



WQ Monitoring for Mercury and Trace Metals

Technical Oversight Committee
Field Data Collection
Water Quality Monitoring Division
August 18, 1999

Presented by:
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Current Mercury and Trace Metal Monitoring Program

Routine Collection

- ⊗ 1 site - bi-weekly flow/monthly
 - ⊗ 10 sites - monthly
 - ⊗ 72 sites - quarterly
 - ⊗ 51 sites - semi-annually
 - ⊗ 31 helicopter supported sites- quarterly
- 660 site visits per year



Trace Metals Analysis

Advantages:

- ⊗ Lower detection limits
- ⊗ Minimizes “false” positive results
- ⊗ More accurate method of analysis for trace metals and mercury
- ⊗ Becoming a more widely acceptable method of analysis



Impacts of Clean Hands/Dirty Hands Technique

- CH/DH sampling technique minimizes field induced contamination, but will require:
 - Separate two-person trips
 - Increased trip preparation



Impacts of Clean Hands/Dirty Hands Technique

- CH/DH sampling technique minimizes field induced contamination, but will require:
 - No sampling during adverse weather
 - Increased field time for TM/Hg collection:
 - 20 min/vehicle or boat sites
 - Up to 45 min/helicopter site



Proposed Monitoring Plan Options

Option 1

- Determine whether the current Trace Monitoring Program is sufficient
 - Includes all STA permit sites and S12D, S334, S32, S9, S141, L28, S140, S10C

(Drop remaining routine sites)



Proposed Monitoring Plan Options

Option 2

- Continue monitoring all sites but change the maximum frequency to quarterly collection:
 - Yearly site visits reduced by 138 to a total of 552
 - 0.60 Additional FTEs required to complete work



Proposed Monitoring Plan Options

Option 2 (continued)

- ◉ Reduce number of parameters based on data collected since January 1988
 - EVPA - Arsenic will be dropped; remaining parameters will be unchanged
 - All other projects - Arsenic, Cadmium, Copper, Iron, Lead and Zinc will be dropped



Action Plan

- ⊗ TOC review and consideration of Options complete by September 1, 1999 (respond to Maxine Cheesman at 681-2500 x4540, or Bahram Charkhian x4572)
- ⊗ Potential implementation date - October 1st