

EPA Operator Certification Guidelines

July 1999

Background

Statutory Requirements

- **SDWA Section 1419**
 - Guidelines for the certification and recertification of operators of community and nontransient noncommunity public water systems
 - ◆ Develop in cooperation with the States
 - ◆ Publish in the *Federal Register* by February 6, 1999 (Final guidelines published on February 5, 1999)
 - States have 2 years to develop and be implementing a program
 - Any State that wants to enforce its existing program in lieu of the guidelines must submit by August 2000 ("substantially equivalent" program)

Statutory Requirements (Con't)

- **SDWA Section 1419**
 - EPA must withhold 20% of a State's Drinking Water State Revolving Fund capitalization grant if its program does not comply with the guidelines
 - Provide (through grants to States) reimbursement to operators of systems serving 3300 or fewer persons for the costs of training and certification, including per diem for unsalaried operators

Statutory Requirements (Con't)

- **SDWA Section 1420**
 - **Establish partnership with States, public water systems, and the public**
 - **Develop and publish information for States on recommended operator certification guidelines by February 6, 1998**

Information for States

- **Collection of available information**
 - Summary of existing State programs
 - ABC Standards
 - Excerpt from "Safe Water From Every Tap" that emphasizes the need for training operators of small systems
 - List of State Drinking Water Administrators and Certification Program Officers
- **Met SDWA deadline by publishing a Notice of Availability in the *Federal Register* on February 6, 1998**

Guideline Development Process

- **Two Working Groups**
 - **The Partnership (a NDWAC workgroup)**
 - identified potential minimum standards
 - **The State-EPA Workgroup**
 - drafted issue papers for each standard
- **Groups exchanged reviews and worked toward consensus**
- **Partnership presented its recommendations for draft guidelines to the full NDWAC in October 1997**

Guideline Development Process (Con't)

- EPA published Draft Guidelines in the *Federal Register* on March 27, 1998.
- Public comments were due to EPA by June 25, 1998.
- Three public stakeholder meetings:
 - ◆ April 23, 1998 - San Francisco, CA
 - ◆ June 2, 1998 - Washington, DC
 - ◆ June 9, 1998 - Dallas, TX

Public Comments

- EPA received 98 sets of comments
- Breakdown of Commenters:
 - 35 State Agencies
 - 30 Water Utilities
 - 18 Business/Trade Groups
 - 5 Water System Operators
 - 2 Federal Agencies
 - 1 Operator Training Provider
 - 1 Tribal Representative
 - 1 Congressional Representative

Guideline Development Process (Con't)

- Both work groups met in August 1998 to consider the comments received on the draft guidelines during the public comment period and to recommend changes
- Partnership presented its recommendations for the final guidelines to the full NDWAC in November 1998

Final Guidelines

- **Published February 5, 1999 in the *Federal Register***

Operator Certification Guidelines

Elements of the Guidelines

- **Public Health Objectives**
- **Anti-backsliding Provision**
- **Nine Baseline Standards**
- **Program Submittal Process**
 - **Submittal Schedule (reserved)**
 - **Submittal Contents**
 - ◆ **Initial Submittal**
 - ◆ **Subsequent Years (Annual) Submittal**
- **Definitions**

Public Health Objectives

- **Ensure that:**
 - ▶ **Customers of any public water system be provided with an adequate supply of safe, potable drinking water.**
 - ▶ **Consumers are confident that their water is safe to drink.**
 - ▶ **Public water system operators are trained and certified and that they have knowledge and understanding of the public health reasons for drinking water standards.**
- **Ongoing training is necessary to the public health objectives of this program.**

Anti-Backsliding Provision

- **Because these guidelines represent only minimum standards, it is expected that States whose current operator certification program requirements go beyond or exceed these minimum standards not lower their operator certification program requirements.**
- **EPA will not approve the operator certification program of any State that reduces its standards below the level that existed 12 months prior to the effective date of these guidelines unless the reduction can be justified by the State and is approved by EPA.**

Baseline Standard #1

- **Authorization**

- **As evidenced by an Attorney General's certification, or certification from delegated counsel, the State must have the legal authority to implement the program requiring the certification of operators of all community and nontransient noncommunity water systems and to require that the systems comply with the appropriate requirements of the program.**

Baseline Standard #2

- **Classification of Systems, Facilities, and Operators**

A State's program must meet the following requirements:

- It must classify all community and nontransient noncommunity water systems based on indicators of potential health risk, which for example may include:

- a) complexity, size, source water for treatment facilities, and

- b) complexity, size for distribution systems.

