

Item No. 6 (Pune Bench)

**BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI**

(Through Video Conferencing)

Original Application No. 2/2016 (WZ)

Prof. Ravindra Bajarang Shinde

Applicant(s)

Versus

Principal Secretary, Environment Department & Ors.

Respondent(s)

Date of hearing: 31.07.2020

Date of uploading of order: 07.08.2020

**CORAM: HON'BLE MR. JUSTICE SHEO KUMAR SINGH, JUDICIAL MEMBER
HON'BLE DR. SATYAWAN SINGH GARBYAL, EXPERT MEMBER**

For Applicant(s) : Mr. Asim Sarode, Advocate

For Respondent(s) : Ms. Supriya Dangare & Mr. Deepak Gupte, Advocates
for R-1
Mrs. Manasi Joshi, Advocate
Mr. Manoj Wad a/w Kapil Agarwal i/b J. S. Wad &
Co., Advocate for R-14
Mr. Aniruddha S. Kulkarni, Advocate for Urban
Development Department, Govt. of Maharashtra

ORDER

1. The issue raised in this application is that due to non-implementation of the provisions of Plastic Waste (Management and Handling) Rules, 2011 various environmental and health hazards are being created. Even though the responsibilities of these authorities are clearly mentioned in the said rules, they have failed in their duties and hence are responsible for the pollution caused to the environment due to these plastic carry bags. It is stated that, Rule 5 of the said Rules mandates Municipal Corporations and Pollution Control Boards to take legal action against those people who violate the provisions of Environment Protection Act, 1986 as well as, the said rules of 2011. But it is observed that, the above mentioned authorities have failed in their duty which has

resulted in environment pollution. The above mentioned authorities are bound to take action against people who produce, sell, distribute or handle such illegal plastic carry bags, i.e. the thickness of which is not as per the permitted microns. As per the said rules, the MPCB should carry out a survey of industrial unit producing carry bags below 50 Microns. But it is seen that, the MPCB has failed to comply with its duty.

2. It is submitted that, the quarterly reports of the action taken against production, distribution, sell and use of plastic carry bags, the thickness of which is below 50 Microns, are to be sent by all the local bodies (i.e. Municipal Corporations, Municipalities and Zilla Parishads) and MPCB to the Respondent No. 1, i.e. The Principal Secretary of Environment Department of The State of Maharashtra but it fell short of its duty.
3. It is submitted that, the information given as a reply to the RTI application revealed that, the use, manufacturing and distribution of the plastic carry bags is not being carried out as per Rules. Moreover, no stringent legal action has been taken by any of the Authorities. This has resulted in increase of plastic carry bags, thickness of which is not as per the permitted level. The information received under RTI regarding action taken on the Circular Dated 04/12/2009 and 12/04/2012 is as under,

a) The Navi Mumbai sub regional office and Aurnagabad Sub regional Office have not taken any action as per the said two circulars.

b) Pune I Sub Regional Office, Pune II Sub Regional Office, Pimpri Chinchwad Sub Regional Office, Chandrapur Sub

Regional Office and Thane Regional Office have replied that "No closure directions are given".

c) Nashik Sub Regional Office has replied that only one Closure direction was given.

4. Bio-accumulation of plastic inside animals is another dangerous effect of plastic pollution. Plastic pollution has the potential to poison animals, which can then adversely affect human food supplies. Similar to humans, animals exposed to plasticizers can experience developmental defects also. The accumulated plastic releases harmful chemicals, and also breaks down into small pieces, causing extreme discomfort to the animals. About 1,00,000 animals such as turtles, whales, are dying every year due to use of plastic bags by human beings. Many animals ingest plastic bags, mistaking them for food and therefore die. And the worst part is the ingested plastic remains intact even after their death and decomposition of the animal and the plastic fragments may remain as a threat to the other animals. Death of animals due to suffocation, stomach and intestine related diseases is a common feature mostly in developing economies due to improper disposal of plastic food bags that are eaten by these animals.
5. Use of plastic is getting converted into non-biodegradable garbage at hill stations like Matheran, Mahabaleshwar, Panchgani, Chikhaldara, Lonawla, Khandala, Mhaismal, Amboli, etc. and other reserved forest areas and wild life sanctuaries in Maharashtra. These places are also getting environmentally damaged due to use of plastic of all types without any check of Government authorities. Moreover, Mahabaleshwar Hill Station Municipal Council had called for a ban on use of plastic bags by

the traders and shopkeepers in April 2012 but it proved to be of no avail. Thereafter also from 1st November 2015 the same ban was called for by Respondent No.47 but it was observed by the Applicant when he had been there with his family recently in the last week of November 2015, that still there is no development in management of the plastic waste in the Mahabaleshwar. And people there, are not implementing the decision of the Municipal Council and yet no report has been made of any action taken against these individuals or traders or shopkeepers from the Municipal council. In addition, there is no report submitted by the Municipal Council whether the traders using plastic bags below 50 microns are penalized or not.

6. It is actually individual's responsibility also that no one shall knowingly or otherwise throw or cause to be thrown in any drain, ventilation shafts, pipe and fittings, connected with private or public drainage works, natural or man-made lakes, wetlands, any non-biodegradable garbage or construction debris or biodegradable garbage by placing in a non-biodegradable bags or container likely to injure the drainage or sewage system, interfere with the free flow or affect the treatment and disposal of drain and sewage contents which will be dangerous or cause a nuisance to the public health, etc.
7. In essence, poly bags are a nuisance since they are not collected. Poly bags remain an unattractive economic proposition for the waste pickers. In towns, cities and tourist centers, plastic bags have become a plague, and attempts to prevent this have come forth from the State, Central Government and NGOs.

8. It is argued that the plastic is the most important and preferred material in industries. However, this is posing threats to the environment as well as consumer's health. The dangers or threats to environment and therefore to health may be in many direct or indirect ways. When plastic bags are not disposed properly, they find way in drainage systems resulting into chocking of drains, creating unhygienic environment and causing water born diseases. The plastic bags containing left over food gets mixed with the garbage resulting in harmful diseases. The plastic bag is non-biodegradable in nature, therefore it contaminates the soil. The chemicals used to make plastic bags are xylene, ethylene oxide and benzene. These are toxic chemicals that are sources of various diseases as well as disorders in humans. They do not only provide negative effects on the health of people and animals but also to the air. These chemicals can pollute the air too which again harm the living organisms. They will not only affect humans and animals but also plants, water and air.
9. In the landmark case of *Karuna Society for Animals and Nature v. Union of India* The Hon'ble Supreme court suggested that either the use of plastic be banned or the manufacturers should pick up the used plastic and re-cycle it. The bench said, "All our urban areas are getting choked with plastics. Until we examine the total ban on plastic and ensure the collection and disposal of all plastic, the next generation will be faced with a ticking atom bomb". At present, colored plastic bags are posing a major health hazard. These bags are harmful to human beings as well as animals. In addition to contributing to litter, poly bags, particularly recycled poly bags pose a major health hazard. The main hazards are

associated with the chemicals used to color plastic bags. Small amounts of lead and cadmium are added during the manufacture, and these could permeate into food products stored in the bags. The recycler may sell poly bags for use only as a carry bag, but the vendors are unaware, of the risks of packing food products in colored plastics.

10. Plastic Waste Management Rules, 2016 provides as follows:

4. Conditions.- (1) The manufacture, importer stocking, distribution, sale and use of carry bags, plastic sheets or like, or cover made of plastic sheet and multilayered packaging, shall be subject to the following conditions, namely:-

a) carry bags and plastic packaging shall either be in natural shade which is without any added pigments or made using only those pigments and colourants which are in conformity with Indian Standard : IS 9833:1981 titled as “List of pigments and colourants for use in plastics in contact with foodstuffs, pharmaceuticals and drinking water”, as amended from time to time;

b) Carry bags made of recycled plastic or products made of recycled plastic shall not be used for storing, carrying, dispensing or packaging ready to eat or drink food stuff’;

c) carry bag made of virgin or recycled plastic, shall not be less than fifty microns in thickness;

d) plastic sheet or like, which is not an integral part of multilayered packaging and cover made of plastic sheet used for packaging, wrapping the commodity shall not be less than fifty microns in thickness except where the thickness of such plastic sheets impair the functionality of the product;

e) the manufacturer shall not sell or provide or arrange plastic to be used as raw material to a producer, not having valid registration

from the concerned State Pollution Control Boards or Pollution Control Committee;

f) sachets using plastic material shall not be used for storing, packing or selling gutkha, tobacco and pan masala;

g) recycling of plastic waste shall conform to the Indian Standard: IS 14534:1998 titled as Guidelines for Recycling of Plastics, as amended from time to time;

h) The provision of thickness shall not be applicable to carry bags made up of compostable plastic. Carry bags made from compostable plastics shall conform to the Indian Standard: IS 17088:2008 titled as Specifications for Compostable Plastics, as amended from time to time. The manufacturers or seller of compostable plastic carry bags shall obtain a certificate from the Central Pollution Control Board before marketing or selling; and

i) plastic material, in any form including Vinyl Acetate - Maleic Acid - Vinyl Chloride Copolymer, shall not be used in any package for packaging gutkha, pan masala and tobacco in all forms.

5. Plastic waste management.- (1) The plastic waste management by the urban local bodies in their respective jurisdiction shall be as under:-

(a) plastic waste, which can be recycled, shall be channelized to registered plastic waste recycler and recycling of plastic shall conform to the Indian Standard: IS 14534:1998 titled as Guidelines for Recycling of Plastics, as amended from time to time.

(b) local bodies shall encourage the use of plastic waste (preferably the plastic waste which cannot be further recycled) for road construction as per Indian Road Congress guidelines or energy recovery or waste to oil etc. The standards and pollution control norms specified by the prescribed authority for these technologies shall be complied with.

(c) Thermo set plastic waste shall be processed and disposed off as per the guidelines issued from time to time by the Central Pollution Control Board.

(d) The inert from recycling or processing facilities of plastic waste shall be disposed of in compliance with the Solid Waste Management Rules, 2000 or as amended from time to time.

6. Responsibility of local body.- (1) Every local body shall be responsible for development and setting up of infrastructure for segregation, collection, storage, transportation, processing and disposal of the plastic waste either on its own or by engaging agencies or producers.

(2) The local body shall be responsible for setting up, operationalisation and coordination of the waste management system and for performing the associated functions, namely:-

(a) Ensuring segregation, collection, storage, transportation, processing and disposal of plastic waste;

(b) ensuring that no damage is caused to the environment during this process;

(c) ensuring channelization of recyclable plastic waste fraction to recyclers;

(d) ensuring processing and disposal on non-recyclable fraction of plastic waste in accordance with the guidelines issued by the Central Pollution Control Board;

(e) creating awareness among all stakeholders about their responsibilities;

(f) engaging civil societies or groups working with waste pickers; and

(g) ensuring that open burning of plastic waste does not take place.

(3) The local body for setting up of system for plastic waste management shall seek assistance of producers and such system

shall be set up within one year from the date of final publication of these rules in the Official Gazette of India.

(4) The local body to frame bye-laws incorporating the provisions of these rules.

