

Annual Report

(2013-14)

on

Implementation

of

Plastic Waste Management Rules

(As per Rule '12' of PWM Rules, 2011)



CENTRAL POLLUTION CONTROL BOARD
(Ministry of Environment & Forests)
Parivesh Bhawan, East Arjun Nagar,
Delhi-110032

Annual Report for the year 2013-2014 on Implementation of PWM Rules, 2011

State-wise Observations:

- 1. Andaman & Nicobar Islands:** The estimated plastic waste generation in this state is 8.6 tons/annum. Six units are authorized for transporting plastic waste to mainland for safe disposal under Rule '6' of PWM Rules, 2011. There is an executive order for complete ban on usage, storage, import, manufacture and transportation of plastic carry bags.
- 2. Andhra Pradesh:** The estimated plastic waste generation in this state is 2,43,820 tons/annum. There are 240 registered plastic manufacturing/recycling units and 9 multilayer plastic units. There are 61 unregistered units in the state. The information regarding Rule '6' on implementation of Plastic Waste Management has not been provided.
- 3. Arunachal Pradesh:** The information about plastic waste generation in this state is not available. Information regarding Rule '6' on implementation of Plastic Waste Management has not been provided. There is an executive order for ban on usage of plastic carry bags issued.
- 4. Assam:** The estimated plastic waste generation is 240 tons/annum. There are 10 registered plastic manufacturing and recycling units and 3 multilayered and metallised units. PWD, CPWD & other construction agencies are requested from time to time to make arrangement for utilization of plastic wastes in road construction/co-processing etc. The State Level Advisory Body has recommended that no plastic bags less than 40 micron is imported to Assam. At every district level, a Committee shall be formed to monitor and detect cases of violation under Rule, 2011. There are 94 municipal authorities under jurisdiction of State Pollution Control Board of Assam.
- 5. Bihar:** The data for amount of plastic waste generation in this state is not available. There are 31 registered plastic manufacturing and recycling units and 55 unregistered units in the State. Information regarding implementation of Plastic Waste Management Rule '6' has not been provided.
- 6. Chandigarh:** The total plastic waste generation is 4818 tons/annum. There are 57 registered plastic units in Chandigarh. The Chandigarh has issued separate notification ED/2006/684, Dated 30/7/2008 for complete ban on plastic carry bags.
- 7. Chhattisgarh:** The estimated plastic waste generation in the State is not available. There are 12 registered plastic manufacturing and recycling units and 1 multilayered and metallised unit. Information regarding Rule '6' of PWM Rules, 2011 has not been provided.
- 8. Daman, Diu & Dadra Nagar Haveli:** The information about the amount of plastic waste generation is not available. There are total 4 registered plastic units. There is a partial ban on use of carry bags in Daman, Diu & Dadra Nagar Haveli. The information regarding Plastic Waste Management is not available.
- 9. Goa:** The estimated plastic waste generation in the State is 117.73 tons/annum. There are 21 registered plastic manufacturing units. The plastic waste is sent to ACC, Wadi & Vasvadatta cement works for co-processing under Rule '6' of PWM Rules, 2011. Goa has issued separate

notification on Non-biodegradable Act for Plastic Waste Management. Monitoring cum Working Committee on Solid Waste Management is formed under PWM Rule, 2011.

