



Commonwealth of Pennsylvania  
Department of Environmental Protection  
Bureau of Safe Drinking Water  
Division of Training, Technical and Financial Services

**Addendum to Pennsylvania's  
FY 2014-2015 Intended Use Plan  
Drinking Water State Revolving Fund  
Workplan for the Use of Set-Aside Funding  
Under Sections 1452 (G) and 1452 (K)  
of the Federal Safe Drinking Water Act**

Submitted to EPA: March 31, 2014  
Approved by EPA: July 8, 2014

## TABLE OF CONTENTS

	PAGE
I. <a href="#">INTRODUCTION</a> .....	1
A. <a href="#">Intent of this Addendum</a> .....	1
B. <a href="#">Relationship to the PWSS Program Grant</a> .....	1
C. <a href="#">Changes to the Workplan from Previous Fiscal Years</a> .....	2
D. <a href="#">Format and Level of Detail Provided</a> .....	3
E. <a href="#">Evaluation of Outputs and Outcomes</a> .....	4
II. <a href="#">GENERAL OVERVIEW</a> .....	4
A. <a href="#">Major Areas Addressed by this Workplan</a> .....	4
B. <a href="#">Source Water Assessment</a> .....	5
C. <a href="#">Source Water Protection</a> .....	5
D. <a href="#">Capability Enhancement</a> .....	7
E. <a href="#">Operator Training and Certification</a> .....	9
III. <a href="#">FUNDING AND WORKPLAN SUMMARY</a> .....	10
IV. <a href="#">PENNSYLVANIA’S SET-ASIDE UTILIZATION FOR ALL GRANTS</a> .....	11
A. <a href="#">State Use of Prior Years’ Unliquidated Obligations</a> .....	11
V. <a href="#">COMPLETED CONTRACTS AND GRANTS</a> .....	12
VI. <a href="#">CANCELLED CONTRACTS AND GRANTS</a> .....	16

# I. INTRODUCTION

## A. Intent of this Addendum

This document serves as an addendum to the workplan that identifies Pennsylvania's intended uses of Drinking Water State Revolving Fund (DWSRF) program support set-aside funds, under Sections 1452(g) and 1452(k) of the 1996 Amendments to the Federal Safe Drinking Water Act (SDWA). The addendum contains the following additional details:

- A description of the relationship to the Public Water System Supervision program grant;
- A summary of changes to the workplan from the previous fiscal year;
- The level of detail provided to remain consistent with EPA's guidances;
- Comments on the evaluation of outputs and outcomes;
- A description of the major areas addressed;
- A funding and workplan summary that further describes categorical spending of set-aside funds;
- An overall spending plan summary that aggregates the individual categorical set-aside spending summaries;
- A summary on state use of prior years' unliquidated obligations; and
- A list of completed and cancelled contracts and grants.

Please refer to the workplan for details on Pennsylvania's intended uses of the DWSRF set-aside funds.

## B. Relationship to the Public Water System Supervision (PWSS) Program Grant

Starting with the FY 2006 DWSRF grant, Pennsylvania has been utilizing set-aside funds to support and enhance PWSS-funded activities. The following core elements of Pennsylvania's program will be complemented with funding support from the DWSRF grant:

- Program Management, Development and Implementation
- Surveillance
- Data Management
- Compliance and Enforcement
- New Regulation Development

The set-asides workplan represents a significant addition to the above activities carried out under Pennsylvania's PWSS program.

### C. **Changes to the Workplan for FY '14-15**

Changes have been made to reflect anticipated spending increases or decreases for certain activities, to keep within planned state budget levels, and to insure expenditure of all grant funds within two years of award unless EPA approves a third year on an exception-only basis. Additionally, starting on July 1, 2013, Pennsylvania's workplan has been converted from a narrative format to a template, which is similar to the PWSS workplan format. By providing updates in the "Status/Comments/Obstacles" column, the template also serves as a progress report that identifies accomplishments over the past six-months and projected activity levels for the next 12 months.

