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KERALA STATE POLLUTION CONTROL BOARD

കേരള സംസ്ഥാന മലിനീകരണ നിയന്ത്രണ ബോർഡ്

Pattom P.O., Thiruvananthapuram – 695 004

പട്ടം പി.ഒ., തിരുവനന്തപുരം - 695 004



PCB/HO/EE3/Plastic Annual Report/2022

Date: 21/10/2023

From

Member Secretary

To

The Member Secretary,
Central Pollution Control Board,
Parivesh Bhavan,
East Arjun Nagar,
New Delhi – 110032

Sub: Annual Report (AR) on Plastic Waste Management Rules, 2016 for the year
2022-23 - reg
Ref: Plastic Waste Management Rule 2016.

Sir,

The Annual Report (AR) on Plastic Waste Management Rules, 2016 for the period
of 2022-23 is submitted herewith in prescribed format.

Yours faithfully,

MEMBER SECRETARY

Encl: As above

Copy to:

1. The Regional Director, CPCB, Bangalore
2. All Ros and Dos
3. IT Cell
4. CA to Member Secretary

FORM-VI

STATE-WISE STATUS OF IMPLEMENTATION OF PLASTIC WASTE MANAGEMENT RULES, 2016, AS AMENDED 2018
ANNUAL REPORT 2021-22

Name of the SPCB/ PCC	Estimated Plastic Waste generation. Tons per annum (TPA)*	Implementation of thickness of less than 50 microns carry bags (virgin/ recycled). (Rule 4c)	Details of Plastic Waste Management (PWM) e.g. Collection, Segregation, Disposal (Co-Processing, Road construction, etc.) Rules (5 & 6). (Attach Action Plan)	Partial/complete ban on usage of Plastic carry bags (through Executive Order) Attach copy of notification	No. of registered Manufacturing/Recycling Units (Rule 13)			No. of unregistered Manufacturing or Recycling Units (in residential or unapproved areas). (Rule 13)	Status of Marking, Labelling on carry bags (Rule 11) Specify No. of units not complied	No. of violations & action taken on non-compliance of provisions of PWM Rules, 2016, as amended, 2018 (Rule 12)	Explicitly pricing of carry bags from producers, brand owners and importers (Rule 15)	Status of submission of Annual Report by ULBs to SPCB/PCCs (Rule 16)	Submission of Annual Report to CPCB (Rule 17)
					Plastic Units	Composite Plastic Units	Multityer Plastic Units						
KERALA STATE POLLUTION CONTROL BOARD	Report enclosed as Annexure I	Report enclosed as Annexure II	Report enclosed as Annexure III	Report enclosed as Annexure IV	Manufactures/producer-556	Manufacturer-5	33	No. of unregistered plastic recyclers-30	Usage of plastic carrybags irrespective of thickness banned in the State w.e.f 01/01/2020	The Government of Kerala has constituted an enforcement team constituted as per GO 673/2023/LSGD dated 21-3-2023. The Board officers along with the officials of Departments conducted inspections for the strict implementation of single use plastic ban in the State. Violations were observed in 153 establishments and an amount of Rs. 7,15,000/- was imposed as fine and Rs.3,35,000/- was collected. Confiscation of banned items was also done for the strict implementation of ban in the State. The Board inspected various shops and market places throughout Thiruvananthapuram District on 21/02/2022 and 12 kg of banned single use plastic items caught in this inspection another inspection was carried out in Kollam city and fine of Rs.1,90,000/- . Pathanamthitta 611.155Kg ban Single use plastic collected. Alappuzha District collect 30kg banned single use plastic ,imposed fine Rs 30000/- .Idukki 0.36370tone penalty 150000/-. Report enclosed as Annexure VII The board conducted a total of 7629 inspections throughout the state in all districts in which single use plastic materials are seized , and 2852 violations were observed for which 2351 notices were issued and imposed spot fine of Rs. 8341402/- and Rs. 1045750 /- was collected .	Usage of plastic carrybags irrespective of thickness banned in the State w.e.f 01/01/2020 Vide G.O.(Ms)No. 6/2019 Env dated 27/11/2019;G.O.(Ms) No. 2/2020 /ENVT dated 27-1-2020; vide GO no G.O.(Ms) No.4/2020 /ENVT dated 16/02/2020 and G.O.(Ms)No.2/202/ENVT dated 28/02/2021.	93 ULBs	21.10.2023

Annexure I (Column 2)

