

Contingency Plan Report First Quarter 2013

Ambient Monitoring

MWRA gathers data near the discharge outfall location in Massachusetts Bay relevant to various thresholds in the Contingency Plan related to its Deer Island outfall NPDES discharge permit. This report shows relevant ambient monitoring results that became available in the January-March 2013 time period. There were no contingency plan threshold exceedances during this time period.

FISH AND SHELLFISH TISSUE CONTAMINATION – LOBSTER and MUSSELS 2012

The fish tissue contamination thresholds are designed to identify unexpected effects of the outfall discharge on marine life. There were no exceedances of lobster or mussel tissue contamination thresholds in 2012.

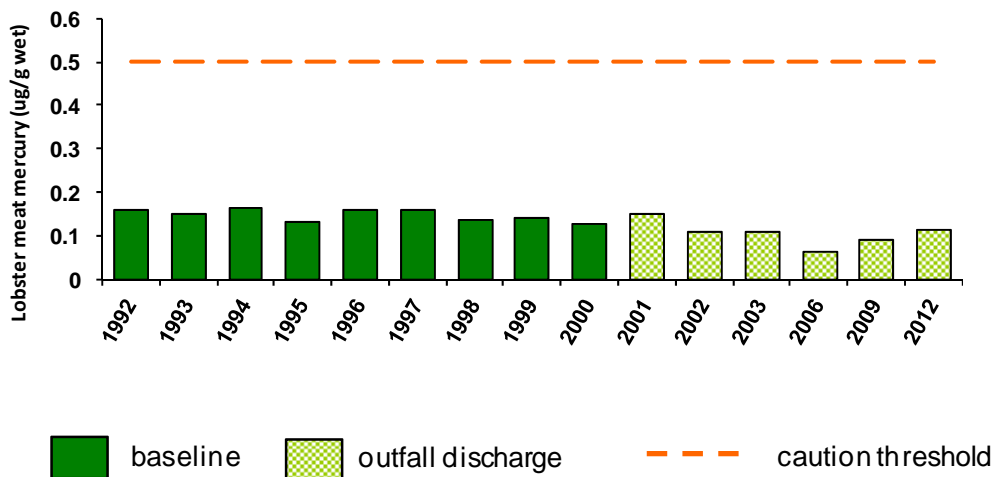
Contaminants are measured in three species of seafood: flounder, lobster, and mussels. For mercury and PCBs in those species, caution and warning thresholds are set at 50% and 80% of the FDA action limits. The threshold for lead in mussels is based on EPA risk assessment of lead in drinking water. Other fish/shellfish tissue contamination thresholds are based on change from baseline conditions at the outfall site.

Data available this quarter include tissue contamination in lobsters from the outfall site and tissue contamination in caged mussels.

LOBSTER

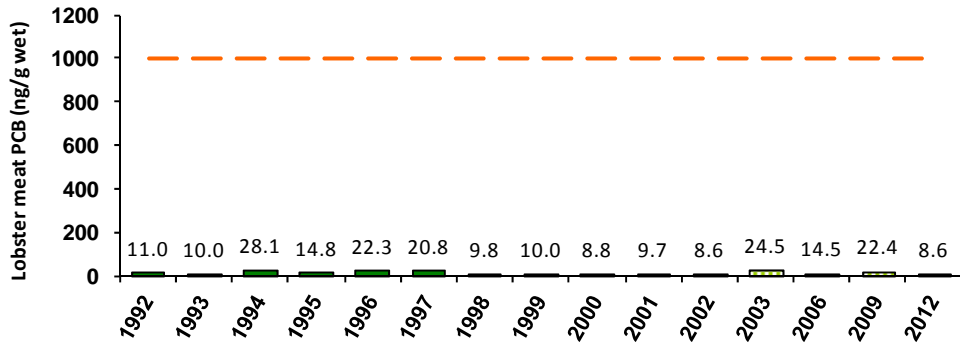
Lobster were sampled at the outfall site in September 2012. Measurements of lobster meat contamination indicated results as low or lower than in previous discharge years.