The following activities were **added** for FY '14-15:

- *Assistance to State Programs – 1452(g)(2) 10%*
  - **Operator Certification and Training**
    - (1) eFACTS Data Maintenance – Use the Commonwealth's staff augmentation contract to hire a data entry employee. The employee will temporarily augment the work assigned to DEPs existing Operator Certification program staff who enter operator client, classification, contact, and other information into eFACTS.

The following **major changes** were made to existing activities for FY '14-15:

- *None*

The following activities have been **completed or deleted** from previous workplans:

- *Technical Assistance to Small Systems – 1452(g)(2) 2%*
  - **Capability Enhancement**
    - (1) Rural Community Assistance Program grant to provide financial assistance to small systems
    - (2) Engineering Services Program contract to Alfred Benesch
- *Assistance to State Programs – 1452(g)(2) 10%*
  - **Source Water Protection**
    - (1) Protection of Source Water Through Optimization of Publicly Owned Treatment Works (POTWs) Pilot Project
    - (2) Occurrence of Unregulated Contaminants
    - (3) Surface Water Assessments for Potable Water Supplies Pilot Project
    - (4) Potable Water Supply Designated Use Study (USGS contract)
    - (5) IPA with EPA for Water Resource Planning
  - **Operator Certification and Training**
    - (1) Web-based Training Contract with JPL Productions
  - **Capability Enhancement**
    - (1) Global Taps & Training Provider Development Program

- (2) Community Water System Collaboration Project, Phases 1 & 2
  - (3) eFACTS Contract with Computer Aid, Inc.
  - (4) Sustainable Infrastructure Initiative
- *Other Authorized Programs – 1452(k)(1) 15%*
  - **Source Water Protection**
    - (1) Ground Water Quality Data Analysis and Monitoring Network
    - (2) Source Water Information System GIS
    - (3) Risk Based Data Management System (RBDMS)
    - (4) Lower Susquehanna River Regional Basin Source Water Protection Plan
  - **Capability Enhancement**
    - (1) Tracer Study, GDF, Inc.
    - (2) Operator Expense Reimbursement Grant Program
    - (3) Investigative Source Water Monitoring Reimbursement for Schedule 4 Systems
  - **Operator Training and Certification**
    - (1) Pennsylvania State Association of Township Supervisors contract for training development
    - (2) SumTotal Systems contract for support and maintenance of the DEP Web-based University, the EarthWise Academy
    - (3) Pennsylvania State University, Middletown grant for ongoing operation of the training center and the development of classroom and web-based training
    - (4) Engineering Services Program contract with Alfred Benesch

#### **D. Format and Level of Detail Provided**

To the extent practicable, the level of detail provided in Pennsylvania's set-asides workplan and addendum is consistent with EPA's *Final Guidelines for the Drinking Water State Revolving Fund* program (February 1997), EPA Region III's *Supplemental Guidance for States* issued as Interim Final in April 2001, and EPA Region III's *Drinking Water State Revolving Fund Program Set-Aside Workplan Supplemental Guidance* issued as Interim Final in June 2006. The general goals, objectives, outputs, deliverables, and agency responsibilities for each set-aside activity are identified in the workplan.

Additional details on project requirements and deadlines will be contained in the various contracts and grant agreements with sub-recipients of set-aside funds. Each contract or grant agreement will incorporate a particular process for evaluating progress and results. Where water monitoring and analysis are involved, the agreement will include a quality assurance (QA) plan that is based upon DEP's overall QA plan in effect for such activities (with modifications, as needed, for the projects in question). Copies of contracts, grant agreements, and invoices will be made available to EPA upon request.

Semi-annual progress reports will be provided to EPA for the January-to-June and July-to-December time periods. These reports will identify accomplishments over the past six months and will project activity levels for the next twelve months. The progress reports will also include a summary of actual expenditures for the six month period. Reports will be submitted within 45 days after the end of each six-month period.

#### **E. Evaluation of Outputs and Outcomes**

Beginning in July 2006, in accordance with EPA's supplemental guidance, specific outputs were defined for each activity. These outputs are definitive products generated through the implementation of the project that will have a significant impact on the achievement of the defined program outcomes for each set-aside category. Progress towards finalizing these outputs will be documented in the semi-annual progress reports.