Details of Plastic waste management details		
PW Generated (TPA)	PW Collected (TPA)	PW Processed (TPA)
71000 TPA	68358.2TPA	<p>Clean Kerala Company has provided the details of waste produced as 3293.15 MT during the year 2022-23 .A total of 2987.02 MT sale is observed out of which 13.93 MT for NHAI/others ,1440.74 for PWD and 1532.35 for LSGI.</p> <p>Segregated plastic is about 6749.245 MT, shredded plastic produced is 259.997MT,shredded plastic utilised as 55.922 MT. In addition, a total Scrap of 451.53 TPA was also collected by other registered scrap collectors.</p>

Annexure II (Column 3)

STATUS OF IMPLEMENTATION OF BAN ON CARRYBAGS WITH THICKNESS < 75 Micron

Items	Status
<p>Implementation of thickness of less than 75 microns carry bags (virgin/ recycled) (with effect from the 30th September, 2021). (Rule 4c- August 12, 2021)</p>	<p>Ban on single use plastic items in the State w.e.f 01/01/2020 Vide G.O.(Ms) No. 6/2019 Env dated 27/11/2019; (Plastic carry bags irrespective of thickness are included in the single use plastic ban.) vide GO no G.O.(Ms) No.4/2020 Env dated 16/02/2020 and G.O.(Ms)No.2/202/ENVT dated 28/02/2021.</p> <p>SEUF Project: MOU was signed between Kerala State Pollution Control Board & Socio Economic Unit Foundation for conducting the assessment of plastic product (SUP) & SUP alternatives. The copy of the report submitted by SEUF is enclosed as Annexure IX.</p> <p>A data repository was published on 'Assessment of alternatives to plastic in the state of Kerala'</p> <p>Webinars:</p> <ol style="list-style-type: none"> 1. Webinar on enforcement of Plastic Waste Management Rules, and Tackling the Single Use Plastic (SUP) crisis, Banned SUP items, SUP Grievance Portal, SUP monitoring Portal, EPR Portal, dated 06.10.2022, 15.10.2022 and 25.10.2022 at KSPCB Kozhikode, Kasargode and Thrissur respectively. 2. Single use Plastic ban awareness programme & Payyambalam beach clean up campaign in District Office, Kannur (Two schools, G.V.H.S.S Payyambalam, Govt.Town H.S.S, Kannur dated 18.11.2022 at KSPCB Kannur 3. Training on Module IA (Updated Module1) & Module IIIA (Generation/Exchange) of Centralized EPR Portal on 17.12.2022 to PIBOs and PWPs 4. Single use plastic ban awareness programme & Payyambalam beach clean – up 18.11.2022 5. Implementation of Extended Producer Responsibility (EPR) for the Producers, Importers, BrandOwners and Plastic Waste Processors was conducted on 20/09/2023 6. As a part of Swachhta Hi Seva, a clean up drive was conducted along the banks of Karamana river and Killi river in association with National River Conservation Directorate on 25/09/2023 and 29/09/2023 respectively. <p>Workshops and Training Programmes :</p> <p>In connection with 'Malinya Muktha Nava Keralam Campaign " an EPR Consultation workshop cum training program was conducted for the major Brand Owners in Government and Private sector on 02/09/2023 at State Municipal House Vazhuthacaud, Trivandrum .</p>

Annexure-III(Column 4)

