WQ Monitoring for Mercury and Trace Metals

Technical Oversight Committee
Field Data Collection
Water Quality Monitoring Division
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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