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**BEFORE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI
M.A. No. 322 of 2015**

In

ORIGINAL APPLICATION NO. 15 OF 2014

IN THE MATTER OF:

Him Jagriti Uttaranchal Welfare Society

....Petitioner

Versus.

Union of India &Ors.

....Respondents

Revised Written Submissions on behalf of M/s. UFLEX Limited (Earlier Known as Flex Industries Limited) Having its Regd. Office at 305, III Floor, Bhanot Corner, Pamposh Enclave, Greater Kailash, New Delhi 110048 and Corporate Office at A-108, Sector 4 Noida. 201301 (U.P.)having being impleaded as Respondent vide Order dated 10.04.2015 passed in M.A. 322 of 2015 in O.A. no. 15 of 2014

(PAPER BOOK)

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ADVOCATE FOR THE RESPONDENT: MR ARUN K.SINHA

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New Delhi

Dated 04.01.2021

Drawn & Filed by:-



(ARUN K. SINHA)

Advocate for the Respondent

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1. That the Respondent is a limited company registered under the Companies Act having its office at the address mentioned above.

2. That the Respondent company is, inter-alia, engaged in the business of manufacturing and marketing dealing in of all kinds of laminates of polyester type based printed material for packaging, fully automatic pick fill and seal

machines, zip pouches, glassine, paper, board and supplies ink, adhesives, rotogravure printing cylinders, plastic materials and PE Films etc. and is the largest manufacturer and supplier of aforesaid products since last more than 30 years in India and abroad and has got its presence all over the world.

3. That, the respondent has established manufacturing Units at Mexico, Dubai, Egypt, Poland, Kentucky(USA), Russia, Hungary and Nigeria . The Company from all the places are Exporting to 120 Countries in the World. That, the respondent company gives employment to about 12,000 workforce under its various companies and also provides an indirect employment to thousands more involved in multilayer plastic packaging manufacturing done under the applicant's Umbrella.
4. The Respondent is one of the major producer of the Plastic and is the largest manufacturer and supplier of aforesaid products since last more than 30 years in India and abroad and has got its presence all over the world and is liable to be adversely effected by any impugned Order dated 03.03.15 passed by the Hon' ble Tribunal.

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5. That the Respondent submits following submissions for consideration by this Hon'ble Tribunal.
- i) That, the Plastic Waste (Management and Handling) (Amendment) Rules, 2011 have been framed by the Central Government under Ministry of Environment and Forests vide notification no. S.O. 249 (E) dated 04.02.2011 & S.O. 1527(E) dated 02.07.2011 after due deliberation and thought and suggestions and objections invited from the public in exercise of the powers conferred by Sections 3, 6 and 25 of Environment (Protection) Act, 1986. **Copy of Notifications has already been annexed with intervention miscellaneous application as Annexure -2 .**
- ii) It is submitted that above notification has already been promulgated to protect the environment from pollution. All the State Pollution Control Boards and Pollution Control Committee have exercised their powers and have taken the responsibility to protect the environment. And in all the States the Plastic Waste (Management and Handling) (Amendment) Rules, 2011 have to be implemented strictly.

- iii) It is submitted that The Plastic Industry is the most important part of Petrochemical Industry. Perhaps it is correct to say that we are living in the "Plastic Age", today due to its impact on human life. The application of plastics is vast which have partially/fully replaced conventional materials like glass, wood, ceramic, metals etc.

- iv) It is submitted that the Central Pollution Control Board has included 'plastic' under 'Green Category' i.e. 'least polluting' and that alternative packing materials like paper and aluminium foil are for more environmentally dangerous. This has been done in light of the fact that Plastic Multilayer Packaging are both recyclable and eco- friendly. **Copy of Schedule-VIII of Classification of industries for consent management has already been annexed with intervention miscellaneous application as Annexure A-3.**

- v) It is submitted that in 1997 a Task Force was setup under the Chairmanship of Shri Dillip Biswas, former Chairman, Central Pollution Control Board to look into the issues of management of plastic wastes. The

taskforce suggested the 3 R's strategy namely Reduction, Reuse and Recycling through a package of preventive promotional and mitigation measures to achieve the measures. The focus was on a conscious effort to regulate the plastic usage and thereby reduce the total usage of plastics by allowing for larger amounts of recycling of plastic materials and their reuse. This is also in line with the global trend and the measures adopted internationally for the management of the plastic wastes. Further in the year 2002, Justice RangnathMisra Committee was also appointed to examine the environmental hazard posed by indiscriminate littering and disposal of plastic wastes wherein committee made recommendation on methods of collection and segregation, treatment and disposal of plastic wastes. Thus there was no suggestion for banning plastics. **Copies of the report of DilipBiswas and Sh. Rangnath Mishra has been already annexed with intervention miscellaneous application and marked as Annexure A-4&Annexure A-5 respectively.**

