Solving the Complex Challenge of Trace Contaminants in Wastewater

Can Small Amounts/Small Sources Have Large Effects?

Where are the trace contaminants REALLY coming from?

- Unused prescription drugs?
- Used prescription drugs?
- Individuals?
- Hospitals or doctor's offices?
- Pharmaceutical manufacturers?
- Hospices or nursing homes?
- Cemeteries?
- Agriculture?

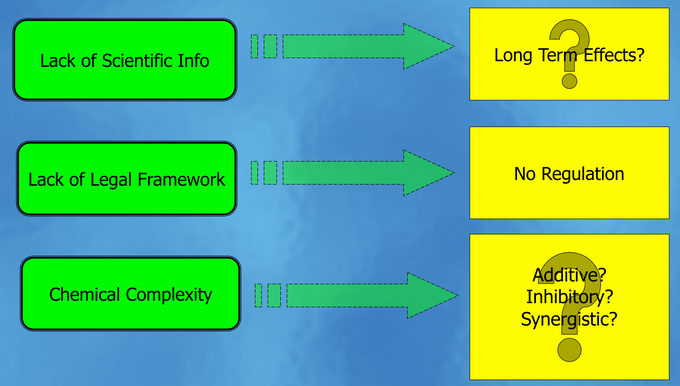
Pathways to the Environment
Direct and Indirect

What problems do these trace contaminants REALLY cause?

- Ecological alterations
  - Mutant fish? Other mutant aquatic animals?
- Human health
  - Reproductive deformities?
  - Endocrine disruption?
  - Cancer?
  - Mental disorders?
- Recreation degradation?
- Other environmental impacts?

What Can/Should Be Done?

The Challenge: Lack of Information



Solutions

Prevent the contamination

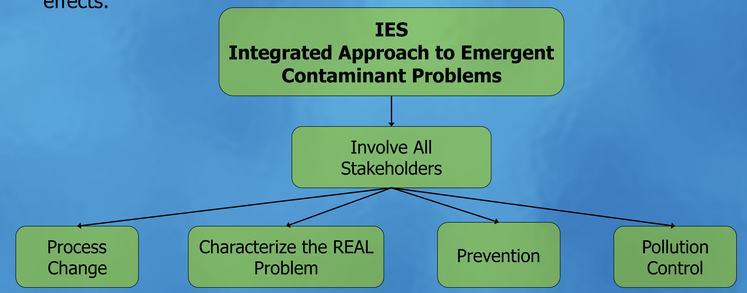
Need better, cheaper technology

End user/consumer treatment

Improved monitoring and adaptive management

Institute for Environmental Solutions (IES)

IES Mission: The Institute for Environmental Solutions is an independent, non-profit organization committed to science-based, technically sound solutions to complex environmental and natural resource problems – without unwanted side effects.



Who are the Stakeholders?

- Medical community
  - Doctors, nurses
  - Hospitals
  - Hospices
- Pharmaceutical community
  - Pharmacies
  - Companies
- Personal care product manufacturers
- Recreation
  - Fishing
  - Water sports
- Wastewater treatment
- Drinking water suppliers
- Government/regulatory agencies
- Scientific community

The IES Proposal

The Institute for Environmental Solutions proposes to:

- Convene all stakeholders
- Establish independent and objective project to tackle emergent contaminant problem
- Conduct objective scientific and economic analysis
- Determine effective, affordable solutions

Are you interested? Please join IES in this collaborative effort.

Institute for Environmental Solutions

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