Baseline Standard #2

- **Classification (Cont.)**
 - It must require owners of all community and nontransient noncommunity water systems to place the direct supervision of their water system, including each treatment facility and/or distribution system, under the responsible charge of an operator(s) holding a valid certification equal to or greater than the classification of the treatment facility and/or distribution system.

Baseline Standard #2

- **Classification (Cont.)**

- It must require, at a minimum, that the operator(s) in responsible charge or equivalent must hold a valid certification equal to or greater than the classification of their water system, including each treatment facility and distribution system, as determined by the State.

Baseline Standard #2

- **Classification (Cont.)**

- **It must require that all operating personnel making process control/system integrity decisions about water quality or quantity that affect public health be certified.**
- **It must require that a designated certified operator must be available for each operating shift.**

Implementation Issues

- **What does the term "available" mean?**
 - **States have been allowed flexibility in defining since its meaning may differ due to geographic and demographic differences between states.**

Baseline Standard #3

- **Operator Qualifications**

States must require the following for an operator to become certified:

- Take and pass an exam that demonstrates that the applicant has the necessary skills, knowledge, ability and judgment as appropriate for the classification. All exam questions must be validated.
- Have a high school diploma or a general equivalency diploma (GED). States may allow experience and/or relevant training to be substituted for a high school diploma or GED. Education, training, or experience that is used to meet this requirement for any class of certification may not be used to meet the experience requirement.

Baseline Standard #3

- **Operator Qualifications (Cont.)**
 - **Have the defined minimum amount of on-the-job experience for each appropriate level of certification. The amount of experience required increases with each classification level. Post high school education may be substituted for experience. Credit may be given for experience in a related field (e.g., wastewater). Experience that is used to meet the experience requirement for any class of certification may not be used to meet the education requirement.**

Baseline Standard #3

- **Operator Qualifications (Cont.)**

Grandparenting

- **EPA recognizes that there are many competent small system operators that may not meet the initial requirements to become certified. EPA believes that States may need a transition period to allow these operators to continue to operate the system through "grandparenting". It is recommended that grandparenting determinations be based on factors such as system compliance history, operator experience and knowledge, system complexity, and lack of treatment.**

Baseline Standard #3

- **Operator Qualifications - Grandparenting (Cont.)**
 - **If States choose to include a grandparenting provision in their programs, they must include the following requirements:**
 - **Grandparenting is permitted only to existing operator(s) in responsible charge of existing systems which, because of State law changes to meet these guidelines, must for the first time have a certified operator.**

Baseline Standard #3

- **Operator Qualifications - Grandparenting (Cont.)**
 - The system owner must apply for grandparenting for the operator(s) in responsible charge within two years of the effective date of the State's regulation.
 - The certification for the grandparented operator must be site specific and non-transferable to other operators.

Baseline Standard #3

- **Operator Qualifications - Grandparenting (Cont.)**
 - After an operator is grandparented, he or she must, within some time period specified by the State, meet all requirements to obtain certification renewal including the payment of any necessary fees, acquiring necessary training to meet the renewal requirements, and demonstrating the skills, knowledge, ability and judgment for that classification.

Baseline Standard #3

- **Operator Qualifications - Grandparenting (Cont.)**
 - If the classification of the plant or distribution system changes to a higher level, then the grandparented certification will no longer be valid.
 - If a grandparented operator chooses to work for a different water system, he or she must meet the initial certification requirements for that system.

Baseline Standard #4

- **Enforcement**

- **The State agency with primary enforcement responsibility for the Public Water System Supervision (PWSS) Program must have regulations that meet the requirements of these guidelines and require community water systems and nontransient noncommunity water systems to comply with State operator certification requirements. In nonprimacy States, the Governor shall determine which State Agency will have this responsibility.**

Baseline Standard #4

- **Enforcement (Cont.)**
 - **States must have appropriate enforcement capabilities, for example: administrative orders, bilateral compliance agreements, criminal or civil administrative penalties, and/or stipulated penalties.**

Baseline Standard #4

- **Enforcement (Cont.)**

- **States must have the ability to revoke operator certifications.**
- **States must also have the ability to suspend operator certifications or take other appropriate enforcement action for operator misconduct. Examples of operator misconduct may include: fraud, falsification of application, falsification of operating records, gross negligence in operation, incompetence, and/or failure to use reasonable care or judgment in the performance of duties.**