- vi) It is submitted that as per the Industry Guidance issued by the FDA it is stated that recycled plastics used in

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conjunction with virgin plastics are a viable alternative for the purposes of packaging food materials. The recycled plastics form the nonfood contact layer and greatly reduce the amount of plastic used overall in such packaging through the use of recycled plastics. Copy of FDA Guidance is already annexed with intervention miscellaneous application and marked as **Annexure A-6**

- vii) It is submitted that subsequently also a Committee under the Chairmanship of Justice (Retd.) R C Chopra was constituted by the Hon'ble High Court of Delhi to study the environmental hazard related to the use of plastic bags in the city of Delhi. It would be relevant to mention herein that this Committee instead of imposing a complete blanket ban on the use of plastic bags adopted a regulatory approach and laid down guidelines for optimized plastic bags which were environmental friendly and bio - degradable. The Committee also emphasized the need of active role of the civic bodies for effective collection and disposal of the plastic waste. **A copy of the Justice R C Chopra committee on environmental hazard related to the use of plastic bags in the city of Delhi submitted on 14.05.2008 is**

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already annexed with intervention miscellaneous application and marked as ANNEXURE A-7.

viii) It is submitted that the report of the Central Pollution Control Board, Ministry of Environment and Forests titled "Plastic Waste Management Issues and Option" was published, wherein a the committee once again suggested an approach for regulation of the plastic bags, restricting their size, etc. and also working towards the spreading of public awareness for the purpose of stopping the littering of plastic wastes which was the main problem with regards to the management of plastic wastes. **Copy of the report of Plastic Waste Management Issues & Options dated April 2007 is already annexed with intervention miscellaneous application and marked as Annexure A-8.**

ix) It is submitted that the Report of the Indian Center for Plastics, in the environment was published, where the essential uses of plastics for the creation of an efficient pilfer proof, hygienic and cost effective packaging was set out. The report also mentioned the fact that no country in the world had taken the step of outright banning of

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plastics and that a complete ban on plastics was not a solution to the problem of littering of plastic wastes. The steps generally employed were of the regulation of the plastic packaging materials, their thickness, etc., in an attempt to better regulate plastics and promote their recycling. **Copy of the Report of Disposal of Plastic Waste through Co-processing in Cement Klins of 2008 is already annexed with intervention miscellaneous application and marked as Annexure A-9.**

- x) It is submitted that the Report of the Committee to Evolve Road Map on Management of Wastes in India was published. The committee recommended that a policy should be set up for the management of wastes in India and, there should be segregation of the various wastes. Furthermore, with regards to plastic waste management specifically the committee was of the opinion that the focus should be on the regulation of the plastics bags, their thickness, etc. and not on the imposition of any blanket ban per say on the use of plastics. **Copy of Report of the Committee to Evolve Road Map on Management of Wastes in India dated March 2010 is**

already annexed with intervention miscellaneous application and marked as Annexure A-10

- xi) It is submitted that the respondent company is a major stake holder known as Uflex Ltd. and any adverse order passed without the Respondent being heard will violate its fundamental rights under Article 14 & 19(1)(g) and Article 21 of the Constitution of India.
- xii) It is submitted that misconception about plastics that plastic wastes effects the environment needs to be clarified:

A.) RECYCLABLE:

Recycling is a process using plastic waste materials into new products. This reduces the consumption of fresh raw materials and energy. It reduces air pollution because incineration does not take place. Further water pollution is also stopped which is created through land filling.

Recycling is a key component of modern waste reduction cycle i.e. "Reduce, Reuse, Recycle" waste hierarchy. It is a scientific process having ISO standards related to recycling such as ISO 15270:2008 for plastics waste and ISO 14001:2004 for environmental management control of recycling practice.

As already understood littering of plastics and now adoption of Bin culture is a huge problem area because of which plastics are blamed. Plastics to be recycled are either brought to a collection center or picked up from the curbside, then sorted, cleaned, and reprocessed into new shapes and materials through manufacturing process. Plastic Recycling is the process of recovering scrap or waste plastics and reprocessing the material into useful products, sometimes completely different in form from their original state.