10. **Gujarat:** The estimated plastic waste generation in this state is 25,796.65 tons/annum. There are 462 registered plastic manufacturing and recycling units and 18 multilayered and metallised units. Information regarding Rule '6' of PWM Rules, 2011 has not been provided by the State of Gujrat. The use of plastic carry bags is completely banned in the city of Gandhinagar.
11. **Haryana:** The estimated plastic waste generation in this state is 50,332.69 tons/annum. There is 1 registered plastic manufacturing and recycling units and 6 registered multilayered and metallised units. Separate Notification regarding complete ban on plastics carry bags in the whole State has been issued. The plastics waste is not used for any beneficial purpose by municipalities under Rule '6' of PWM Rules, 2011. The State Government has made total of 598 challans during the year 2013-14, for violations of various provision of the PWM Rules, 2011.
12. **Himachal Pradesh:** The State has generated total of 2,326.80 tons/annum of plastic waste during 2013-14. The State has 3 registered plastic waste manufacturing/recycling units. The Govt. of H.P. has issued a separate Act: HP Non-Biodegradable Garbage Control Act, 1995 for complete ban on use and sale of plastic carry bags in Himachal Pradesh. The CPWD/HPPWD/ACC have used plastic waste for road construction and incineration as per Rule "6" of PWM Rules, 2011.
13. **Jharkhand:** The total plastic waste generated by the State of Jharkhand was 75,817.80 tones/annum, for the year 2013-14. The State has total 8 registered plastic manufacturing/recycling units, out of which 6 units are related to multi-layered plastic operations. There is one unregistered plastic manufacturing/recycling unit. The use and sale of plastic carry bags is partially banned. The Forest and Environment Department, Govt. of Jharkhand has issued a separate notification for PWM (notification no 3691, Dated 11/09/2013).
14. **Karnataka:** The total waste generated during 2013-14 is 77,247 tons/annum. There are 209 registered plastic manufacturers and 2 registered compostable plastic manufacturers/recyclers in the State. Apart from this, there are 19 unregistered plastic manufacturers. Information regarding implementation of plastic waste management rules is not available. There are total 2777 violation of PWM Rules reported during 2013-14.
15. **Kerala:** The State of Kerala has produced approximately 27,794 tons/annum of plastic waste during 2013-14. There are 786 plastic units in the State, out of which 3 units are of compostable plastic and 2 units deal with multi-layer plastic. The State of Kerala has issued separate notification for banning the use of plastic carry bags during pilgrimage season at Sabarimala Pilgrim Center.
16. **Madhya Pradesh:** Madhya Pradesh has produced 22,973.55 tons/annum of plastic waste during 2013-14. M.P. has 45 registered plastic manufacturing/recycling units and 04 registered multi-layer plastic units. Plastic Waste is co-incinerated in cement plants.

Approximately 7813.32 kg of substandard plastic carry bags have been seized in Gwalior during 2013-14.

17. **Maharashtra:** The State of Maharashtra generates around 5,87,285 tons/annum of plastic waste during the year 2013-14. There are 572 registered plastic units and 33 registered multi-layer plastic units. The State has issued Guidelines (M&V Rules 2006) for minimum thickness of carry bags as 50 μ . Carry bags less than thickness of 50 μ are not allowed & plastic sachets for guthka are banned. MPCB has issued direction to local bodies to submit proposals for use of plastic waste in beneficial manner.
18. **Manipur:** The State has generated around 5475 tons/annum of plastic waste during 2013-14. There are 8 registered and 15 unregistered plastic units in this State. Around 25 notices have been issued to users/sellers for using/selling plastic carry bags.
19. **Meghalaya:** Total 4015 tons/annum of plastic waste was generated by State of Meghalaya during 2013-14. The number of registered plastic and multi-layer plastic units is 3 and 1 respectively. There is no plastic carry bag manufacturer in this State. The information about plastic waste management is not available.
20. **Mizoram:** According to the data of Aizwal city, total 45625 tons/annum of plastic waste was generated during 2013-14. Meeting of Mizoram Pollution Control Board held on 01/08/2013 decided to use plastic waste for road construction and Plasma Pyrolysis method.
21. **Nagaland:** There is no information available about the waste generated by the State. Total 3 units of plastic manufacturing/recycling are registered in Nagaland. The use of plastic carry bags is completely banned in the State. NPCB has constructed a bitumen polymer road within the office premises as per Rule 6 of PWM Rules-2011
22. **Odisha:** Odisha has generated around 896 tons/annum of plastic waste during 2013-14. There are 19 registered plastic manufacturing/recycling units in the State. Partial amount of plastic waste is used for co-processing. There is partial ban on use of plastic carry bags in Odisha State.
23. **Pondicherry:** Data for plastic waste generation in the U.T. is not available. There are 5 registered and 46 unregistered plastic waste units in this Union Territory. This UT has issued separate notification regarding minimum thickness of plastic carry bags. The plastic carry bags having thickness less than 51 μ are banned in Pondicherry.
24. **Punjab:** Punjab has generated 377.78 tons/annum of plastic waste during 2013-14. There are total 152 plastic units, out of which 2 units are involved in multi-layer plastic manufacturing. Around 70 unregistered units are present in the State. Government of Punjab has issued separate Act for carry bags: The Punjab Carry Bags Control Act 2005. However, there is no ban on sell and use of carry bags in Punjab. Total 88 violations of PWM Rules-2011 have been recorded during 2013-14
25. **Telangana:** Telangana has generated 2,00,385 tons/annum of plastic waste during 2013-14. There are total 209 plastic units out of which 96 units deal with multi-layer plastic manufacturing. The State has issued separate notification for plastic waste management on 1/11/2001. There is a partial ban on manufacturing and use of plastic carry bags. During 2013-14, total 21 violations of Plastic Waste Management Rules-2011 have been reported.

