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Barriers and Solutions to New Method Implementation

What are the Options?

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Session summary

- Highly sophisticated and technologically advanced methods for analytes of emerging interest
  - ~ Consensus bodies: ASTM D 7485 for alkylphenols by LC/MS/MS – many other analytes in pending ASTM methods
  - ~ EPA: SW-846 8276 for Toxaphene congeners
- Issues with accreditation and implementation of new methods from the state and commercial laboratory perspectives
- An old new method (12 years old) that was very considerable technical advance for one of the most critical groups of compounds that is still not consistently used

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New Methods

- Expensive to develop and even more expensive to validate
  - ~ EPA offices
  - ~ EPA regions
  - ~ Consensus bodies (with help from EPA and state labs)

Commercial labs – not so much

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Implementation of new methods

- New Analyte(s)
  - ~ Easiest case since there is less inertia
  - ~ New methods and regulations that drive their use are not always in sync
  - ~ Capital expense can be a barrier
  - ~ Accreditation takes a while to get into place

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Implementation of New Methods

- When there is a previous method for the same analyte:
  - ~ More difficult since there is more inertia
  - ~ Existing method may be listed in permits and project plans
  - ~ Different clients wish to switch at different times
  - ~ Different regulatory authorities wish to switch at different times
  - ~ Especially difficult if the new method is better but more expensive or more difficult than the existing method

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Implementation of Revised Methods

- Perhaps the most difficult
  - ~ Need consistency in the time of switching to the new revision
  - ~ Even then implementation is difficult because of the inertia of the old way of doing things

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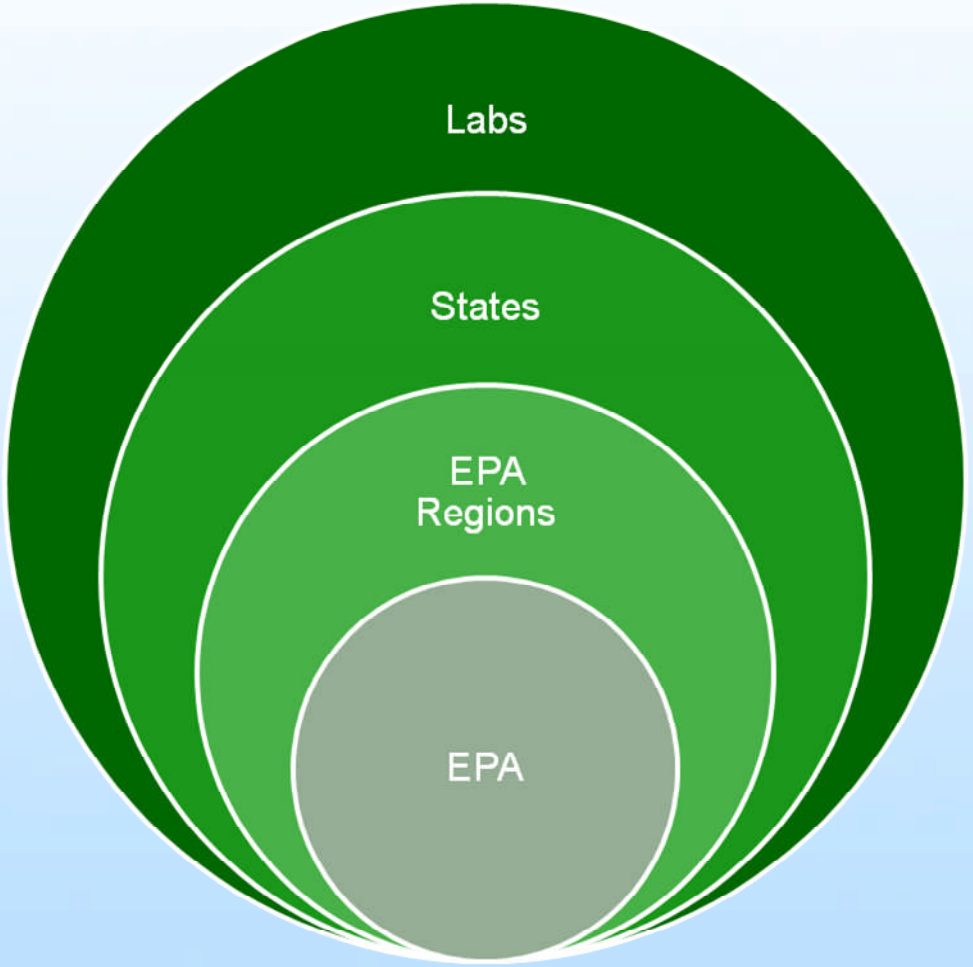
Available methods