- (i) Recycling Technology has been developed and invented by Respondent Flex Industries Limited (now called as Uflex Limited) in the year 1994 and Recycling of Plastic Waste is presently being carried out at Noida Plant, Jammu Plant & Malanpur (Gwalior).
- (ii) In 1994 the Cost of Plant & Machinery for Recycling was around Rs. 110 Lacs excluding cost of land & building & storage space and utility provisions.
- (iii) There was no support or incentives provided by the Govt in the year 1994 on Waste Handling or processing. Govt. had given lot of incentives to set up new Industries of

Plastic, but there were no incentives or concessions on the handling of Waste generated during processing of Plastic and Companies handling Waste Management and those industries had to pay all leviable Taxes. Knowingly or un-knowingly Central Govt / State Govt. has never given any due attention / focus to Waste handling Industry.

- (iv) Funding of the Recycling Plant was done through Internal Resources of the then Respondent Flex Industries Ltd.
- (v) It was not a profitable venture as there was approximately 30% Viability Gap Funding which is required to be considered now.
- (vi) Since the Recycling Plant's requires around minimum Rs. 2-3 Crore Investment and Viability Gap Funding of 30% was not available therefore companies are not coming forward for putting this plant and thus the waste Plastic could not be recycled by those industries for want of Recycling Plants.
- (vii) Technology & Knowledge is available with present intervener respondent company but it is expensive and

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for running the plant Viability Gap Funding is required to the tune of 30%.

- (viii) It is not only Technology of Flex Industries Limited, but also investment which Flex Industries Limited has done. In past no Bank was giving any Loan for Waste handling because Banks were not considering this Waste Management handling projects as Business model. Today proper directions needs to be given to Central Govt. / State Govt./ Banks / Financial Institutions for providing Loans to Industry otherwise this Waste Industry will not be able to grow at all. Important to note that globally Multilayer Plastic is most preferred and most favored Packaging material compared to all other packaging material including Metal, Glass, Rigid plastic, Containers or Paper based packaging. The Multilayer Plastic as it is signified and is important because of its min weight, Minimum cost of Transportation and benefits.
- (ix) Hence State Government and Central Government needs to come forward to allot land for waste management and incentives for setting up Waste Management Plants.

- (x) Multilayer Plastic Packaging is Re-cyclable number of times In India and this practice is already prevailing in respondent company (UFlex Industries Ltd.) It is further submitted that the UFlexIndustries has also been awarded First prize from Former Prime Minister Dr. Manmohan Singh under the category of Environmental Excellence for its pioneering contribution to preserve Environment by developing a unique technology to process printed and multi-laminated mixed film scrap comprising of Metalized Polyester /BOPP/PET.

A copy of the 'Best Paper Award' in recognition of the aforesaid work granted to ShriVipinMital the Chief Executive Officer of the respondent company by the DAVOS RECYCLE'95 Forum, Switzerland and the Award for Environmental Excellence from Dr. Manmohan Singh, Prime Minister is already annexed with intervention miscellaneous application and marked as Annexure A-11(Colly).

- xi) It is submitted that the plastic materials have excellent properties of recycling and offer huge economic and ecological advantages by conserving the resources apart from original first cycle use. At the same time

widespread use of plastic results in large waste after the use of product is over. Hence the need to recycle plastics became absolute necessity to keep the earth and environment neat, clean and green.

xii) It is submitted that in India in year 2017 plastic use shall increase very substantially with per capita plastic consumption from 8 Kg at present to 12 Kg per annum. Accordingly much larger plastic waste will be released and has to be recycled in the quantities never imagined before to generate employment and keep the earth and environment green, neat and clean.

xiii) The Respondent Company Uflex has developed state of the art technology of non-contaminated Polymeric material at post industry level i.e. film waste generated at various process levels of converting with virgin polymers and additives to develop high value added granules for specific applications without compromising on the desired properties. Flex commingled Pre Printed Laminated & Metallised Polymer Films Recycle Project was the only type of the Project developed in the world till year 1996. This method of plastic recycling involves the compounding of

polymers, which can then be used in various applications. It is submitted that the solution to waste management problem lies in segregation of dry and wet solid waste at the source for which an effective mass awareness campaign is very important. Creation of efficient Solid Waste Management infrastructure coupled with encouraging establishment of recycling centres would help address the MSW problem. Plastics can be recycled to produce articles for mass use augmenting the concept of resource management. Many useful products have been developed with recycled plastics and large number of people are employed in these activities in small, micro and informal sectors. **In this behalf the rag pickers can be involved in the recycling plants by giving them proper incentives and good service conditions.** An informal industry estimate put the recycling figure of India at around 1.5 Million Tons – close to 50% of plastics used for packaging applications. This is a very high recycling ratio.

xiv) End Use of Recycled Plastic Waste Material:

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- A.) The various technologies which are available can typically help producers turn such waste into useful products with typical applications as below:
- a. Use of Plastic Waste Material in Highway & Road Construction
 - b. Thick Black Films etc.
 - c. Flooring Tiles etc.
 - d. Tarpaulins
 - e. Injection Moulding(caps, clips, automotive buttons, electrical conduit joints, cables, garden gadgets.)
 - f. PET bottles recycled material for specific purposes.

g. Advantages of Recycled Waste Plastic in Road Surfaces:

- Reduced penetration and ductility, a higher softening point, less rutting and cold cracking.
- Higher Marshal value and better stripping value.

