



## **Chemical Contamination of Recycled Plastic Pellets**

Theme: How safe is recycled plastic?

## Press Note

In the business of profound influence, plastic is not lightweight, having transformed (positively and negatively) our economic and social systems. But the world is increasingly realising, this invention is proving to be a great nuisance. Our waterways are filled with plastic waste and animals' stomachs are full of it, yet we have been told for years by the companies that recycling is a solution.

To counter the global boom of plastic production and thereby plastic waste, countries across the world are focussing on recycling plastics as a solution to keeping the material in the resource economy. This recycled (often downcycled) plastic however poses health problems. Several chemicals used in plastic production, such as brominated flame retardants, benzotriazole UV-stabilizers and bisphenols, are known to be hazardous to human health.

CAG, as part of an international study conducted by IPEN (a global network of over 600 civil society groups), collected samples of plastics that had been pelletised for recycling. These samples from 23 countries were analysed by IPEN to understand the chemical composition and nature of the plastic pellets. The pellets were analyzed to determine the presence of 18 substances, representing three types of toxic chemicals: 11 brominated flame retardants, 6 benzotriazole UV stabilizers and bisphenol A (BPA). None of the samples were free from all the targeted chemicals, and 21 samples contained all three types of chemicals. More than half of the samples contained 11 or more chemicals, and 17 samples contained five or more endocrine-disrupting chemicals. A large number of toxic chemicals in many of the samples highlights the need to also consider the potential for combination effects.

The HDPE pellets collected from a recycling facility in Chennai contained all three groups of chemicals analyzed. They contained 14 of the 18 chemicals, including 7 flame retardants, 6 UV-stabilizers and BPA. The chemicals detected in the Chennai samples included 10 endocrine disruptors. Considering the chemical contamination of these pellets, they are unsuitable for use in new products.

Most of these pellets are used to make low-grade plastic items like buckets, jugs, mugs, thin plastic containers, and carry bags that are widely used. There is no information during the recycling process for recyclers to avoid such plastics and these recycled plastics are then used by consumers who are unaware of the issue as well.

Plastic pollution is a wicked problem, posing a challenge that currently seems to surpass our ability to tackle it. To tackle it we need collective, and collaborative efforts of producers, citizens, policymakers, and governance systems. At the forefront of such efforts, taking responsibility for the waste they create,

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should be the producers. However, one cannot think of recycling or tout it as a solution to the plastic litter problem owing to its severe limitations technically and effects on health.

To present the findings of the IPEN study and to begin a robust conversation on this overlooked issue of toxicity of recycled plastics, CAG is holding a webinar. Please join us for this much needed conversation.

Join the Zoom meeting using the following link.

**Topic**: How safe is recycled plastic? **Time**: Jan 12, 2022 02:00 PM India

Join Zoom Meeting https://us06web.zoom.us/j/87235265229?pwd=RzIzVDdnRHhQRGhwRTZGTHZHQ2Imdz09

Meeting ID: 872 3526 5229 Passcode: 508672

Virtual Meet: Date: (12/01/2022) | Time: (2 - 3:00 pm IST)

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## Agenda:

Time	Session	Speaker
2.00 pm - 2.05 pm	Welcome	Sumana Narayanan, CAG
2.05 pm - 2.20 pm	Widespread chemical contamination of recycled plastic pellets globally	Vamsi Shankar Kapilavai, CAG
2.20 pm - 2.35 pm	Chemical contamination of plastics: the Indian Scenario	Priti Mahesh, Toxics Link
2.35 pm - 2.55 pm	Discussion - Q&A	
255 pm - 3.00 pm	Vote of Thanks	Sumana Narayanan, CAG