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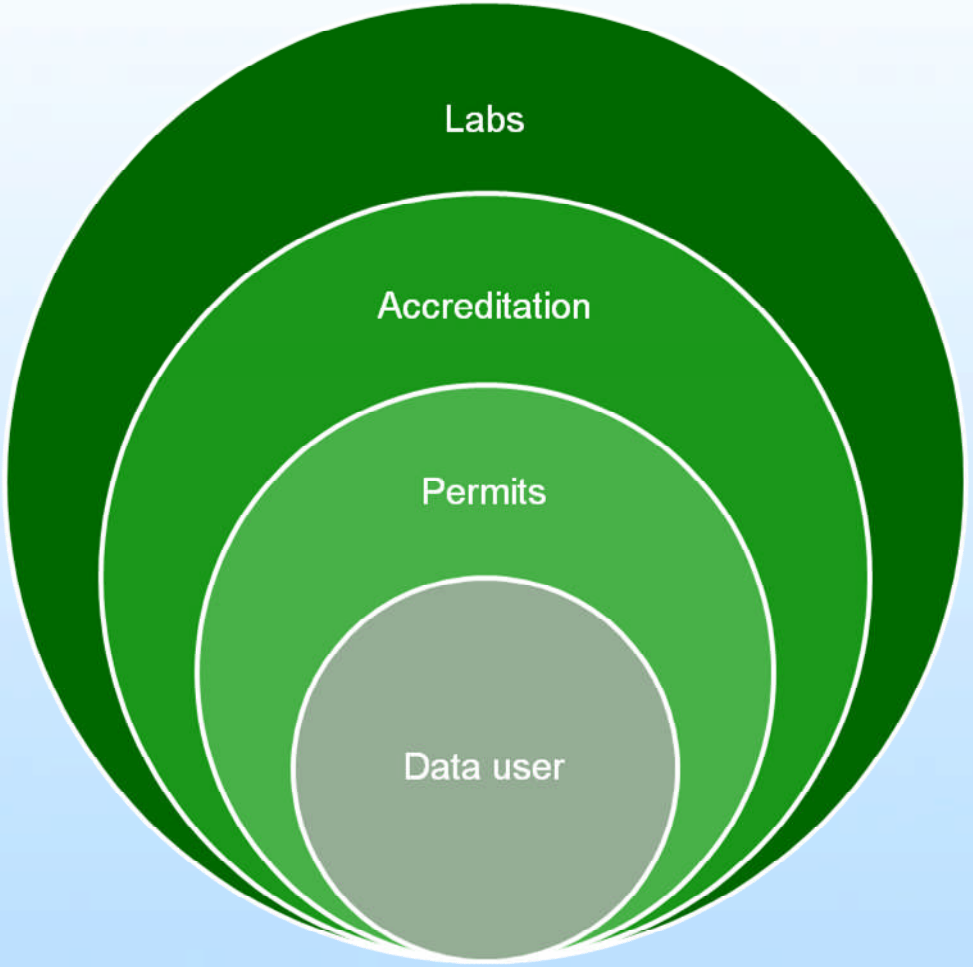
Methods that are used



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- How should methods be implemented?
- What do we mean by comparability, and how important is it (for example, is it more important to be comparable than correct?)
- What is a reasonable time frame to switch to a new or revised method?
- When/ how should we get rid of old methods?

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Answers?