Baseline Standard #5

- **Certification Renewal**

A State's program must meet the following requirements:

- **The State must establish training requirements for renewal based on the level of certification held by the operator.**
- **States must require all operators including grandparented operators to acquire necessary amounts and types of approved training. States may determine other requirements as deemed necessary.**

Baseline Standard #5

- **Certification Renewal (Cont.)**
 - **States must have a fixed cycle of renewal not to exceed three years.**
 - **The State must require an individual to recertify if the individual fails to renew or qualify for renewal within two years of the date that the certificate expired.**

Baseline Standard #5

- **Certification Renewal - Grandparented Operators**
 - States must pay special attention to identify specific renewal requirements for grandparented operators to ensure that they possess the knowledge, skills, ability and judgement to properly operate the system. This must be done by one or more of the following approaches or by an alternative approach approved by EPA:

Baseline Standard #5

- **Certification Renewal - Grandparented Operators (Cont.)**
 - States may specify renewal requirements for grandparented operators on a case-by case basis, taking into consideration factors such as a system's compliance history and operator experience and knowledge. For systems that have a history of being out of compliance, any certification renewal decision should consider whether non-compliance is the result of the actions or inactions by the system's owner or the system's operator.

Baseline Standard #5

- **Certification Renewal - Grandparented Operators (Cont.)**
 - States may require specific training requirements for certification renewal at the first renewal cycle for grandparented operators. This training should include all of the information covered by the initial certification exam for the system classification level for which the operator was grandparented even though an initial exam may not be required for certification renewal.

Baseline Standard #5

- **Certification Renewal - Grandparented Operators (Cont.)**
 - States may require operators with grandparented certificates to meet all of the initial certification requirements for the level of classification for which the operator was grandparented, and thereby obtain certification within a reasonable time period specified by the State.

Baseline Standard #6

- **Resources Needed to Implement the Program**

States must provide sufficient resources to adequately fund and sustain the operator certification program (components include, but are not limited to: staff, data management, testing, enforcement, administration, and training approval). EPA recommends that States establish a dedicated fund that is self-sufficient.

Baseline Standard #7

- **Recertification**

The States must have a process for recertification of individuals whose certification has expired for a period exceeding two years. This process must include: review of the individual's experience and training, and reexamination. An individual is not certified with an expired certificate. The State may develop more stringent requirements for recertification for individuals whose certificates have expired, been revoked, or been suspended.

Baseline Standard #8

- **Stakeholder Involvement**

- **Stakeholder involvement is important to the public health objectives of the program. It helps to ensure the relevancy and validity of the program, and the confidence of all interested parties.**

Baseline Standard #8

- **Stakeholder Involvement (Cont.)**
 - **States must include ongoing stakeholder involvement in the revision and operations of State operator certification programs. Public comment on rule revisions is not adequate stakeholder involvement.**

Baseline Standard #8

- **Stakeholder Involvement (Cont.)**
 - A stakeholder board or advisory committee is strongly recommended.
 - Examples of stakeholders may include: operators, environmental/public health groups, the general public, consumer groups, technical assistance providers, utility managers, trainers, etc.

Baseline Standard #9

- **Program Review**

- **States must perform reviews of their operator certification programs. EPA recommends that States perform periodic internal reviews and occasional external/peer reviews.**
- **Examples of items to review include: regulations, exam items for relevancy and validity, compliance, enforcement, budget and staffing, training relevancy, training needs through examination performance, and data management system.**

Implementation Issues

- **What will EPA look for in State program review processes?**
 - **EPA suggests:**
 - ◆ **Internal reviews at least every three years**
 - ◆ **External reviews at least every five years (provides opportunity for ongoing stakeholder involvement)**
 - **This review process is in addition to the annual review conducted by EPA**

Submittal Contents - Initial Submittal

- **The submittal of operator certification programs to EPA by States must include the following:**
 - ▶ **The State Attorney General's certification, or certification from delegated counsel, that the State has the legal authority to implement the program requiring the certification of operators of all community and nontransient noncommunity water systems and to require that the systems comply with the appropriate requirements of the program;**

Submittal Contents - Initial Submittal (Cont.)

- ▶ **A full description and explanation of how the State's operator certification program complies with or is substantially equivalent to the requirements of these guidelines; and**
- ▶ **A copy of the State operator certification regulations.**

Submittal Contents - Subsequent Years

- ▶ All annual program submittals subsequent to the initial submittal must include documentation and evaluation of ongoing program implementation; and
- ▶ A new State Attorney General's certification, or certification from delegated counsel, if changes were made to the regulations or statutes and a copy of the revised regulations or statutes.