- Improvement in fatigue life of roads.
- The voids are reduced in polymer coated road surface.
- Reduction of voids leads to reduction of moisture absorption which results into prevention of stripping of bitumen.

h. It is submitted that Multilayer Plastic Packaging when burnt donot release any Poisonous Gases. **The Copy of Report of Shriram Institute For Industrial Research is already annexed with intervention miscellaneous application which confirms that no Poisonous Gases or Dioxin is produced and released when Multilayer Plastic Packaging is burnt and this report is marked and annexed as ANNEXURE A-12**

B.) **Eco - Friendly:**It is submitted that Multilayer Plastic Packaging / Plastics is totally Eco-friendly. Prima facie impression about the plastics being an environmental hazard and having non eco-friendly character is a myth which needs to be busted. In general, admittedly all man made product, during manufacture, processing and

disposal have an impact on the environment of some degree. The issue therefore, which should be brought to the attention of the authorities and the Court while reviewing / examining any of these products / process should be as to which of the such product / process imposed the least burden on the environment and contribute to what is termed as "sustainable development".

Plastics have brought about Second Green Revolution in Agriculture and Water Management. Minor and Micro Irrigation systems like sprinklers and drip irrigation using plastics help in conserving water. Plastics have also made it possible to bring vast tracks of arid land under farming.

By virtue of 'degassing of plastics / pelletising' technology, the multilayer plastic packaging, laminates, metalised films, heavily printed films can easily be recycled into granules. The said technology is eco-friendly, reduces energy consumption and most importantly is cost and space saving and is very much in use in other developed countries like United States.

It is admitted position with the Central Pollution Control Board of India the major problem in plastic waste management is of collection, segregation, transportation, and disposal which at present is primarily done through unorganized sectors like rag pickers and kabadiwalas, through unscientific method which create environmental problem. The major part of collection of the post consumer plastic waste is done by scrap dealers, rag pickers etc. and the cost of collection of scrap is generally low. **In this behalf the rag pickers can be involved with giving them incentives and family too recycling plant.** There are basic all dirty & contaminated Post Consumer scrap material with like all type of laminated film packing HDPE/LPE bags, milk MULTILAYER PLASTIC PACKAGING , PVC Items, carry bags, packing pouches. Plastic Waste which cannot be separated into individual polymers are to be recycled as coming into garbage. Recycling of used multilayer films which are preprinted, metallised and laminated also fall under this category but essentially with mud & dirt and contamination.

Therefore, the primary and foremost need is to reorganize the whole recycling process of the plastic waste management rather than banning the usage of plastic per se.

- C.) In India for effectively and efficiently handling the process of re - processing, re - cycling and disposal of such wastes, method of Co - processing in Cement Kilns which is a known and accepted process for Municipal Solid Waste Management in many developed countries as well as in India.
- D.) It is submitted that by virtue of 'degassing of plastics / pelletising' technology, laminates, metalised films, heavily printed films can easily be recycled into granules. The said technology is eco-friendly, reduces energy consumption and most importantly is cost and space saving and is very much in use in other developed countries like United States.
- E.) It is worth noting that multilayered plastics in the form of film per se has not been banned in any of the countries in the world. Usage of plastics comprising of plastics carry bags and other ancillary packagings are widely

used in USA, Canada, UK and the EU Countries and Japan with certain prescribed size and thickness restrictions. Multilayered Plastic in the form of film is the most popular plastic adopted by the most developed Countries including Europe, America and Japan which are very much concerned with the Environment Laws. This is because in these countries Waste Management Systems exists and are fully enforced & waste is Recycled.

- F.) It is submitted that any product which improves the quality of life particularly on the economically weaker section of the society and which reduces significantly the pollution load on the environment and further contribute to the preservation of land, water resources and forests would amount to an eco friendly product. Plastic being one of them, which lends itself to recycling and /or recovery of significant part of energy. Prima facie impression about the plastics being an environmental hazard and having non eco-friendly character is a myth which needs to be removed. In general, admittedly all man made products, during manufacture, processing and disposal have an impact on the environment of some degree. The issue therefore, which should get the

attention of the authorities and the Court while reviewing / examining any of these products / process should be as to which of the such product / process imposed the least burden on the environment and contribute to what is termed as "sustainable development".