Also in accordance with the supplemental guidance, program outcomes were defined for each set-aside category. They are further divided into the eligible funding programs of Operator Training and Certification, Capability Enhancement (Capacity Development), and Source Water Protection, depending on the types of activities funded in each set-aside category. Since many of these outcomes are also defined performance measures for the drinking water and state DWSRF, progress made towards achievement of these outcomes will be evaluated and documented as part of the state annual budgetary process. Results of this analysis and changes to the workplan will be documented in future workplans as part of the DWSRF grant application.

## **II. GENERAL OVERVIEW**

#### **A. Major Areas Addressed by the Workplan**

The SDWA established program responsibilities for states in the following major areas:

- Drinking water source assessment and protection
- Capability enhancement (technical, financial, and managerial)
- Operator training and certification

The Department of Environmental Protection (DEP) has ongoing programs that address the above areas and proposes to expand and improve these programs in order to implement these new responsibilities through a combination of:

- Partnerships with outside organizations for:
  1. Training and technical, financial, and managerial assistance
  2. Public education
- Technical and financial support for small systems, using:
  1. Contractor support
  2. Equipment

### 3. Innovative technology support

- Equipment, supplies, and travel necessary to support the above activities.

## **B. Source Water Assessment**

Using 1452(g)(2) funds, DEP staff have delineated wellhead protection areas (WHPAs) and conducted assessments for all high priority groundwater sources, and have conducted assessments of all low priority surface water sources. Using 1452(k) funds, contractors and grantees have conducted assessments for the remaining surface water sources serving public water systems (PWS) in accordance with the state Source Water Assessment and Protection Program (SWAP) plan. Another contractor developed a statewide assessment for all lower priority groundwater sources and provided support to regional staff through a Geographical Information System (GIS) analysis. All reports have been made available to the water suppliers and summaries have been posted for the community water systems. Staff are maintaining the assessments and incorporating new sources into the program. GIS tools developed through these initiatives were placed in a web environment for access and use by all field staff as a real-time application.

The delineation and assessment of source water protection areas provides the basis for many other municipalities and PWSs to develop local source water protection programs. DEP staff will continue source water assessments through the permitting process, sanitary survey process, and site-specific source water assessments for the previously considered low priority ground water systems.

For groundwater sources serving PWSs, the SWAP program will continue to rely on Pennsylvania's approved wellhead protection program (WHPP). The SWAP will also be coordinated with other existing local and state efforts designed to encourage the development of water systems in an efficient, cost-effective manner to protect public water supply sources from contamination. GIS technology will be used extensively for source water assessments and protection management and program integration.

## **C. Source Water Protection**

Pennsylvania's approved WHPP is a key component of DEP's source water protection efforts. The WHPP is based on statutory and regulatory requirements for water suppliers to find the best source available and to take those measures necessary to protect that source and ensure a continual and safe water supply. Wellhead Protection Areas (WHPAs) for all PWSs and sanitary surveys of these areas are established in regulation. Much of the authority and responsibility to protect public health and safety via source water protection is already in place in Pennsylvania through DEP programs and local government controls.

To further support and enhance Pennsylvania's WHPP, specific projects in the set-aside workplan include grants or contracts for:

- Education to promote the concepts of source water protection and development of local source water protection programs. Public education and involvement are crucial to developing an effective source water protection program.
- Municipalities and water suppliers to develop and implement local, voluntary source water protection programs. The original source water protection grants are now completed and resulted in the development of 88 DEP-approved local programs. To maximize efficiency, the grants were phased out and support was continued through the selection of a contractor through the Commonwealth's Request for Proposals process. This contractor is now responsible for assisting communities with the development of local source water protection programs in the future.
- The Pennsylvania Rural Water Association (PRWA) to provide additional technical assistance to small and medium size water systems to develop local wellhead protection programs. PRWA is providing public education and assistance in establishing a source water protection committee, conducting contaminant source inventories, developing management and contingency plans, and planning for inclusion of new sources in the program. PRWA is providing operator training on source water assessments and protection.
- The League of Women Voters - Community Education Fund to conduct outreach and support for development of community based education projects for local source water protection efforts, and for statewide education and promotion of source water protection throughout the Commonwealth.
- A Source Water Protection Guidebook to assist with the development of local source water protection programs. This workbook is available on DEP's web site and on CD.

