Monitoring PBDEs in air during e-waste recycling

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Many types of plastics and circuit boards used in electronic products contain Poly Brominated Diethyl Ethers (PBDEs). There are rising concerns about worker exposures to PBDEs in the e-waste recycling industry, due to early studies in Sweden. There are a variety of techniques used by recyclers to dismantle and shred electronic waste to separate materials, which result in PBDEs being discharged into air as vapor or dust which cause different exposures. This pilot study examined airborne concentrations of combined vapor and particle phase PBDEs at three facilities using different techniques to break down electronic waste. The sampling and analysis methods used in this study were able to detect airborne concentrations for 9 of the 10 congeners included.

References

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