Item No.01

BEFORE THE NATIONAL GREEN TRIBUNAL
CENTRAL ZONE BENCH, BHOPAL
(Through Video Conferencing)

Original Application No.189/2025(CZ)

Suo Moto Titled "Shehat Ka Kabad Do Lakh Logon Ke Liye Khatra Bane 50 Plastic Kharkhane" Dated 14th December, 2025, *Suo Moto*

Vs.

State of Madhya Pradesh & Ors. Respondent(s)

Date of Hearing: 21.01.2026

CORAM: HON'BLE MR. JUSTICE SHEO KUMAR SINGH, JUDICIAL MEMBER
HON'BLE MR. SUDHIR KUMAR CHATURVEDI, EXPERT MEMBER

For Applicant (s): *Suo Moto*

ORDER

1. The news reporting Dainik Bhaskar dated 14th December, 2025, has highlighted the health hazards created by the plastic units endangering the life of more than lakhs of people and having no provision for disposal of the plastic waste and violating the Environmental (Protection) Act, 1986, and environmental rules.

2. It is reported that in Bhopal, single-use plastic has officially been banned since 2022. However, shopkeepers across the city continue to distribute goods in polythene bags. Disposable cups and plates are still widely used in hotels and dhabas. The Municipal Corporation conducts campaigns from time to time, but the use of plastic has not been effectively stopped. Even today, l0 to 12 tonnes of plastic waste reach the Municipal Corporation's transfer stations and Adampur Cantonment daily. Almost the same amount of plastic waste reaches the junkyard through scrap dealers, where it is recycled illegally. It is

stated that the situation of e-waste is even more alarming. Old mobile phones, laptops, and other electronic waste are ending up in scrap yards along with regular waste. These are dismantled to extract valuable metals, releasing hazardous gases during the process.

3. It is further reported that the Municipal Corporation has allotted around 800 plots in the area under the name "New Categorized Garage." Currently, lease cancellation proceedings for nearly 70 plots are pending due to non-payment of lease rent. Shockingly, the corporation does not maintain proper records of the businesses operating on each plot. It is stated that to operate any industry, approvals from the Industries Department, the District Administration, and the local body are mandatory, along with pollution clearance. The rules governing plastic recycling units are even stricter.

4. The news reporting further highlights that "Junkyard" is the name that comes to mind when people need second-hand parts for everything from bikes to trucks. However, more than 50 plastic recycling factories are also operating illegally in this area, posing a serious health threat to nearly 200,000 people living in the surrounding colonies. Piles of plastic waste can be seen everywhere in the narrow lanes of the junkyard. A brief investigation reveals machines used to convert plastic waste into granules. These granules are then sent to industrial areas across the state and the country, where they are used to manufacture polythene products. At least two small or large fires break out here every week. The smoke from burning plastic is especially alarming. Due to the extremely narrow lanes, it is often difficult for fire brigade vehicles to access the area.

5. It is further reported that the Pollution Control Board had commissioned a study by the Automotive Research Association of India

(ARAI), Bhopal. At that time, the PM_{10} level recorded at DIG Bungalow (near the scrapyard) was 225-the highest level noted and the reason why the risk is increasing are:

- Fires break out twice a week, significantly increasing air pollution.
- The e-waste dismantling area is so narrow that fire engines cannot reach it.
- Valuable metals are extracted here, releasing toxic and dangerous gases in the process.

6. A regulatory framework for management of plastic waste management generated in the country was provided by the Plastic Waste Management and Handling Rules, 2011, by the Government of India. To implement these rules more effectively and to give thrust on plastic waste minimization, source segregation, recycling, involving waste pickers, recyclers and waste processers in collection of plastic waste fraction either from households or any other source of its generation or intermediate material recovery facility and adopt polluter pay principle for the sustainability of the waste management system were introduced. The Government of India had reviewed the existing rules and brought out the Plastic Waste Management Rules, 2016.

