Scampi	12	2	Cca : 338 (Kochi)	Nil	
	Fish	200	200		Nil	
	Shrimp	488	474		Nil	

	Oxacillin	Shrimp	488	474	Cca : 327.4 (Kochi)	Nil
		Scampi	12	2		Nil
		Fish	200	200		Nil
	Cloxacilin	Shrimp	488	474	Cca : 327.6 (Kochi)	Nil
		Scampi	12	2		Nil
		Fish	200	200		Nil
	Collistin A & B	Shrimp	488	474	Cca:168(Collistina) Cca:164(Collistin B) (Kochi)	Nil
		Scampi	12	2		Nil
		Fish	200	200		Nil
	Amoxicillin	Shrimp	488	474	Cca : 54.00 (Kochi)	Nil
		Scampi	12	2		Nil
		Fish	200	200		Nil
<b>Lincosamides</b>	Lincomycin	Shrimp	488	474	Cca : 112.9 (Kochi)	Nil
		Scampi	12	2		Nil
		Fish	200	200		Nil
<b>Diaminopyrimidines</b>	Trimethoprim	Shrimp	488	474	Cca : 53.7 (Kochi)	Nil
		Scampi	12	2		Nil
		Fish	200	200		Nil
<b>Doxycycline</b>	Doxycycline	Shrimp	488	474	Cca : 109.1 (Kochi)	Nil
		Scampi	12	2		Nil
		Fish	200	200		Nil
<b>Aminoglycosides</b>	Neomycin	Shrimp	488	474	LOQ: 50 (Kochi)	Nil
						Nil



		Scampi	12	2			Nil
		Fish	200	200			Nil
		Shrimp	488	474			Nil
	Spectinomycin	Scampi	12	2		LOQ: 30 (Kochi)	Nil
		Fish	200	200			Nil
		Shrimp	186	189			Nil
	Ivermectin	Scampi	5	1		LOQ 3.00 (Kochi) 3 (Nellore) 5 (Bhimavaram) Cca: 112(Bhubaneswar)	Nil
		Fish	80	80			Nil
		Shrimp	186	189			Nil
	Emamectin	Scampi	5	1		Cca: 111.00 (Kochi) 104.20 (Nellore) 114.20(Bhimavaram) 112(Bhubaneswar)	Nil
		Fish	80	80			Nil
		Shrimp	509	573			Nil
	Aldrin	Scampi	12	1			Nil
		Fish	110	110			Nil
		Shrimp	509	573			Nil
	Dieldrin	Scampi	12	1		LOQ -10ppb	Nil
		Fish	110	110			Nil
		Shrimp	509	573			Nil
	Chloradane	Scampi	12	1			Nil
		Fish	110	110			Nil
		Shrimp	509	573			Nil
		Scampi	12	1			Nil

**B1b Anthelmintics**

**Organochlorine Pesticides**

*NRCP for Aquaculture Products – 2024*

	Fish	110	110	Nil
DDT	Shrimp	509	573	Nil
	Scampi	12	1	Nil
	Fish	110	110	Nil
Endrin	Shrimp	509	573	Nil
	Scampi	12	1	Nil
	Fish	110	110	Nil
Heptachlor	Shrimp	509	573	Nil
	Scampi	12	1	Nil
	Fish	110	110	Nil
Hexachloro Benzene	Shrimp	509	573	Nil
	Scampi	12	1	Nil
	Fish	110	110	Nil
Alpha HCH	Shrimp	509	573	Nil
	Scampi	12	1	Nil
	Fish	110	110	Nil
Beta HCH	Shrimp	509	573	Nil
	Scampi	12	1	Nil
	Fish	110	110	Nil
Gamma HCH	Shrimp	509	573	Nil
	Scampi	12	1	Nil
	Fish	110	110	Nil

			Fish	110	110	110			Nil	
B3c Chemical Elements	Mercury	Shrimp	341	341	342			ML:500	Nil	
		Scampi	9	9	7				Nil	
		Fish	83	83	83				Nil	
		Shrimp	341	341	342			MI:500	Nil	
	Cadmium	Scampi	9	9	7				Nil	
		Fish	83	83	83			ML:50	Nil	
		Shrimp	341	341	342			No regulatory limit LOQ:40	*	
		Scampi	9	9	7					*
	Arsenic	Fish	83	83	83				*	
		Shrimp	341	341	342				Nil	
		Scampi	9	9	7				Nil	
		Fish	83	83	83				Nil	
Lead	Shrimp	341	341	342				ML:500		
	Scampi	9	9	7				ML:300		
	Fish	83	83	83						
	Shrimp	166	166	166						
Halogenated Persistent Organic Pollutants	PCB-28	Scampi	5	5	1			MI: 75 Sum Of 6 NDL- PCBs	Nil	
		Fish	83	83	83				Nil	
		Shrimp	166	166	166				Nil	
		Scampi	1	1	1				Nil	
	PCB-52	Fish	83	83	83					Nil
		Shrimp	166	166	166					Nil
		Scampi	5	5	1					Nil
		Fish	83	83	83					Nil
	PCB-101	Shrimp	166	166	166					Nil
		Scampi	5	5	1					Nil
		Fish	83	83	83					Nil
		Shrimp	166	166	166					Nil

