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National Priority Chemicals Trends Report (2005-2007)

Section 4 Trends Analyses for Specific Priority Chemicals (2005-2007): Introduction

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SECTION 4

TRENDS ANALYSES FOR SPECIFIC PRIORITY CHEMICALS (2005–2007)

Introduction

The primary focus of this Report is to support EPA's NPEP program by identifying the non-recycled quantities of PCs contained in wastes that are managed by disposal, energy recovery, or treatment and thus potentially might offer waste minimization opportunities. A discussion of recycled quantities of PCs is presented in Appendix C.

Section 4 presents the generation and management trends from national, EPA region, state, county, and industry perspectives for ten of the 24 PCs reported to TRI¹⁰ (see Table below). The ten PCs consist of six PCs with the largest quantities generated (excluding recycled quantities), the three metals (cadmium, lead, and mercury) and their compounds, and dioxins. Although we only present trends for these ten PCs in this Report, waste minimization opportunities likely exist for the other PCs. In this section, we also provide basic information regarding the PC, including its alternative names (if any), and general uses. To find more descriptive information, including the Chemical Abstracts Service Registration Number, and potential hazards for each of these chemicals, please see <http://www.epa.gov/epawaste/hazard/wastemin/priority.htm>.

In this section of the Report, we also present data derived from the BR for the ten PCs reported to TRI, as well as six of the seven PCs that are not reported to TRI. See the section for each PC with the heading: **Data Derived From Hazardous Waste Biennial Reports**. By law, LQGs¹¹ and TSDFs must submit reports every two years on their hazardous waste streams. EPA has developed a methodology to identify those hazardous waste streams that are likely to contain PCs and to estimate the quantity of PCs in the waste streams. We estimate quantities of PCs that are contained in both generated and managed hazardous waste streams. The focus of this methodology is primary generation activities that includes waste streams generated from a production process, service activity, or routine/periodic cleanup, where potential opportunities for direct waste minimization (e.g., source reduction, recycling) are the greatest. For one or more reasons, estimated quantities of PCs in managed waste associated with primary generation activities may differ from the estimated quantities of PCs in generated wastes associated with primary generation activities. Please see Section 2.2 of the PC BR Measurement Methodology document for a discussion of potential reasons for these differences.

To learn more about the PC BR Measurement Methodology, please see <http://www.epa.gov/epawaste/hazard/wastemin/trend.htm>. As discussed in Section 1, we caution readers against making casual one-to-one comparisons between the TRI and BR data. The differences between these two reporting systems can cause significant variation in the number of reporting facilities and quantities of chemicals reported.

Priority Chemicals (PCs) Reported to TRI	
Cadmium and cadmium compounds	Lead and lead compounds
Dioxins and dioxin-like compounds	Mercury and mercury compounds
Hexachloro-1, 3-butadiene	Naphthalene
Hexachlorobenzene	Phenanthrene
Hexachloroethane	Polycyclic aromatic compounds (PACs)
Priority Chemicals (PCs) Not Reported to TRI*	
1,2,4,5-Tetrachlorobenzene	Endosulfan, alpha, beta
4-Bromophenyl phenyl ether	Fluorene
Acenaphthene	Pyrene
Acenaphthylene	

* Although we do not have TRI data for these seven PCs, we use the PC BR Measurement Methodology to estimate the quantities of these PCs in hazardous waste streams reported for the BR. These quantities (for six of these PCs) are presented at the end of this section.

¹⁰ The quantities of some PCs might differ from the quantities presented in the TRI Public Data Release because we only extract a subset of the TRI universe which we believe offer opportunities for waste minimization. We also exclude air emissions and surface water discharges reported to TRI.

¹¹ A LQG is a facility that generates 1,000 kilograms (2,200 pounds) or more of hazardous waste or 1 kg or more of acute hazardous waste in a calendar month.