26. **Tripura:** Tripura has produced 11,680 tons/annum of plastic waste during the year 2013-14. There are 36 registered plastic units in the State. There is no unregistered unit in this state. The State has issued separate notification for banning manufacturing & use of plastic carry bags.
27. **Uttarakhand:** There are 2 registered multi-layer plastic units in this State. The information on plastic waste management is not available.
28. **West Bengal:** The State has not estimated plastic waste generation. There are 49 registered recycling and 21 registered plastic carry bags manufacturing units present in the State. Apart from this 361 unregistered recycling units & 109 unregistered plastic carry bags manufacturing units are present. The State issued order for banning use of plastic packaging for guthka, tobacco and pan masala. Plastic waste has been used for the construction of polymer bitumin roads by few municipal corporations.

NOTE:- The States of Delhi, Jammu & Kashmir Lakshadweep, Rajasthan, Sikkim, Tamilnadu and Uttar Pradesh have not provided any information regarding Annual Report 2013-14.

Recommendations:

As per Rule 12, SPCBs/PCCs shall prepare and submit the annual report on implementation of these Rules to CPCB by 30th September (now 30th July, PWM Rules, 2016) every year. Out of 35 SPCBs/PCCs, only 28 SPCBs/PCCs have provided information about implementation of Plastic Waste Management Rules, 2011 for Annual Report 2013-14. The 28 States/UTs, who have provided partial information on implementation of PWM Rules. Also, major violation such as use, stock & sell of <40 μ thickness plastic carry bags are manufactured, sold & used by public. Besides, some States/UTs, namely: Jammu & Kashmir, Delhi, Lakshadweep, Rajasthan, Sikkim, Tamil Nadu and Uttar Pradesh have not submitted their reports. Based on available information the recommendations for improvement of implementation of PWM Rules are given as below:

1. As per the PWM Rules, 2011, all the plastic manufacturing/recycling units shall be registered with the concerned SPCBs/PCCs. There are around 689 unregistered plastic manufacturing/recycling units running in few States/UTs, namely: Bihar, Jharkhand, Karnataka, Manipur, Punjab, Telangna and Pondicherry. Concerned SPCBs/PCCs should take appropriate action against those unregistered units.
2. According to the Rule-6 of Plastic Waste Management Rules, 2011, Municipal Authorities shall be responsible setting up, operationalization and co-ordination of waste management system and performing the associated functions. However, it is observed that most of States/UTs have not established the organized system for Plastic Waste Management. Hence resulting into massive littering of plastic waste in towns & cities of the country. Few States/UTs namely: Goa, Himachal Pradesh, Madhya Pradesh, Nagaland, Odisha and West Bengal are using their plastic waste for beneficial purposes like co-incineration in cement plants and road construction etc. Some other States/UTs namely: Andaman & Nicobar Island, Chandigarh and Kerala are recycling/disposing their plastic waste.
3. As per Rule No. 10 of PWM Rules, 2011, carry bag shall not be provided free of cost by retailers to customers and concerned municipal authority will be responsible for minimum pricing of carry bags.