Definitions

- **Administrator**

Means the Administrator of the United States Environmental Protection Agency

Definitions

- **Available**

Based on system size, complexity, and source water quality, a certified operator must be on site or able to be contacted as needed to initiate the appropriate action in a timely manner.

Definitions

- **Community Water System (CWS)**

A public water system providing water to at least 15 service connections used by year-round residents or regularly serving at least 25 year-round residents.

Definitions

- **Distribution System**

Any combination of pipes, tanks, pumps, etc. which delivers water from the source(s) and/or treatment facility(ies) to the consumer.

Definitions

- **Distribution System Complexity**

Examples include: pressure zones, booster stations, storage tanks, fire protection, chlorination, non-residential consumers, cross connection potential, and/or demand variations.

Definition

- **Distribution System Size**

Examples include: population served, number of service connections, size of pipes, total distance of pipe, and/or quantity of water distributed.

Definitions

- **Grandparenting**

The exemption for the existing operator(s) in responsible charge, as of the effective date of the State's regulation, from meeting the initial education and/or examination requirements for the class of certification the system has been assigned.

Definitions

- **Nontransient Noncommunity (NTNC) Water Systems**

A public water system that is not a community water system and that regularly serves at least 25 of the same persons over six months per year. Common types of NTNC water systems are those serving schools, day care centers, factories, restaurants, and hospitals.

Definitions

- **Operating Shift**

That period of time during which operator decisions that affect public health are necessary for proper operation of the system.

Definitions

- **Primacy**

Primary responsibility for administration and enforcement of the primary drinking water regulations and related requirements applicable to public water systems within a State.

Definitions

- **Responsible Charge**

The Operator(s) in Responsible Charge is defined as the person(s) designated by the owner to be the certified operator(s) who makes decisions regarding the daily operational activities of a public water system, water treatment facility and/or distribution system, that will directly impact the quality and/or quantity of drinking water.

Definitions

- **Source Water**

Examples include: type (surface water, ground water, ground water under the influence of surface water, purchased water), quality (variability), and/or protection (e.g., wellhead protection).

Definitions

- **Treatment Facility**

Any place(s) where a community water system or nontransient noncommunity water system alters the physical or chemical characteristics of the drinking water.

Chlorination may be considered as a function of a distribution system.

Definitions

- **Treatment Facility Complexity**

Examples include: difficulty in controlling water quality, potential effect to the consumer and/or safety of the operator.

Definitions

- **Treatment Facility Size (capacity)**

Examples include: population served, number of service connections served, and/or plant flow.

Definitions

- **Validated Exam**

An exam that is independently reviewed by subject matter experts to ensure that the exam is based on a job analysis and related to the classification of the system or facility.

