

Appendix A

TCLP Evaluation Memo

Foth & Van Dyke Memorandum

September 17, 1997

TO: Steve Laszewski

CC:

FR: Joe Arensdorf

RE: Fox River Deposit N - Evaluation of Need for Pre-Design Phase Mercury TCLP Testing

In the RI for Fox River Sediments prepared by GAS, 12 sediment samples from Deposit N were tested for Mercury by EPA Method SW-7471. Mercury concentrations in the 12 samples ranged from 169 ug/kg to 5,445 ug/kg.

Individual samples were not tested for TCLP mercury. However, three composite samples were tested for TCLP mercury. These same three composite sample were tested for total mercury using the EPA CLP methods for metals. Results of CLP methods are comparable to those of SW methods. A summary of the results are presented in the following table.

Composite Sample	Total Mercury- CLP (ug/kg)	TCLP Mercury (mg/L)
N-R1-COMP1 (0-2)	3,780	<0.0002
N-R1-COMP2 (0-2)	2,560	<0.0002
N-R1-COMP3 (0-2)	993	<0.0002
<i>Regulatory TCLP Concentration</i>		0.2

The composite sample with the highest total mercury concentration was N-RI-COMP1 with 3,780 ug/kg mercury. This concentration is 69% of the highest mercury concentration (5,445 ug/kg) in a discrete sample at Deposit N. Sample N-RI-COMP1 had a Mercury TCLP result of less than 0.0002 mg/L. The regulatory limit for Mercury TCLP is three orders of magnitude higher (0.2 mg/L). These results indicate that the Mercury TCLP regulatory concentration is unlikely to be approached by Deposit N sediment.

In view of the results discussed, it is recommended that Mercury TCLP not be included as a test parameter for sediments during pre-design phase testing.