

## Embargoed Press Release

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Attn: Environment, Health, and News Editors

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## Toxic Chemicals in Plastic Waste Poisoning People in Africa, Asia, Central & Eastern Europe and Latin America

Link to the study: [www.ipen.org/PlasticPoison](http://www.ipen.org/PlasticPoison)

**Gothenburg, Sweden** –Toxic chemicals in plastic waste exports from wealthy countries are contaminating food in developing/transition countries around the world, according to a new study released today by the International Pollutants Elimination Network (IPEN).

Virtually all plastics contain hazardous chemical additives. Most of the plastic waste exported from wealthy countries to countries with developing economies or economies in transition is landfilled, burned, or dumped into waterways. All of these disposal methods result in highly toxic emissions that remain in the environment for decades and build up in the food chain. ***Plastic Waste Poisoning Food and Threatening Communities in Africa, Asia, Central and Eastern Europe, and Latin America*** demonstrates how these plastic waste handling methods end up poisoning local populations.

For this study, non-governmental organizations (NGOs) in fourteen countries which in many cases receive plastic waste from abroad collected free-range chicken eggs in the vicinity of various plastic waste disposal sites and facilities. The egg collection sites included plastic and electronic waste yards; waste dumpsites with significant amounts of plastic wastes; recycling and shredder plants which deal with significant amounts of plastic waste; and waste incineration and waste-to-energy operations.

The eggs were then analyzed for dioxin contamination, a highly toxic byproduct of open burning, crude recycling, chemical production, and incineration technologies. Additionally, the eggs were analyzed for other toxic chemicals known as “persistent organic chemicals” (POPs) that have been banned or are in the process of being banned globally through the Stockholm Convention. Even small amounts of these plastic chemical additives and byproduct emissions can cause damage to the immune and reproductive systems, cancers, impaired intellectual functions, and/or developmental delays.

IPEN’s POPs Policy Advisor Lee Bell said, “This report confirms that the harm being caused by plastic waste exports is not limited to visible litter and pollution but includes the insidious damage to human health caused by contamination of the food chain in importing countries. Toxic chemical additives and the world’s most hazardous substances are literally bleeding into the food supply of those countries least able to prevent it.”

The report found that the levels of dioxin and PCBs in eggs in some locations were so high that residents could not eat a single egg without exceeding the safe limits for these chemicals established in the European Union.

The report also found:

- The analyzed eggs contained some of the most toxic chemicals ever studied, many of which are banned or regulated by international law, including dioxins, and the chemical additives PBDEs, PCBs and SCCPs.<sup>1</sup>
- In nearly every open, plastic waste site where eggs were sampled, dioxin levels exceeded the European Union (EU) safe consumption maximum limit (2.5 pg WHO TEQ per gram).<sup>2</sup> In some locations, eggs exceeded the safe limit by tenfold. For dioxin combined with PCBs that are just as toxic as dioxins (so are measured as

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1. Polybrominated diphenylethers (PBDEs), polychlorinated biphenyls (PCBs), & short-chained chlorinated paraffins (SCCPs).

2. 2.5 pg WHO TEQ per gram is equivalent to 2.5 parts per trillion (ppt)

a combination) all sites exceeded the EU limit (5 pg WHO TEQ per gram)<sup>3</sup> with some sites up to sixfold higher.

- The maximum PBDEs levels in egg samples taken near some plastic waste disposal sites were comparable to the world's most seriously contaminated e-waste sites in Guiyu, China.
- In one location in Indonesia, the dioxin levels in eggs were at a similar level to eggs sampled on a former US Air Force base in Vietnam which is heavily contaminated by Agent Orange.
- Very high levels of POPs were detected at locations where plastics and electronic waste are mixed and then dumped and/or burned to recover metals. The study confirmed that burning this kind of mixture very often leads to much more severe dioxin contamination than open burning of wastes at general dumpsites.

Study co-author and Arnika – Toxics and Waste Programme Director Jindrich Petrlik said, “In the vicinity of the dumpsite in Pugu Kinyamwezi, Tanzania, eating just half an egg would exceed the European Food Safety Authority’s Tolerable Daily Intake limit by 7.5 times. It is unconscionable that people are exposed to such dangerous levels of contamination.”

Petrlik added, “Dioxins and other POPs remain in the soil for decades or even centuries, creating a reservoir of highly toxic contaminants that poison the food chain now and will continue to do so for a long time into the future.”

The report recommends global controls on hazardous chemicals in plastic and an end to plastic waste exports. It also calls on industry to invest in safe plastic alternatives, eliminate toxic chemical additives to plastics, and create closed-loop systems that don’t create toxic waste.

Yuyun Ismawati, Nexus3 Foundation, Indonesia said: “In addition to the domestic waste challenges, Indonesia is flooded with foreign plastic waste. We had some of the highest toxic levels recorded in the study. It is dishonest and irresponsible to export dumpsites to us under the guise of fake recycling.”

Griffins Ochieng, Centre for Environmental Justice and Development, Kenya said, “Africa is not a major plastic nor chemical producer. But plastic waste and the contamination that comes with it is growing in Africa. Why? Because wealthy countries are exporting their waste to us. This problem will only grow worse in the coming years if it is not stopped now.”

Egg samples from fourteen countries were analyzed for *Plastic Waste Poisoning Food and Threatening Communities in Africa, Asia, Central and Eastern Europe, and Latin America* including: Belarus, Cameroon, the Czech Republic, Gabon, Ghana, China, Indonesia, Kazakhstan, Kenya, Mexico, Philippines, Tanzania, Thailand, and Uruguay.

This is the first in a series of IPEN reports on how chemicals used by the plastics industry are contaminating communities in countries with developing economies or economies in transition. Soon to be released is ***Plastic Waste Management Hazards***, which documents how most “green” plastic recycling claims are fraudulent and a cover for practices that poison low-income countries.

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**IPEN (International Pollutants Elimination Network)** is a global environmental network of over 600 public interest NGOs in 124 countries, working to eliminate and reduce the most hazardous substances to forge a toxics-free future for all. IPEN is registered in Sweden as a public interest non-profit organization. [www.ipen.org](http://www.ipen.org)

**Arnika Association** is a Czech non-governmental organisation established in 2001. Its mission is to protect nature and a healthy environment for future generations both at home and abroad. Arnika works to protect consumers from hazardous products, and serves as the Regional Hub for Central, Eastern & Western Europe for IPEN. <https://english.arnika.org>

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3. 5 pg WHO TEQ per gram is equivalent to 5 parts per trillion (ppt)