7. Responsibility of Gram Panchayat.- (1) Every gram panchayat either on its own or by engaging an agency shall set up, operationalise and co-ordinate for waste management in the rural area under their control and for performing the associated functions, namely,-

(a) ensuring segregation, collection, storage, transportation, plastic waste and channelization of recyclable plastic waste fraction to recyclers having valid registration; ensuring that no damage is caused to the environment during this process;

(b) creating awareness among all stakeholders about their responsibilities; and

(c) ensuring that open burning of plastic waste does not take place

8. Responsibility of waste generator.- (1) The waste generator shall.-

(a) take steps to minimize generation of plastic waste and segregate plastic waste at source in accordance with the Solid Waste Management Rules, 2000 or as amended from time to time.

(b) not litter the plastic waste and ensure segregated storage of waste at source and handover segregated waste to urban local body or gram panchayat or agencies appointed by them or registered waste pickers', registered recyclers or waste collection agencies;

(2) All institutional generators of plastic waste, shall segregate and store the waste generated by them in accordance with the Municipal Solid Waste (Management and Handling) Rules, 2000 notified vide S.O 908(E) dated the 25th September, 2000 under the Act or amendment from time to time and handover segregated

wastes to authorized waste processing or disposal facilities or deposition centers either on its own or through the authorized waste collection agency.

(3) All waste generators shall pay such user fee or charge as may be specified in the byelaws of the local bodies for plastic waste management such as waste collection or operation of the facility thereof, etc.;

(4) Every person responsible for organising an event in open space, which involves service of food stuff in plastic or multilayered packaging shall segregate and manage the waste generated during such events in accordance with the Municipal Solid Waste (Management and Handling) Rules, 2000 notified vide S.O 908(E) dated the 25th September, 2000 under the Act or amendment from time to time.

9. Responsibility of producers, Importers and Brand Owners.- (1) The producers, within a period of six months from the date of publication of these rules, shall work out modalities for waste collection system based on Extended Producers Responsibility and involving State Urban Development Departments, either individually or collectively, through their own distribution channel or through the local body concerned.

(2) Primary responsibility for collection of used multi-layered plastic sachet or pouches or packaging is of Producers, Importers and Brand Owners who introduce the products in the market. They need to establish a system for collecting back the plastic waste generated due to their products. This plan of collection to be submitted to the State Pollution Control Boards while applying for Consent to Establish or Operate or Renewal. The Brand Owners whose consent has been renewed before the notification of these rules shall submit such plan within one year from the date of notification of these rules and implement with two years thereafter.

(3) manufacture and use of non- recyclable multilayered plastic if any should be phased out in Two years time.

(4) The producer, within a period of three months from the date of final publication of these rules in the Official Gazette shall apply to the Pollution Control Board or the Pollution Control Committee, as the case may be, of the States or the Union Territories administration concerned, for grant of registration.

(5) No producer shall on and after the expiry of a period of Six Months from the date of final publication of these rules in the Official Gazette manufacture or use any plastic or multilayered packaging for packaging of commodities without registration from the concerned State Pollution Control Board or the Pollution Control Committees.

(6) Every producer shall maintain a record of details of the person engaged in supply of plastic used as raw material to manufacture carry bags or plastic sheet or like or cover made of plastic sheet or multilayered packaging.

12. Prescribed authority.- (1) The State Pollution Control Board and Pollution Control Committee in respect of a Union territory shall be the authority for enforcement of the provisions of these rules relating to registration, manufacture of plastic products and multilayered packaging, processing and disposal of plastic wastes.

(2) The concerned Secretary-in-charge of Urban Development of the State or a Union Territory shall be the authority for enforcement of the provisions of these rules relating to waste management by waste generator, use of plastic carry bags, plastic sheets or like, covers made of plastic sheets and multilayered packaging.

(3) The concerned Gram Panchayat shall be the authority for enforcement of the provisions of these rules relating to waste management by the waste generator, use of plastic carry bags, plastic sheets or like, covers made of plastic sheets and

multilayered packaging in the rural area of the State or a Union Territory.

(4) The authorities referred to in sub-rules (1) to (3) shall take the assistance of the District Magistrate or the Deputy Commissioner within the territorial limits of the jurisdiction of the concerned district in the enforcement of the provisions of these rules.

14. Responsibility of retailers and street vendors- (1) Retailers or street vendors shall not sell or provide commodities to consumer in carry bags or plastic sheet or multilayered packaging, which are not manufactured and labelled or marked, as per prescribed under these rules.

(2) Every retailers or street vendors selling or providing commodities in, plastic carry bags or multilayered packaging or plastic sheets or like or covers made of plastic sheets which are not manufactured or labelled or marked in accordance with these rules shall be liable to pay such fines as specified under the bye-laws of the local bodies.

16. State Level Monitoring Committee.- (1) The State government or the union Territory shall, for the purpose of effective monitoring of implementation of these rules, constitute a State Level Advisory Committee consisting of the following persons, namely;-

(a) the Secretary, Department of Urban Development - Chairman

(b) Director from State Department of Environment - Member

*(c) Member Secretary from State Pollution Control Board or
Pollution Control Committee - Member*

(d) Municipal Commissioner - Member

(e) one expert from Local Body - Member

*(f) one expert from Non-Governmental involved in Waste
Management - Member*

(g) Commissioner, Value Added Tax or his nominee, - Member

(h) Sales Tax Commissioner or Officer - Member

- (i) representative of Plastic Association, Drug Manufacturers Association, Chemical Manufacturers Association - Member*
- (j) one expert from the field of Industry - Member and*
- (k) one expert from the field of academic institution - Member*
- (l) Director, Municipal Administration - Convener*

The State Level Advisory Body shall meet at least once in Six Month and may invite experts, if it considers necessary.

11. By filing the reply the respondent no. 2 has submitted that there are no non-compliant urban local bodies, who have not provided storage place for plastic waste and there is no miscommunication as regards the total number of such non-compliant urban local bodies between the two authorities namely MPCB & SLAC.

(a) At present 58 municipal councils have identified places for deposit / collection of non bio degradable waste whereas 175 municipal council have not identified the place to deposit / collection of plastic waste. However, it is found that there is one municipal corporation in the list of 58 municipal council. Hence, municipal councils which have identified places to deposit plastic waste are only 57 in numbers.

(b) It is also seen that in the list of 175 municipal councils submitted by MPCB which have not identified the place to deposit plastic waste, the list contains 5 cantonment boards areas which are not in control of Urban Development Department and it also contains one municipal council i.e., Panvel Municipal Council, which later got converted in to municipal corporation, so the list of municipal councils and municipal corporations submitted by SLAC vide their affidavit dated 25.01.2018, comprises of 169 municipal councils only.

(c) As per the orders of Hon'ble Tribunal dated 28th November, 2017, the show cause notices were issued to all those 169 Municipal councils & 27 Municipal corporations on 6th December 2017 & 7th December 2017 for identifying the place to deposit plastic waste. In response to that, it is seen

that all the 169 Municipal councils and 27 Municipal corporations have identified the place to deposit plastic waste. Their replies have been compiled and which was attached with the affidavit dated 25/01/2018 as Annexure R/234/2.

(d) This explanation shows that there is no miscommunication between the two authorities with respect to submission of number of compliant Urban Local Bodies.

(4), In order to assess the extent of progress made in implementation of these rules, we deem it essential for the State Pollution Control Board and the Secretary, Urban Development Department, Government of Maharashtra, to file affidavits setting out the steps taken by them on each of the component in the rules."

(6) The state has a robust Solid Waste Management Policy in accordance with the provisions of the SWM Rules, 2016. The Urban Development Department has framed a policy vide Government Circular, No. SMA 2017/CR60/UD-34 dated 29th April 2017 and also issued various guidelines vide:

1) Government Resolution no. SMA 2017/CR53/UD- 34 dated 29th April 2017.

2) Government Circular no. SMA 2017/CR223/UD-34 dated 11th September 2017.

3) Government Resolution SMA-2016/C.R. 204/UD-34 dated 21st September, 2017

4) Government Resolutions no. SMA 2017/CR80/UD- 34 dated 27th October 2017 and 17th November 2017.

5) Government Resolutions no. SMA 2017/CR256/UD- 34 and SMA 2017/CR256 (1)/UD- 34 dated 30th December 2017.

(8) I say and submit that the State has prepared State Policy on Solid Waste Management in accordance with the provisions of the Solid Waste Management Rules 2016 vide Government Circular, No. SMA 2017/CR60/UD-34 dated 29th April 2017, Following are the main objectives of the policy:

8.1. 100% Segregation of waste at source as per Solid Waste Management Rules, 2016.

8.2 100% segregated collection and transportation of waste to treatment facility.

8.3 Decentralized or centralized treatment of organic waste (bio-degradable).

8.4 100% scientific treatment of waste through composting, vermicomposting, bio-methanization etc. followed by scientific land filling of inert.

8.5 Recycling and recovery of materials through promoting material recovery facilities/sorting centres in city with the help of informal waste pickers.

(12) The state has signed Memorandum of Understanding (MoU) with German International Cooperation (GIZ) for supporting Swachh Maharashtra Mission especially for Solid Waste Management. GIZ is supporting quality control of DPRs through capacity building, preliminary review of DPRs etc.

(13) To ensure that all provisions of Solid Waste Management Rules, 2016 are incorporated in DPRs state has appointed Ministry of Housing and urban Affairs empanelled consultants for each revenue division of the state to prepare DPRs.

(19) That in order to promote and encourage Urban Local Bodies, the State has developed HARIT Maha City Compost brand for compost generated from organic waste in Urban Local Bodies. Main objective of Harit Compost is to encourage Urban Local Bodies for production of quality compost and support them in marketing the same. This will in

turn ensure scientific treatment of organic waste generated in Urban Local Bodies. On the line of Government of India, Government of Maharashtra has proposed to give subsidy of Rs. 1000 per tonnes of compost sold by urban Local Body. The ULBs are selling compost to farmers and using compost for their captive consumption as well. Public Works Department has published a Government Resolution dated 14th June 2016 regarding the use of plastic waste in the construction of bitumen roads. Again, Government of Maharashtra has made it mandatory to use plastic waste in the construction of the bitumen road vide Government Resolution dated 21st June 2018. Every ULB has provided Material Facility comprising of Shed for secondary segregation different streams of non-biodegradable waste i.e., plastic, metal, glass, cloth etc., storage facility for each component, Bailing and Shredding machine for processing of plastic waste. State Government has started an extensive Information Education and Communication (IEC) campaign on the ban on usage of plastic by print and digital media. The campaign has taken up at the ULB level with enthusiasm and the retailers, manufactures are fined accordingly.

(26) Informal sector of rag pickers plays a vital role in segregation and recycling process. 260 ULBs have identified rag pickers in the city, giving them training for segregation at source and ID cards are also issued which has helped them in upliftment of their standard of living as well as preventing the potential health hazards. As reported by Chief Officers of the Municipal Councils till date Rs. 42,43,630/- has been collected as a fine by the ULBs.

