

Table S1 soil sampling points and soil types

Sampling points	Location Description	Soil types
Soil 1#	around the reservoir after river water filtered	Sandy Loam
Soil 2#	around the reservoir before river water filtered	Sandy Loam
Soil 3#	the sandy of apple orchard	Loamy Sand
Soil 4#	downstream of apple orchard	Loam
Soil 5#	puddle	Loamy Sand

The reservoir, apple orchard and puddle were located 8, 6 and 4 kilometers from the plant.

Figure. S1

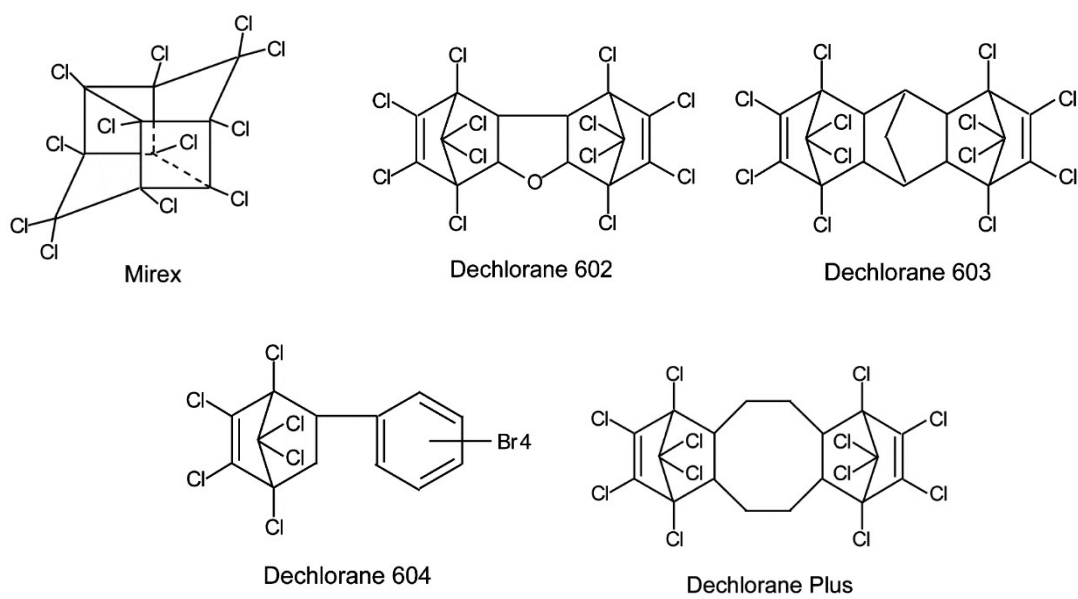


Figure S1. Chemical structures of Mirex, Dec 602, Dec 603, Dec 604 and DP

Figure. S2

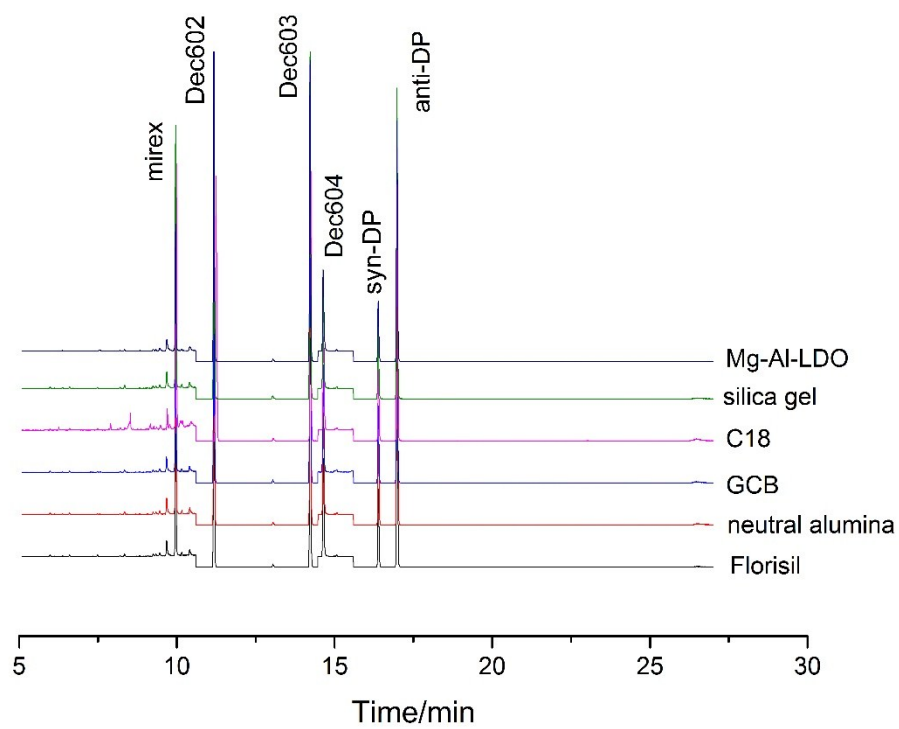


Fig. S2. Dechloranes chromatograms of sediment sample obtained from using different sorbents: Florisil, neutral alumina, silica gel, C18, GCB and Mg-Al-LDO.