7. Regulation of Multi Layered Plastic (for short 'MLP') to be phased out in two years' time as provided in Rule 9(3) of the Plastic Waste Management Rules, 2016. The Plastic Waste Management Amendment Rules, 2018 added the MLP to the list of plastic which was expected to be phased out. These MLP packets are one of the few materials which are non-recyclable, non-energy recoverable or with no alternate use. The list of single use plastic items which were banned is not comprehensive as it did not include the MLP which is concerned when it comes to plastic contamination. Even while managing the solid

waste, the ban on single use plastic is not comprehensive as it does not include many of the single use plastics used every day. While so, the non-inclusion of the MLP is also equally harmful as the same is used in all the fast moving consumer goods. Going by the definition as per Section 3(N) of the Plastic Waste Management Rules, 2016 multi-layered packaging means:

> *"multi-layered packaging means any material used or to be used for packaging and having at least one layer of plastic as the main ingredients in combination with one or more layers of materials such as paper, paper board, polymeric materials, maetallised layers or aluminium foil, either in the form of a laminate or co-extruded structures".*

8. As the definition goes, there is one layer of plastic in the combination of other layers of various materials like paper etc. which makes it impossible to collect and also impossible to process. The definition 3(h) speaks about the extended producer's responsibility which means:

> *"responsibility of a producer for the environmentally sound management of the product until the end of its life".*

9. The above definition only means to say that the companies which manufacture the MLP or consume this material are required to take it back and send it for reprocessing. The producers would bear the full costs including environmental and social impacts. But whether the EPR which sounds interesting on paper is practical and is easy to implement. Rule 9 of the Plastic Waste Management Rules, 2016 fixes a responsibility on the producers of the MLP to collect the waste generated due to their products.

> *"**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 Responsivity and involving State Urban Development Departments, either individually or collectively, through their own distribution Channel or through the 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"

10. As per the above, the producers are responsible for collecting back the waste produced due to their product and make a plan of collection of such wastes. Such plan has to be submitted to the State Pollution Control Board when applying for 'Consent to Establish' or Operate or renewal. The responsibilities is on the State Pollution Control Boards not to grant the consent unless they submit plan of collection of waste. The reason being that there is no information about the quantity of the plastic material or the waste the company generates, it is only based on the self-declaration which is also not made available in the public domain to access its accuracy.

11. The MLP are not used for energy recovery in the country because of the structure of the MLP which contains plastic, paper and also contains aluminium and it is difficult to use in waste to energy plant or in incinerator without hugely polluting the environment. If MLP wastes are burnt the toxic substances released are carcinogenic in nature and the remaining fly ash will also be highly toxic to dispose of in landfill. The burning of plastic releases toxic gases like dioxins, furans, mercury

and polychlorinated biphenyls into the atmosphere and poses a threat to the vegetation, human and animal health.

12. The MLP also do not have any alternate use because they are non-recyclable in nature. The conversion of MLP into chairs and, therefore, the benches is not done at the market level. production, usage and disposal of MLP in the country is causing irreparable damage to the environment and the phasing out of the production and usage of MLP in the country will improve the issue of worsening the waste problem in the country.

13. To implement Clause 9(3) of the Plastic Waste Management Rules, 2016 to phase out the MLP which are not recyclable, non-energy recoverable and also does not have an alternative use on the grounds that:

(i) The recycling of MLP in India is not commercially viable because of the structure of the MLP.

(ii) There is no information or evidence to suggest that any technology in India can be used to separate the layers of MLP to make it recyclable.

(iii) Even If technological support is available, these technologies involve complex scientific procedures which are not being tried practically.

(iv) As the MLPs are not recyclable, it is not even collected by the rag pickers, which has got no money value.

(v) The MLP cannot be used in the energy recovery because of its structure that it not only contains plastic and paper but also contains aluminium and it is difficult to use in waste to energy plant and in incinerator which would result in pollution.

(vi) Additionally when there is no waste segregation done at source, it is difficult to use the same for energy conversion.