Mercury

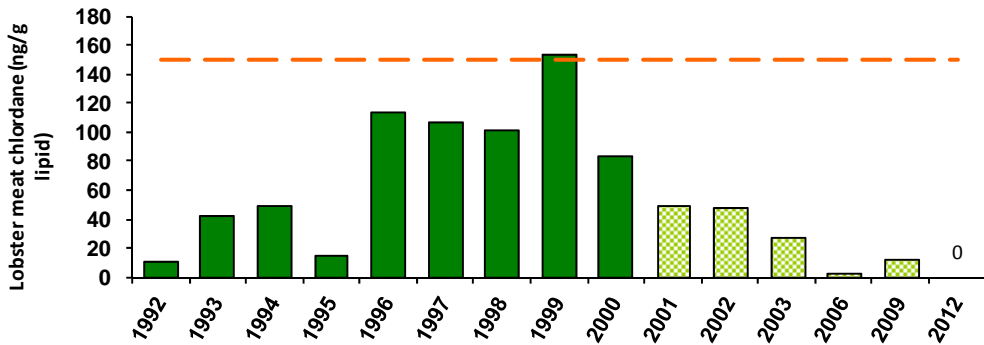


Lobster tissue contaminant levels (continued on next page)

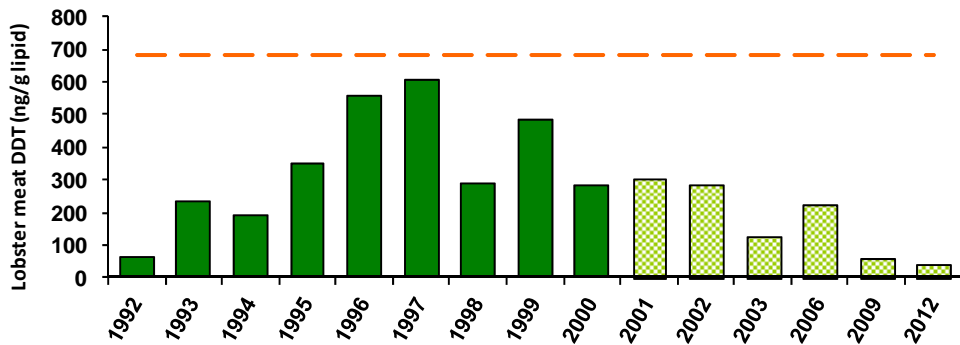
PCBs



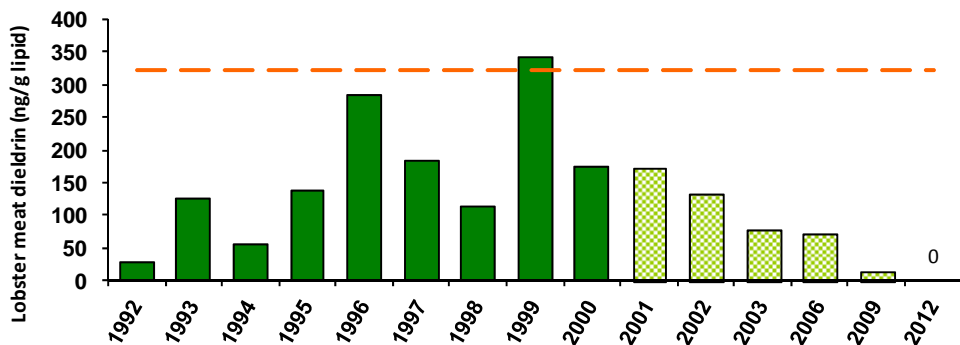
Chlordane



DDT



Dieldrin

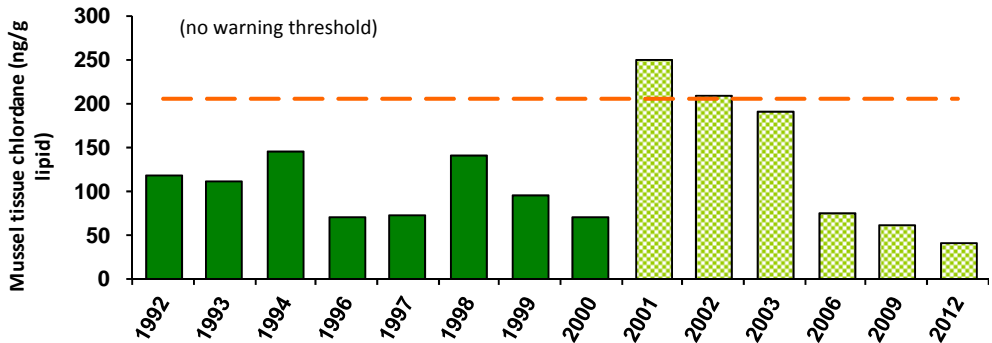


Lobster tissue contaminant levels (continued)