ACTION PLAN FOR PLASTIC WASTE MANAGEMENT					
Sl. No.	Items	Current Status	Desirable Levels	Gap between current status and desirable level	Timeline
1	What is the quantity of plastic waste generated (Annual Report from VI pt. 2,6)(TPA)	71000	68358.2	2641.8	6 months (MCF, MRF, Harithakarma senas are being set up)
2(a)	Number of registered plastic manufacturing units	556			
2(b)	Capacity of registered plastic manufacturing units (TPD)	Being collected			
3(a)	Total No of ULBs	93 (87 Municipality and 6 Corporations)			
3(b)	Percentage of ULBs which have set-up of plastic waste management system as per Rule 6(2)?	98.92	100	1.08	6 months
3(c)	Percentage of ULBs having facilities for collection of segregated waste	95.83	100	4.17	6 months
3(d)	Percentage of ULBs Material Recovery Facility	93.43	100	6.57	6 months
4(a)	Total No. of Panchayat	941			
4(b)	Percentage of Grama Panchayat which have setup of plastic waste management system as per Rule7	31.74	100	68.26	6 months
4(c)	Percentage of GPs having facilities for collection of segregated waste	87.25	100	12.75	6 months
4(d)	Percentage of GPs having Material Recovery Facility	66.29	100	33.71	6 months
5(a)	No. of registered Producers/brandowners/importers as per Rules 9 & 13 of PWM Rules?	54 no.s			
5(b)	Percentage of Producers/brandowners/importers which have engaged with ULBs for PWM				
5(c)	Percentage of ULBs which have set-up system for plastic waste management with assistance of producers been set-up?Rule	1.1	100	98.9	6 months
6(a)	Number of registered plastic waste recyclers	123			
6(b)	Capacity of recycler (TPD)	600 TPD			
7	Status-of Utilization of plastic waste (Annual Report from VI pt.4)				
7(a)	Quantity of Plastic waste utilized in recycling (TPD)	600 TPD			
7(b)	Quantity of Plastic waste utilized in recycling Road Construction	243.09TPA			
7(c)	Quantity of waste co-processed in plastic waste in cement kilns	1713.58 TPA			
7(d)	Quantity of waste utilized in production of RDF	Nil			
7(e)	Quantity of plastic waste used in production of waste to oil	Nil			
7(f)	Quantity of plastic waste used in other purpose (Please specify)	Nil			
8(a)	No.of Units registered manufacturing compostable plastic	3 units			
8(b)	Total capacity of units manufacturing compostable plastic	25.15 TPA			
9(a)	No. of unregistered plastic manufacturing or recycling units (Annual Report format pt.7)	Nil			
10	Whether local bodies have framed bye-laws [Rule 6(4)]?	Yes			
11	Whether plastic carry bags & plastic sheet of thickness<50micron banned or not [Rule 4(c)]?	Banned			
12	Has complete ban on plastic carry bags been imposed? (Annual Report format pt.3)	Yes			

13	Status of action taken on non-compliance of PWM Rules (Annual Report format pt.9)	<p>The Board officers along with the officials of departments conducted inspections for the strict implementation of single use plastic ban in the State. Violations were observed in 153 establishments and an amount of Rs. 7,15,000/- was imposed as fine and Rs.3,35,000/- was obtained. Confiscation of banned items was also done for the strict implementation of ban in the State. The Board inspected various shops and market places throughout Thiruvananthapuram district on 21/02/2022 and 12 kg of banned single use plastic items caught in this inspection another inspection was carried out in Kollam city and fine of Rs.1,90,000/- . Pathanamthitta 611.155Kg ban Single use plastic collected. Alappuzha District collect 30kg banned single use plastic ,imposed fine Rs 30000/- .Idukki 0.36370tone penalty 150000/- . As per the G.O. No.673/2023/LSGD dated 21.03.2023, a special enforcement task force was constituted to detect the violations in waste management. As of 16/05/2023, out of 7628 inspections conducted by the Task Force in the State, 2852 violations have been noticed and further action is being taken.</p>
14	Status of marking & labelling on plastic carry bags & multi layered packaging (Rule 11)	Single use Plastic is banned in Kerala
15	Whether State Level Advisory Committee is constituted or not? [Rule 16] If yes, details of number of meetings conducted in a year	Yes
16	Status of phasing out of manufacture and use multi-layered plastic which is non-recyclable or non-energy recoverable or with	PVC flex has been banned in the State.
17		
a	Details of Action taken to ensure that plastic waste is not burnt (Rule-6(g))	Instruction given to local bodies
b	Details of Action taken w.r.t. engagement of civil societies/groups with waste pickers (Rule-6(f))	Local bodies with Harithakarma Senas associated with waste pickers
c	Details of Action taken w.r.t. creating awarness among stakeholders (Rule-6(e))	Awareness Programmes were conducted at State, District and Institutional levels.

Annexure IV (Column 5)						
Details of units producing restricted Single Use Plastic items						
S.No	Items	Total No of units	Operating Units (No.)	Capacity of operating units (TPD)	Closed Units (No.)	Capacity of closed units (TPD)
1	Ear buds with plastic sticks					
2	Plastic sticks for balloons					
3	Plastic flags					
4	Candy sticks					
5	Ice-cream sticks					
6	Polystyrene [Thermocol] for decoration					
7	Plates, cups, glasses, cutlery such as forks, spoons, knives, straw, trays,					
8	Wrapping or packing films around sweet boxes, invitation cards, and cigarette packets					
9	Plastic or PVC banners less than 100 micron, stirrers					
10	Plastic Sheets < 50 micron					
11	Plastic Bags < 75 micron					

*Ban on single use plastic items in the State w.e.f 01/01/2020 Vide G.O.(Ms) No. 6/2019 Env dated 27/11/2019; G.O. (Ms) No. 2/2020 /ENVT dated 27-1-2020 ; vide GO no G.O. (Ms) No. 4/2020 Envnt dated 16/02/2020 and G.O.(Ms)No.2/202/ENVT dated 28/02/2021 G.O. (Rt) No. 37/2021/ Envnt. dated 04/05/ 2021. Plastic carry bags irrespective of thickness are included in the single use plastic ban.