(29) It is further submitted that, as far as Respondent No. 86 is concerned i.e. Chief Officer, Municipal Council, Lonar has sent a report to the Director of Municipal Administration vide letter No.453/2018, dated 6th August, 2018 that the Lonar lake which has been also declared as Bird Sanctuary from 8th June, 2000 by the Government of Maharashtra is under the jurisdiction of Forest Department and it is monitored by Forest Department. This lake area has been protected by Chain Link Fencing. Entry points on it have been 24 hours monitored by Forest Guards so that the lake area is banned from plastic completely. So, no tourist can carry at the lake area. It is also communicated by Chief Office, Municipal

Council, Lonar that, Municipal council has also taken drive for Plastic Ban in city area also and made budgetary provision for public awareness by erecting banners and posters in the city of Lonar.

12. Steps taken by the Respondent No. 3-Board on the component in the Plastic Waste Management Rules, 2016, are as under:

- i. As stated in the Board's earlier Affidavit in April, 2016, the Respondent Board has issued letter dated 27.1.2015 to all the Regional Officers of the Respondent Board to constitute the squads for vigilance and reporting illegal operations of unregistered units including units manufacturing sub-standard carry bags. Accordingly, different squads have been constituted at each Regional Offices of the Respondent Board.*
- ii. The Regional Officers have been directed to initiate actions at their level against the defaulting units vide letter dated 12.3.2015. Accordingly, the Respondent Board has issued Closure directions to the defaulting Plastic units in the State of Maharashtra.*
- iii. The Respondent Board has issued directions vide letter dated 25.7.2017 to all the local bodies directing them to comply with the provisions of Plastic Waste Management Rules, 2016.*
- iv. The Respondent Board has received the applications for registration under the provisions of Plastic Waste Management Rules, 2016. Due to non-submission of Extended Producers' Responsibility Plan endorsed by Urban Development Department, Government of Maharashtra, the Respondent Board had issued Show Cause Notices.*
- v. The Respondent Board has submitted the Annual Reports regularly to the Central Pollution Control Board.*

13. It is submitted that taking into consideration increase in non-biodegradable plastic waste causing damage to the environment, the Govt. of Maharashtra has published Maharashtra Plastic and Thermocol Products (Manufacture, Usage, Sale, Transport, Handling and Storage)

Notification dated 23.03.2018, which has been further amended vide Notifications dated 11th April 2018 and 30th June 2018 respectively.

The relevant Paras of the said Notification are reproduced as under:

- a) *Clause 1) of Para 3 (1) of the said notification provides that there is a ban in whole State of Maharashtra for manufacture, usage, transport, distribution, wholesale and retail sale and storage, import of the plastic bags with handle and without handle and disposable products manufactured from plastic and Thermocol (polystyrene) such as single use disposable dish, cups, plates, glasses, fork, bowl, container, disposable dish/bowl used for packaging food in hotels, spoon, straw, non —woven polypropylene bags, cups/ pouches to store liquid, packaging with plastic to wrap or store the products, packaging of food items and food grain material etc.*
- b) *Clause 2) & 3) of Para 3 (1) provides that these regulations are applicable to every person, body of person, government and non-government organization, educational institution, sport complex, club, cinema halls and theaters, marriage/ celebration halls, industrial units, commercial institutions, offices, pilgrimage organizers, pilgrimages and religious places, hotels, dhabas, shopkeepers malls, vendors or sellers, traders, manufacturer, caterer, wholesalers, retailers, stockiest, businessmen, hawkers, salesmen, transporters, market, producers, stalls, tourist places, forest and reserved forest, eco-sensitive area, all sea beaches, all public places, bus stands, railway stations in the State of Maharashtra and there is also ban in whole state for use of plastic and thermocol for decoration purpose.*
- c) *Clause a) of Para 3 (2) provides that PET or PETE bottle manufacturers, producer, sellers and traders under 'Extended Producers & Sellers / Traders Responsibility' will develop Buy-*

Back Depository Mechanism' with predefined buy-back price printed specifically on such PET and PETE bottles and also set-up collection centers, reverse vending machine, crushing machines with linkages established with recycling units to collect and recycle such PET or PETE bottles within three months from the date of publication of this notification, at strategic places including Malls, Multiplexes, Hotels, Shops, Tourist Places, Beaches, Forts, Public Places etc.

- d) *Clause b) of Para 3(2) provides that Traders/ sellers will buy back such used PET/PETE bottles with predefined buy back price.*
- e) *Clause c) of Para 3(2) provides that PET / PETE Bottles of Drinking water, having liquid holding capacity of one litre or more, shall be printed on it, the Deposit and Refund Price of Re.1 or buyback price as decided by the Manufacturer. Drinking water PET / PETE Bottles, having liquid holding capacity of less than one litre but more than 200 ml. shall be printed on it, the Deposit and Refund Price of Rs. 2 or buyback price as decided by the Manufacturer.*
- f) *Clause d) of Para 3(2) provides that use, sale, storage and manufacture of drinking water PET or PETE bottles of having liquid holding capacity less than 200 ml. is banned in the State.*
- g) *Clause f) of Para 3(2) provides that it shall be the sole responsibility of the PET Bottle industries to ensure that these bottles are collected from retailers at depository and refund rate or buyback rate and are recycled.*
- h) *Clause 2A (1) of Para 3 provides that as per Plastic Waste Management Rules, 2016 issued vide 18th March 2016, by the Ministry of Environment, Forest and Climate Change, Government of India, manufacture and use of non-recyclable multi-layered plastic if any, should be phased out in two years' time. Since, the two years' time is over, the Manufacturers should stop use of non-recyclable multi-layered plastic immediately.*

- i) *Clause 2A (2) of Para 3 provides that the manufacturer/brand owner/ producer of recyclable multi-layered and paper-based carton packaging material using one layer of plastic / Manufacturers Association, shall diligently implement their Extended Producer's Responsibility (EPR) Plan which includes co-ordination / collaboration with existing Rag pickers / Scrap Traders, retailers for collection of plastic waste and its subsequent recycling and final disposal through their own established recycling plant or registered recyclers by establishing Producer's Responsible Organisations (PRO), which shall be responsible for 100% integral Plastic Waste Management right from collection to final disposal.*
- j) *Clause 2A (3) of Para 3 provides that Extended Producer's Responsibility (EPR) Plan of the manufacturer/ brand owner/ producer of multi-layered and paper-based carton packaging material using one layer of plastic shall be reviewed after three months from the date of issuance of this notification and on the basis of the outcome of review, further decision will be taken for regulation.*

14. Respondent has further submitted that in order to verify the compliance of Maharashtra Plastic and Thermocol Products (Manufacture, Usage, Sale, Transport, Handling and Storage) Notification, 2018 & amended Notification dated 11th April 2018 and 30th June 2018, the Officials of Respondent Board have carried out the survey of Plastic and Thermocol units in the State of Maharashtra during the month of April, May and June, 2018 and during the survey, it has been observed that 287 units have closed their manufacturing activity voluntarily. Further, the Respondent Board has issued directions of closure to 50 defaulting units. In order to take the review of Extended Producers' Reasonability (EPR) Plan of Multi-layered Packaging and

PET/PETE bottles manufacturers / producers /brand-owners, Respondent Board has conducted review meetings with the manufacturer, brand owner, producers, associations of PET/ PETE bottles on 10.7.2018 and 26.7.2018 and in respect of Multi Layered Packaging on 19.7.2018. On the basis of review meeting, the Respondent Board has issued directions u/s 5 of the Environment (Protection) Act, 1986 r/w Plastic Wastes Management Rules, 2016 to the Brand owners/ Producers of Multi-layered Packaging vide letter dated 26.7.2018 wherein they were directed as follows:

1. *To create a separate fund for discharging their liability under the above rules and to credit to this fund an amount of Twenty five paise for each packet/ sachet of goods packed in multilayer film, introduced or sold by them directly or through their distributors/ wholesalers/retailers or partners in the State of Maharashtra.*
 2. *The fund mentioned above shall be created no later than 15th Aug 2018.*
 3. *They shall be responsible for management of fund and the amount to credit of the fund shall be strictly used for implementing the approved EPR to the satisfaction of MPCB.*
 4. *The designate officers with assigned territorial jurisdiction who will be responsible for compliance of the above said rules.*
 5. *To submit a quarterly report of the amounts credited to the fund and the amounts utilized therefrom for implementation of EPR to concerned Regional Officer of Maharashtra Pollution Control Board. The unutilized balance, if any, in the fund shall always remain completely unencumbered and invested in fixed deposit with banks or invested in rated liquid instruments.”*
15. India consumes an estimated 16.5 million tonnes about 1.6 million trucks full of plastic annually of which 25-30% remains uncollected. The plastic processing industries is estimated to grow

to 22 million tonnes per year by 2020, as per the expert study. The said part is that the current situation of disposing plastic is not easy to stain. One cannot be disposed off plastic like other forms of garbage. Plastic is strong, flexible and durable, making it extremely useful and hard to break. As useful as it might be, it does create harm to the environment by entering the oceans everyday and staying there forever, becoming toxic food for marine life.

16. The consumption of plastic has been increasing by 10% year to year but the disposal method of plastic have not evolved and that make the situation murky for us. Multiple factors add to the problem-for instance there is no segregation of the waste source, many amounts us still us use one being on all kinds of waste. Lack of awareness about segregation leads to a bigger problem. Plastic makes up about 8% of total solid waste of India, according to Government and this plastic comes for single use of plastic such as bag, cutlery and etc. alone. It is estimated that 80% of marine litter comes from land and this hotpotch in landfills. The concept of reduce, reuse, recycle and educate should be adopted.
17. The matter of plastic management was taken up by Principal Bench of this Tribunal in O.A. No. 851/2018 and vide order dated 04.12.2019 the Principal Bench of this Tribunal had directed as follows:

2. "Vide order dated 30.04.2019, this Tribunal considered the response of the CPCB dated 01.04.2019 suggesting restrictions on import of plastic waste and proper management of hazardous waste. It was further suggested that local bodies should use plastic waste for road construction and energy recovery. Producers should follow the Extended Producer Responsibility (EPR). CPCB had evolved guidelines on the subject.

3. *The Tribunal directed CPCB to take further action for implementation of its recommendations on the issues of plastic waste management as well as restrictions on import of plastic waste and furnish a further action taken report.*
4. *The matter was further considered on 06.09.2019 with reference to the report dated 28.06.2019 as follows:*

“Report dated 28.06.2019 acknowledges that there is no proper mechanism for plastic waste management which was being dumped in open or burnt in brick kilns resulting in pollution. Action taken by the CPCB is the issuance of directions. MoEF&CC is to deal with the issue of transboundary movement (import/export) hazardous and other wastes.

The report cannot be taken as adequate action. Apart from issuance of direction, compliance of direction is required to be overseen. Even with regard to illegal import, CPCB as a statutory regulator can take up the matter with the concerned authorities. This Tribunal vide order 26.08.2019 in O.A. No. 804/2017, Rajiv Narayan v. UOI has already issued direction for restricting import of hazardous waste and vide order dated 22.07.2019 in E.A. No. 13/2018, CPCB v. State of Andaman & Nicobar & Ors. directions have been issued with regard to management of plastic waste. These directions need execution.