Figure. S3

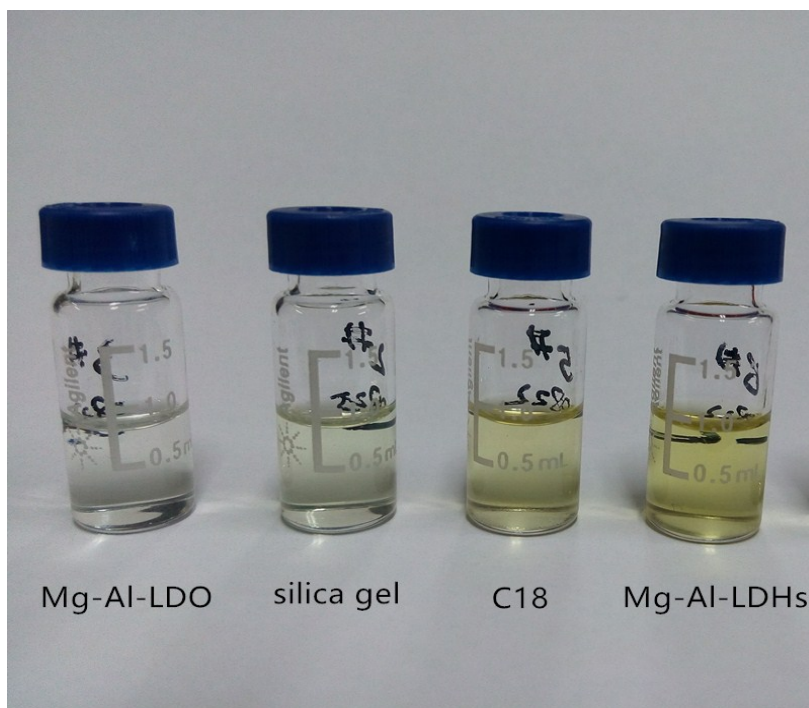


Fig. S3. The SPLE extracts acquired from sediment using different sorbents

Figure. S4

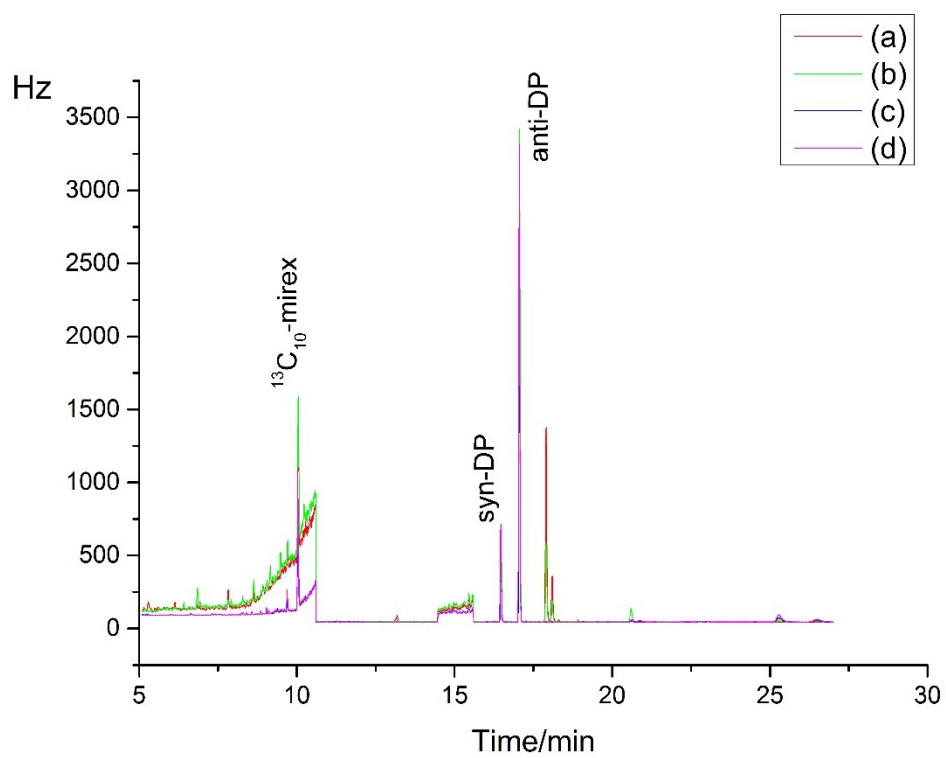


Fig. S4. Dechloranes chromatograms obtained from using different extraction solvents for real sediment samples: (a) dichloromethane (DCM): acetone (1:1, v/v); (b) acetone: hexane (1:1, v/v); (c) DCM; (d) DCM: hexane (1:1, v/v).

Figure. S5

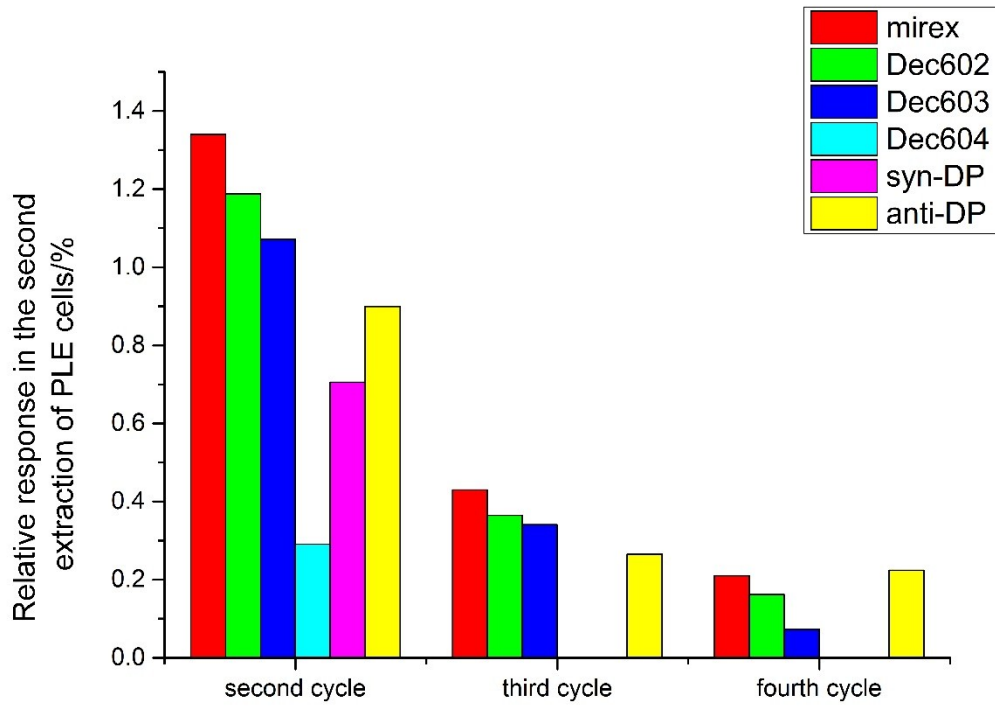


Fig. S5. Relative responses obtained in the re-extraction of SPLE cells vs. the number of static cycles considered in the first extraction. Average data for duplicate experiments (n=3).

