

# The Independent Laboratory Institute: *A Collaborative Approach for the Advancement of Environmental Monitoring*

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# Why Did ILI Undertake this Effort?

1. Solid Phase Extraction (SPE) has long been used for testing (food, air, drinking water, etc.), but had not been accepted for wastewater testing
2. SPE has the demonstrated potential to:
  - Improve data quality
  - Increase laboratory productivity and reduce testing costs,
  - Reduce the use of toxic chemicals and generation of hazardous waste
3. EPA saw the value of SPE, but did not have the resources to develop and validate a SPE protocol for wastewater
4. Neither was it economically feasible for any single SPE vendor to undertake the effort and expense to bring the technology forward

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# What Was Accomplished?

- The first method validation undertaking by the ILI New Technology Incubator
- Unique collaboration between the Laboratory Community, Government, and Industry Vendors
  - We collaboratively selected the problem to be solved
  - Developed a generic SPE protocol
  - Designed and executed the study
  - Analyzed and critiqued the data
  - Produced the study report and submitted it to the Office of Water
- The efficacy of SPE for waste water was demonstrated

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# The Broader Meaning

- We have scientifically demonstrated the use of SPE as a valuable tool for wastewater testing
- But, we have also demonstrated the utility of the ILI Technology Incubator and its collaborative approach to problem solving
  - The Incubator approach saved the members of the SPE vendor community a great deal of money
  - Since the program was paid for by private sector, it also allowed EPA to greatly leverage its limited resources
- The ILI Incubator has been shown to be a valuable new tool to drive technology innovation in the environmental testing industry
- Now we want to focus on a new question:
  - *Where does the ILI New Technology Incubator go from here?*

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# ILI New Technology Incubator

- The ILI Incubator is:
  - A vehicle for voluntary collaboration between Laboratories, Government and Technology Vendors
  - Designed to drive technology innovation in areas of mutual interest
  - Our mission is to serve as a vehicle to mobilize the environmental community to scientifically demonstrate the efficacy of new technology, and thereby facilitate regulatory acceptance
- The ILI Incubator is not:
  - A consensus standards development organization
  - A methods publishing organization

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# Why is the ILI Incubator Needed?

- The Incubator can effectively address those “orphan problems” that neither the government, the laboratory or the technology innovation communities can solve alone
- Our premise: Other problems exist in our industry that could be resolved by employing this collaborative, trilateral approach
- Our objective: Identify these orphan problems and select the highest value projects for action

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# How Will the Incubator Work?

- Bring the parties together to identify, vet and select projects
- For each selected project, choose a project manager to lead the effort
- Collaboratively:
  - Define the program objective (e.g., approval of SPE for waste water)
  - Establish project objectives (e.g., generic protocol, validation data)
  - Scope the effort and identify needed resources
  - Identify technology vendors to underwrite the project
  - Recruit private and public laboratories to assist in the effort
  - Create a rigorous budget and schedule

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# The Next Steps

- SPE Project wrap-up activities
  - Develop a SPE training course for the laboratory community
  - Develop a management guidebook for future projects based upon lessons learned from the SPE project
- Forward focus
  - Develop sustainable management structure and processes
  - Reach out to regulatory agencies and the private sector
    - Identify additional orphan technologies to address
  - Select the next project(s) to execute



# An Appeal to Environmental Community

- For this new enterprise to be successful, we need your commitment, engagement and participation
- In the coming months we will reach out to:
  - Recruit a pool of volunteers for potential service
  - Solicit your input to identify essential problems
  - Organize workshops to collectively vet projects
- Our goal is to do the necessary ground work and select the next ILI Incubator project(s) before the end of 2015

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# Thank You!

- For your attention
- For your participation
- For your continuing support

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