

**POLYBROMINATED DIPHENYL ETHERS IN SOUTHERN MISSISSIPPI CATFISH**

Staskal DF<sup>1</sup>, Ferriby LL<sup>2</sup>, Williams ES<sup>2</sup>, Luksemburg WF<sup>3</sup>, Haws LC<sup>1</sup>, Birnbaum LS<sup>4</sup>, Paustenbach DJ<sup>5</sup> and Harris, MA<sup>2</sup>

<sup>1</sup>ChemRisk, Austin, TX, USA; <sup>2</sup>ChemRisk, Houston, TX, USA; <sup>3</sup>Alta Analytical Laboratory, El Dorado Hills, CA, USA; <sup>4</sup>USEPA, ORD, NHEERL, ETD, RTP, NC, USA; <sup>5</sup>ChemRisk, San Francisco, CA, USA

**Introduction**

Polybrominated diphenyl ethers (PBDEs) are used as flame retardants in a wide variety of consumer products. Concerns surrounding these compounds are primarily due to their ubiquitous presence in the environment as well as in human tissue, such as milk, coupled with evidence indicating the potential for adverse effects. Despite these concerns, relatively few studies are available in the literature which characterize and quantify intake by humans. It has commonly been assumed that dietary intake is the primary intake pathway, although recent analyses indicate that inhalation and dermal contact with these compounds may also contribute to total body burdens. The few studies which evaluate PBDEs in food from the U.S. suggest that fish contain higher levels of PBDEs than other sources in the diet.<sup>1,2,3</sup>

In this study, we measure PBDE concentrations in Southern Mississippi catfish in an effort to determine background levels and daily intake of these compounds from a primary food source for residents in this area of the United States. Catfish in the Southern Mississippi region were chosen because these fish have traditionally been a common staple in the diet of this region. Dean et al<sup>4</sup> have reported that Arkansas and Mississippi lead the U.S. in average per capita consumption of catfish. Given this region-specific dietary pattern, catfish consumption could potentially contribute significantly to the intake of PBDEs in this population.