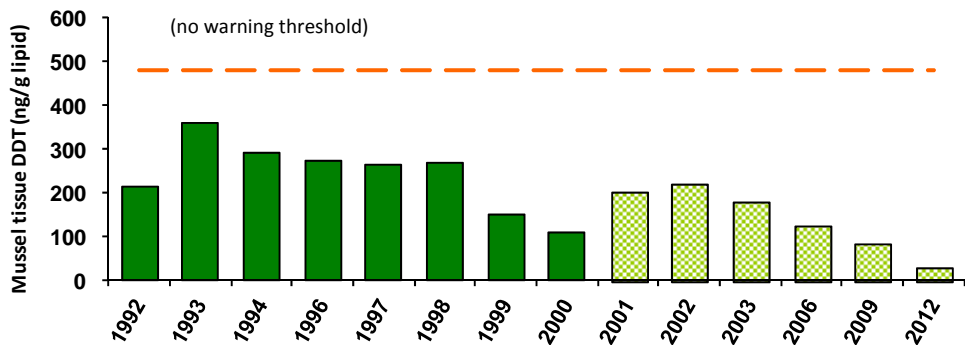
MUSSELS

Mussels from a control site were deployed in cages near the outfall from June-August 2012. Measured mussel bioaccumulation levels were as low or lower than in previous discharge years, and for most parameters were lower than the range seen during baseline.