However, it is observed that most of the States/UTs don't have proper monitoring system for use of carry bags as per the specified guidelines. Only 17 States/UTs have partial or complete ban on use of plastic carry bags. Still the States/UTs with partial or full ban on plastic carry bags are using plastic carry bags indiscriminately. Besides, thin carry bags (40µ) are used in other States/UTs.

4. As per the Rule No. 8 of PWM Rules, 2011, retailers shall be responsible for use of properly marked and labeled plastic carry bags. Most of the States/UTs are not following the proper practice of plastic carry bag labelling, especially in case of the carry bags available with the street vendors and small retailers.

5. As per Rule no. 10 of PWM Rules, 2011, there shall be a State Level Advisory Body to monitor the implementation of PWM Rules, however, majority of the States/UTs have not constituted such monitoring body.

6. It is observed that SPCBs/PCCs are municipal corporation in the cities/towns are not implementing these Rules in holistic manner, hence lot of violation have been reported.

7. It is proposed to that MoEF and CC shall direct Secretary in-charge of Urban Development in each State/UT for setting-up of plastic waste management facilities in each city/town of India.

NOTE: State wise table showing information on implementation of the Rules is **Annexed**.

State-wise Status of Implementation of PWM Rules, 2011 for the Year 2014

Name of the SPCB/PCC	Estimated Plastic Waste generation Tons Per Annum (TPA)	No. Of registered Plastic Manufacturing/Recycling (including multilayer, compostable) units. (Rule 9)			No. of Unregistered plastic manufacturing Recycling units. (in residential /unapproved areas)	States/UTs issued separate Act/Notification if any (Attach copy of notification or executive order)	Implementation of Plastic Waste Management (PWM) e.g. Collection, Segregation, Disposal (Co-processing road construction etc.) (Rules 6) (Attach separate sheet)	Partial or complete ban on usages of Plastic Carry Bags (through Executive Order) (Attach list of Plastic/Cities/Towns)	Status of Marking Labelling on carry bags (Rule 8)	Explicit Pricing of carry bags (Rule 10)	Recommendation of State Level Advisory (SLA) Body on Implementation (Rule 11)	No. of violations and action taken on non-compliance of provisions of these Rules	Number of Municipal Authority under jurisdiction and Submission of Annual Report to CPCB (Rule 12)
		Plastic units	Compostable Plastic Units	Multilayer Plastic units									
(1)	(2)	(3)			(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
A & N Island	8.6	Nil	Nil	Nil	Nil	Vide Notification dated 06/10/2009 issued separate Notification	Transporting plastic waste to mainland for safe disposal	Imposed complete ban on usage, storage, import, manufacture, transportation of plastic carry bags	Carry bags are completely ban in A& Nicobar Islands	Does not arise	Nil	Nil	01 Municipal Authority
Andhra Pradesh	243820	240	Nil	9	61	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Incomplete Information regarding no. of Municipal Authority
Arunachal Pradesh	Not Available	Nil	Nil	Nil	Nil	No	Not Available	Executive order on ban on usage of plastic carry bags issued.	Not Available	Yet to empty	Nil	Nil	Incomplete Information regarding no. of Municipal Authority

Assam	240 (data from 25 ULBs out of total of 94)	10	Nil	3	Nil	Nil	(i)The District Administration & Urban Deviltment Department (UDD), Govt. of Assam have been requested for enforcement of the plastic waste management & Handling Rule 2011 relating to the use , collection, segregation, transportation & disposal of post consumer plastic wastes. (ii)PWD &, CPWD & other construction agencies are requested from time to time to make arrangement for utilization of plastic wastes in road construction / co- processing etc.	District Administration have been promulgating 144 Cr. Pc. for prohibition on the uses of recycles carry bags & plastic of thickness less than the prescribed thickness. 1.kamrup 2.Sonitpur 3.Nalbari 4.Dibrugarh 5.Cachar 6.Karimganj 7.Hailakandi 8.Jorhat 9.North Lakhimpur 10.Gola 11.Bongaigaon 12.Barpet	All registered units carry out marketing labelling on carry bags	Not Available	State Level Advisory Body recommended that plastic bags <40 micron is imported to Assam. It was further recommended that at every district level, a committee shall be formed to monitor and detect cases of violation Under Rules, 2011 and also take effective steps to implement this provision of rule	No violation have been reported till date.	94 Nos.
Bihar	Not Available	31	Nil	Not Available	55	No	Not Available	Not Available	Not Available	Not Available	No information	Nil	Nil
Chandigarh	4818	57	Nil	Nil	Nil	Complete ban on plastic carry bags. Vid notification ED/2006/684 Dated 30/7/2008	Municipal Corp., Chandigarh is collected the solid waste including plastic waste & send it to garbage Processing Plant for Processing for final disposal.	Nil	Nil	Nil	Nil	Nil	01 i.e. Municipal Corp. Chandigarh