14. Rule 12 speaks about the prescribed authorities which is the State Pollution Control Board or the Pollution Control Committee of Union Territory, who will be the authority for enforcement of these rules relating to registration, manufacture of plastic products, MLP, processing and disposal of plastic waste. Similarly, the concerned Secretary, In-charge, the concerned Gram Panchayat shall be the authorities for enforcement of the provisions, who shall take assistance of the District Magistrate or the Deputy Commissioner within the territorial limits of the jurisdiction of the concerned districts in the enforcement of the provisions of these rules. There is also a State Level Monitoring Committee as per Rule 16 constituted by the concerned State Government or Union Administration for effective monitoring of implementation of these rules. The MoEF&CC has further stated that all MLP made in the country are either recyclable or energy recoverable or have alternate use and as such may not require to be phased out. Further, information is also sought from the Central Pollution Control Board in this regard.

15. As per Rule 13(2), the units are to provide the action plan for fulfilling the extended producer responsibility for collection and processing of the plastic waste introduced by them in the market. The Central Pollution Control Board has further stated that there are guidelines prepared for the disposal of non-recyclable fraction (MLP waste) which is available on their website. As per this respondent, respondent nos. 12 and 13 as brand owners/producers have not registered with Central Pollution Control Board so far. The Central Pollution Control Board

also had produced the notification GSR 133(E) dated 16.02.2022 which further amended the Plastic Waste Management Rules, 2016.

16. As per this notification, the extended producer responsibility shall be applicable to both pre-consumer and post-consumer plastic framework for packaging waste. These guidelines provide framework for implementation of extended producer responsibility. The said guidelines also provide roles and responsibility of producers, importers, brand owners, Central Pollution Control Board and State Pollution Control Board or Pollution Control Committee, recyclers and waste processers for effective implementation of the extended producer responsibility. By this amendment dated 16.02.2022 in the Plastic Waste Management Rules, 2016 in Rule 9 in Sub-Rule 1 for the words as per guidelines issued under this rule from time to time. The words "as per guidelines specified in Schedule-II shall be substituted".

17. In other words, the Schedule-II is added to the notification which has introduced definitions in Rule 3 which are as follows:-

> ***"3. Definitions:***
> *(a) -Biodegradable plastics means that plastics, other than compostable plastics, which undergoes complete degradation by biological processes under ambient environment (terrestrial or in water) conditions, in specified time periods, without leaving any micro plastics, or visible, distinguishable or toxic residue, which have adverse environment impacts, adhering to laid down standards of Bureau of Indian Standards and certified by Central Pollution Control Board.*
> *(b) "Brand Owner" means person or company who sells any commodity under a registered brand label or trade mark;*
> *(c)-Carry Bags (covered under Category II of plastic packaging Clause (5.1) (II)) means bags made from plastic material or compostable plastic material, used for the purpose of carrying or dispensing commodities which have a self-carrying feature but do not include bags that constitute or form an integral part of the packaging in which goods are sealed prior to use:*

(d) End of Life disposalt means using plastic waste for generation of energy and includes co-processing (e.g. in cement kilns) or waste to oil or for road construction as per Indian Road Congress guidelines, etc;

(e) -Extended Producer Responsibility means the responsibility of a producer for the environmentally sound management of the product until the end of its life;

f)-Importer means a person who imports plastic packaging product or products with plastic packaging or carry bags or multilayered packaging or plastic sheets or like;

(g) -Plastic means material which contains as an essential low ingredient a high polymer such as polyethylene terephthalate, high density polyethylene, density polyethylene, polypropylene, polystyrene resins, multimaterials like acrylonitrile butadiene styrene, polyphenylene oxide, polycarbonate. polybutylene terephthalate;

(h) -Plastic Packaging means packaging material made by using plastics for protecting, preserving, storing and transporting of products in a variety of ways.

(i)-Plastic Sheet means plastic sheet is the sheet made of plastic;

(j)-Plastic Waste Processors means recyclers and entities engaged in using plastic waste for energy (waste to energy), and converting it to oil (waste to oil), industrial composting.

(k) -Pre-consumer plastic packaging wastell means plastic packaging waste generated in the form of reject or discard at the

stage of manufacturing of plastic packaging and plastic packaging waste generated during the packaging of product including reject, discard, before the plastic packaging reaches the end-use consumer of the product.

(l) -Post-consumer plastic packaging waste" means plastic packaging waste generated by the end-use consumer after the intended use of packaging is completed and is no longer being used for its intended purpose.