EPA Program Review Proposal

Program Review and Approval Process

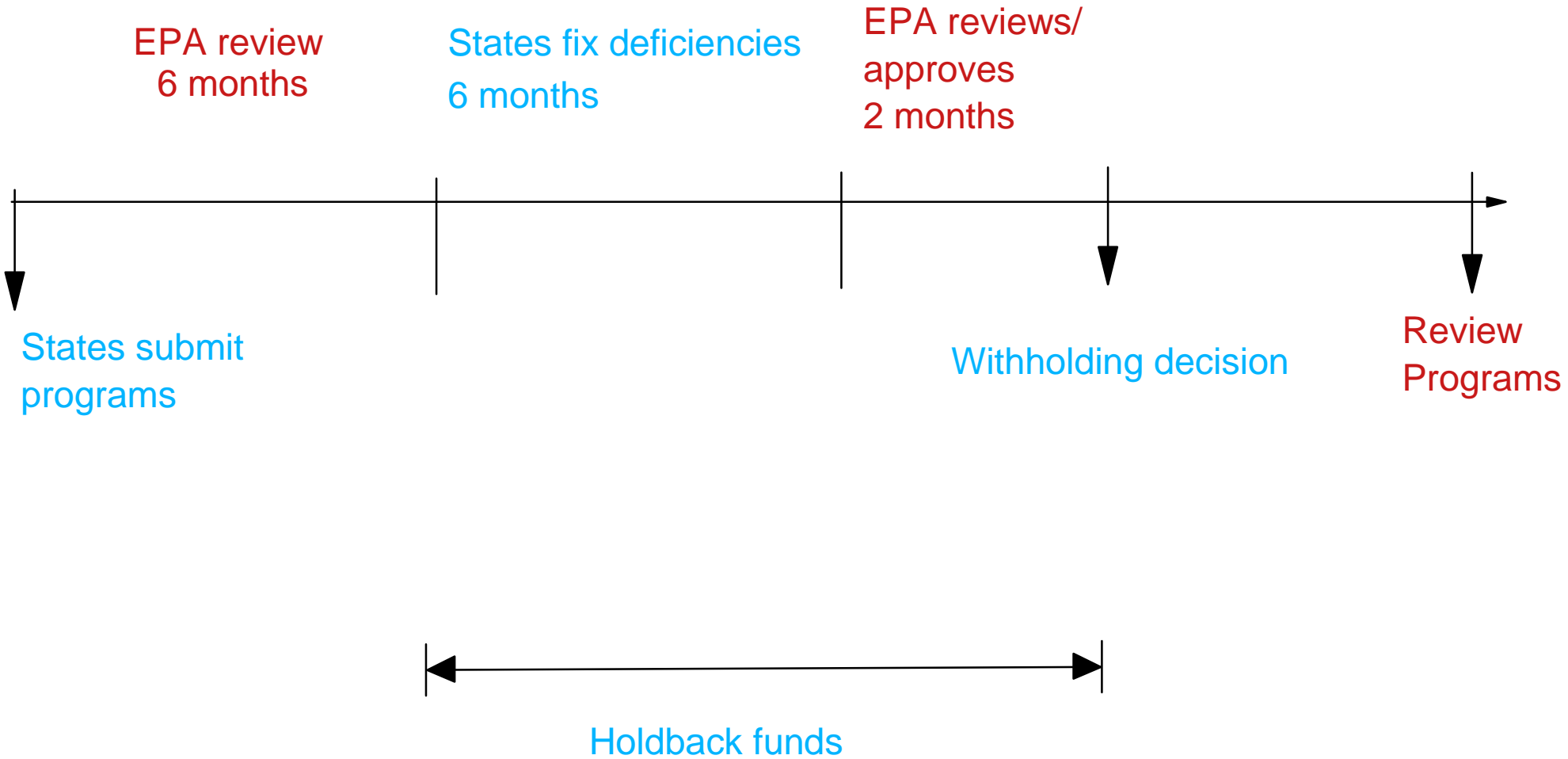
- **States Submit Programs to Regions**
- **Regions Review and Approve State Programs With the Following Exceptions:**
 - **RA Must Seek Concurrence with OGWDW on the Following:**
 - ▶ **the decision on one State operator certification program per region**
 - ▶ **the decision on all State operator certification program submitted as "substantially equivalent" in each Region**
 - ▶ **all decisions to withhold funds**

DWSRF: Availability of Funds

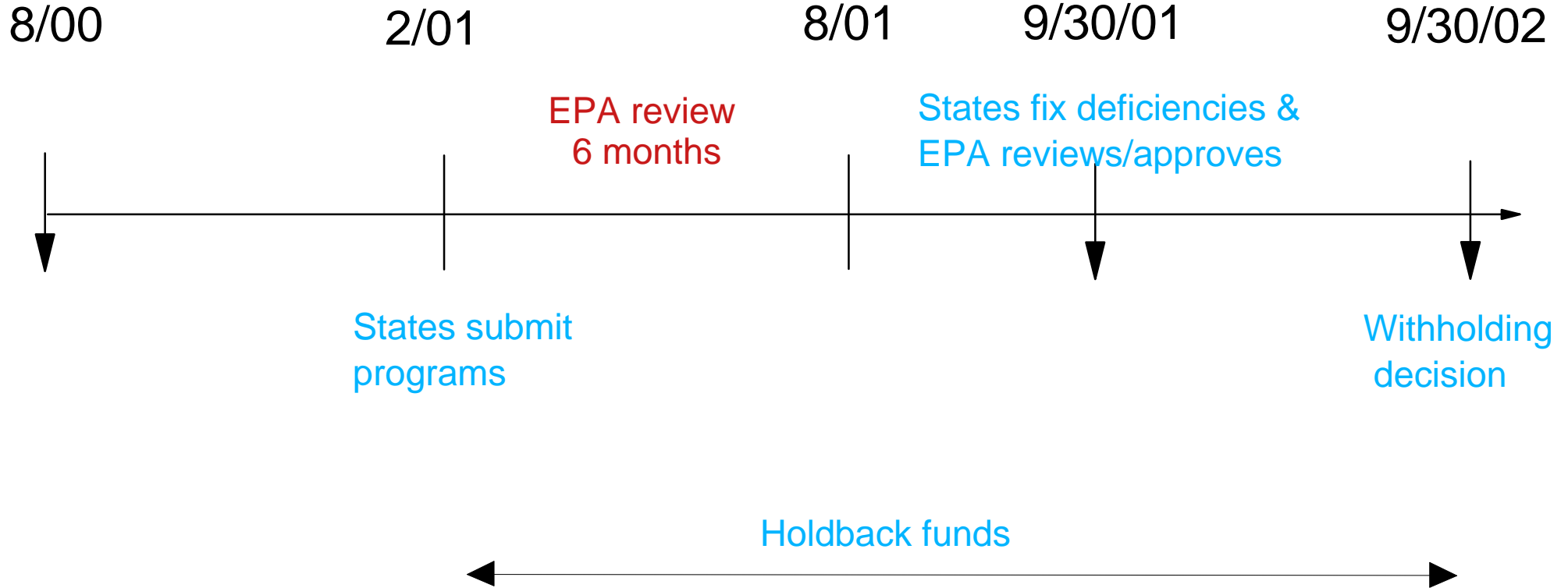
Fiscal Year (FY)	Availability
FY 2000	Oct 1, 1999-Sept 30, 2001
FY 2001	Oct 1, 2000-Sept 30, 2002
FY 2002	Oct 1, 2001-Sept 30, 2003
FY 2003	Oct 1, 2002-Sept 30, 2004