Let further steps be taken in the matter accordingly and report filed before the next date by e-mail at judicial-ngt@gov.in.”

18. In O.A. No. 15/2014 vide order dated 31.05.2019 and 14.10.2019, it was held as follows:

“3. On 07.01.2019, the Tribunal directed the parties to file written notes. The applicant in a written note filed on 17.01.2019 pointed out that the regulations on the subject are inadequate for the following reasons:

“a. There is no specific Testing protocol for Specific Migration Testing (Antimony & Phthalates-DEHP)

b. The Plastic Waste Rules are limited for restrictions of plastic "Bags" only. It doesn't cover the plastic packaging especially PET Bottles.

c. In light of the inadequate standards, this Hon'ble Tribunal, vide order dated 10.10.2018, categorically stated that the Plastic Waste (Management and Handling Rules), 2016 need further amendments so as to eradicate the menace of use of plastics in general.”

4. The applicant sought enforcement of notification being G.S.R. no. 701 (e) dated 29.09.2014 issued by the Ministry of Health and Family Welfare for prohibiting plastic/ PET containers for oral pharmaceutical activities and fresh label registration with the direction that “no pet/ plastic container and /or multilayered packaging be used for packaging of liquor and carbonated beverage.”

5. The applicant further submitted that the Notification dated 24.12.2018, issued by the Ministry of Health and Family Welfare under Section 92 of Food Safety and Standards Act, 2006 deals with the issue of packaging mode of food but it ignores Antimony and DEHP in specific migration limits provided for plastic packaging. Two sets of regulations were separately laid down being the Food Safety and Standards (Packaging) Regulations, 2018 and the Food Safety and Standards (Labelling and Display) Regulations, 2018 replacing the Food Safety and Standards (Packaging and Labelling) Regulations, 2011. The said regulations also give a list of suggested packaging material to be used for different food items.

6. On 22.01.2019, the Tribunal noted the steps taken by various States, the regulations prescribed by the Bureau of Indian Standards (BIS) in relation to packaging material and the regulations framed by FSSAI in respect of food safety standards. The Tribunal directed the MoEF&CC to look into the said regulations and file its response. The MoEF&CC in its response filed on 19.01.2019, apart from indicating the features of the Plastic Waste Management Rules, 2016, including the provision for phasing out multi-layered plastic (MLP), submitted that the same may not be immediately feasible without alternates which are technically comparable. The same was proposed to be phased out in two years. It was further stated that the mechanism for registration of manufactures was to be improved. Rule 13 was required to be amended and Rule 15 was required to be withdrawn. The Ministry also organized Ministers conference and adopted resolutions on the effective capacity building programme, promoting innovative technologies, meetings with Chief Secretaries to monitor the implementation of the Rules, efforts to reduce the use of plastic, adopting Green Good Deeds for better waste management and to develop mechanism to document success. Thereafter, on 15.02.2019, the matter was directed to be listed within O.A. No. 606/2018 dealing with the compliance of waste management Rules.”

“3. Accordingly, a report dated 30.08.2019 has been filed by the Expert Committee. The Committee noted following key areas of concern:

- “1) Continued use of multi polymer plastic (MPP) or multi layered plastic (MLP) with associated difficulties in its recycling.

- 2) *Increasing use of small packages such as bottles used for beverages, sachets, pouches which are not viable to collect and recycle.*
- 3) *High capital cost involved in the presently available techniques in recycling plastics.*
- 4) *Inadequate reach of Extended Producer Responsibility (EPR).*
- 5) *Non availability of economically viable substitutes to the plastics.*
- 6) *Lack of consumer awareness for proper disposal of plastics and litter management.*
- 7) *Absence of joint regulatory mechanism with respect to plastic waste management.”*

It proposed a systematic action plan with 12 specific points as follows:

“(A) Manufacturer / User Industries of Plastic Packaging Materials.

- (1) *Institute concept of ‘plastic footprint’: What gets measured is managed. Therefore, in order to encourage businesses to reduce use of plastics through innovation and redesigning of their packaging, a system of quantifying the use of plastics per unit of final product (say kg of plastic used in 1000 kg/kiloliter of final product) may be put in place. A deflator or inflator may be used for use of recyclable plastics, biodegradable/compostable plastics or multilayered plastic as the case may be. A system of periodic assessments of plastic footprint for each product category may be done. In food and beverages, these categories could include confectionery and bakery products (biscuits, ice-creams, bakery products and chewing gum), namkeens (chips, namkeen, nuts/peanuts), instant noodles and cereals, beverages (cold drinks, juices, energy drinks and hot drinks) and dairy products (milk, paneer, yoghurt and flavoured milk). Plastic footprint for each category may be benchmarked with the market average of use of plastic. This would encourage companies to adopt packaging reduction strategies that may include reducing weight of packaging, eliminating unnecessary packaging, using lightweight packaging materials, optimizing packaging size and use of recyclable (compostable) and reusable packaging material. Through a system of recognition, rewards and perhaps eventually penalties, it is hoped that the companies would work towards continuous reduction of plastics, product by product and enable businesses to demonstrate their commitment to safer environment.*
- (2) *Discourage small pack sizes: Lighter, portable, and cost-effective nature of single serve sachets/pouches/bottles continues to make them an attractive proposition for the low-income consumers as well as young and active millennials. Smaller pack sizes/single serve packaging*

also have brought better quality and premium products affordable to all the sections of the society. But on the other hand it constitutes to the major plastic waste and litter, as their collection is economically non-viable. Hence, in consultation with Legal Metrology Dept. the small pack sizes such as small water bottles, pouches, cups which constitute a considerable amount of plastic waste may not be allowed.

- (3) *Reducing plastic content in multi-layered plastic (MLP):* Ideal packaging materials had been tailored by combining different material with customized functionality to sufficiently protect sensitive food products and thus obtain extended shelf life. Latest feasible techniques and technologies may be employed to cut down the use of multiple polymers/plastics. More research in this area is required to be done by scientific institutions. Use of Single polymer/layer recyclable packaging materials shall be encouraged in this case.
- (4) *Encourage alternatives to plastics: Bio-plastics and biodegradable plastics like Poly Lactic Acid (PLA) made from fermented plant starch etc. can be a sustainable alternative to conventional plastics. However there are limitations with the availability of resources for such material. More research in the area to reduce the cost of PLA is required to be done. There is also need to create awareness on biodegradable, compostable or bio-based plastics since their degradation requires conditions like appropriate temperature, light, hydration and/or microbial presence. Hence these have to be separately marked and disaggregated. In case, the biodegradable & compostable or bio-based plastics remain unsegregated and go in landfills just like that, it is unlikely to meet these conditions and serves no purpose. Existing packaging systems of paper based cartons with minimal plastics as coatings, composite and reusable containers made up of glass, tin, metal and paper maybe promoted as replacements. A list of alternatives to plastic packaging materials as suggested by Centre for Science and Environment (CSE) is at Annexure-2.*
- (5) *Effective Extended Producer's Responsibility (EPR) framework:* The current Plastic Waste Management Rules mandate the "producer of packaging products and branded consumer goods to dispose plastic packaging waste generated due to their business activities". Even though the policy framed under these rules is fairly good but it has been confined to selected few big businesses. It is understood that National Framework on EPR for plastic waste management is being finalized. The framework may consider a system of monitoring as well as penalty provision for its non-compliance may be explored. The companies may be encouraged to use their downstream supply chain of distribution and retail for collection and aggregation of plastics for recycling.

This may be quite easy in direct selling entities that use multi-layered marketing, distribution networks.

(B) Final consumers/Users of plastic packaged articles and food stuff.

Establishments, agencies, institutions, organizations including government/nongovernment, food/non-food operators such as roadways, railways, airlines, schools, colleges and university campuses, E-commerce groups, corporate campuses, hotels, marriage, banquet and community halls under this head shall take-up responsibilities on the following;

(6) Eliminate/Ban single use plastics: should eliminate and prohibit the usage of single serve/use plastics within their ecosystems. Recent ban by the Parliament and Indian railways are worth emulating.

(7) Alternatives to plastics: They shall encourage the use of reusable and recyclable environment friendly alternatives such as jute and cloth bags, bamboo and wooden cutlery, leaf based plates, glass and metal containers etc.

(8) Improved Litter Management: They should take up the responsibility of collecting all the waste in their campuses, sorting out dry and wet waste. They could also encourage their staff, teachers and students to bring such plastic waste from homes and help in collection and aggregation of such waste by tying up with businesses in plastic recycling. Dry waste can be segregated into recyclable and non-recyclable and accordingly processed. Wet waste may be sent to composting, which can be done in-house. This activity could be made a part of the social responsibility system.

(9) Better Plastic Disposal: Initiatives are to be taken up, to dispose plastic waste by forming groups/clusters to set up/identify energy recovering systems such as incineration and pyrolysis. Getting adequate quantities of suitable plastics waste is seen as most important factor in success of such units. More organized efforts and encouragement is required for this proper disposal.

(C) Municipal bodies/other organizations promoting circular economy.

(10) All municipal bodies must be made responsible for development and setting up of infrastructure for segregation, collection, storage, transportation, processing and disposal of the plastic waste either on its own or by engaging agencies or producers as mentioned in the Plastic Waste Management Rules.

(D) Citizens and consumers.

(11) Citizens, especially the socially engaged ones living in urban areas with wide access to information, have

adopted more environmentally conscious consumption habits oriented toward recycling, reusing and composting the waste that derives from their domestic consumption. This segment of socially discerned consumers, appreciate brands that demonstrate a commitment to environmental sustainability. A more intensive public campaign, however, is needed to mainstream this kind of behavioral change to a wider public segment. Further approach of incentivizing the customers can also be explored to encourage them for plastic waste management.

(E) Science and Research Institution.

(12) Science and research institutions must be encouraged for working in the direction of developing environmental friendly packaging materials and plastic waste management systems which can be used on commercial basis. Start-ups may also be encouraged to work in this area. For the food and beverages sector, FSSAI may create a group of institutions and experts to coordinate new work in this area with leading institutions like the Indian Institute of Packaging, CIPET, IIT Delhi, IIT Guwahati, Indian Institute of Toxicological Research (IITR), National Chemical Laboratory, Pune and others.”

4. The Committee further noted that these are not only environmental issues but also public health issues. In that view of the matter, FSSAI has taken steps to reduce the use of plastic in packaging of foods and beverages as follows:

- “(1) FSSAI has decided to permit use of liquid nitrogen dosing in PET bottles during the packaging of drinking water. This would help in strengthening the bottle thereby facilitating the manufacture with the use of bottles with lower wall thickness.*
- (2) FSSAI has initiated the process of removing the restriction on the use of returnable bottles for packaging of artificially sweetened beverages.*
- (3) FSSAI is promoting the use of bamboo as an alternative to plastics such as straws, plates, bowls, cutlery etc.*
- (4) Allow and enable hotels to keep in-house packed glass bottles in place of plastic bottles in hotel rooms.”*

5. The FSSAI has also established a separate ‘Scientific Panel on Packaging and Food Contact Materials’. The Committee thereafter made following specific recommendations on regulatory aspects:

- “(1) Food Safety and Standards (Packaging) Regulations, 2018: To review the limits of heavy metals in PET and fix the limits of specific migration limits of Antimony and DEHP (Diethylhexyl-phthalate). In addition to this also*

explore the possibility of setting limits for Cadmium and chromium.