- G.) It is submitted that misconception about the plastic waste being a large part of municipal solid waste also needs to be clarified. It has been aptly demonstrated via various researches / studies that out of the total per capita consumption of plastic at over 100kg per annum in Europe and USA (India is merely 10-12 kgper annum), plastic waste makes up only 8% of the total municipal solid waste. The rest is made up of a organic material (33%, paper and board 30%), glass and metals 16% and others 13%. Needless to mention plastic waste arising out of thrown / littered Multilayer Plastic Packaging are a significantly low to be accounted for. It is relevant to mention herein that plastics makes a significant contribution by reducing the weight and volume of the material that are typical thrown away. Unfortunately in India, such waste is littered instead of being disposed of to facilitate collection and recycling.


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xv) It is submitted that the outright banning of usage of Multilayer Plastic Packaging will lead to tremendous loss of employment in several plastic industries. It is submitted that lakhs of families will be ruined if they will be rendered jobless as a major portion of the packaging material is utilized in preparation of Multilayer Plastic Packaging for essential items.

xvi) It is submitted that in today's scenario, Plastic have made significant contribution in almost every field of activity i.e., agriculture, medical, transportation, piping, electrical, packaging, manufacturing of household, electronic goods and other items of daily or specific use and in turn its tremendous contribution towards employment, revenue and economy of the State. Furthermore, the usage of plastics in medical products like disposable syringes, blister packing of tablets and capsules, blood bags has become irreplaceable for the medical sector. The goods packed in the plastic enhances the shelf life of the contents as also preventing it from contamination, etc. The said aspect is particularly important in the case of life saving drugs and instruments. The plastic - poly pouches has revolutionized the distribution and supply of milk, edible

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oil, etc in poly pouches. Packaging represents the largest single sector of plastics use. This sector accounts for 35% of plastic consumption and plastic is the material of choice in nearly half of all packaged goods. In fact about 40% of plastic materials worldwide are used in packaging applications which in turn contribute towards creating a sustainable, hygienic, energy efficient, cost effective and environmental friendly packaging system.

xvii) It is submitted that generally, as per the Economic Survey Report 2009-10, plastic products have shown reasonable growth and, according to the advance estimate for 2009-10, the plastic manufacturing sector as a whole has grown at the rate of 8.9 per cent while contributing tremendously towards employment generation to lakhs of families. Furthermore, Survey Report 2009-10 also states that 16% of the Revenue for the State comes from Man made fibers which includes Plastics. It is also pertinent to mention that the report titled "The impact of economic reforms on Indian manufacturers: Evidence from a small sample survey by Eckhard Siggel and Pradeep Agrawal in the year 2009 by Institute of Economic Growth, University Enclave, Delhi

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110007, India states that employment in Plastic and Rubber Sector has grown at an average annual rate of 5.2%, the third-fastest among manufacturing industries thereby providing large scale employment to masses.

The Copy of report of Impact of Economic Reforms on Indian Manufacturers: Evidence from a Small Sample Survey by Institute of Economic Growth, University Enclave, Delhi dated Nil April 2009 is already annexed with intervention miscellaneous application and marked as AnnexureA-13.

xviii) It is submitted that Multilayer plastic packaging have allowed creating and efficient pilfer proof, hygienic and cost effective quality control of the products in the quality in which they need to be delivered to the ultimate consumer. This has been possible due to following attributes of plastic materials.

- Safe & Hygienic – Inert and Chemical Resistance
- Light Weight & Non-Breakability
- Excellent Barrier Properties – Enhancing Shelf-life
- Superior Impact Resistance
- Sterilizable and resistance to bacterial and other microbial growth.


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- Pilfer proof packaging.
- Transparency as well as Opacity.
- Lower Fuel Consumption and Product Loss during Transportation.

Belowmentioned usages of plastics will reveal the importance of Multilayer plastic packaging in the today's scenario. The most common usage of plastic are inter alia;

- Packaging medical products including life saving drugs and also in surgical instruments. The table below enumerates it further –

Item name	Plastic Packaging structure	Form of packaging	Shelf Life (Paper and Paper/Poly)	Shelf Life(Laminates and Al foil)
Ampules, Vials and Syringes	Blow Molded PP	Primary	~	1 year
Blisters, Clamshells and Trays	Thermoformed PVC	Primary	0	2-3 years
Blood bag	Plasticised PVC	Primary	0	1 to 11 weeks
Blood bags Kits	Plastic laminates of PET/Al foil/ PE	Secondary	0	4-6 months
Sleeves and Labels	PVC, PETG and PET	Secondary	0	2-3 years