Annexure-VII (Column 9)

Details of violations & action taken on non-compliance of provisions of PWM Rules, 2016, as amended, 2018

Sl. No.	Rule	Provisions	Violator	Nature of Violation	Action taken
1	4(c)	Carry bag made of virgin or recycled plastic, shall not be less than fifty microns in thickness;		Single use plastic is banned in Kerala	
2	4(d)	Plastic sheet or like, which is not an integral part of multi-layered packaging and cover made of plastic sheet used for packaging, wrapping the commodity		Single use plastic is banned in Kerala	
3	4(f)	Sachets using plastic material shall not be used for storing, packing or selling gutkha, tobacco and pan masala;		Banned	
4	4(h)	Carry bags made from compostable plastics shall conform to the Indian Standard: IS 17088:2008 titled as specifications for Compostable Plastics, as		Ban of compostable carry bag is subjected to judgement dated 06/02/2021 in WP(C)4291/2020.	
5	6(1)-(7)	Every local body shall be responsible for development and setting up of infrastructure for segregation, collection, storage, transportation,	34748 Harithakarma senas, 1201 MCFs and 137 RRFs		
6	6(2)(g)&7(c)	Ensuring that open burning of plastic waste does not take place		Instruction given to localbodies	
7	8(1)(a)	The waste generator shall take steps to minimize generation of plastic waste and segregate plastic waste at source	34748 Harithakarma senas, 1201 MCFs and 137 RRFs		
8	8(1)(b)	The waste generator shall not litter the plastic waste	34748 Harithakarma senas, 1201 MCFs and 137 RRFs		
9	13(2)	Every producer or brand-owner shall, for the purpose of registration or for renewal of registration, make an application in Form-I to i."The concerned State Pollution Control Board or Pollution Control Committee of the Union territory, if operating one or two States or Union Territories"; ii. "The Central Pollution Control Board , if operating in more than two States or Union Territories"		In Kerala since the launch of portal on October 21th (7 brand owners, 110 producers , 112 importers,14PWP) have been given registration so far. Note on Implementation of Extented Producer Responsibility under Plastic Waste Management Rules by the State of Kerala is attached as Annexure IX.	
10	13(3)	Every person recycling or processing waste or proposing to recycle or process plastic waste shall make an application to the State Pollution Control		Number of registered recyclers in the State- 123	
11	13(4)	Every manufacturer engged in manufacturer of plastic to be used as raw material by the producer shall make an application to the State Pollution		Number of registered manufacturers/ producerers in the State-556	
12	14(1)	Retailers or street vendors shall not sell or provide commodities to consumer in carry bags or plastic sheet or multi-layered packaging, which are not		Single use plastic is banned in Kerala	
13		Any other (Please specify)		Nil	

Annexure-VIII (Column 11)

Status of submission of Annual Report by ULBs/VPs to SPCB/PCC [Rule 17(2)]		
Sl. No.	Item	No.
1	Total No. ULBs	93
a	Total NO. of ULBs which have provided complete Annual Report	64
2	Total No. GPs	941
a	Total No. of GPs which have provided complete Annual Report	373
3	Any other local bodies (please specify)	Nil
a	Any other local bodies which have provided complete Annual Report	Nil

Annexure-IX

Action Taken for the implementation of EPR under Plastic Waste Management Rules by the State of Kerala as on 31/03/2023

1. Awareness and capacity building:

Awareness created among, plastic waste processors, brandowners, importer: local bodies through various webinars, meetings.

