

Greg,

The results from all sediment borings indicate that site is clearly impacted by mercury and that the source of mercury is from the Budget Lamp facility and also that mercury deposition has been higher in the past. The concentrations of the other ten metals are all acceptable. The concentrations of mercury closest to the Budget site are clearly elevated in B1-S1 (0.41 mg/kg) and particularly B1-S2 (1.6 mg/kg), that is well above the Probable Effect Level (PEL 0.486 mg/kg) and the consensus-based PEC (1.060 mg/kg). Mercury concentration is still above the consensus-based Threshold Effect Concentration (TEC) is 0.180 mg/kg B2-S1 and TEL 0.174 mg/kg but declines in the lower boring B2-S2. Conversion to methylated mercury if any is unknown. I understand that the gravel below B1-S2 may not allow sampling deeper.

Note also that for the site metals concentrations are compared on a bulk chemistry basis without adjusting for TOC. TOC does not play the same role in determining metals availability as it does for organics availability.

If sediment removal is considered, Hg release by volatilization has to be considered during sediment storage and drying. The safest method would be for a waste hauler to remove the contaminated sediment from site.

Let me know if this answers your question. Thanks,  
Kirsti

