



Residential, Collection System, and Septage Mercury Sector Worksheet

National Pollutant Discharge Elimination System (NPDES) Wastewater Program Mercury Minimization Plan

Doc Type: Pollutant Minimization Plans

Residential

Background: From Western Lake Superior Sanitary District (WLSSD) "A Blueprint for Mercury Elimination." WLSSD found an average concentration of 0.1 ppb when sampling sewer lines from neighborhoods. Metropolitan Council Environmental Services (MCES) estimates that "residential waste may contribute a substantial portion of mercury to wastewater treatment plants. Approximately two-thirds of the hydraulic load at MCES treatment plants are residential. Even at low concentrations, the amount of mercury would be significant." From "Controlling Dental Facility Discharges in Wastewater, Water Environment Federation, 1999.

Name of Community? (County or City)	Has the community done thermometer exchanges?	Has the community collected mercury during Household Hazardous Waste (HHW) collections? (Measures, amounts?)	Has the community provided education on proper disposal of mercury and mercury containing items? (brochures, newsletters, articles?)	Has the wastewater staff partnered with HHW staff at the county or city level to reduce improper disposal of mercury?

Resources:

WLSSD Guide "Blueprint for Mercury Elimination, p. 22 "Suggestions for communities embarking on mercury reduction projects."

EPA Mercury Web page <http://www.epa.gov/mercury/>

POTW Collection System

Background: Cleanouts for collection systems may cause a spike in influent as sediment is washed from collection pipes. This is especially likely when cleanouts occur where a historic mercury discharge may have occurred. From WLSSD "A Blueprint for Mercury Elimination." "Sewer Cleaning Practices: Mercury collects in the sediments in sewer lines because it is much heavier than water. Sewer cleaning practices send a significant amount of mercury to a plant through flushing of the lines. Alternative cleaning methods, such as removing sediment with a bucket, or vacuuming sewer lines, should be considered for use below facilities with current or historic uses of mercury".

Are collection system cleanouts performed?	How often are they done?	Are WWTF staff notified of cleanout?	Is influent monitored during cleanouts?	Monitoring results

Septage

From WLSSD “A Blueprint for Mercury Elimination.” “WLSSD found an average mercury concentration of 62 ppb when sampling septic hauler discharge. The total volume is low compared to other sources. Calculate a mass-loading estimate to assess the importance of the contribution to your facility. WLSSD estimated 1.6 percent of influent mercury was from septage”.

Does the WWTF accept septage from haulers? ☐ Yes ☐ No If yes, please complete table.

List of septage haulers (business name)	Contact Name: Date:	Are contributors to haulers septage known? (domestic, industrial?)	Has the septage been sampled for mercury?	Results