SUPPLEMENTARY FILE 1

GCMS sample preparation:

Fluid samples:

The fluid samples (10 mL) were extracted by 20 mL of dichloromethane and the dichloromethane fraction was concentrated to 0.5 mL by gentle nitrogen evaporation. The concentrated samples were directly analyzed by GC-MS analysis. The migratory chemicals were studied after preparation of 1 g of the sample which was sonicated with 5 mL of methanol for 10 min and the methanol fraction was directly analyzed without any further concentration steps.

Plastic Samples:

The quality of the plastics was assessed by solvent extraction, headspace GC-MS, and pyrolysis GC-MS analysis.

For **solvent extraction** of plastics, the samples were segregated as the dialysis bags and infusion tubing. The dialysis bags have approximately 0.75 mm thickness and the infusion tubing has approximately 1.5 mm thickness. Both bag and tube samples have soft texture. The plastic samples were cut in to small pieces of approximately 3 mm sizes. The plastic samples were subjected to solvent extraction by extracting 1 g of each sample with 5 mL of methanol by ultra-sonication (PCI Analytics, Mumbai, India) at full power for 5 min. The supernatant methanol fraction was separated and subjected to GC-MS analysis without any further concentration or purification steps.

For **headspace GC-MS analysis**, 1 g of finely cut plastic samples were mixed with 5 mL of 5 mL of DNS saline solution and heated at 80℃.

For **Pyrolysis GCMS analysis**, the plastic samples were cut in to small pieces of approximately 3 to 5 mm sizes and subjected to the thermal desorption.

LCMS sample preparation:

For LCMS analysis, 400 µL of each sample was taken and chilled methanol (cooled at – 80℃ was added to make the sample to make the final volume of 80%(vol/vol) methanol solution. The solution was mixed well and incubated at 80℃ for 8 hours. After incubation the sample were centrifuged at 1400g for 10 minutes. The supernatant was taken and dried using vacuum concentrator (Eppendorf Concentrator Plus). The dried sample were re-constituted to a final volume of 50 µL using 50% methanol. The samples were filtered through a 0.22 µL filter before analysis.

SUPPLEMENTARY FILE 2

GC-MS analysis:

1. GC-MS analysis of volatiles and semi-volatiles:

   The GC-MS analysis of volatiles and semi-volatiles components present in the dichloromethane extracts of the PD fluids and methanolic extracts of the plastic bags and tubing was conducted on Agilent 5977 A mass selective detector coupled with Agilent 7890 GC and G4513A auto sampler. The migration of the chemicals was studied according to the ASTM D-7823 method and EPA-506 method. The separation of the analytes was carried out on HP-5MS column of length 30 m, 0.25 mm internal diameter and 0.25 µ film thickness. The inlet and GC-MS interface temperatures were maintained at 250 ℃ each. Helium was used as carrier gas at a flow rate of 1.0 mL/min. The samples were injected in split mode of injection with the split ratio of 10:1. The analytes were identified by NIST14 library database.

2. Headspace GC-MS analysis:

The HS-GC-MS analysis was conducted on Agilent 5973N Mass selective detector coupled to Agilent 6890 GC system and G1888 Headspace sampler. The oven of the headspace sampler was maintained at 80 ℃, loop temperature at 90 ℃ and the transfer line temperature was kept at 100 ℃. The vial equilibration time was 35 min, loop fill time was 0.2 min, loop equilibration time was 0.05 min, and the injection time was 1 min. The vial was pressurized at 14 psi by helium gas. The vapours were injected at a split ratio of 10:1. The injection port of GC system was maintained at 250 ℃. Helium at a flow rate of 1.0 mL/min was used as carrier gas in constant flow mode of analysis. The separation of analytes was carried out on a DB-624 column of length 30 m, 0.25 mm internal diameter and 1.4 μ of film thickness. The GC oven was programmed from an initial temperature of 35 ℃, held for 5 min, raised at a rate of 10 ℃/min to a final temperature of 240 ℃ held for 5 min. The GC-MS interface temperature was maintained at 220 ℃. The ionization was carried out in EI mode with 70 eV electron energy. The source and quadrupole temperatures were maintained at 230 ℃ and 150 ℃ respectively. The analytes were identified by NIST14 library database.

3. Pyrolysis GC-MS analysis:

The pyrolysis GC-MS analysis was conducted on Agilent 7000D triple quadrupole mass spectrometer connected to Agilent 8890B GC system and Frontier Lab EGA/PY-3030D multi-shot pyrolizer system. The pyrolysis analysis was conducted in three shots, thermal desorption at 300 ℃, thermal desorption at 450 ℃ and pyrolysis at 600 ℃. Helium was used as carrier gas. Nitrogen was used as coolant gas. The injection port temperature was maintained at 280 ℃. The vapours generated in the pyrolizer were injected at a split ratio of 10:1. The separation was carried out on HP-5 MS capillary column of length 30 m, 0.25 mm internal diameter, and 0.25 μ film thickness. The GC oven was programmed from 50 ℃, hold time of 2 min, 10 ℃/min, to final temperature 300 ℃, hold time of 5 min.

The MS analysis was carried out in EI mode with 70 eV energy, 250 ℃ and 150 ℃ as source and quadrupole temperatures respectively. The GC-MS interface temperature was 300 ℃.

SUPPLEMENTARY FILE 3

LC-MS analysis:

The LC-MS analysis was carried out on Thermo QExactive Orbitrap mass spectrometer connected to Quaternary gradient Vanquish Ultra performance liquid chromatography system and auto sampler. The separation of analytes were carried out on Thermo Hypersil Gold C18 column of length 100 mm, 2.1 mm internal diameter, and 1.9 µm particle size. The mobile phase consists of 0.1% formic acid in water as mobile phase A and 0.1% formic acid in methanol as mobile phase B. The analysis was carried out in gradient mode starting with initial 5% of B till 2 min, 50% B till 5 min, raised to 95% B by 13 min, maintained isostatically till 16 min and maintained in the initial conditions from 16.2 min to 20 min. The flow rate was maintained at 0.35 mL/min. The analysis was carried out in heated electrospray ionization mode (hESI) in positive ionization mode with spray voltage of 3.5 kV, 320 ℃ source temperature, and transfer line temperature of 300 ℃. The column was maintained at 40 ℃.