Figure. S6

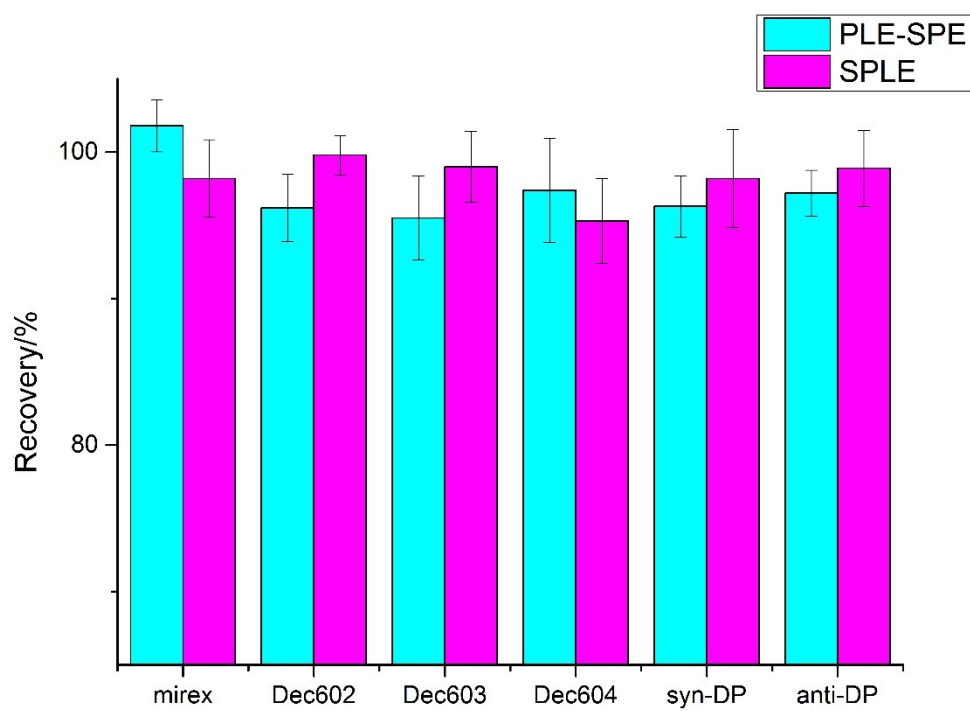


Fig. S6. Dechloranes recoveries by using SPLE and PLE-SPE method (n=3).

Figure. S7

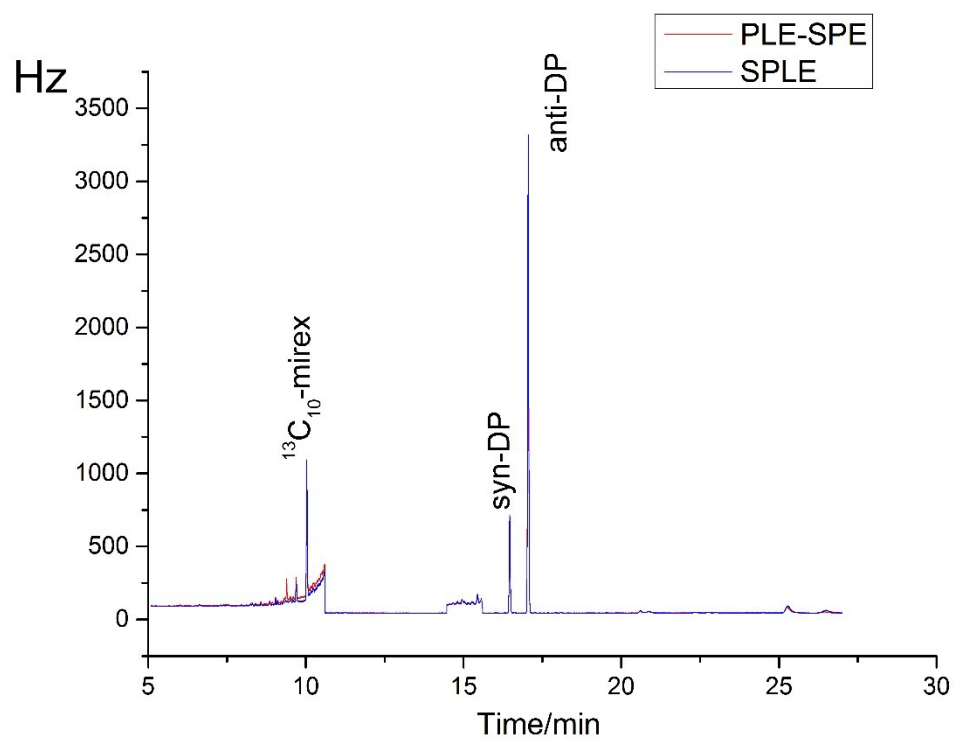


Fig. S7. Dechloranes chromatograms obtained from using PLE-SPE and SPLE method for real sediment samples.