



## **“2 Day On-line Training Course on Procedures to Manage Single Use Plastic (SUP) and PET Recycling and Sustainability”**

**Conducted By**



**National Productivity Council-Kanpur**

**Expert Speaker on PET Recycling and Sustainability**

**Rajesh Kumar Gera**

**Packaging and Recycling Consultant.**

**Master Trainer & Lead Assessor (MEPSC).**

**Chairman Program Committee-IPI Mumbai chapter**

**Ex-AVP, RIL-PET Division, Mumbai.**

**Dates: 11<sup>th</sup> October 2021; Timings: 2:00 pm to 5:00 pm**

**Expert Speaker on Single Use Plastic**

**Mr. Nitin Dumasia**  
**ESG Expert and Consultant**  
**Growlity Inc. (USA and India)**

**Dates: 12<sup>th</sup> October 2021; Timings: 2:00 pm to 5:00 pm**

### **About Training Course: -**

#### **PET Recycling and Sustainability**

Polyethylene terephthalate (PET) is one of the most widely used plastics today. PET bottles are ubiquitous in our day-to-day lives—one has to just look around to spot a PET bottle containing mineral water or soft drink or used for other applications. With such wide usage (in 2015-16, ~ 900 KT of PET was used in India), comes the question, what happens to the PET bottles after use. Are they recyclable? If so, how can they be recycled? What can be made out of recycled PET? How much of PET consumed in India ends up being recycled, in a given year?

#### **Single Use Plastic**

Single-use plastics are goods that are made primarily from fossil fuel-based chemicals (petrochemicals) and are meant to be disposed of right after use—often, in mere minutes. Single-use plastics are most commonly used for packaging and service ware, such as bottles, wrappers, straws, and bags. Seeking to make India single-use plastic-free by next year and deal with the menace of huge uncollected plastic waste across the country, the Centre notified ban on the use of 'single-use plastic items from July 1 next year and increased thickness of polythene bags from 50 microns to 120 microns. The government has notified Plastic Waste Management Amendment Rules, 2021, prohibiting identified single-use plastic items by 2022. The manufacture, import, stocking, distribution, sale and use of following single-use plastic, including polystyrene and expanded polystyrene, commodities shall be prohibited with effect from July 1, 2022. Citizens will have to shun plastic like ear buds with plastic sticks, plastic sticks for balloons, plastic flags, candy sticks, ice-cream sticks, polystyrene (thermocool) for decoration; plates, cups, glasses, cutlery such as forks, spoons, knives, straw, trays; wrapping or packing films around sweet boxes, invitation cards, and cigarette packets, plastic or PVC banners less than 100 micron.

## **Training Course Coverage: -**

### **PET Recycling and Sustainability**

PET bottles, post use, still carry a lot of value, and recycled PET (r-PET) can be used in a wide variety of applications. This makes post-consumer PET bottles a very sought-after item by waste collectors. Discarded PET bottles fetch waste collectors Rs 14-15/kg. These bottles are bought by kabadiwallahs or waste traders, who employ people to segregate, sort and further sell it to large vendors or recyclers. The caps, neck rings, labels (non-PET components) are removed, and the bottles are shredded, washed, and sold as what is called 'washed flakes'. These washed flakes are then used to make (predominantly) polyester fibre, which is used as filling material for cushions, pillows, and converted to fabrics for use in clothing, upholstery, etc. These end products sell at anywhere between Rs 50-110/kg; the market for r-PET products is quite large. There are 40+ large manufacturers across India who use r-PET as raw material. The PET recycling business can be estimated (roughly) to be around Rs 3,000- 4,000 crore in a given year in India.

### **Single Use Plastic**

Single use disposable plastic items including take out containers such as cups, plates, bowls, forks, spoons, knives, plastic straws and stirrers, plastic bags and plastic water bottles pose a serious environmental problem around the world.

These items are used once and are often discarded in our streets and parks. Plastic items do not go away, they simply break down into increasingly smaller pieces.

Plastics fragments can release toxic chemicals into the environment and can be a serious health risk for humans and animals.

Single-use plastics are a glaring example of the problems with throwaway culture. Instead of investing in quality goods that will last, we often prioritize convenience over durability and consideration of long-term impacts. Our reliance on these plastics means we are accumulating waste at a staggering rate. We produce 300 million tons of plastic each year worldwide, half of which is for single-use items. That's nearly equivalent to the weight of the entire human population.

Reducing plastic use is the most effective means of avoiding this waste (and the impacts linked to plastic production and use). Carrying reusable bags and bottles is one great way to avoid single-use plastics in our day-to-day lives; more on preventing plastic waste can be found below.

Recycling more plastic, more frequently, reduces its footprint. Polyethylene terephthalate, one of the most commonly recycled plastics and the material that makes up most water and soda bottles, can be turned into everything from polyester fabric to automotive parts.