Tamper Evident	Heat Seal Coated (VCVA-MA terpolymer) Al foil	Primary	0	3-5 years
Oral Rehydration salt	Plastics laminates of PET/Al foil/PE	Primary	0	2-3 years
Capsules and Tablets (Hygroscopic)	Cold formable Plastic Laminates of BON /Al foil/ PVC	Primary	0	2-3 years

- Packaging/ carrying of confectionery, bakery products and other food items.
- Packaging/carrying hygroscopic products like sugar/salt/jaggary/tobacco consumables.
- Carrying perishable food products like fish, meat, poultry and other wet products like milk etc.
- In farming for increased yields, earlier harvest and less reliance on herbicides and pesticides.
- For more efficient water conversation and irrigation.
- For handling, transport and conversation of food crops.
- For thermal insulation in buildings in refrigeration and in industrial installations.
- For energy economy by weight reduction, transport means, packaging, luggage.



- For Low energy lighting, monitors and displays based on organic electronics (OLED, LCP)
- For electrical insulation in cables, batteries, appliances.
- For energy economy by miniaturization of ICT appliances.
- In automobile sector usage of plastic results in weight savings and consequently reduction in consumption of average fuel to the extent of 750 liters per life span of 1,50,000/- kilo meters. Further, usage of plastics allowed aerodynamic and compact design resulting in lower fuel consumption.

xix) It is submitted that Eco-friendly plastics have brought about Second Green Revolution in Agriculture and Water Management. Minor and Micro Irrigation systems like sprinklers and drip irrigation using plastics help in conserving water to the tune of 40% to 70% besides improving agricultural productivity and quality of produce. Plastics have also made it possible to bring vast tracks of arid land under farming.

The Report of Indian Center for Plastics in the Environment, Vol. 10, Issue 4, October – December, 2009 “Envis – Eco Echoes” is already annexed with intervention miscellaneous application marked as ANNEXURE-A-14).



xx) It is submitted that apart from the above stated process being adopted in India, another advanced and a revolutionary technology is on the verge of being started. By virtue of the said technology, the sachets, laminates, metalised films, heavily printed films can easily be recycled into granules. The said technology, known as 'degassing of plastics / pelletising', is well equipped with a fully automatic self segregation and cleaning system. The said technology is eco-friendly, reduces energy consumption and most importantly is cost and space saving. The said technology is very much in use in other developed countries United States.

The product report of the technology being marketed by Erema Technologies is already annexed with intervention miscellaneous application marked as ANNEXURE - A-15.

xxi) It is submitted that it is much hyped that paper are best alternative for plastics usage. However it is pertinent to mention that Central Pollution Control Board has included 'plastic' under 'Green Category' i.e. 'least polluting'. Further more the usage of plastic is more

appropriate for sustainable development in comparison to the usage of paper. **Copy of Notification under the Environment (Protection) Rules, 1986 dated 6th January 1989 is already annexed with intervention miscellaneous application and marked as Annexure A-16.**

xxii) It is submitted that the so called alternatives to Plastic i.e Paper or Aluminum foil are much-much more dangerous and having much more adverse effects than the Plastic used because they are not Eco-friendly nor recyclable etc. It is relevant to ponder herein that as compared to usage / consumption of paper, the usage / consumption of plastic is more sustainable for "Mother Earth". As has been well documented that for production of 1 (one) ton of paper the following resources would be irreversibly consumed:

Energy data				
Category	Feedstock	Petroleum	Process Energy	Total energy
Paper	550 KJ	500KJ	350KJ (Coal)	1680 KJ
Plastic	495KJ(Natural Gas)	120 KJ(feedstock)	80KJ	735KJ
Water	To manufacture 1 kg of paper approx. 25-30 litres of water is consumed to put enormous stress on the water resources specially for country like India for water scarce.			

		Pollutants Data	
Category	Solid waste	Air Emissions	Water borne waste
Paper	50g	2.6Kg	1.5g
Plastic	7g	0.55Kg	0.05g

xxiii) It has been a concern world over that indiscriminate usage of paper has enormously eroded the 'rain forests' coverage across the globe, including India. Thus the rain forests considered to be the 'lungs of the world' are fast depleting and becoming cancerous for sustainable development. The said aspect becomes more pertinent in view of the fact that the world today is now moving more towards a paperless office. Even the Courts today have taken the initiative for promoting setting up of e-courts, etc.

xxiv) It is submitted that the processing of plastic does not generate any pollutant in air, land and water. If the plastic bags / Multilayer Plastic Packaging is replaced with paper, cloth, jute, metal, etc. it would lead to major burden on the ecological system as the making of paper

consumes lot of chemicals and water. The production of paper consumes lot of energy, water and pulp. The manufacture of paper bags requires two and a half times the energy, as compared to plastics bags of same size and for a comparable performance. The manufacture of paper also produces high air pollutants and wastewater discharge used in the manufacture or recycling of paper. The details with regard to the consumption of energy (Power), water, etc, used in relation for the manufacturing of paper is as under:-