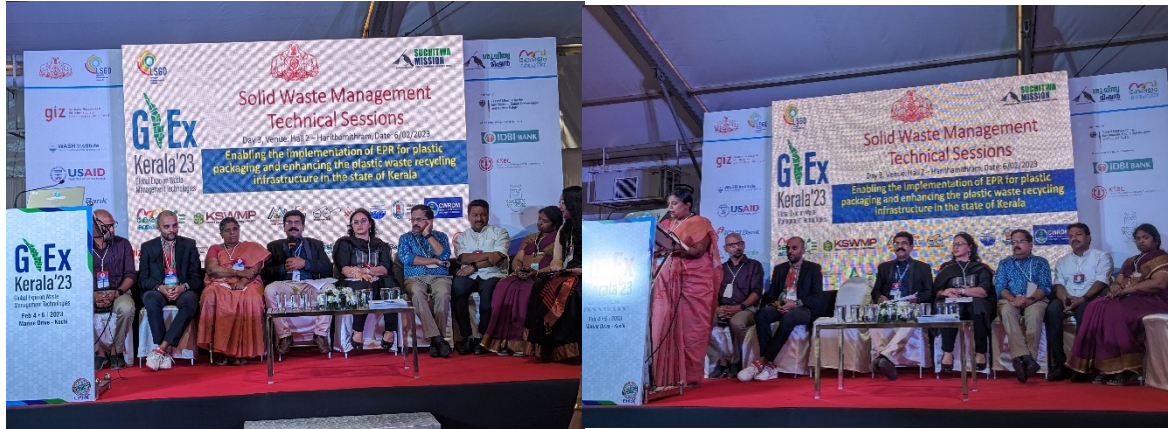
1.1 State level programmes

- To generate awareness on EPR portal and complying to framework for complying to the EPR regulations, a workshop was organised by GIZ India along with FICCI as Industry Partner, under the aegis of Directorate of Environment & Climate Change (DoECC), GoK, Kerala State Pollution Control Board (KSPCB) & Centre for Environment and Development (CED) on 17.09.2022. The role of stakeholders in EPR implementation & successful enforcement on ground were discussed at a state level.



Images from left to right: Mr. Savio Mathew, Head, FICCI Kerala State Council; Dr. Rachna Arora, Team Leader-CES project; Mr. Deepak L Aswani, Chairman, FICCI Kerala State Council; Dr. Sheela A M, Member Secretary, Kerala State Pollution Control Board; Mr. Jyothish Chandran G, Director (SWM), Suchitwa Mission; Mr. Suneel Pamidi IFS, Director, Directorate of Environment & Climate Change, Kerala (joined virtually)

- As part of the Global Expo on Waste Management (4-6 February 2023) by the Suchitwa Mission, Technical Support Group' for Waste Management in Kerala, a technical session on EPR was jointly organised with key institutions including Kerala SPCB and jointly with GIZ . The session titled “Enabling the implementation of EPR for plastic packaging and enhancing the plastic waste recycling infrastructure in the state of Kerala” current challenges and opportunities associated with EPR in Kerala in the context of plastic packaging were discussed and support offered by state and central government to enhance recycling was elaborated.



1.2 Regional awareness programmes

(jointly by Kerala state PCB, GIZ, Kerala Plastic Manufacturing Association , Plastic recycling Industrial Association)

Facilitated trainings for approximately 200 members of the Kerala Plastic Manufacturers Association (KPMA) and approximately 100 members of the Plastic Recycling Industrial Association (PRIA) on EPR Guidelines for Plastic Packaging

- 25th May 2022 (members of KPMA also joined the session to encourage recyclers to get registered in the EPR portal, held in Perumbavoor)
- 11 June 2022- Training for members of plastic association -KPMA, As part of celebrating silver jubilee on formation of Kerala Plastic Manufacturers Association (KPMA), Kerala (Held at Calicut for plastic producers in the northern part of Kerala)
- 15 June 2022- Training for members of plastic association -KPMA. (Held at KDPIA Hall, Kalamassery, Ernakulam)