Economically affordable and ecologically viable alternatives which will not burden the resources are needed and their prices will also come down with time and increase in demand. Need to promote alternatives like cotton, khadi bags and biodegradable plastics. More R&D (Research & Development) and finances for it, are needed to look for sustainably viable options. Citizens have to bring behavioural change and contribute by not littering and helping in waste segregation and waste management.

### **Speaker Profile: -**

Rajesh Kumar Gera

Packaging and Recycling Consultant.

Master Trainer & Lead Assessor (MEPSC).

Chairman Program Committee-IPI Mumbai chapter

Ex-AVP, RIL-PET Division, Mumbai.

Mr. Rajesh Kumar Gera did my B.Sc.(PCM) from Agra college, Agra in '82 (Agra University) and then did B.Tech. (Plastics Technology) from HBTI Kanpur in '85 (Kanpur University). He joined M/s Hindustan Polymers in their 'Product Development & Technical Services' (PDTs) Department at Visakhapatnam, AP making PS and EPS resins. He was responsible for 'Technical Services, Product Development & Market Development' for these 2 products. He then joined M/s Ceat Ltd.-Glass Fibre Division (GFD) at Hyderabad in '90 and started the 'Market Development Department'. He was responsible both for Business Development & Market Promotion on an All-India basis for Glass Fibre reinforcements and Glass Fibre Tissue. He then joined RIL in '97 and superannuated in April' 20 after 2 decades plus association. He handled 'Business and Market Development, Technical Services, NPDs, Recycling & Sustainability' for PET resins in the longest stint of my career.

## Single Use Plastic

Mr. Nitin Dumasia

ESG Expert and Consultant

Growlity Inc. (USA and India)

2021 Developed and Patented a unique "Problem Solving Approach" for Business Transformation & Industry 4.0 2020 Registered Management Consulting Organization in USA, a global start up called "Growlity, Inc."

2019 Collaborated with Kognoz Research & Consulting for Business Transformation Projects

2018 Started Consulting for GMP Standards to International Suppliers of Costco, Walmart, Disney, Macy's, etc.

2017 Certified Zero Defect Zero Effect (ZED) Consultant by Quality Council of India, Govt. of India

2016 Awarded as Best Leader - Consulting Services (Revenue & Service Quality) by RSM India 2016 Certified as Enterprise Risk Management Professional by Riskpro India

2016 Certified as Lead Auditor for ISO 9001

2015 by British Standards Institute 2015 Certified Six Sigma Black Belt from American Society of Quality, U.S.A.

2015 Certified for Lean Applications in Service Industry by Asian Productivity Organization, Tokyo, Japan

2015 Empanelled as Lean Manufacturing Consultant by Quality Council of India, Govt. of India

2015 Started Consulting for ISO 9001, 14001, 18001 (45001), 22001, 27001, 50001, 22301, GMP standards

2014 Invited as speaker in conference on Excellence in Textile Industry organized by Ministry of Textiles, Govt. of India to deliver presentation on Importance of ISO standards and Internal Audits in Manufacturing

2014 Certified as Material Flow Cost Accounting Professional by National Productivity Council, India

2013 Invited as speaker in Sparkle International Exhibition on Gem & Jewellery Sector to deliver presentation

2012 Empanelled as Lean Manufacturing Consultant by National Productivity Council, India

2011 Appreciated as THE TOYOTA TALENT Award by Pentair Water India

2010 Awarded as BEST TRAINER OF THE YEAR by Pentair Water India

2009 Elected as TPM Trainer & Implementation Facilitator by Pentair Water India

2008 Elected as 5S Champion, Co ordinator and Auditor by Pentair Water India

2007 Appreciated as TOYOTA WAY THINKER Award by InspirOn Engineering, India

2007 Certified as Diploma in Lean Management by Ahmedabad Management Association, India

2006 Certified as Advanced Diploma in Foundry Technology by Nirma University, India

**Register to learn: -**

- Promoting sustainable manufacturing practices, including the fair treatment of employees, transparency in the supply chain and the use of recycled plastics in new products.
- Educating companies about the aspects of sustainable manufacturing, such as how to reduce water and energy use and make their products easier for consumers to recycle.
- Demonstrating viable business models for collecting and recycling different types of plastic materials from locations to be returned to the supply chain.
- Incentivizing companies to eliminate waste and increase recycling.
- Measuring the amount of wasted recyclable plastic material.

**PET Recycling and Sustainability**

**Dates: 11<sup>th</sup> October 2021; Timings: 2:00 pm to 5:00 pm**

**Single Use Plastic**

**Dates: 12<sup>th</sup> October 2021; Timings: 2:00 pm to 5:00 pm**

**Participation Fee: Rs. 3776/- (Rs. Three Thousand Seven Hundred Seventy Six Only) per participant**

***Register in advance for this training course.***

**Thanks & Regards  
National Productivity Council  
4th Floor, Kabir Bhawan, G.T. Road,  
Kanpur-208005, U.P.**