Starting July 1, 2008, funding for the implementation of the state's WHPP is covered through the 15%, Other Authorized Activities. These activities were funded by DEP's federal Section 106 Water Pollution Control grant in the past. Transferal of these program activities to the set-asides resulted in a more effective use of both funding sources and helped resolve some shortfall problems with the Section 106 grant.

The Water Resources Planning Act (Act 220) was passed in November 2002. Act 220 requires the development of a State Water Plan by March of 2008, with subsequent revisions every five years. In developing this plan, it became obvious that there is a very strong link between the Source Water Assessment and Protection Programs, the Capability Enhancement Program, and the State Water Plan. The integration of these program elements is instrumental in insuring the long-term sustainability of Pennsylvania's drinking water infrastructure by providing a focus on the technical, managerial, and financial capabilities of drinking water systems within a watershed approach. For this reason, the state's Capability Enhancement Program was modified to incorporate a number of activities in this workplan, including the following:

- Transference of 7 of the 15 FTEs devoted to source assessment in the 10% set-asides to the 15% set-asides to achieve improvements in the technical and managerial capability of drinking water systems through the development and implementation of source water protection plans.
- Addition of 1 FTE in the 10% set-aside to DEP's Interstate Waters Office and 2 FTEs to DEP's Bureau of Safe Drinking Water to focus on water resource planning and protection efforts, such as the very successful Schuylkill Action Network. This section will also facilitate the development and implementation of the State Water Plan and the identification of critical water planning areas. These areas will then be the focus of more intense evaluation and plan implementation to protect the limited water resources in these watersheds. Starting on July 1, 2010, one of these positions was transferred to Southeast Regional Office as part of the Drinking Water Protection Initiative funded in the 15% set-aside due to a decision by the Bucks and Chester County Health Departments to no longer implement PWSS programs in their counties.

To accomplish this initiative, the state's Capability Enhancement Program strategy was revised and submitted to EPA for review in May 2008. This draft strategy was published in the *Pennsylvania Bulletin* on June 28, 2008. Comments were addressed and a final strategy was published in the *Pennsylvania Bulletin* on January 17, 2009.

In addition, a significant amount of work to implement surface water source protection initiatives is accomplished through the state's Filter Plant Performance Evaluation Program, Nonpoint Source Program, Chesapeake Bay Program, River Basin Commissions' projects, the development of Total Maximum Daily Loads (TMDLs) for identified impacted streams, and other state and local watershed management initiatives.

#### **D. Capability Enhancement**

As required by Section 1420 of the 1996 Amendments to the Safe Drinking Water Act, Pennsylvania's Capability Enhancement Program includes five phases of implementation:

- The *Assessment Phase* to identify and prioritize systems for participation in the Capability Enhancement Program and to identify initiatives to be implemented in more of a global context, rather than system specific.
- The *Comprehensive Evaluation Phase* to complete a detailed evaluation of the priority systems to identify the technical, managerial, and financial issues hindering the system's capability.

- The *Plan Development Phase* to work with priority system personnel, DEP Regional and Central Office staff, and appropriate assistance providers to develop a plan to address the issues found in the comprehensive evaluation.
- The *Implementation Phase* to implement the Capability Enhancement Assistance Implementation Plan.
- The *Reassessment Phase* to reassess progress made and to reprioritize systems for participation in the program.