Chhattisgarh	Not Available	12	Nil	1		Nil	Nil	Nil	Yes	Nil	Nil	Nil	Not Available
Daman,Diu& Dadra Nagar Haveli	Not Available	04	Not Available	Not Available	Data under compilation	Yes, the notification were republished vide notification dated 20/04/.	As per Rule 4, the aforesaid instructions/notification is already forwarded to the respective Municipalities.	Imposed partial ban on use of carry bags. vide no. PCC/DMN Plastic bags/12-13/473 dated 24/01/2014	Nil	Not Available	Not Available	Nil	Not reported
Delhi	(information not provided by DPCC)												
Goa	117.73	21	Nil	Nil	Nil	Goa Non-biodegradable Act has been enacted.	PW is sent to ACC, Wadi& Vasvadatta cement works for co-processing	Not available	Yes	Not Available	Monitoring cum Working Committee on Solid Waste Management is formed	Yes	Not Available
Gujarat	251796.65	462	Nil	18	0	Nil	Information not available	Use of plastic carry bags is completely banned in Gandhinagar.	Comply at large however in case of violation board takes necessary action.	Partially implemented by ULBs.	Nil	The Municipal Authority imposed penalty/Ceased the Plastic bags in case of less than 40 micron thickness	Only 28 ULBs has submitted Annual Report to the Board out of 167 ULBs.
Haryana	50332.69	01	Nil	06	Nil	Yes, Separate Notification regarding complete ban of plastics carrybags in whole State	Plastics waste is not used for anybeneficial purpose by Municipality.	Use and sale of plastic carry bags is totally banned	Use and sale of plastic carry bags is totally banned	Not constituted.	Not Available	598 Challans issued	Information not provided

Himachal Pradesh	2326.8	3	Nil	Nil	Nil	HP non-biodegradable garbage (control Act, 1995 promulgated)	Plastic waste is sold to: WD/HPPWD use for PW road construction purposes and for incineration.	Complete ban or use & sale of plastics carry bag.	Nil	Nil	Not Available	Not Available	Incomplete Information regarding no. of Municipal Authority
J & K	Information not provided												
Jharkhand	75817.80	02	Nil	06	01	Notification 3691 11/9/2013	Not fixed	Partly banned	No information	Incomplete information	SLA body constituted		Information not provided
Karnataka	77247	209	02	0	19	PWM Rule by MoEF has been adopted.	Not available	Not available	Information Not Available	51	Attached	2777	SPCB submit Annual Report to CPCB.
Kerala	27.794	763	3	2	0	Nil	Government is also extending financial support to urban local bodies in setting up of facilities. Plastic recycling unit :221, Shredder : 1	Partial ban on use of plastic carry bags at Sabarimala pilgrim centre. Notification no. PCB/HO/PLA/GEN/2010	Complied	Being implemented through local bodies		Nil	Five Corporations and Sixty Municipalities on receiving instructions from CPCB Board had issued directions U/S 5 OF E(P) Act dated 9/9/13 to all corporations
Lakshadweep	Nil	No Information			Nil	Nil	Nil	Not implement successfully	Nil	Nil	Nil	Nil	Nil
M.P.	22973.95	45	Nil	04	Nil	Not Available	Co-incinerated in cement plant	Complete ban on substandard plastic carrybags .	yes	Few local bodies carry bag price decided (??)	SLA Body constituted	7813.32 Kgs. Sub standard seized 2013-14 Gwalior	200