(m) -Producer means person engaged in manufacture or import of carry bags or multilayered packaging or plastic sheets or like, and includes industries or individuals using plastic sheets or like or covers made of plastic sheets or multilayered packaging for packaging or wrapping the commodity;

(n) -Recyclers are entities who are engaged in the process of recycling of plastic waste:

(o) "Recycling" means the process of transforming segregated plastic waste into a new product or raw material for producing new products;

(p) —Reuse means using an object or resource material again for either the same purpose or another purpose without changing the object's structure;

(q) —Use of recycled plastic means recycled plastic, instead of virgin plastic, is used as raw material in the manufacturing process;

(r) —Waste Management means the collection, storage, transportation reduction, re-use, recovery, recycling, composting or disposal of plastic waste in an environmentally sound manner;

(s) —Waste to Energy means using plastic waste for generation of energy and includes co-processing (e.g. in cement kilns)"

18. The Schedule-II defines biodegradable plastics, brand owners, carry bags, end of life disposal etc. The coverage of the extended producer responsibility is also categorized and in Category-III MLP packing (at least one layer of plastic and at least one layer of material of plastic is included) this has to be read in consonance with Rule 9(3).

19. **The three types of Multilayer Plastic wastes generated from units are: (i) laminated plastic like – biscuit cover, (ii) metalized plastic waste like - shampoo sachet and (iii) aluminium foil contains plastic waste like -coffee packs and other air tight packs**.

20. For instance, a wrapper of a chips packet or a biscuit packet once discarded will stay in the environment forever because there is no plan to meet the extended producer responsibility to retrieve it from the open. Even the Government do not have a clue as to how to deal with these packets which go to the garbage dump and are indestructible. These wrappers are made of MLP and these MLPs have two sheets of plastics enclosing a layer of aluminium but technically MLP can be any material that has at least one layer of plastic. The volume of such waste which may be due to the law of segregation and lack of continuous

supply of MLP to the industries, it is not recycled. The Plastic Waste Management Rules, 2016 was introduced, Rule 9(3) mandated that phasing out of the non-recyclable MLP should be done in two years. However, the 1st amendment came in the year 2018.

21. In the said amendment "non-recyclable multi-layered plastic" was substituted with "multi-layered plastic which is non-recyclable or non-energy recoverable or with no alternate use". This is now taken advantage by the producers by claiming that the packaging material, if not recycled can be put to some other use. The said amendment was being exploited by the MLP manufacturers and they continue to use the material. Though, the 2016 have mandated all these producers to practice EPR and recover the MLP which they used to package their products. So far as the recovery is concerned, there is no minimum percentage of the waste fixed to be retrieved. In other words, the manufacturers can continue to use MLP even if they recover or retrieve only 01% of what they sent into the market. As there was no criteria prescribed in the rules and also that the manufacturers cannot do that without MLP, the effective implementation of the rules has become impossible.

22. Unless the EPR policy is made rigid, collecting of MLP will become too tedious. In this regard, the producers have to come up with ideas of alternatives to MLP rather than trying to take shelter under the amendment clauses.

23. Though, these amendments and guidelines and new definitions have been introduced in the Plastic Waste Management Rules, 2016, Rule 9(3) which had originally intended to phase out these MLPs have not been amended. Once it become difficult to collect or treat MLP undoubtedly this has to be phased out. But merely substituting the

words non-recyclable or non-energy recoverable or with no alternate use of plastic, the intention of the legislation cannot be attained. Multi-material multilayer packaging, there is a use of different materials in different layers connected to functionalizes and packaging performance needs. This MMPP recycling is complex since recycling industry is not able to identify, sort and separate the diverse layers with current standard technology. Hence, this MMPP is sorted as mixed plastic waste post-consumer use and incinerated with energy recovery. This method does not prioritize recycling and result in disposal on dump sites and landfills. As solutions, (i) detach the distinct components for further treatment of materials separately, (ii) process all layers all together. However, no commercial treatment in industrial level is currently identified. It is time to enforce Extended Producers Responsibility (EPR) rigidly. The producers of MLP also revisit their design of products and examine packaging and delivery models. This is an area where the producers alone are responsible as the consumers or the Government cannot be forced to deal with the plastic management.