A combination of 1452(g) and 1452(k) set-aside funds is used to bolster Pennsylvania's Capability Enhancement Program. Uses of these set-aside funds include:

- Contracts with the private sector or water supply related organizations to provide training and hands-on, site-specific technical, managerial and financial assistance to system owners and operators, including application of water treatment fundamentals, the application of affordable treatment technologies, and business planning techniques.
  - The use of DEP's wage payroll system to hire certified operators and others with specialized expertise on a part-time basis to provide training and hands-on, site-specific technical, managerial, and financial assistance to system owners and operators, including application of water treatment fundamentals, the application of affordable treatment technologies, and business planning techniques.
- Contracts for training course development and delivery and related software development.
- A contracts with private consultants to provide engineering expertise and assistance in the design and application of affordable treatment technologies; legal assistance to promote regionalization and consolidation concepts where appropriate; financial management assistance to develop appropriate rate structures, business plans, and long-term budgets; and technical assistance to implement asset management programs.
- The enhancement of DEP's Filter Plant Performance Evaluation Program and implementation of the Area Wide Optimization Program to prepare surface water systems for future regulations and identify factors that impair surface water system capability.
- DEP's participation in the national Partnership for Safe Water, a voluntary effort that seeks to encourage public water systems to assess their facilities, treatment processes, operating and maintenance procedures, and management oversight practices to identify weaknesses and set milestones for correcting weaknesses.

- Staff resources for the development and implementation of critical water planning area resource plans and source water protection initiatives such as the Schuylkill River Action Network.
- Staff resources for the integration of source protection activities with capability enhancement outreach efforts and to promote sustainable infrastructure principles.

## **E. Operator Training and Certification**

The goal of the Operator Certification Program is to maximize public health protection, compliance, and system operation through improvement of the knowledge, skills, and abilities of more than 5,100 drinking water system operators. There is a direct relationship to DEP's Capability Enhancement Program efforts by enhancing the technical competence of water system operators. A combination of 1452(g)(2) and 1452(k) set-aside funds is used to enhance the drinking water system operator components of this program, including:

- Contracts and grants for technical, financial, and managerial training for operators.
- The operation of the Penn State Harrisburg Environmental Training Center and the purchase of pilot and test equipment for hands-on training applications at the center. This effort is now completed.
- The implementation of the training approval process of courses for operators to meet the basic training and continuing education requirements of the program.
- The implementation of the Outreach Assistance Provider Program by hiring certified operators on a part-time basis to provide training and on-site, hands-on assistance.

### III. FUNDING AND WORKPLAN SUMMARY

Use of set-aside funds for each federal fiscal year with available funds is divided into the following categories:

	FY2007	FY2008	FY2009	FY2010	FY2011	FY2012	FY2013	FY2014
<b>1452(g)(2) Technical Assistance to Small Systems</b>								
(2%) Capability Enhancement		\$548,740		\$795,320	\$543,080		\$493,460	\$565,000
<b>Subtotal</b>	<b>\$554,380</b>	<b>\$548,740</b>	<b>\$0</b>	<b>\$795,320</b>	<b>\$543,080</b>	<b>\$0</b>	<b>\$493,460</b>	<b>\$565,000</b>
<b>1452(g)(2) Assistance to State Programs</b>								
(10%) Source Water Protection		\$1,273,419	\$1,392,994	\$1,374,929	\$567,937	\$760,065	\$506,765	\$635,495
Operator Training/ Certification		\$493,429	\$302,478	\$735,488	\$628,385	\$847,231	\$577,105	\$718,483
Capability Enhancement		\$976,852	\$1,048,228	1,866,184	\$1,519,078	\$1,816,405	\$1,383,429	\$1,474,022
<b>Subtotal</b>	<b>\$2,771,900</b>	<b>\$2,743,700</b>	<b>\$2,743,700</b>	<b>\$3,976,600</b>	<b>\$2,715,400</b>	<b>\$3,423,700</b>	<b>\$2,467,300</b>	<b>\$2,828,000</b>
<b>1452(k)(1) Other Authorized Activities</b>								
(15%) Source Water Protection		\$1,284,547	\$1,015,991	\$3,332,625	\$1,931,116	\$1,636,067	\$1,528,609	\$1,836,647
Operator Training/ Certification								
Capability Enhancement		\$2,831,003	\$1,868,459	\$2,632,275	\$2,141,984	\$2,308,483	\$2,172,341	\$2,405,353
<b>Subtotal</b>	<b>\$0</b>	<b>\$4,115,550</b>	<b>\$2,884,450</b>	<b>\$5,964,900</b>	<b>\$4,073,100</b>	<b>\$3,944,550</b>	<b>\$3,700,950</b>	<b>\$4,242,000</b>
<b>TOTAL Set-Aside Funds</b>	<b>\$3,326,280</b>	<b>\$7,436,190</b>	<b>\$5,628,150</b>	<b>\$10,736,820</b>	<b>\$7,331,580</b>	<b>\$7,368,250</b>	<b>\$6,661,710</b>	<b>\$7,635,000</b>