PCB-138	Shrimp	166	166		Nil
	Scampi	5	1		Nil
	Fish	83	83		Nil
PCB-153	Shrimp	166	166		Nil
	Scampi	5	1		Nil
	Fish	83	83		Nil
PCB-180	Shrimp	166	166		Nil
	Scampi	5	1		Nil
	Fish	83	83		Nil

Note: \* No regulatory limit for Arsenic. Hence no compliance statement.

**The Marine Products Export Development Authority  
NRCP 2023 – List of Non-Compliant (Residue Positive) samples**

SNo.	Sample ID	Type & Species	Test	Parameter	Value (µg/kg)
<b>FARM SAMPLES - SHRIMP</b>					
1	16/S1/Q1/1272/2023	Shrimp <i>L. vannamei</i>	A2a Chloramphenicol & A2b Nitrofurans Metabolites	Chloramphenicol	0.10
2	16/S3/P6/0894/2023	Fish Rohu	A2a Chloramphenicol & A2b Nitrofurans Metabolites	Nitrofurans Metabolite - AOZ	5.16
3	16/S3/P6/0895/2023	Fish Rohu	A2a Chloramphenicol & A2b Nitrofurans Metabolites	Nitrofurans Metabolite - AOZ	2.40
<b>HATCHERY SAMPLES _ SHRIMP SEED</b>					
4	16/S4/P1/2018/2023	Shrimp seed ( <i>P. monodon</i> )	A2a Chloramphenicol & A2b Nitrofurans Metabolites	Nitrofurans Metabolite - AOZ	11.77
5	16/S4/Q1/1023/2023	Shrimp seed ( <i>L. vannamei</i> )	A2a Chloramphenicol & A2b Nitrofurans Metabolites	Nitrofurans Metabolite - AOZ	16.35
6	16/S4/Q1/1067/2023	Shrimp seed ( <i>L. vannamei</i> )	A2a Chloramphenicol & A2b Nitrofurans Metabolites	Nitrofurans Metabolite - AOZ	2.62
7	16/S4/Q1/1455/2023	Shrimp seed ( <i>L. vannamei</i> )	A2a Chloramphenicol & A2b Nitrofurans Metabolites	Nitrofurans Metabolite - AOZ	3.38
8	16/S4/Q1/1473/2023	Shrimp seed ( <i>L. vannamei</i> )	A2a Chloramphenicol & A2b Nitrofurans Metabolites A	Nitrofurans Metabolite - AOZ	8.12
9	16/S4/Q1/1474/2023	Shrimp seed ( <i>L. vannamei</i> )	A2a Chloramphenicol & A2b Nitrofurans Metabolites	Chloramphenicol	1.84
10	16/S4/Q1/1677/2023	Shrimp seed ( <i>L. vannamei</i> )	A2a Chloramphenicol & A2b Nitrofurans Metabolites	Nitrofurans Metabolite - AOZ	1.01
11	16/S4/Q1/2019/2023	Shrimp seed ( <i>L. vannamei</i> )	A2a Chloramphenicol & A2b Nitrofurans Metabolites	Chloramphenicol	0.65
12	16/S4/Q1/2024/2023	Shrimp seed ( <i>L. vannamei</i> )	A2a Chloramphenicol & A2b Nitrofurans Metabolites	Chloramphenicol Nitrofurans Metabolite - AOZ	0.15 9.17
13	23/S4/Q1/0167/2023	Shrimp seed ( <i>L. vannamei</i> )	A2a Chloramphenicol & A2b Nitrofurans Metabolites	Chloramphenicol	0.96
14	33/S4/01/0002/2023	Shrimp seed	A2a Chloramphenicol & A2b Nitrofurans Metabolites	Chloramphenicol	0.50
15	33/S4/01/0097/2023	Shrimp seed	A2a Chloramphenicol & A2b Nitrofurans	Chloramphenicol Nitrofurans Metabolite	14.26 3.30

			Metabolites	- AOZ	
16	33/S4/Q1/0246/2023	Shrimp seed ( <i>L. vannamei</i> )	A2a Chloramphenicol & A2b Nitrofurans Metabolites	Chloramphenicol	0.13
17	33/S4/Q1/0247/2023	Shrimp seed ( <i>L. vannamei</i> )	A2a Chloramphenicol & A2b Nitrofurans Metabolites	Nitrofurans Metabolite - AOZ	5.27
18	33/S4/Q1/0336/2023	Shrimp seed ( <i>L. vannamei</i> )	A2a Chloramphenicol & A2b Nitrofurans Metabolites	Nitrofurans Metabolite - AOZ	1.13
19	33/S4/Q1/0338/2023	Shrimp seed ( <i>L. vannamei</i> )	A2a Chloramphenicol & A2b Nitrofurans Metabolites	Nitrofurans Metabolite - AOZ	2.48