24. It is reported that Microplastics both primary and secondary, pollute drinking water sources primarily through discharge of sewage/waste water treatment plant effluent and surface runoff. As sewage/waste water treatment plants are not equipped for the complete removal of Microplastics, effluent released from these plants contains substantial quantity of Microplastics. Upon mixing of this effluent with fresh water sources, Microplastics become part of fresh/drinking water supply chain. Components of water treatment plants and water distribution system are usually made up of plastic materials such as high density polyethylene, polyvinyl chloride, polypropylene etc. These further contribute towards Microplastics generation in the water they carry.

Treated bottled water is also reported to contain Microplastics. In air, suspended Microplastics particles have been isolated from various places such as urbanized city centres, indoor households and remote outdoor regions. As there is wide range of Microplastics size, it is highly likely that these particles are inhaled by the humans. Soil can get affected from plastics through various means such as plastic mulch films, municipal waste, sewage sludge, fertilizers coated with plastics. A significant positive correlation has been seen between the rate of sludge applied onto the soil and concentration of Microplastics particles in the soil. Microplastics concentrations have been detected in the air at dumpsites in India. Microplastics is also being reported in human saliva, blood, placenta, colon, stool and lungs.

25. In Original Application No.271/2024(CZ), a report was called from the authorities concerned and in para 11 of order dated 08.09.2025, it was concluded as under:-

> *"**C. Conclusions***
>
> *1. Independent studies regarding microplastics have been conducted by various organizations in the country including CPCB, MOES-NCCR, NCSCM, NPC and CIPET. Further international studies have been conducted by WHO, UNEP, OECD and others.*
>
> *2. The studies have primarily focussed on monitoring microplastics (concentration, polymer type, colour, shape) in various environmental matrices.*
>
> *3. Occurrence of microplastics has been reported in oceans, sediments, surface water, ground water, wastewater, tap water, bottled water, air, food products, aquatic organisms, and human beings*
>
> *4. There is currently no standard method for sampling and analysis of microplastics in the environment. ISO is currently working on the subject*
>
> *5. Sampling and analytical methods adopted by different institutions in India are similar with minor variations. Variation in Microplastic*

concentrations units reported by different organizations has been observed

6. Uniform procedure for sampling & analysis may be developed by organizations involved in microplastic analysis (CIPET, NCSCM, MOES-NCCR) which be adopted uniformily across the country till the time ISO standard is finalized. can

7. Source of generation of microplastics including industries, waste management, waste water treatment, ocean activities etc. have been identified. However, exact quantum of microplastics generated from the identified source has not been determined.

8. Microplastic concentration in transfer media is available for soil/beach sediment, surface water bodies, biota and ocean water. Microplastic concentration for sludge, specifically when it is converted to compost for land application is not available.

9. Microplastic concentration in end use areas including ambient air, drinking water and ground water is available.

10. Source monitoring, transfer end use of all possible sources listed in Table 3.1 to be covered. Emphasis to be laid on such areas for which no information is available.

11. Regular monitoring of various water quality parameters to be conducted to provide insight into the presence and concentration of microplastics in environmental matrices(water, sediments, biota)

12. Microplastic leakages and pathways may be monitored in order to identify further sources and hotspots of microplastics.

13. Uniform procedure for sampling & analysis as finalized by this Committee may be adopted for such studies till the time ISO Standards are finalized.

14. Studies conducted on the matter have reported about the presence of microplastics in human body. Physiological or psychological impact has not been reported in these studies.

15. Health impact of emerging contaminants and long term studies are required to establish Cause effect relationship of microplastics on human health.

16. The aforementioned studies should cover different type, concentration and shapes of microplastics. Impact of chemicals/biofilms associated with Microplastics on human health to be covered. The studies may include the following:

Estimation of the duration and frequency of human exposure to microplastics. Microplastic monitoring as required may be conducted for the same.

Once the exposure assessment is done precisely, doseresponse assessment may be carried out, where the minimum concentration (of microplastics) responsible for any observable effect (on human) shall be assessed.