- I. Globally the paper is the 5th largest consumer of energy;
- II. The paper industry is among use of the largest users of water;
- III. The paper can be recycled maximum up to 4 times;
- IV. The recycling of paper is also energy intensive and requires chemicals for bleaching / drinking;
- V. The paper is rated as medium in Bio-degradability with associated hazards like leakages;
- VI. The paper comes from forests which plays an important role in protecting our soil bank and maintaining gaseous balance of the atmosphere by absorbing carbon dioxide

and in turn release oxygen as 44 million hectares of forests have been felled since independence making India as one of the lowest areas under forest cover (area under forest to total land area).

- VII. The use of plastics has saved environment by saving trees and forests as for yearly production of 50 million plastic chairs and 15 million plastic crates nearly 20 million trees have been saved over 10 years.

xxv) It is submitted that every Multilayer Plastic Packaging is basically criticized due to its unawareness, misconception about the benefits, relative costs and performance offered by Multilayer Plastic Packaging and the ignorance about its contact with foodstuffs, safety, energy efficiency, recyclability and disposal. The Multilayer Plastic Packaging benefits the people and the environment as there are various products that are safely packed and protected by plastics. It is stated that due to the environmental friendly image and the benefits provided to both the manufacturer and consumer the importance & the consumption of plastic has been increased and if there would no plastics bags, Multilayer Plastic Packaging or products there will be a phenomenal

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increase towards weight of packaging, volume of waste, energy, cost of packaging

The effect and the impact of any product on the environment depend upon the manufacture, usage and disposal of the product. The plastic processing involves mild heating and extrusion using specific machines and does not generate any pollutant in air, land and water and therefore plastic - processing is included under Green category i.e. Least Polluting and item No.37: Plastic & PVC processed goods and item No.38: Polythene, Plastic and PVC goods through injection / extrusion molding under category III. B, whereas production and processing of glass is included in Red category i.e. most polluting item No.32 under I. B as per the guidelines issued by Central Pollution Control Board's Guidelines for Management of Consent and Authorization.

xxvi) It is submitted that as almost 95 percent of the total milk packed is packed in Polyethylene pouches as it provides safe, pure, easiest, convenient and cheapest option as compared to glass bottles out of total milk packed in

India. The India is the largest producer of the milk in the world with 81 million tones of the production in the Year 2000 - 2001 and approximately 46 percent of the total milk production is consumed in liquid form and only 26 percent of liquid milk was branded, packed and sold to the consumers and while the rest is converted into ghee, khoa, powder milk, ice cream, cheese etc. That each pouch of the $\frac{1}{2}$ liter weighs barely 4 gms and costs only 25-28 paise for transportation of milk across India and the various studies have shown that for packing 16 Billion litres of milk annually, only 08 million tones of polyethylene pouches are consumed and if these were replaced by glass 14.7 million tones of glass would be required and for that 27.6 Billion units of power would be required i.e. equivalent to 4 X 1000 MW Thermal Power Stations, which would be a great drain on the economy and environment of India. The milk is packed in virgin / prime polyethylene pouches bags and due to great resale values of the empty pouches, the waste dealers collect them for recycling for good quality films for packing other products except cooked food. The following studies demonstrate the weight and resources conservation,

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usefulness of plastic pouches for packing one liter of milk
as under:-

Glass Bottle	:	75 gms
Tetra Pack	:	26 gms
PET Bottle	:	20.25 gms
Plastic Pouches	:	4.5 gms

**A sample of the various products packing using the multi
layered laminates is already annexed with
intervention miscellaneous application and marked
as ANNEXURE-17)**

xxvi) A report of INCPEN the Industry Council for Packaging
and the Environment - A Research Organization
established in 1974 to study the environmental and
social effects of packaging **is already annexed with
intervention miscellaneous application marked as
ANNEXURE-A-18.**

xxvii) It is submitted that as on today, the Indian scenario of
usage of plastic is wide spread over numerous sectors
including packaging, building and construction, electrical
and electronic and furniture, house ware etc. Of all the

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sectors, it is the plastic packaging industry which is the leader and stands out with a total of 35% share in the entire plastic manufacture/consumption/usage industry.

xxviii) It is submitted that out of the entire packaging segment, the bulk of the plastic packaging is consumed / used during the packaging of perishable food products and other consumer durables.

xxix) It is submitted that Plastic being inert in nature do not pose any health hazard. All plastics in general meet the requirement of both national and international standards like BIS, FDA etc. Specific standards for plastic packaging used in food contact items have been laid down by national and international regulatory bodies. Plastic carry bags are generally made of polyethylene - the material used for packaging of liquid milk, pharmaceutical tablets, intra venous liquid bottles and in the packaging of scores of ready to eat or drink food items. Use of polyethylene in contact with foodstuffs, pharmaceutical products and drinking water is permissible as per specifications laid down in Indian Standard IS 10141-2001/ IS 10146-1982, etc.