**The Marine Products Export Development Authority**  
(Ministry of Commerce & Industry, Govt. Of India)  
**Kochi – 682 036**

No. LAB-KOC/NRCP(NRCP)/1/2024

Dated: 01 January 2024

**NRCP – Instructions** – effective from January 2024.

1. The sampling procedure/strategy shall be as per the instruction contained in Annex-I of EU Commission Regulation 2022/1646 – for Group A&B and Commission Regulation 2022/932 for Pesticides and other Contaminants. The sampling level for RDs/SRDs is being communicated to you separately.
2. The target given to each field office of MPEDA is in consideration production of shrimp/scampi/fish from their jurisdiction. The sample target for field office is fixed on the basis of district-wise production of farms and the month-wise targets for the field offices are also based on the various stages of production.
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 shrimp/scampi/fish samples under NRCP shall be collected by the designated residue monitoring officers (RMOs) only from farms that are enrolled by the Marine Products Export Development Authority (MPEDA), which may include farms approved by the Coastal Aquaculture Authority (CAA) and State fisheries Departments.
5. Samples must be collected in Polythene bags and properly labeled to maintain the sample integrity and traceability by using tamper proof seal. 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.
6. The follow-up samples being collected from farms shall be considered as only additional samples over and above the samples allocated under NRCP to each region/state.
7. Sampling at farm level shall be in such a way that it covers major areas under aquaculture. In other words, there shall not be excess drawl of samples from one farm and similarly no farm will be left uncovered.
8. 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.
9. 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.
10. 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.
11. 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.
  12. While collecting the hatchery samples (seed), a minimum of 20 - 25 gm (excluding water) shall be drawn. The supervision of seed sample collection shall be done by the MPEDA officer and not by the hatchery representative. The seed sample should be collected in polythene bags, sealed and transported in thermocol box packed with dry/wet ice.
  13. In case of any farmer/hatchery operator want to retain a portion the collected sample as reference sample. The sample shall be divided equally from the drawn sample packed in polythene pouches and properly labeled, signed (by MPEDA & CAA officials wherever applicable) and sealed by using tamper proof seal. This sample shall be under custody of field office without losing the sample integrity.
  14. All field offices are advised to draw samples from saltwater aquaculture (cage culture) also, as per availability in their region, for analysis of different substance groups.
  15. RDs and SRDs are directed to use the GPS device while collecting samples from farms.
  16. 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.
  17. When collecting samples from the farm, the details of medication within the last 4 weeks before sampling shall be collected and indicated in the register as well as in the packing slip/sampling report that will accompany each sample.
  18. As already in practice, the field offices shall maintain a register of samples collected and dispatched to the respective Laboratory.
  19. The field offices shall verify periodically, the parameter-wise target/allocation assigned to each region/state, in order to ensure that all the districts in the region/state are covered for all the parameters in sample collection during the plan year.
  20. The drawl of samples shall be done by the residue monitoring officer of MPEDA himself. This task should not be entrusted to any personnel of the farm/Hatchery/Feed mill.
  21. 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.
  22. The samples shall be forwarded to the respective MPEDA Laboratory with in 3 (threc) days of its collection so as to reach the laboratory with in 30 (thirty) hours of dispatch.
  23. All field offices shall ensure that the samples are collected and delivered to the QC Lab concerned before 20<sup>th</sup> of every month as per their monthly target/allocation.
  24. The results of the tests communicated from the respective laboratory should be recorded in the specified columns in the registers maintained by the field offices.
  25. Wherever non-compliant (residue positive) results are reported, the EIAs and MPEDA field offices concerned may take action as follows:
    - i. On receipt of the alert information along with test results, the EIA, CAA & MPEDA shall undertake the joint inspection of the facility to trace the origin/source of contamination. A joint inspection report shall be prepared & be available at EIA, CAA & MPEDA.
    - ii. The EIA, CAA & MPEDA officials collect follow up samples from the same premises for further analysis at MPEDA Laboratory. 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.

- iii. Based on the reply received from the facility, the EIA shall take the action as deemed fit.
- iv. 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.

26. The farms reported with non-compliant results are subjected to more stringent checks for a period of at least twelve months by the EIAs.

Sd/-

(DR. M. KARTHIKEYAN)

DIRECTOR

Copy for information and necessary action, to:

1. All field offices of MPEDA
2. MPEDA QC Laboratories - Kochi, Nellore, Bhimavaram & Bhubaneswar
3. Director, EIC of India, New Delhi