- (2) *Food Safety and Standards (Packaging) Regulations, 2018 and IS 14543 (Packaged Drinking water): To remove the restriction on the use non-transparent bottle for drinking water to enable businesses to explore the possibilities of use of alternatives other than the PET currently in use.*
- (3) *Food Safety and Standards (Packaging) Regulations, 2018; IS 14534 (Guidelines for Recycling of Plastics); and Plastic Waste Management Rules, 2016: The European Food Safety Authority (EFSA) permits the use of recycled PET in food packaging under certain set protocols. EC recommends to explore the possibilities for removal of ban on use of recycled plastic in food packaging after a scientifically validated method of pre-cleaning of plastic waste is developed to ensure that the final product using recycled material does not pose any health risk.*
- (4) *Legal Metrology (Packaged Commodities) Rules 2011: To explore the possibilities of restricting small packs of commodities such as water, shampoo, sauce, pickle etc.”*

6. On the subject of review and monitoring, the Committee observed:

“8. The Expert Committee noted that while regulatory provisions for restrictions on the packaging by use of plastic material are mostly in place, there is lack of coordinated approach and implementation of these provisions is poor. It suggested putting in place sector-specific mechanisms to review and monitor the use of plastics in packaging and commitment of businesses under ‘Extended Producer Responsibility (EPR)’ framework, managing plastic footprints, and related issues. In this, sector-specific regulators such as FSSAI (for food and beverage packaging), CDSCO (for drugs and cosmetics packaging), Ministry of Textile (for textile packaging) etc. and the Central Pollution Control Board (CPCB) could work together to ensure better coordination. Related ministries and the Ministry of Housing and Urban Affairs and Department of Drinking Water and Sanitation could also be associated for better coordination with Swachh Bharat Mission.”

19. Again the matter was taken up in E.A. No. 13/2019 and the Principal Bench of this Tribunal discussed the matter vide order dated 04.12.2019 as follows:

“1. The issue for consideration is the implementation of Plastic Waste Management Rules, 2016 (PWM Rules) and

directions issued by the CPCB on 30.06.2016 to implement the thickness norms for carry bags, constitution of squads for vigilance, preventing littering of plastic waste in public, submission of annual reports and action plan for management, quantification and characterization in every city/town of all the States/UTs.

2. On 12.03.2019, we noted the stand of the CPCB that States are not furnishing information and not taking steps to take preventive and regulatory measures envisaged under the PWM Rules. Though ban was imposed on the use of plastic carry bags etc. in many States, the same was not enforced. Burning of plastic waste was continuing, apart from littering of plastic waste on railway tracks, bus stations etc.

3. Accordingly, the Tribunal directed the States/UTs to ensure compliance of the PWM Rules requiring furnishing of reports as well as taking other steps. In default, the defaulting States were to be required to pay compensation @ Rs. 1 Crore per month after 01.05.2019. CPCB was to furnish status of compliance.

4. Thereafter the matter was considered on 22.07.2019 with reference to the report of the CPCB filed on 30.05.2019 giving details of compliance of PWM Rules based on the information furnished by some of the States / UTs under the following heads:-

a. Details of Plastic Waste Management as per Provisions 5, 6 and 9 of PWM Rules, 2016, as amended, 2018.

b. Complete/Partial Ban on carry bags/products.

c. Status of marking & labelling on carry bags/products.

d. No. of violations & action taken on non-compliance of Rules.

e. Status of submission of AR by ULBs to SPCBs/PCCs.

5. CPCB made following recommendations:-

“Recommendations:

1. SPCBs/PCCs shall ensure that Annual Report on implementation of PWM Rules, 2016, as amended, 2018 is complete in all respect as per Form-VI and submitted timely to CPCB i.e. on 31st July each year along with Action plan.

2. SPCBs/PCCs should direct to UDDs to ensure setting-up of collection, source segregation& disposal system for plastic waste.

3. SPCBs/PCCs shall provide the details such as quantification, characterization & disposal methods of plastic waste. The details of disposed plastic waste should be provided to CPCB.

4. SPCBs/PCCs should also ensure that no unregistered plastic manufacturing/recycling units is in operation & no unit is running in nonconforming/ residential areas. Besides, it is also to be ensured that plastic carry bags /films.

5. SPCBs/PCCs, UDDs shall ensure to promote compostable carry bags certified by CPCB.

6. SPCBs/PCCs and Municipalities should constitute squad to check illegal manufacturing, stocking, sale of <50 microns thickness plastic carry bags and uncertified compostable carry bags/products in the market.

7. SPCBs/PCCs and UDDs to ensure prohibit litter of plastic waste at historical, religious, public places and dumping of plastic waste on drains, river, banks & sea beaches is prohibited.

8. SPCBs/PCCs and UDDs to prohibit ensure open burning of plastic waste

Action Plan:

The Action Plan for plastic Waste Management Rules has been submitted by 12 States/UTs namely Chhattisgarh, Delhi, Himachal Pradesh, Kerala, Madhya Pradesh, Meghalaya, Punjab, Telangana, Tripura and Andaman & Nicobar Islands, Daman Diu & Dadra Nagar Haveli and Puducherry.”

6. The Tribunal directed as follows:-

“The concerned States/ UTs may now take further action meeting the gaps pointed out above as per the timeline laid down under the PWM Rules. The CPCB may monitor the same and furnish its further status report by 30.09.2019 by e-mail at judicial-ngt@gov.in. The recovery of compensation for the delay in compliance timeline will be considered on the next date.”

7. Status report filed by CPCB on 30.09.2019 is that letter was sent to all the SPCBs/PCCS seeking information about the status of implementation of action plans for PWM Rules, addressing the gaps pointed out and also seeking details of recyclers of such waste. 23 States/UTs have provided their action plans which are incomplete and need to be upgraded in terms of quantification. Remaining 12 States/ UTs namely Bihar, Gujarat, Haryana, J&K, Jharkhand, Karnataka, Lakshadweep, Mizoram, Rajasthan, Sikkim, Uttar Pradesh and West Bengal have not furnished information. Gap analysis has been mentioned in terms of lack of information required. The report further states:-

“4. All 35 States/UTs have submitted the Annual Reports for the year 2018-19 on implementation of PWM Rules, 2018. Information provided by these

States/UTs has been compiled by CPCB and State/UT wise compilation of Annual Report as per Form-VI of PWM Rules, 2018 is placed at Annexure -III. It may be noted that complete information as per form-VI has not been submitted by most of the SPCBs/PCCs.

4.1 Estimated plastic waste generation during the year 2018-19 is 33,60,043 Tons/Annum.

4.2 Implementation of thickness >50microns carry bags as per provisions 4(c & d, Thickness criteria Condition) of PWM Rules, 2016, as amended, 2018. 22 States/UTs namely Andaman and Nicobar Islands, Assam, Bihar, Chandigarh, Chhattisgarh, Daman Diu and Dadra Nagar Haveli, Haryana, Himachal Pradesh, Jharkhand, Karnataka, Lakshadweep, Madhya Pradesh, Maharashtra, Nagaland, Puducherry, Punjab, Rajasthan, Sikkim, Tamil Nadu, Tripura, Uttarakhand & Uttar Pradesh have imposed complete ban on carry bags. Besides, 9 States/UTs namely: Andhra Pradesh, Goa, Gujarat, Jammu & Kashmir, Kerala, Manipur, Meghalaya, Odisha & Telangana have complied with thickness criteria. Further, 4 States/UTs namely Arunachal Pradesh, Delhi, Mizoram & West Bengal have not provided the information in this matter.

4.3 Details of Plastic Waste Management as per Provisions 5, 6 & 9 of PWM Rules, 2016, as amended, 2018:

a. 8 States/UTs namely; Arunachal Pradesh, Bihar, Daman Diu & Dadra Nagar Haveli, Jammu & Kashmir, Kerala, Maharashtra, Manipur & Sikkim have not submitted the details in this matter.

b. 14 States/UTs namely: Andhra Pradesh, Assam, Chhattisgarh, Goa, Gujarat, Himachal Pradesh, Jharkhand, Karnataka, Madhya Pradesh, Odisha, Puducherry, Tamil Nadu, Telangana & Uttar Pradesh are sending plastic waste to cement plants for co-processing.

c. 15 States/UTs namely: Andaman & Nicobar Islands, Andhra Pradesh, Assam, Haryana, Himachal Pradesh, Jharkhand, Madhya Pradesh, Meghalaya, Mizoram, Nagaland, Puducherry, Tamil Nadu, Telangana, Uttar Pradesh & West Bengal are using plastic waste for polymer bitumen road construction.

d. 16 States/UTs namely: Andaman & Nicobar Islands, Andhra Pradesh, Chhattisgarh, Goa, Jharkhand, Karnataka, Lakshadweep, Madhya Pradesh, Nagaland, Punjab, Tamil Nadu, Telangana, Uttarakhand and Uttar Pradesh have recycled the plastic waste.

e. 2 States/UTs namely: Himachal Pradesh & Delhi have sent the plastic waste to Waste to Energy plants.

f. Uttar Pradesh is utilizing the plastic waste in waste to oil plant. Further, Chandigarh, Goa and Madhya Pradesh are using the plastic waste as RDF.

4.4. Complete/Partial Ban on carry bags: 22 States/UTs namely Andaman and Nicobar Islands, Assam, Bihar, Chandigarh, Chhattisgarh, Daman Diu and Dadra Nagar Haveli, Haryana, Himachal Pradesh, Jharkhand, Karnataka, Lakshadweep, Madhya Pradesh, Maharashtra, Nagaland, Puducherry, Punjab, Rajasthan, Sikkim, Tamil Nadu, Tripura, Uttarakhand & Uttar Pradesh have imposed complete ban on carry bags. Besides, 7 States namely Arunachal Pradesh, Andhra Pradesh, Gujarat, Kerala, Mizoram, Odisha and West Bengal have imposed the partial ban on plastic carry bags at religious/historical places. Further, 5 States/UTs namely Goa, Jammu & Kashmir, Manipur, Meghalaya & Telangana have not imposed any ban on plastic carry bags except meeting thickness criteria. Further, Delhi has not provided the information in this regard.

4.5 No. of registered Manufacturing/Recycling Units: There are 4773 (4294 —Plastic Mfg., 7-Compostable Mfg., 287-MLP Mfg. & 185-Recycling) Registered units in 30 States/UTs and there are no plastic manufacturing units in Andaman and Nicobar Islands, Arunachal Pradesh, Bihar, Lakshadweep & Sikkim.

4.6 No. of unregistered plastic manufacturing/recycling units:

There are 1080 unregistered plastic manufacturing/recycling units running in 12 States/UTs, namely; Assam, Bihar, Jammu & Kashmir, Karnataka, Madhya Pradesh, Maharashtra, Puducherry, Punjab, Tamil Nadu & Uttar Pradesh. Further, Chhattisgarh, Daman Diu and Dadra Nagar Haveli, Delhi PCC, Himachal Pradesh, Uttarakhand & West Bengal have not provided the details in this matter.