Proposed Submittal Schedule for "Substantially Equivalent" Programs

8/00 2/01 8/01 9/30/01 9/30/02



Proposed Submittal Schedule for "Revised" Programs



EPA withholds 20% of all available, unawarded DWSRF funds if a State fails to submit its final package by Feb 5, 2001

Expense Reimbursement Grants Proposal

Allotment Formula

- **Allotment Formula Based on the Total Number of CWS and NTNCWS Serving 3,300 Persons or Fewer, by State**
- **Total Allotment Based on Amount of Money a State Will Need for Reimbursement Through FY 2003**
- **States Can Apply for Expense Reimbursement Funds Once EPA has Approved Their Programs**

Amount of Allotted Funds

- **Funds Will Be Taken off the Top of the DWSRF**
 - ▶ **FY99: \$15 Million**
 - ▶ **FY2000-2003: Up to \$30 Million Each Year**
- **Total Amount of Estimated Funds Needed Ranges from \$98 million to \$132 million**
- **Allocation Based on Several Assumptions**

Assumptions for Number of Operators: Three Options

- **2 Operators Per Eligible System**
- **1.5 Operators Per Eligible System**
- **2 Operators Per Eligible CWS and 1 Operator Per Eligible NTNCWS**

Additional Assumptions

- ▶ 65,255 CWSs & NTNCWSs serving 3,300 or fewer
- ▶ 1/2 of operators are unsalaried, therefore eligible for per diem at \$100/day
- ▶ Two classes for initial certification/renewal
 - @ \$300 per class
- ▶ Four days of per diem (2 days per class)
- ▶ \$75 fee for initial certification/certification renewal
- ▶ Mileage
 - 2 round trips, 200 miles per trip
 - 31 cents per mile

Eligible Expenses

- **Examples of items eligible for reimbursement:**
 - ▶ **Centralized training program**
 - ▶ **Approved classes**
 - ▶ **Mileage**
 - ▶ **Per diem for unsalaried operators**
 - ▶ **Certification/renewal fee**
 - ▶ **Others?**

Uses of "Remaining" Expense Reimbursement Grant Funds

- Pursuant to Section 1419(d)(2) of SDWA, a State May Use Any Remaining Expense Reimbursement Grant Funds for Other Purposes Authorized for Grants Under Section 1452 of the SDWA, After Notification to the EPA Administrator
- The Notification Responsibility Will Be Delegated to the Regional Administrators (RA's Can Re-delegate This Responsibility to the Water Division Directors)
- A State Must Demonstrate That it Has Reimbursed All Costs to Eligible Operators in the Notification to EPA

State Flexibility on Administering Expense Reimbursement Grants

- **States Can Use Expense Reimbursement Funds to Pay Third-Party Trainers**
- **States Can Use Expense Reimbursement Funds to Pay Their Own Employees to Conduct Training**
- **States Will Have Flexibility to Decide Which Costs Are "Reimbursable"**