Implementing a Point-of-Use (POU)/Point-of-Entry (POE) Strategy

Fred Pontius, P.E.
Pontius Water Consultants, Inc.
Lakewood, Colorado
(With POU) in the long run we get high quality water that’s safe for us and our children at a very, very reasonable price compared to a large filtration plant.

- Customer currently using POU RO Treatment -
Critical Questions for the Community (and Water System)

- Is POU/POE the best strategy?
- What planning steps are necessary?
- What customer outreach strategy is needed?
- How can 100% participation be achieved?
- What about reluctant customers?
Is POU/POE the Best Strategy?

- POU or POE must clearly be the best compliance choice for the community
- Economic savings ($$/Household) provides the primary customer incentive
- The water system must be committed to making POU/POE work

We estimated that for our system serving 20 people, to install centralized treatment we’d have to pay $200,000, plus $20,000 to $30,000 for maintenance each year...We told our customers we could take out a loan, make payments, and adjust our water rates accordingly. But POU was definitely the way to go.

- Manager of a Small System currently using POU RO Treatment -
What Planning Steps Are Necessary?

- Define roles and responsibilities
- Develop local ordinance; Define liabilities
- Determine state requirements
- Decide what vendor services are needed
- Develop outreach strategy and materials
- Schedule installation, service, sampling

We have to comply with the regulation by January 2006. We started more than two years ahead of time to warn people about the situation.

- Manager of a small system using POU Treatment -
What Customer Outreach Strategy is Needed?

- Informing customers about POU/POE
  - Written materials (Fact Sheets, letters, etc)
  - Mailings, public meetings, telephone calls, signs, newspaper notices, community events, DVD, email, web pages
  - Simplest, easiest, lower cost methods most effective

- Tailor outreach strategy to the community
  - How do customers get info about their water?
  - Who do customers trust? How is info passed on?
  - What socioeconomic factors should be considered?
  - How much effort ($$) can be directed to outreach?
How Can 100% Participation Be Achieved?

- 100% customer participation is expected for compliance
  - Start early…water systems should give themselves plenty of time
  - Customer outreach is an ongoing activity…not a one time event

Some people have already said “You’re not coming in my house!”

No water system wants to shut off water, but they might have to be willing to do that…

- May 2004 Focus Group participants -
What About Reluctant Customers?

Each water system must tailor a strategy specific to their community

- What incentives could be offered for participation?
- Will the water system shut off water service?
- Should POU/POE be required as a condition of water service?

I’ve been drinking this water for 50 years and I’m not dead yet.
Reluctant customer whose water system is currently using POU Treatment –

Younger people seem more receptive to the POU units; they are concerned if the current water could be hazardous for their children.
- Operator and manager of a small system currently using POU treatment -
Implementation Tools for Water Systems

- Model POU Ordinance
- “Generic” Fact Sheets
  - Long and short versions, special circumstances
  - Common objections to POU
- Draft Letters and Access Agreements
- Review of typical PIDs and how they work
- Model contract language for custom agreements
- Small Water System Planning guide
  - Example community outreach strategy

Note: The above draft POU “Tools” are currently under internal review by USEPA.
Key Questions for State Regulators

- Where does POU/POE make sense in my state as a compliance strategy?
- What submittal requirements from the water system will be required for state approval of POU/POE?
- What will be the role of the PID? How will service/monitoring intervals be set?
- What customer participation level must be met to initially proceed with POU/POE?