Expenditures using the previously reserved FY 2005 2% monies are now included in this workplan. The FY 2006 and 2007 2%, and the FY2005, 2006 and 2007 10% monies, were transferred to the Clean Water State Revolving Loan Fund. However, DEP reserves the right to reclaim future use of these set-aside funds. All of the FY 2009 2% and \$1,231,100 of the 15% will not be utilized as a set-aside and was allocated to projects.

The above spending amounts are as accurate as possible, but they may change depending upon the rate of expenditures that occur for spending categories (and activities within those categories) under each major set-aside. These amounts have been developed based upon the information contained in **Appendix A** of the workplan and portray the cumulative expenditure of set-aside funds in a spreadsheet format. The spending plan spreadsheets included with the workplan are organized on a state fiscal year basis (July 1 through June 30).

## **IV. PA's SET-ASIDE UTILIZATION FOR ALL GRANTS**

### **A. State Use of Prior Years' Unliquidated Obligations (ULO)**

All DWSRF set-aside grant funds currently awarded and outstanding, up to and including the FFY 2013 award, will be 100% expended by September 30, 2016. In the past, ULOs have occurred in Pennsylvania for the following reasons:

1. The Commonwealth of Pennsylvania furloughed DEP employees in late 2009. Additionally, hiring freezes, and travel restrictions within DEP have been alternately instituted and lifted over the past four years. As an interim measure, DEP shifted staff resources to accommodate public health priorities within the Safe Drinking Water Program, which adversely affected DEP's ability to complete set-aside outputs and activities.
2. DEP staff have devoted a considerable amount of time to working through cumbersome contractual procedures within the Commonwealth. Additionally, DEP devoted time to resolving contract issues related to program development, implementation, and program management.

To remedy existing ULOs, DEP's reorganization in 2012 has enabled program managers to more efficiently focus efforts on set-aside outputs and activities in the statewide Safe Drinking Water Program. Additionally, except for a temporary hold between November 2013 and February 2014, federal set-aside vacancies are now excluded from state hiring freezes, and travel restrictions have been lifted. Furthermore, program development for most contracts is now complete, and program managers and contractors are now focusing on implementation and drawdown through contracted activities within the set-asides.

Going forward, Pennsylvania will accelerate spending and/or utilize other tools (e.g., reduce the amount requested in set-asides applications) to achieve EPA's two-year expenditure policy.

## V. COMPLETED CONTRACTS AND GRANTS

	<b>Contractor/Grantee</b>	<b>Start Date</b>	<b>Date Complete</b>	<b>Final Cost</b>	<b>Brief Description</b>
<b>1452(g)(2) 2% Technical Assistance to Small Systems</b>	Pennsylvania Rural Water Association (PRWA)	Oct-98	Jun-03	\$952,119	Assist small systems with leak detection
	Rural Community Assistance Programs (RCAP)	Oct-98	Jun-07		Assist small systems with rate structure, budgeting, capital improvement planning
	Alfred Benesch		Oct-08		Engineering Services Program
<b>1452(g)(2) 10% Assistance to State Programs</b>	Susquehanna River Basin Commission (SRBC)	July-98	Sep-99	\$81,563	Pilot watershed protection plan for Swatara Creek
	Clean Water Action	Mar-98	Dec-98	\$55,167	Conduct source water assessment workshops
	Lehigh Valley Water Suppliers Assoc.	May-00	Jun-01	\$145,974	Public education & protection of source water protection
	Centre County Planning Commission	July-01	Jun-02	\$61,600	Troubled systems emergency operation program
	Environmental Protection Agency	Nov-08	Nov-10	\$223,051	Intergovernmental Personnel Agreement, K.R.Young
	JPL Productions, Inc.	Aug-06	July-11	\$550,917	Design, develop, and deploy web-based training courses
	Community Water Systems (Surface Water)	July-01	June-10	\$1,074,611	Source Water Protection Grants (Watershed Protection)
<b>1452(k)(1) Delineate and Assess Source Water Protection Areas</b>	US Geological Survey (USGS)	Jan-00	Apr-01	\$28,800	Develop time of travel to delineate SWA zones on >100 sq. mi. watersheds