- xxx) It is submitted that unlike alternate materials such as glass, metals which are also not biodegradable. Conventional plastics packaging provides the highest product to packaging weight ratio in the same shelf-life requirement, thus necessitating least material input for packaging. The long life of plastics has added value to the product. However, for certain applications, the properties of plastics are desired minus its long life. In fact, the products are required to degrade after a specific period of time after its intended use, which otherwise created problem for recycling or disposal.
- xxxii) It is submitted that the technology to make Biodegradable/compostable plastic is in the process of evolution. Few customers are already using fully Biodegradable Packaging material in Country. In future most of the Companies will be using fully Biodegradable plastics. This is mandated in Rule 10 and Schedule -1 of Plastic Waste Management Handling Rules, 2018.
- xxxii) It is submitted that the harmful effects of glass to the environment are quite tough to be ignored. These effects include:

- a.) Upon the glass manufacture process, air-polluting compounds like nitrogen oxides, sulfur dioxide and particulates are previously proved to be released. These are of a great health concern since the particles of metals, chemicals, acids and dust are so tiny (10 micrometers or even smaller) that they are able to enter the nose and throat and reach the lungs, where they produce damage to the body .

- b.) For the production of float glass, energy and raw materials make up to almost 70% of the cost of goods sold. At 30 €/m², pv glass is already a high cost for a module, especially thin-film modules. In addition to this the transportation costs, if glass is not produced near the vicinity of the pv industry, may prove to be as high as 25% of the total cost for glass.

- c.) Although sand is the major ingredient during the manufacture of glass and is easily available in the environment, but other minerals are very scarce .

- d.) When not recycled, the glass gets its path directly to the garbage, where it gets piled up since it may take around a millions of years to get degraded. Also, overfilled landfills can contaminate the ground and the groundwater.
- xxxiii) It is submitted that Biodegradable Plastics have been developed for some specific applications in mind. Its use in medical applications is very important. In other cases, use of biodegradable plastics is recommended in applications where recycling is not possible or difficult. India has adopted the international specification ISO/170888:2088 - on Compostable Plastics and ISO/17556:2018 on Aerobic biodegradation. ASTM (USA) and EN(EU) have similar specifications. The concept of Biodegradable Plastics for a mass application like carry bags will encourage littering. Spurious products cannot be detected in market place causing flooding of fake bags.
- xxxiv) It is submitted that some manufacturers claim to have developed a type of biodegradable plastics which when disposed off in the backyard / open air, degrade due to the action of oxygen / sun light and would provide relief to the civic authorities from the waste management

woes. However, these types of products do not comply with the specifications of compostable plastics and nor have these been proved to be environment friendly. Regulatory Authorities of the developed countries have not yet accepted these types of degradable plastics for mass use.

xxxv) It is submitted that the efforts of the Indian industries for contributing towards sustainable development and taking steps towards setting up ideal mechanism for recycling of mixed plastic waste comprising of laminated films of metallized PET/LDPE/BOPP, etc have been taken cognizance of across the world.

In view of the facts and submission made herein above the grievance of the Petitioner no more subsists and same is liable to be dismissed.

DATED
04.01.2021

RESPONDENT

UFLEX LIMITED

Drawn & Filed by:-



(ARUN K. SINHA)

Advocate for the Respondent

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REVISION WRITTEN SUBMISSION IN O.A. NO. 15 OF 2014

3 messages

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Mon, Jan 4, 2021 at 1:07 PM

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To,

Sh. Ritwick Dutta, Advocate
Sh. Raj Kumar, Advocate for CPCB
Sh. S.Nandakumar, Advocate for BIS

Sub:- O.A No. 15 of 2014
Hlm Jagriti Uttaranchal Welfare Society Vs. Union of India & Ors.

Dear Sir/s

Please find attached herein Revised Written Submissions on behalf of M/s UFlex Limited (Earlier Known as Flex Industries Limited) having being impleaded as Respondent Vide order dated 10.04.2015 passed in M.A. No. 322 of 2015 in O.A. No. 15 of 2014.

Thanks & Regards

ARUN K. SINHA
ADVOCATE-ON-RECORD
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