17. Bioassays may be conducted to assess the Eco-toxicological impact of microplastics on animal life.

18. Standards development (Source & ambient) for microplastics may be taken up following establishment of the cause-effect relationship of microplastics on human health

19. Available technologies to be assessed for their efficacy for removal of microplastics.

20. Technologies to be developed for removal of microplastics from Air & Soil

21. Source-directed interventions,

Sustainable design and manufacturing of textiles, tyres, and complementary products (laundry detergents, road surfaces, and vehicles), to minimise the tendency of products to contribute to microplastics generation;

Restrictions on microplastics in the manufacture and sale of certain personal care and cosmetic products containing microplastics.

Product requirements for household, commercial, or industrial washing machines. For instance, Australia and France have introduced measures to phase in microfibre filters on new washing machines.

22. End-of-life interventions, effective solid & plastic waste management practices, to prevent waste leaking into the environment and potentially contributing to microplastics generation including the following;

(a) Reducing the amount of plastic waste that enters landfills and dumpsites through the implementation of waste reduction policies and initiatives, such as waste-to-energy programs Microplastics can also be reduced by supporting the development and use of biodegradable plastic alternatives and increased recycling.

23. End-of-pipe interventions, wastewater, stormwater, and road runoff management and treatment, to retain the emitted microplastics before these reach water bodies.

24. Maximizing clean drinking water supply to all citizens in the country.

25. Other Best practices as listed below for minimizing microplastics in environment may be followed:

(a) Install physical barriers such as screens and filters on STP/ WWTP systems to help reduce the amount of microplastics that enter rivers, lakes, and oceans.

(b) Support sustainable fishing practices to reduce the amount of microplastic entering rivers from fishing equipment.

(c) Implementation of Clean-up efforts for beaches and rivers.

26. Training and capacity building including microplastic monitoring, analysis, health impact studies may be taken up for effective implementation of aforementioned points."

26. The Central Pollution Control Board has also filed a report in the above matter which contains a report of 2019 of the World Health Organisation (WHO) highlighting the following points:-

"• Plastic polymers being insoluble, they are unlikely to be absorbed from the gastrointestinal (GI) tract and generally do not interact with biological matrices.

• Plastics can contain additives and unbound monomers, which may leach out either into the surrounding water environment prior to human consumption or potentially, into the GI tract to become bioavailable under some circumstances.

• Investigation of potential risks related to particles indicate that it is possible that smaller plastic particles may be able to pass through the gut wall and translocate to tissues remote from the mucosa, although this may not necessarily translate to a health risk.

• Humans have always ingested particles and have ingested plastic particles for decades with no related indication of adverse health effects and evidence suggests that microplastics pass through the GI tract into the faeces.

• Currently a paucity of information to quantitatively asses any potential risk associated with exposure to microplastic particles. Most toxicological tests of microplastics have focused on aquatic organisms or ecotoxicology.

• There are no studies on the impacts of ingested microplastics on human health and there are only a limited number of animal studies of questionable reliability and relevance.

• There is currently no evidence to suggest a human health risk from microplastic associated biofilms in drinking-water.

• *Routine monitoring of microplastics in drinking-water is not recommended at this time, as there is no evidence to indicate a human health concern."*

27. Thereafter, conclusions which emerged from WHO Report, have been culled down in para 9, which are as under:-

"9. After detailed deliberations, the following emerged based on conclusions drawn in the report:

(a) Proposed studies on human health effects of microplastics, standardization of methodology for sampling and analysis microplastics, availability of technologies for removal of microplastics and standard development.

(i) Long term studies on health effects of microplasties and ecotoxicological studies under Indian conditions need to be performed using standardized methodologies, before development of any environmental standards, as required, based upon scientific data

(ii) Central Pollution Control Board to coordinate with the expert institutions/technical experts, if required beyond those mentioned in the pro-forma, for development of uniform methodology and availability of technologies for removal of microplastics. Central Pollution Control Board may also involve expert institutions/technical experts, beyond those mentioned in the Ministry wise proforma, as required.

(iii) Indian Council of Medical Research along with the Central Pollution Control Board and other relevant institutions may initiate long-term under Indian conditions, keeping in view national and international literature available on the topic. It was noted that causal relationship between micro plastics and adverse health effects has not been shown. WHO report of 2109 has also mentioned the same.