4.7 Status of marking & labelling on carry bags/Multilayered packaging:

As per provision '11' marking & labelling of PWM Rules, 2018, 23 States/UTs namely Andhra Pradesh, Assam, Bihar, Chhattisgarh, Daman Diu Dadra and Nagar Haveli, Gujarat, Himachal Pradesh, Jammu and Kashmir, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Manipur, Meghalaya, Nagaland, Puducherry, Punjab, Rajasthan, Tamil Nadu. Telangana, Uttar Pradesh & West Bengal have

complied with Rule . There are no plastic carry bag manufacturing units in 6 States/UTs namely: Andaman & Nicobar Islands, Arunachal Pradesh, Chandigarh, Haryana, Lakshadweep & Mizoram. Besides, 5 States/UTs namely Delhi, Goa, Odisha, Sikkim & Uttarakhand which have not provided the information in this regard. Further, Marking & Labelling is not started yet in Tripura.

4.8 No. of violations & action taken on non-compliance of Rules: As per provision '12' "the prescribed Authorities for implementation of Rules" of PWM Rules, 2018, 21 States/UTs namely Andhra Pradesh, Bihar, Chandigarh, Chhattisgarh, Daman Diu Dadra & Nagar Haveli (DDDNH), Delhi, Goa, Gujarat, Haryana, Jammu & Kashmir, Jharkhand, Karnataka, Madhya Pradesh, Maharashtra, Punjab, Puducherry, Tamil Nadu, Telangana, Tripura, Uttarakhand & Uttar Pradesh. have imposed fine, issued notices, closure directions to the defaulters & seized the material in their respective State/UT. Besides, there are no violations in 9 States/UTs namely Andaman and Nicobar Islands, Arunachal Pradesh, Assam, Kerala, Lakshadweep, Mizoram, Nagaland, Rajasthan and West Bengal. Further, 5 States/UTs namely Himachal Pradesh, Manipur, Meghalaya, Odisha, & Sikkim have not submitted the information in this regard.

4.9 Status of submission of Annual report (AR) by ULBs to SPCBs/PCCs:

Except following 6 States/UTs given in the table, all other States/UTs have submitted information provided by all ULBs.

S. No.	Name of the States /UTs	Submission of AR by ULBs to SPCBs/PCCS		
		Total no. of ULBs	No. of ULBs submitted	No. ULBs not submitted
1.	Assam	101	66	35
2.	Gujarat	162	161	1
3.	Madhya Pradesh	378	274	104
4.	Maharashtra	384	366	18
5.	Manipur	Not provided		
6.	Puducherry	10	5	5

5. Recommendations:

1. States/UTs should frame a time targeted action plan covering the action points related to plastic waste segregation, collection and recycling/reuse of plastic waste. The current status, desirable level of compliance in terms of statutes, gap between the current status & desired level and proposal of attending the gap with timeline as per the enclosed format (Annexure- IV) be provided to CPCB.
2. Quarterly report of the implementation status of the Action Plan should be submitted by States/UT.
3. SPCBs/PCCs should direct to UDDs to ensure setting-up of collection, source-segregation & disposal system for plastic waste.
4. SPCBs/PCCs should also ensure that no unregistered plastic manufacturing/recycling units is in operation & no unit is running in nonconforming/residential areas. Besides, it is also to be ensured that plastic carry bags/films <50 microns thickness should not be manufactured, stocked, sold and used in cities/towns.
5. SPCBs/PCCs, UDDs shall ensure to promote compostable carry bags certified by CPCB.
6. SPCBs/PCCs and Municipalities should constitute squad to check illegal manufacturing, stocking, sale of <50 microns thickness plastic carry bags and uncertified compostable carry bags/products in the market.
7. SPCBs/PCCs and UDDs to prohibit litter and open burning of plastic waste at historical, religious, public places and dumping of plastic waste on drains, river, banks and seas beaches is prohibited.”
8. Gap analysis given in Table – I is as follows:-

Sl. No.	Item	Remarks	Quantity
1	What is the quantity of plastic waste generated, (Annual Report form VI pt.2,6) (TPA)	<u>Information provided by 23 states</u> (Andhra Pradesh, Arunachal Pradesh. Assam, Chandigarh, Chhattisgarh, Daman and D&NH, Goa, Maharashtra, Manipur, Nagaland, Odisha, Punjab, Tamil Nadu, Uttarakhand, Kerala, Meghalaya,	1841714.7

		Andaman and Nicobar, Tripura, Telangana, M.P., Puducherry, Delhi, Himanchal Pradesh	
2	Number of registered plastic manufacturing units	<u>Information provided by 23 states</u> (Andhra Pradesh, Arunachal Pradesh, Assam, Chandigarh, Chhattisgarh, Daman and D&NH, Goa, Maharashtra, Manipur, Nagaland, Odisha, Punjab, Tamil Nadu, Uttarakhand, Kerala, Meghalaya, Andaman and Nicobar, Tripura, Telangana, M.P., Puducherry, Delhi, Himanchal Pradesh)	2797
3	Capacity of registered plastic manufacturing units (TPA)	None of the states have provided information on the matter	NA
4	Total number of ULBs	<u>Information provided by 21 states/Uts</u> (Andhra Pradesh, Arunachal Pradesh, Assam, Chandigarh, Chhattisgarh, Daman and Dadra & Nagar Haveli, Goa, Maharashtra, Nagaland, Odisha, Punjab, Tamil Nadu, Uttarakhand, Kerala,	2008

		Meghalaya, Andaman and Nicobar, Tripura, Telangana, M.P., Puducherry, Delhi, Himanchal Pradesh)	
4 (a)	No of ULBs which have set-up of plastic waste management system as per Rule 6(2)? (including collection, segregation, Channelization & processing of plastic waste)	<u>Information provided by 9 states</u> (Andhra Pradesh, Arunachal Pradesh, Assam, Chandigarh, Chhattisgarh, Maharashtra, Tamil Nadu, Kerala & M.P.)	800
4(b)	Number of ULBs having facilities for Collection of Segregated waste	<u>Information provided by 8 states :-</u> (Andhra Pradesh, Arunachal Pradesh, Chandigarh, Chhattisgarh, Goa, Maharashtra, Kerala &M.P.	678
4(c)	Number of ULBs having Material Recovery facility	<u>Information provided by 5 states</u> (Arunachal Pradesh, Chandigarh, Chhattisgarh, Maharashtra, M.P.)	356
5	Total number of Gram Panchayat (GPs)	<u>Information provided by 7 states</u> (Chandigarh, Goa, Tamil Nadu, Nagaland, Uttarakhand, Kerala and Andaman & Nicobar)	9135

5(a)	Number GPs which have setup of plastic waste management system as per Rule7?	<u>information provided by 2 states</u> (Chandigarh, Goa)	6
5(b)	Number of GPs having facilities for Collection of Segregated waste	<u>None of the states have provided</u> information on this matter	NA
5(c)	Number of GPs having Material Recovery facility	<u>2 states have provided information</u> (Chandigarh, Goa)	Actual number not specified
6	No. of registered Producers/brand owners/importers as per Rules 9 & 13 of PWM Rules?	Only Andhra Pradesh have provided information	80
6(a)	Number of Producers/brand owners/importers which have engaged with ULBs for	<u>2 states have provided information</u> Maharashtra and Assam	Number not specified
7	Number of ULBs which have set up system for plastic waste management with assistance of producers been set —up? Rule(6(3))?	<u>2 states have provided information</u> Maharashtra and Assam	Number not specified
8	Number of registered plastic waste recyclers	<u>information provided by 20 states</u> (Andhra Pradesh, Arunachal Pradesh, Assam, Chandigarh, Chhattisgarh, Daman and Dadra & Nagar Haveli, Goa, Maharashtra,	808

		Manipur, Nagaland, Punjab, Tamil Nadu Kerala, Meghalaya, Andaman and Nicobar, Tripura, Telangana, M.P., Puducherry, Himachal Pradesh)	
8(a)	Capacity of recyclers (TPA)	<u>Information provided by 9 states</u> (Arunachal Pradesh, Chandigarh, Chhattisgarh, Daman and Dadra & Nagar Haveli, Goa, Maharashtra, Meghalaya, Kerala & M.P.)	681492
9	Status of Utilization of plastic waste (Annual Report form VI pt.4)	<u>Information provided by 21 states</u> (Andhra Pradesh, Arunachal Pradesh, Assam, Chandigarh, Chhattisgarh, Daman and Dadra & Nagar Haveli, Goa, Maharashtra, Nagaland, Odisha, Punjab, Tamil Nadu, Uttarakhand, Kerala, Andaman and Nicobar, Tripura, Telangana, M.P., Puducherry, Delhi, Himachal Pradesh)	NA
10	Quantity of plastic Waste utilized in recycling (TPD)	<u>Information provided by 3 states</u> (Goa Maharashtra	Goa-6057.62 Tons, Maharashtra- 617TPD, Tamil Nadu-46720

		Tamil Nadu)	Tonnes per year is proposed to dispose)
10(a)	Quantity of plastic waste utilized in recycling Road Construction	<u>Information provided by 7 states</u> (Tamil Nadu, Odisha, Maharashtra, Chhattisgarh, Kerala, Andaman, Telangana)	Tamil Nadu 4015 TPA is proposed, Odisha 4.6 MT is being used , Chhattisgarh under process, Kerla-574T is used, Andaman and Nicobar -1 tonnes is used, Telangan 6.34 MT is used
10(b)	Quantity of waste Co-processed in Plastic Waste in Cement kilns	<u>Information provided by 7 states</u> (Chhattisgarh Goa Maharashtra Odisha Tamil Nadu, Telangana and M.P.)	Goa- 19,249.46T baled RDF sent for Co-processing in cement Kilns, Maharashtra: 8420 tonnes, Odish- 21.82MT, Tamil Nadu- 250TPD is proposed, Telangana- 4.5TPD is used, M.P.- 300 tonnes
10(c)	Quantity of waste utilized in production of RDF	<u>Information provided by Goa only</u>	detail regarding quantity not provided
10(d)	Quantity of plastic waste used in production of Waste to oil	<u>information provided by 2 states</u> Odisha and Maharashtra only	Odisha, Maharashtra- 657 tonnes
10(e)	Quantity of plastic waste used in other purpose (please specify)	<u>Information provided by</u> Tamil Nadu only	250 TPD is propose to dispose

11	Whether State Level Advisory Committee is constituted or not? [Rule 16] If yes, details of number of meetings conducted in a year and implementation of suggestions of committee in the last two years.	<u>Information provided by 13 states</u> (Arunachal Pradesh, Chandigarh, Chhattisgarh, Daman and Dadra & Nagar Haveli, Uttarakhand, Meghalaya, Andaman and Nicobar, Tripura, Telangana, M.P., Puducherry, Delhi, Himachal Pradesh.)	Detail regarding quantity not specified
12	No. of Registered Compostable plastic unit	<u>Information provided by 5 states</u> (Maharashtra, Nagaland, Odisha, Punjab, Tamil Nadu)	2
12(a)	Total Capacity of registered Compostable plastic unit	None of the states have provided information about it. However, CPCB has issued certificates to 44 registered units engaged in manufacturing of compostable carry bags/products.	114962 As Certificate issued by CPCB under PWM Rule 4(h)

9. The above gap analysis appears to be in terms of the information available and information required. The recommendations are for framing of time targeted action plans and giving of information in the prescribed format to CPCB apart from giving implementation status quarterly. Further recommendations are for setting up collection, source segregation and disposal system and checking unregistered plastic manufacturing, recycling, prohibiting handling of plastic less than 50 microns thickness, promoting

compostable carry bags and prohibiting litter and open burning of plastic waste. These recommendations are already part of Rules of which strict compliance need to be ensured.

