

## **Environmental Working Group**

### **PBDEs in San Francisco Bay (C-2003-0211) Final Report to the San Francisco Foundation July 28, 2003**

In March 2002, the San Francisco Bay Fund of the San Francisco Foundation awarded Environmental Working Group (EWG) \$50,000 to conduct the first-ever tests on San Francisco Bay fish for the fire retardant chemicals known as polybrominated diphenyl ethers (PBDEs). After unavoidable laboratory delays, on July 10, 2003, we released *Tainted Catch* (enclosed), detailing our findings. Here is our final report to the Foundation on the project.

#### **Grant Objectives**

We proposed to conduct a groundbreaking study of PDBEs, a little-known class of persistent bioaccumulative toxins found in humans and animals in the Bay Area at the highest levels known worldwide. Our objectives were to:

- Fill a major gap in scientific knowledge on the threat to people and Bay species from PBDEs.
- Support advocacy on PBDEs and other fire retardants by state and national groups.
- Address environmental justice issues of subsistence consumption of Bay fish by lower-income communities and communities of color.
- Influence regional water quality authorities to set discharge standards for these pollutants, currently unregulated by state or federal law.

We said our success should be measured by news coverage of our findings, recognition and use of our research by the scientific and regulatory communities, and the efficacy of the advocacy coalition. We're pleased to report that by each measure, and for each of our objectives, the project was successful beyond expectations. In addition, it has laid a solid foundation

for an ongoing national campaign on PBDEs and other fire retardants.

## **Findings**

In the fall of 2002 EWG researchers obtained 22 fish from anglers at public piers and other fishing sites around the Bay. The samples included each of the six most commonly eaten Bay fish. We also obtained archived samples of fish caught in 1997 from the Regional Monitoring Program (RMP) of the San Francisco Estuary Institute. All samples were sent to the Hazardous Materials Laboratory of the California Department of Toxic Substances Control (DTSC) for analysis. Although our sampling was complete by October 2002, unavoidable delays by the lab in scheduling the analysis meant that we did not get the results until May 2003.

It was worth the wait: The lab found PBDEs in every fish, and comparison between our 2002 samples and the RMP's 1997 samples found that levels in striped bass and halibut, the two most commonly eaten Bay fish, had more than doubled and more than tripled. These were both the first findings of PBDEs in Bay fish and the first time-trend analysis of sport fish anywhere in the United States, and they confirmed previous studies which had found elevated levels of PBDEs in Bay harbor seals and the breast tissue of Bay Area women. The two DTSC scientists who conducted our analysis have written a scientific paper on the results which has been submitted to the peer-reviewed journal of the International Dioxin Conference, which is holding its annual meeting in Boston this fall.

## **News Coverage**

Throughout the Bay Area, news coverage of our findings was as strong as we've achieved in the seven-year history of EWG's California office. We closely coordinated the release of our report with *San Francisco Chronicle* reporter Jane Kay, who broke the story in a lengthy front-page article that led the paper on July 10. As we'd planned, Kay's story drove other news outlets to a news conference that day on the Berkeley fishing pier.

This event produced not one, but two additional front-page stories in the *Oakland Tribune* and *Sing Tao Daily*, the largest Chinese-language newspaper in the country with a circulation of more than 1 million. Other newspaper coverage included the *San Jose Mercury News*, *Berkeley Daily Planet*, and the Chinese-language *World Journal*. Among broadcast outlets, the story was covered by KRON-TV, KPIX-TV, the Spanish-language KSTS-TV, KQED-FM, KCBS-AM and KPFA-FM. One week later, when the state Senate passed a bill that would make California the first state to ban some kinds of PBDEs (see below), our findings were again cited by the statewide Associated Press, *Los Angeles Times*, and the *Chronicle*. The AP is working on another story, using PBDEs as an example of environmental issues California is taking action on in the absence of federal regulation, and our study should again be cited.

### **Advocacy and Regulation**

When we began the project, we thought a realistic goal would be to influence the San Francisco Bay Regional Water Control Board to set limits on the amount of PBDEs discharged into the Bay - a first step toward regulating their use. But political events moved much more quickly than we could have hoped.

Assembly Majority Leader Wilma Chan of Alameda, who has emerged as a champion in the fight to protect Californians from toxic chemicals, authored AB 302, a bill to ban two commonly used types of PBDEs by 2008. In coordination with Environment California, sponsors of the bill, we released our report just one week before the Senate was to vote on it. This not only helped focus attention on the legislation, but increased the news value of our report.

A week after our release, the Senate approved the bill, which will be sent to Gov. Davis for his signature. The unstable political climate in Sacramento this year makes it risky to predict what will happen, but Chan is optimistic that the governor will sign this historic legislation, and its impact will spread across the country. The AP quoted Bill Walker, EWG's Vice President/West Coast, who noted "the California effect: If California passes a law,

national manufacturers have to follow suit."

### **Environmental Justice**

State studies show that most of the Bay Area residents who depend on Bay fish for food are from lower-income communities and communities of color, especially recent immigrants. There are a number of existing advisories against eating too much Bay fish, but surveys show that most anglers from these communities are unaware of the warnings - which may not even be available in their preferred languages. Coverage of our findings will help to not only make the public aware of another toxin, but to raise overall awareness of the dangers of eating Bay fish.

Our plan to make sure that our findings are disseminated to diverse communities got a huge boost from our collaboration with Majority Leader Chan. As the first Chinese-American elected to the Assembly, Chan is covered closely by the Chinese-language news media. Her participation in our news conference helped us earn major stories in *Sing Tao Daily* and the *World Journal*, both of which distribute more than 1 million copies in the Bay Area and nationally.

With an additional grant from the Rose Foundation for Communities and Environmental Justice, EWG will work this fall to package our findings and the existing fish advisories into a reader-friendly pamphlet in multiple languages, and distribute this guide to community organizations who can make it available to their members.

### **Future work**

The translation is just the beginning. Under a grant from the Richard and Rhoda Goldman Fund, EWG has embarked on a series of national-level PBDE studies that will build on the solid foundation of the Bay study. First up, probably in September, will be the results of the first national tests for PBDEs in women's breast milk. Additional studies are planned on PBDEs in home and office dust and in the bodies of workers at electronics recycling facilities.

The San Francisco Foundation's commitment to the Bay fish study was instrumental in leveraging these additional resources. EWG and our collaborators are grateful for your support, and the Foundation can be justly proud of its role in this groundbreaking work. We look forward to working with you again.