(b) Source directed interventions

(i) The concerned Ministries/bodies, to consider source directed interventions as per pro-forma, based upon principle sustainable development and scientific evidence on micro plastic releases, and submit comments and action plans, ns appropriate. It was noted that the report does not provide data

on releases of microplastics form these sectors under Indian conditions.

(c) Waste management, end-of-life interventions and other best practices

(i) The conclusions covered in the NGT order dated 1st March 2023 and the report of the Committee is to be considered by all the concerned Ministries, as per the NGT order, keeping in view ongoing initiatives."

28. The MoEF&CC has prepared an action plan, specifying obligations/duties/performance to be shown by different departments on various aspects and the said action plan has been filed as Annexure-III, also finds mentioned in para 14 of the above order and does not require to be repeated again.

29. It is also reported that the human health risk from microplastics in drinking-water is a function of both hazard and exposure. Potential hazards associated with microplastics come in three forms: the particles themselves which present a physical hazard, chemicals (unbound monomers, additives, and sorbed chemicals from the environment), and microorganisms that may attach and colonize on microplastics, known as biofilms. Based on the limited evidence available, chemicals and microbial pathogens associated with microplastics in drinking-water pose a low concern for human health. Although there is insufficient information to draw firm conclusions on the toxicity of nanoparticles, no reliable information suggests it is a concern.

30. With regard to particles, it is stated that particle toxicity is dependent on a range of physical properties, including size, surface area, shape and surface characteristics, as well as the chemical composition of the microplastic particle. The fate, transport and health impacts of

microplastics following ingestion is not well studied and no epidemiological or human studies on ingested microplastics have been identified. However, microplastics greater than 150 μm are not likely to be absorbed in the human body and uptake of smaller particles is. expected to be limited. Absorption and distribution of very small microplastic particles including nano plastics may be higher, however, the database is extremely limited and findings demonstrating uptake in animal studies occurred under extremely high exposures that would not occur in drinking-water. The limited number of toxicology studies in rats and mice on ingested microplastics are of questionable reliability and relevance, with some impacts observed only at very high concentrations that would overwhelm biological clearance mechanisms and that therefore do not accurately reflect potential toxicities that could occur at lower levels of exposure. Based on this limited body of evidence, firm conclusions on the risk associated with ingestion of microplastic particles through drinking-water cannot yet be determined; however, at this point, no data suggests overt health concerns associated with exposure to microplastic particles through drinking-water.

31. A substantial issue of environmental has been raised.

32. In view of the above, following persons should be impleaded as party Respondents:

1. State of Madhya Pradesh through District Magistrate, Collectorate, A-Block, Old Secretariat, Bhopal, Madhya Pradesh, India 462001

2. Member Secretary, Madhya Pradesh Pollution Control Board, Paryavas Bhavan, E-5, Paryavaran Parisar, Arera Colony, Bhopal, Madhya Pradesh, 462016

3. Regional Officer, Madhya Pradesh Pollution Control Board, Paryavas Bhavan, E-5, Paryavaran Parisar, Arera Colony, Bhopal, Madhya Pradesh, 462016

4. Commissioner, Bhopal Municipal Corporation, Harshwardhan Complex, Mata Mandir, Bhopal, Madhya Pradesh – 462001

5. Collector, Indore, M.P.

6. Collector, Jabalpur, M.P.

7. Collector, Gwalior, M.P.

8. Collector, Rewa, M.P.

9. Collector, Ujjain, M.P.

10. Commissioner, Municipal Corporation, Indore, M.P.

11. Commissioner, Municipal Corporation, Jabalpur, M.P.

12. Commissioner, Municipal Corporation, Gwalior, M.P.

13. Commissioner, Municipal Corporation, Rewa, M.P.

14. Commissioner, Municipal Corporation, Ujjain, M.P.

33. Issue notice to the respondents, returnable within four weeks.

34. Registry is directed to take necessary steps for service to the respondents by both ways and also on available email.

35. Respondents are directed to submit their reply within six weeks through e-filing portal, preferably in the form of searchable PDF/ OCR Support PDF and not in the form of Image PDF.