Maharashtra	587,285	572	Nil	33	Nil	50µ is the thickness limit of carry bags (M&V Rules 2006.	MPCB issued direction to Local Bodies for submission of proosal	Carry bags <50µ not allowed. Plastic sachets for gutkha, banned	Not Available	Consider for SLA formation	Not Available	Board has monitoring compliance of Plastic Carry Bags.	Incomplete Information regarding no. of Municipal Authority
Manipur	5475	08	Not Available	Not Available	15 units	Not Available	No information	No. issue of partial ban. However, ban on usage of plastic bags less than 40 µ as per Plastic Rules 2011 as amended in force in the State	Not Available	Not Available	SLA Body has been constituted.	25 notices given to users /sellers for use & sale of plastic carry bags less than 40µ.	Incomplete Information regarding no. of Municipal Authority
Meghalaya	4015	3	Nil	01	Nil	Not Available	Workshop organised by the Board in collaboration with CPCB with all cement plants in state with regard to Co-processing of wastes in their kilns.	No information	No carry bags Manufacturer in the State	Board has no complaints with regard to explicit pricing of carry bags.	Not yet formed	Nil	No Information available
Mizoram	45625	Nil	Nil	Nil	Nil	Nil	MPCB meeting held on 01/08/2013 decided to adopted "Plastic for road construction" and Plasma pyrolysis method".	Nil	Nil	Nil	Nil	Nil	Incomplete Information regarding no. of Municipal Authority
Nagaland	Not Available	3	Nil	Nil	Nil	Nil	NPCB has constructed a bitumen polymer road within the office premises.	Use and sale of plastic carry bags is totally banned	Started in Kohima city	No	SLA body was not constituted	Nil	Submitting
Odisha	896.618	19	Nil	Nil	Nil	Not Available	Few urban local	Use of carry bags	Not properly	Minimu	SLA	No violation	Out of 106 ULBs

	(47 out of 106 ULBs)						bodies are sending their plastic waste to M/s ACC Ltd. Bargarh for co-processing	have been banned	labelled and marked	m price fixed	body not constituted	has been observed	47 ULB have submitted annual report format
Pondicherry	Not Available	5			46	Issue notification on ban on sale and usage of thin plastic articles less than 51µ.	Not Available	Banned for below 51µ.	Not Available	Not Available	Not Available	Not Available	Not Available
Punjab	377.765	150	0	2	70	Govt. of Punjab has separate Act namely "The Punjab Carrybag Control Act 2005"	No information	No ban on use of plastic carry bags	Max. units are labelling on carry bags	Prices are to be fixed by the Local Bodies.	Nil	88	137
Rajasthan	Information not provided												
Sikkim	Information not provided												
Tamil Nadu	Information not provided												
Telangana	243820	240	Nil	9	61	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available
Tripura	11680	36	Nil	Nil	Nil	Notification issued for banning manufacture, use of plastic carry bags	Not Available	Complete ban on all carry bags	Not Available	Not Available	Under consideration	Not Available	20.
Uttarakhand	Not Available	Nil	Nil	02	Not Available	Yes	Nil	Nil	Nil	Nil	Nil	None	None
West Bengal	Not Available	Total 70nos. units obtained registrations. i. Recycling units-49nos.			Recycling units-361nos.	Yes, west Bengal Government had issued	Polymer-Bitumen roads have been constructed by ULBs like KalyaniMunicipality,Cha	Use of plastic carry bags completely banned	Not Available	Explicit Pricing of carry bags is	SLA Body not constit	Nil	Number of Municipal Authority under jurisdiction is 127.

		ii. Carry bag manufacturing units- 21nos.			Carry bag manufacturing units- 109nos.	Order for banning of use of Plastic Packaging for gutkha, tobacco and pan Masala.	ndernagore Municipal Corporation,AshoknagarKalyangarh Municipality			the responsibility of ULBs.	uted		
Total	1829059	2896	5	95	689	14	9	16				3422	