10. We may also deal with the issue of implementation of Extended Producers Responsibility (EPR) under the PWM Rules in the light of the order dated 17.09.2019 in O.A. No. 376/2018, Jitender Yadav v. Union India & Ors. wherein it was observed:-

“1 to 6 xxx

xxx

xxx

7. On 12.09.2018, this Tribunal directed the Ministry of Environment, Forest & Climate Change (MoEF&CC) to take steps to implement the Extended Producer’s Responsibility (EPR) in accordance with Plastic Waste Management Rules, 2016, (PWM Rules) as amended in 2018.

8. On 16.05.2019, noticing the failure on the part of the MoEF&CC in furnishing any information about compliance of the said direction, the Tribunal sought an explanation and directed that on the default, the concerned Joint Secretary, MoEF&CC may remain present in person.

9. On this aspect, written submissions have been filed by the MoEF&CC to the effect that a Committee has been constituted on the subject which held several meetings. Last such meeting was held on 31.05.2019. The Ministry was in the process of preparing final draft guideline document on National Framework on EPR to be placed in public domain for receiving further comments. The minutes of the meeting do not indicate any tangible action beyond recording suggestions. The minutes of the meeting also show that except a Joint Secretary, all other participants representing Government are of junior level.

10. The PWM Rules elaborately lay down the norms and the responsibilities. Rule 9 requires the producers to workout the modalities for the waste collection system based on EPR and also by involving State Urban Development Departments. Primary responsibility is of the producers who introduce such products in the market. The minutes of the meeting merely shows shifting of responsibility instead of adhering to the mandate of the PWM Rules. The PWM Rules have a provision for State Level Monitoring Committees for effective monitoring of the implementation of the PWM Rules.

11. Hazardous impact of unscientific handling of plastic waste is well acknowledged.¹ The minutes of the

1 “Fact Sheet on Plastic Waste in India, 2018”, TERI- Plastic contributes to 8% of the total solid waste, with Delhi producing the maximum quantity followed by Kolkata and Ahmedabad. Significant amount of toxic heavy metals like copper, zinc, lead and cadmium

meeting and the submissions filed on behalf of the MoEF&CC are not consistent with the mandate of the PWM Rules which require immediate enforcement of liability by effective mechanism instead of deferring the subject. One of the means to implement EPR is to require stamping of non-degradable product with the information as to how after use such product is to be handled.

12. This Tribunal is also considering the matter of implementation of PWM Rules based on an application filed by the CPCB itself, complaining that the States are not furnishing the requisite information and not taking preventing and regulatory steps as per the PWM Rules.² The matter was last reviewed on 22.07.2019 and directions were issued requiring the States/UTs to take further action to meet the gaps pointed out by the CPCB within the laid down timelines failing which compensation may be required to be paid by the defaulting States/UTs.

13. Further, vide order dated 16.01.2019 in O.A. No. 606/2018, the Tribunal directed the Chief Secretaries of all the States/UTs to appear in person before the Tribunal with their respective reports on the subject of compliance of the Solid Waste Management Rules along with other subjects including PWM Rules. The Chief Secretaries have accordingly appeared and given their reports but since the reports were not found to be adequate, time was given for taking further action and furnish further reports.

14. It will be appropriate that the Chief Secretaries look into the issue of compliance of PWM Rules as per mandate of law and the MoEF&CC also concludes the long pending issue of framing National Framework on EPR within two months instead of adopting long winded procedure which has been going on for more than two years, inspite of the enactment of the Rules more than three years ago. The concerned Joint Secretary,

recovered from plastic wastes from sea shores have an adverse effect on the coastal ecosystems. Lead and Cadmium pigments, commonly used in most of the plastics as additives are hazardous in nature and are known to leach out. "Impacts of Marine Debris: Entanglement of Marine Life in Marine Debris Including a Comprehensive List of Species with Entanglement and Ingestion Records", David W. Laist - Plastic debris affects at least 267 species worldwide, including 86% of all sea turtle species, 44% of all seabird species, and 43% of all marine mammal species. <https://www.indiaspend.com/india-is-generating-much-more-plastic-waste-than-it-reports-hereswhy/> - CPCB data on plastic waste generation from a 2015 study showed that, in 2010-12, India generated 25,940 tonnes plastic per day. This would amount to 9.5 million tonnes per year. In 2016-17 too, CPCB received figures from only 25 regional pollution boards. The total plastic waste generation figure for that year was estimated at 1.6 million tonnes, or 160,000 truckfulls. India's annual plastic consumption is expected to cross 20 million tonnes in 2020.

2 Execution Application No. 13/2019 in O.A. No. 247/2017, Central Pollution Control Board vs. State of Andaman & Nicobar & Ors.

MoEF&CC may remain present in person, to assist the Tribunal in Execution Application No. 13/2019 in O.A. No. 247/2017, Central Pollution Control Board vs. State of Andaman & Nicobar & Ors. on 04.12.2019.

15. The MoEF&CC may ensure that meeting takes place with the involvement of senior officers who are competent to take decision and for this purpose CPCB must be also involved. The compliance report of the MoEF&CC may be filed latest by 30.11.2019. The Central Pollution Control Board (CPCB) may lay down a compensation regime and scale on 'Polluter Pays' principle by appointing such Expert Committee as may be found necessary and furnish its report before the next date. The scheduled date of 16.10.2019 in Execution Application No. 13/2019 will now stand deferred to 04.12.2019."

11. Accordingly, Ms. Nidhi Khare, Additional Secretary, MoEF&CC is present in person and has handed over action taken during the hearing mentioning inter-alia that three models were being considered as follows:-

"Model 1 —Fee based model

- Under the fee based model the producers/importer/brand owner is required to contribute to the EPR corpus fund at the central level/State level.*
- The amount to be contributed by each of the producers/importer/brand owner will be decided based on the amount of plastic being introduced into the market by the producers/importer/brand owner. Normative cost based on the cost of recycling may be adopted.*
- The collected funds shall be utilized for creation of infrastructure for the management of plastic waste in Smaller municipalities.*
- There is a need to build the capacities of the ULB in terms of infrastructure development and their expertise so that the waste management can happen systematically under the EPR mechanism.*
- Secondly, an important factor which is indirectly contributing to the cleanliness of the city are the rag pickers/assemblers/recyclers. They are anyway contributing to the mechanism of EPR without any benefit. This fraction of the stakeholders shall be supported for the better management of the waste under the mechanism of EPR under this model.*
- Thirdly the component of Information, Education and Communication (IEC) activity shall be supported through the component of EPR to*

achieve an effective waste segregation, collection, transportation and recycling.

Model 2 — PRO based model and Plastic Credit Model Under this model, the objective is to establish a Producer Responsibility Organization (PRO) to lead on implementation and provide funding required under the Rules on behalf of producers to support plastic recycling while also promoting the ease of doing business for all stakeholders.

Local bodies and some states do not have the expertise or resources to design, implement and manage effective local plastic waste management programs. This can be addressed by having an industry self-managed PRO take on the responsibility for discharging producer's national and state legal obligations in a more efficient and cost effective manner by applying industry's experience gained through successful producer responsibility programs implemented in other jurisdictions.

Model 3 -Plastic Credit Model

- *PRO/Producers/Importers can also obtain certificates from accredited processors [recyclers, W2Eplant operators, cement co-processors, users utilizing plastic in road] in exchange of an evidence of recycling or recovery, which will act as ERP compliance.*
- *Producers will be at liberty to decide options for establishing channels of collecting plastic credits with or without forming or linking with PROs. Producers with established supply chains can establish other channels for collection/ segregating/ processing plastic waste for eg.:*
 - *Deposit refund schemes*
 - *Buy-back schemes*
 - *Forming social ventures involving informal sector directly.*

12. Let the matter be finalized and National Framework established as far as possible within three months. Further report may be furnished before the next date by e-mail at judicial-ngt@gov.in.

13. CPCB has also filed a report in terms of direction in paragraph 15 in the order dated 17.09.2019 in O.A. No. 376/2018, Supra, on the subject of Environmental Compensation regime for improper Plastic Waste Management. The report is infact application seeking time to submit such regime in four weeks after finalization of National Framework on EPR by MoEF&CC.

14. In view of above discussion, we sum up our directions as follows:

- a) National Framework for extended producers liability be finalized and enforced as far as possible within three months and a report furnished by the MoEF&CC as per observations in para 12 above.
- b) CPCB may give its report for compensation regime in terms of para 13 above.
- c) The States/UTs may finalize the time targeted action plans and give information about the implementation status to the CPCB as per recommendations in the report of the CPCB summarized in para 9 above.
- d) An institutional mechanism be established to ensure that:
 - i. No unregistered plastic manufacturing/recycling units is in operation and no unit is running in non-conforming/ residential areas.
 - ii. No plastic carry bags /films <50microns thickness should be manufactured, stocked, sold and used in cities/towns.
 - iii. Thermocol/polystyrene cups, plates, etc. used extensively and haphazardly littered are properly regulated.
 - iv. Special Environment Squads may be set up for enforcement to oversee and ensure that no litter of plastic waste takes place at historical, religious, public places and dumping of plastic waste on drains, river, banks and sea and no burning of plastic takes place in open.
 - v. The States/UTs may submit their compliance reports to CPCB quarterly in a cumulative format, failing which compensation of Rs. 1 lakh per quarter shall be levied by the CPCB. The CPCB may compile and file its consolidated report on quarterly basis before this Tribunal. First quarterly report be filed before the next date by e-mail at judicial-ngt@gov.in.

20. The problem of plastic waste and its disposal on the Indian Railway Station was taken up by the Principal Bench of this Tribunal in O.A. No. 141/2014 and vide order dated 01.10.2018, it was dealt as follows:

“1. This application has been filed with a prayer to ban the use, sale, carrying or dumping of any plastic product on the Indian railways stations, railway tracks, etc., to ban open defecation by humans on and around the railway tracks and to build a mechanism in all Indian trains to prevent dumping of human waste on railway tracks and to form a task force to look after the proper disposal of plastic and human waste, already generated and dumped on the Indian railway stations, railway tracks, etc. The application was filed on 26.07.2014 and has been pending for the last more than four years.

2. Averments in the application are that huge amount of plastic waste is generated by the vendors, hawkers and catering service providers at the railway stations. Such waste is non-biodegradable in nature and not fit for dumping at landfill site because of toxic chemicals which leach out in the soil and underground water. Passengers and other visitors to the railway stations contribute to such wastes.