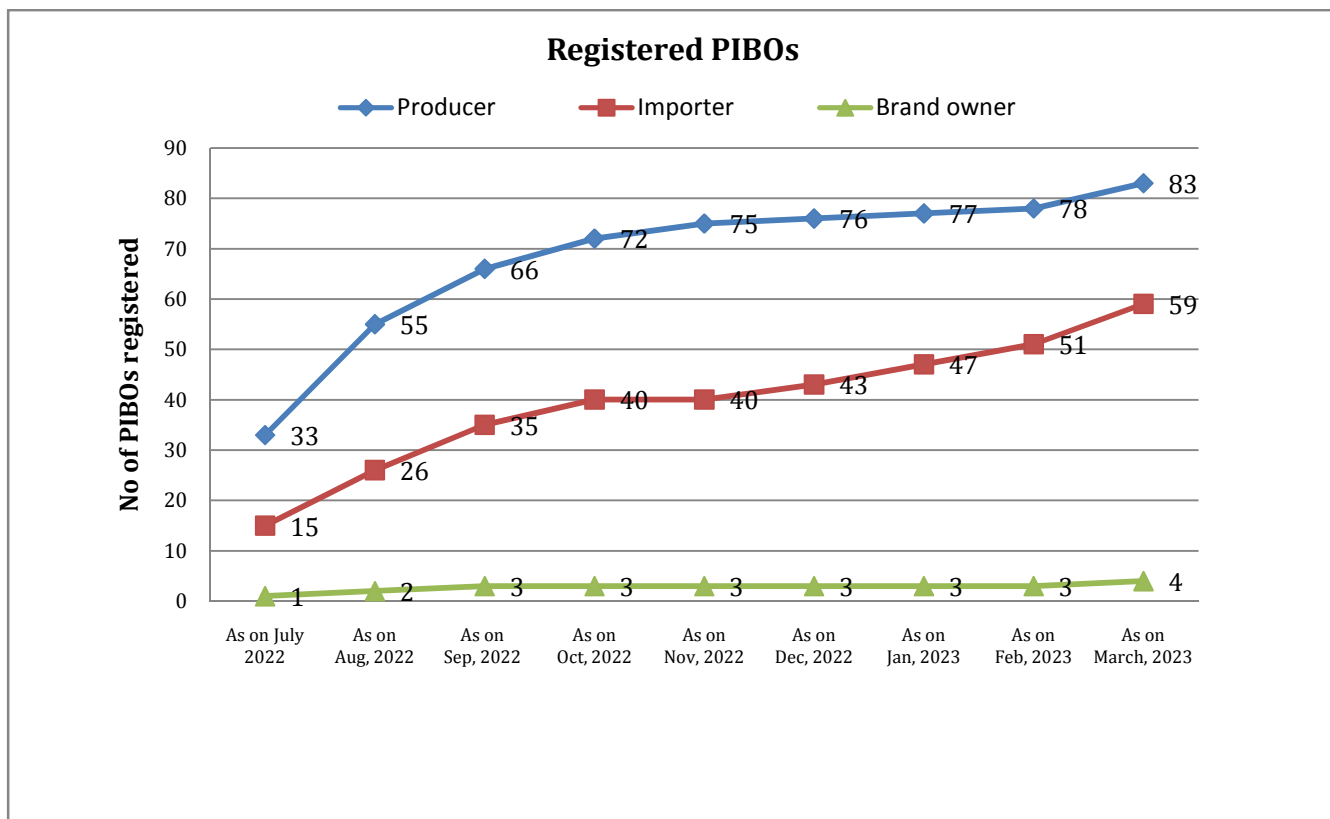
1.3 Webinar Session:-

- Online Training on enforcement of Plastic Waste Management Rules, and EPR was given district wise on 06.10.2022, 15.10.2022, 25.10.2022 and 18.11.2022 .
 - V.C regarding Module IA (Updated Module1) & Module IIIA (Generation/Exchange) of Centralized EPR Portal for importers and recycling Plastic waste processor on 07.12.2022.
 - Trained 437 Secretaries / Health Inspectors/ Engineers on implementation of PWM Rules for Urban Local Bodies across major districts of Kerala
 - Facilitated trainings for Kerala Plastic Manufacturers Association, Plastic Recycling Industrial Association and other key industries in Kerala on EPR (May – Sept 2022)
 - Participatory Training on Plastic Waste Management Rules and Implementation perspectives for Health Inspectors of Thiruvananthapuram Municipal Corporation was conducted on 29.10.2022
2. Brochure in vernacular language was published in website for applying for EPR registration and also circularity among PWPS.
 3. Study on assessment of the brands of the collected plastic at solid waste processing and disposal facilities was conducted.

Kerala SPCB is continuously making efforts to increase the number of PIBOs and PWP's units for their registration on CPCB EPR portal.

Number of registered PIBOs

	As on July 2022	As on Aug, 2022	As on Sep, 2022	As on Oct, 2022	As on Nov, 2022	As on Dec, 2022	As on Jan, 2023	As on Feb, 2023	As on March, 2023
Producer	33	55	66	72	75	76	77	78	83
Importer	15	26	35	40	40	43	47	51	59
Brand owner	1	2	3	3	3	3	3	3	4
Total	49	83	104	115	118	122	127	132	146



Number of registered PWPs				
Recycler category I	Recycler category II	Recycler category III	Waste to Energy Plants	Co-processing
7	4	3	0	0