36. Considering the seriousness of the matter, we direct as follows:-

(i) The State Government is directed to ensure that the (Multi-Layered Plastic) MLP industry should immediately work towards substituting the non-degradable plastic in the MLP packaging material with biodegradable plastic.

(ii) The MoEF&CC is directed to encourage units for extraction of aluminium metal from foils by adopting dissolution techniques

where the solvent would target the component and remove the plastic. The units also to convert the MLP into laminated plastic waste and the metalized waste into granule and blocks for utilization in value added products.

(iii) The bigger local bodies like – Bhopal, Indore, Jabalpur, Gwalior, Rewa and Ujjain are directed to examine the facilities established in the cities for disposal of plastic waste and will take necessary remedial measures in this regard.

(iv) The State PCB and the Municipal Corporations of Bhopal, Indore, Jabalpur, Gwalior, Rewa and Ujjain are directed to periodically monitor the water quality of the water supplied for drinking purpose to the people. It is also directed to monitor the water quality of the wetlands located within and around the municipal area as regard to the presence of microplastics, twice in a year by recognized lab and to take necessary precautions in view of the health of the citizens.

(v) The CPCB is directed to form an expert team comprising of members of the CPCB, ICMR, Central Institute of Petrochemical Engineering and Technology (CIPET), and any other expert institutions as required under the nodal coordination of CPCB to carry out studies in this field and make recommendations/suggestions which may cover standards for safe environment, remedial steps to reduce the menace of microplastic and addressing other incidental issues to be implemented in municipal areas.

(vi) A study is required to be taken by the CPCB for prescribing sampling, analysis and standards of microplastics in water

with regard to permissible quantity and effects on human consumption exceeding the permissible quantity.

(vii) The Principal Secretary Environment may consider to refer the matter to the researchers to the Maulana Azad National Institute of Technology, Bhopal, for undertaking targeted, well designed and quality control investigative studies to better understand the sources and occurrence microplastics in fresh water and drinking water, the efficacy of different treatment processes and combinations of processes and the significance of the potential return of microplastics to the environment from treatment waste streams including the application of sludge biosolids to agricultural land.

(viii) The State Government is directed to take effective measures to better manage plastics and reduce the use of plastics wherever possible, to minimize plastic and microplastic pollution considering the human health risk posed by exposure to microplastics in drinking-water and other food materials consumed by humans.

(ix) The Principal Secretary Environment, Govt. of M.P., State PCB, Collectors and Municipal Corporations of Bhopal, Indore, Jabalpur, Gwalior Rewa and Ujjain are directed to control the illegal operation of plastic units effectively and make a policy to re-locate the units which are functional after taking due permissions from the competent authorities to designated industrial zone away from the residential areas, considering the safety concerns of local people.

37. The above remedial action must be taken in a reasonable time frame and the Principal Secretary Environment, Govt. of Madhya Pradesh,

has to monitor it by constituting a Committee of competent officials at the State Level as also a Committee at the District Level consisting; Commissioner of Municipal Corporation, Collector and one representative from the State PCB, to monitor and assess the situation of plastic waste generation and disposal and to prepare the periodic reports and submit the same to the Secretary Environment, Govt. of Madhya Pradesh. The action taken report from the Principal Secretary Environment, Govt. of Madhya Pradesh, Member Secretary, State PCB, Collectors and Municipal Corporations of Bhopal, Indore, Jabalpur, Gwalior Rewa and Ujjain, be submitted before this Tribunal within four weeks.

38. Registry is directed to supply the required documents and copy of the application to the Committee and Respondents within a week.

39. The report in the matter be filed through email at ngtczbbho-mp@gov.in preferably in the form of searchable PDF/OCR support PDF and not in the form of Image PDF.

40. A copy of this order be communicated to the Principal Secretary Environment, Govt. of Madhya Pradesh, Member Secretary, State PCB, Collectors and Municipal Corporations of Bhopal, Indore, Jabalpur, Gwalior Rewa and Ujjain, for information and necessary action.

List it on **27th March, 2026**.

Sheo Kumar Singh, JM

Sudhir Kumar Chaturvedi, EM

21th January, 2026,
Original Application No.189/2025(CZ)
AK