3. There is no mechanism for segregating the plastic waste from bio-degradable waste. As per Municipal Solid Waste(Management and Handling) Rules, 2000, waste has to be separated into bio-degradable and non-biodegradable. Separate bins have to be provided. Railway stations do not have such mechanism. There are incidents of open burning of plastic waste. Some such incidents are mentioned in report No. 21 of 2012-13 of the Comptroller and Auditor General of India (CAG) called “Environment Management in Indian Railways”. Rail India Technical and Economic Services (RITES) conducted a study in the year 2009 at three major railway stations in Delhi and found generation of 6758 kg of plastic waste every day. There is also generation of huge amount of human waste which is dumped on the tracks. Open defecation on the tracks leads to unhygienic conditions and spread of diseases like diarrhoea, cholera, typhoid, hepatitis, other water-borne diseases and parasitic infections. Parasites like hookworm, tapeworm, roundworm and pinworm are spread through human waste that results in the spread of communicable diseases.

6. Vide order dated 18.03.2015, directions were issued for platform being cleaned and freed from any municipal solid waste in accordance with the Environment (Protection) Act, 1986, Municipal Solid Waste Management Rules, 2000 and The Indian Railways (Penalties for activities affecting cleanliness at railway premises) Rules, 2012. Effluents generated by washing and cleaning of the tracks should not seep into the ground water. Effluents must be taken into the CETPs/STPs and discharged, recycled and used for irrigation. For these purposes, fresh water or extracted groundwater should not be used. It was also noted that sum of Rs. 11.25 crores was given, in the year 2003-2004, for rehabilitation of slum dwellers to the Delhi Urban Shelter Improvement Board (DUSIB). Out of 4410 Jhuggies (huts), only 257 have been rehabilitated. It was also noted that

there are Jhuggies and residential buildings, within 2 meters from the railway tracks throwing waste on such tracks.

14. Learned Additional Solicitor General, appearing for the Railways fairly stated that maintaining cleanliness at the railway platforms, railway tracks and railway properties is an uphill task. It is also very difficult to tackle the situation of encroachments of the railway property by way of construction of Jhuggies etc., adding to the difficulty of maintaining cleanliness.

16. The situation depicted in the Performance Audit conducted by the CAG for the year ended 2011 is quite revealing. There is no doubt that the Indian Railway is the second largest carrier of passengers and freight of the country. It also carries pollution intensive commodities like coal, cement, fertilizers, petroleum etc. It is a major consumer of water and energy. Its activity has substantial impact on environment. The Public Accounts Committee (PAC), in its 83rd report mentioned the deficiencies on the issue of environment management in the Indian Railways.

17. The CAG undertook the comprehensive audit performance in managing the environmental risks. The CAG noticed that handling of commodities like coal, cement, iron or fertilizers in open wagons creates lot of pollution. Operation of handling of transport of such commodities requires guidelines include consent to operate from State Pollution Control Boards. The CPCB in its study, found that generally railways failed to comply with the statutory provisions at 14 major stations, studied by the CPCB. There was no system of monitoring the quality and quantity of waste water generated. There was non-compliance of instructions of installation of ETPs at major stations. Effluents were discharged to low lying areas/water bodies. There was no significant progress in implementing water conservation method. Measures taken to conserve flora and fauna are not adequate. There was no proper collection and segregation of plastic waste. About 3980 MT human waste was discharged directly on railway tracks. Comprehensive environmental guidelines for handling and transportation of bulk commodities are required. Siding and goods-sheds are required to obtain consent to operate from SPCBs. ETPs and STPs are required on all major stations. Water recycling and re-use is required on all stations where water is scarce. Automatic coach wash plants are required to be installed. Use of non-conventional energy sources is required as per Energy Conservation Policy. Animal mortality rate due to stray hits has not declined. 62 elephants died during the review period. In most of the contracts for disposal of garbage, there was no clause for segregation of garbage. Disposal was being done by burning or dumping at many places. A monitoring mechanism was required for compliance of environmental policies, including conservation of water, use of alternative source of energy, prevention of animal mortality, waste management policy, having eco-friendly toilets. Object of the solution should be proper waste disposal. Disposal of

plastic waste at landfill site is unsafe. No separate Waste Management Cell exists in the organizational structure of the Indian Railways. On audit of garbage, it was noted that no central ward for disposal are available and transportation of garbage was not being covered. Quantity of garbage generated was not being assessed. No separate clause was incorporated for segregation of waste in the Agreements. Despite agreement, disposal of garbage was being done by burning or dumping. Plastic packaging was extensively used. Study conducted at three railway stations revealed pet bottles generation, food packaging, tumblers, multilayer metalized plastic, plastic carry bags and cups. These plastic wastes go to the landfill along with other municipal solid waste. Study also revealed that the plastic wastes generated from the Railway stations are not collected, segregated, transported, treated, reused and disposed properly. Use of plastic was not discouraged. Environmental friendly toilets were required to be adopted, including vacuum toilets, Controlled Discharge Toilet System (CDTS), Zero Discharge Toilets both aerobic and anaerobic.

18. The CPCB, in its conclusion observed that inadequate resources, in-appropriate technologies, management apathy and low efficiency of the system are unable to give fruitful results. The existing waste management system at railway stations has several short-comings. Hence, the waste management system needs complete reorganization, with a clear definition of roles and responsibilities.

20. Thereafter, following recommendations were made:-

“1) The entry of rag-pickers at railway stations shall be restricted, however, they can be included in the main stream of waste management system as per norms of railway authorities. The waste collection, segregation, transport and disposal shall be privatized to some specialized agency.

2) Separate dustbins system should be adopted for biodegradable and non-biodegradable waste. Railways may keep vigil on waste generating/managing organizations and consider penalties for plastic littering.

3) Plastic recycling industry is needed to upgrade the technology for better products and the products should be labelled with the plastic identification code to help in sorting and collection as per IS 14535: 1998.

4) Reuse of plastic as in cement kilns and utilization in road construction could be the best option, as it is free from pollution and mixed plastic waste can be processed easily.

5) *Massive public awareness programs with the help of NGO's will have to be launched on war footing against littering, segregation and disposal of plastic waste.*

6) *There is need to use biodegradable plastic bags in place of plastic bags, thus. Use of plastics products can be reduced.*

7) *An independent Waste Management Cell (WMC) could be set-up to look-after solid and plastic waste management."*

21. *We may note that the Municipal Solid Waste Management Rules, 2010 have since been replaced by Solid Waste Management Rules, 2016. This Tribunal has dealt with the issue of implementation of the said rules, inter-alia, vide judgment dated 20.08.2018 in Original Application No. 606 of 2018. Directions, to the extent relevant for the present case, have to be equally applied to the present case also.*

22. *In view of above, we find that there is an urgent need for the Railway Administration to put in place an effective implementation and monitoring mechanism with provisions of fixing of accountability of notified individuals at Railway Station level, Divisional level and Zonal level in respect of railway tracks, railway stations and the properties along at railway tracks especially w.r.t. solid waste disposal, littering of solid and plastic wastes, defecation along the railway tracks, removal of encroachments etc. We are informed that railway property along the railway tracks may extend from 15 to 100 meters. Being the owner of the said property, the Railway must own responsibility for compliance to Solid Waste Management and Plastic Waste Management Rules.*

Atleast three persons must be identified and declared to be the accountable persons at every important Railway Station as well as at Divisional and Zone levels. This will be in addition to the existing hierarchy. Adequate provisions in the budget must also be made. A person or a team responsible for implementation for removal of encroachments must be identified at every level.

23. *Enabling provisions are available under the Railways Act itself for constitution of such mechanism. Immediate steps be taken for displaying the do's and don'ts for passengers in all railway compartments. Details of 24 hour helpline and Indian Railway Twitter handle shall also be conspicuously displayed in all train compartments. Along-with this, fine and penalty to be imposed on passenger for littering in the trains, railway tracks and the railway platforms etc. shall also be displayed. Steps be taken for removal of graffiti inside as well as outside the train and on the railways stations within 24 hours of their being made or displayed. All railway franchise holders are required to operate retention tanks which are to be emptied in only at the designated rail depots.*

Measures be also taken for rodents and pest control and management inside the trains as well as at the railway platforms and stations. It may be noted that education, training drills and capacity building of railway station staff be carried out at regular intervals.

27. The Railway administration shall constitute a Special Task Force for removal of encroachments and squatters from railway lands/ premises and also undertake landscaping of such vacated land parcels especially within city precincts by way of creation of bio-diversity parks, planting of ornamental plants, fountains etc. This Special Task Force shall submit its quarterly Action Taken Report to the Tribunal from time to time. The Railway administration shall also plan afforestation and plantation along such land parcels in country side area with the help of Forest Departments of respective State Governments.

21. Accordingly, we direct the respondents as follows:

- i. Carry bags made of recycled plastic or products made of recycled plastic shall not be used for storing, carrying, dispensing or packaging ready to eat or drink food stuff’.
- ii. Local bodies shall encourage the use of plastic waste (preferably the plastic waste which cannot be further recycled) for road construction as per Indian Road Congress guidelines or energy recovery or waste to oil etc. The standards and pollution control norms specified by the prescribed authority for these technologies shall be complied with.
- iii. Thermo set plastic waste shall be processed and disposed off as per the guidelines issued from time to time by the Central Pollution Control Board.
- iv. Ensuring segregation, collection, storage, transportation, processing and disposal of plastic waste.
- v. Ensuring that no damage is caused to the environment during this process;

- vi. The local body to frame bye-laws incorporating the provisions of these rules.
- vii. All waste generators shall pay such user fee or charge as may be specified in the byelaws of the local bodies for plastic waste management such as waste collection or operation of the facility thereof, etc.
- viii. Primary responsibility for collection of used multi-layered plastic sachet or pouches or packaging is of Producers, Importers and Brand Owners who introduce the products in the market. They need to establish a system for collecting back the plastic waste generated due to their products. This plan of collection to be submitted to the State Pollution Control Boards while applying for Consent to Establish or Operate or Renewal. The Brand Owners whose consent has been renewed before the notification of these rules shall submit such plan within one year from the date of notification of these rules and implement with two years thereafter.
- ix. Name, registration number of the manufacturer and thickness in case of carry bag.
- x. Name and registration number of the manufacturer in case of multilayered packaging.
- xi. Retailers or street vendors shall not sell or provide commodities to consumer in carry bags or plastic sheet or multilayered packaging, which are not manufactured and labelled or marked, as per prescribed under these rules.

22. The State and local authorities are directed to follow the guidelines issued by the Principal Bench of this Tribunal in above noted original applications and further the guidelines issued in these applications may be monitored in accordance with directions given in the above original applications pending in the Principal Bench of this Tribunal.
23. The State and local authorities are directed to strictly follow the Plastic Waste Management Rules, 2016.
24. Accordingly, Original Application No. 2/2016 (WZ) is finally disposed off.

Sheo Kumar Singh, JM

Dr. Satyawan Singh Garbyal, EM

August 07, 2020
Original Application No. 2/2016 (WZ)
MN