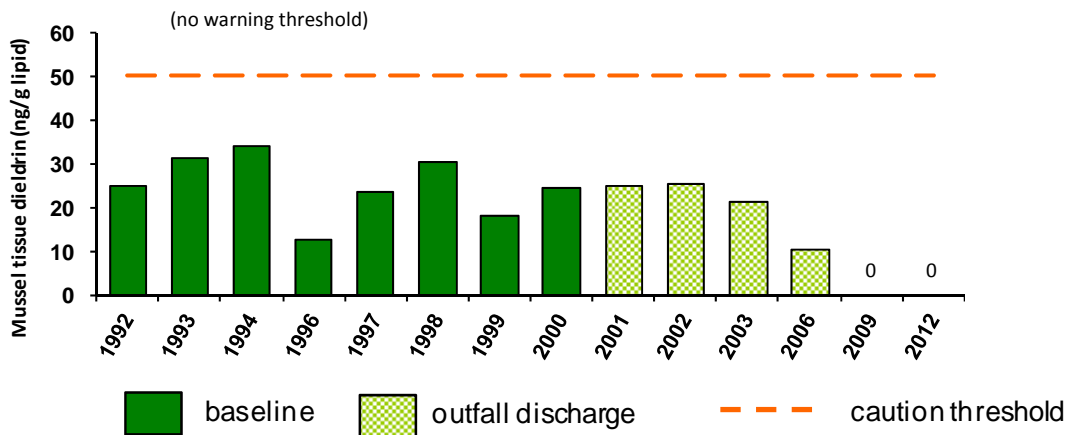
Chlordane



DDT

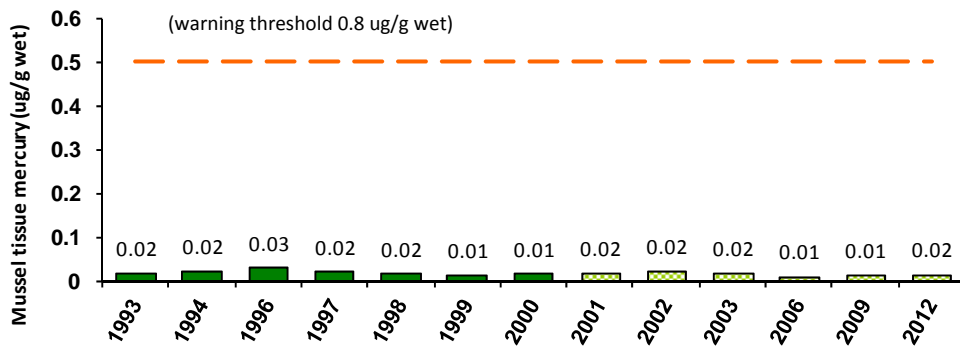


Dieldrin

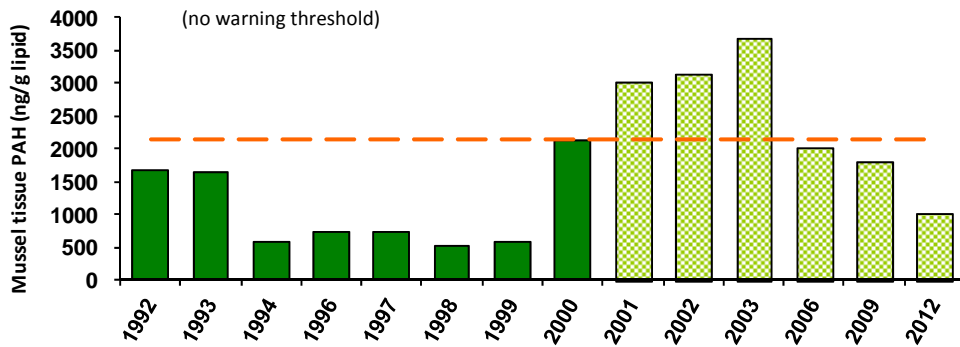


Mussel tissue contaminant levels (continued on next page)

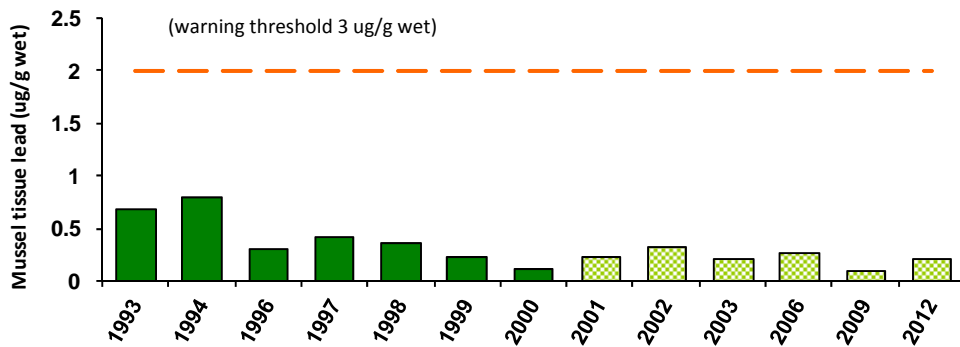
Mercury



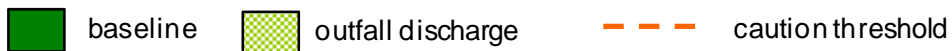
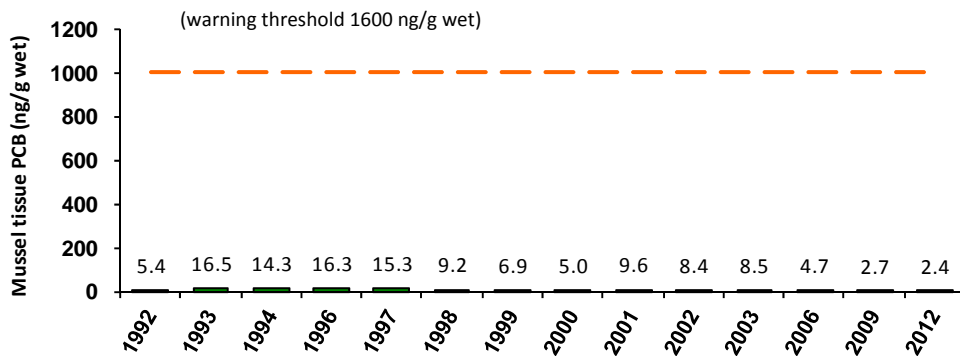
PAHs



Lead



PCBs



Mussel tissue contaminant levels (continued)