	Susquehanna River Basin Commission (SRBC)	July-02	Jun-03	\$289,000	Develop models for early warning / spill detection system
	Spotts, Stevens and McCoy (SSM), Reading, PA	Mar-01	Jun-03	\$530,162	Conduct assessments for select surface water sources in PA
	Interstate Commission for the Potomac River Basin (ICPRB)	July-02	Jun-03	\$24,000	Source water assessments for the Potomac River Basin
	City of Erie	July-02	Jun-03	\$11,741	Source water assessments for Lake Erie at two locations
	Philadelphia Water Department (PWD)	July-00	Jun-03	\$140,000	Source water assessments in the Delaware R. basin
	Philadelphia Water Department (PWD)	Mar-00	Jun-03	\$402,500	Source water assessments in the Schuylkill R. watershed
	Susquehanna River Basin Commission	July-00	Jun-03	\$608,000	Source water assessments in the lower Susquehanna R. basin
	Env. Resource Research Inst., Penn State Univ. (ERRI)	Jan-99	Aug-03	\$982,112.00	Digital mapping and GIS training for DEP staff
	Barry Evans, Penn State University  Michael Anderson, Spatial Information Tech.	Feb-11	July-12	\$41,984	Phase 2-Developing a GIS web application
	Delaware County Conservation District	Aug-99	Nov-01	\$55,400	Pilot source water plan to protect intakes on Crum Creek

	Ohio River Valley Sanitary Commission	July-02	Aug-03	\$795,257	Develop models for early warning/spill detection
	City of Philadelphia	July-02	Sep-03	\$725,000	Develop models for early warning/spill detection
	City of Philadelphia	July-03	Sept-04	\$50,000	Operate and maintain early warning system
	Susquehanna River Basin Commission	July-03	Aug-04	\$50,000	Operate and maintain early warning system
	Ohio River Valley Sanitation Commission	July-03	Aug-04	\$75,000	Operate and maintain early warning system
	Water Center at Montana University	Aug-00	May-02	\$36,000	Workbook, CD and web page to provide technical assistance for local source water planning programs
<b>1452(k)(1)(B) and (D) 15% Other Authorized Activities (continued)</b>	PA Rural Water Assoc.	Jan-98	Jun-03	\$572,898	Provide technical assistance to develop local WHP programs
	PA Rural Water Assoc.	July-03	June-08	\$778,811	Provide technical assistance to develop local WHP programs
	PA Section American Water Works Association	June-04	July-08	\$280,338	Partnership for Safe Water project
	Computer Software Development (Berkeley Computer Training)	Jan-01	Jun-01	\$20,674	Enhance DEP ability to deliver quality operator training
	Computer / Web-Based Training (Langevin Learning Services)	Mar-01	Jun-01	\$36,100	Enhance DEP ability to deliver quality operator training

	Association of Boards for Certification	July-02	Jun-04	\$28,000	Develop Exams for Operator Certification
	Aquaterra	July-01	Jun-05	\$413,587	Tracer Studies of Chlorine Contact Time for Small Systems
	PA State Association of Township Supervisors	May-01	Apr-06	\$2,069,007	Provide operator training support services
	Click 2 Learn; SumTotal Systems	Nov-02	Jan-06	\$90,488	Provide hosting services for DEP's EarthWise Academy
	WTP Tracer Studies		Jun-08		
	Alfred Benesch		Oct-08		Engineering Services Program
	Penn State University Training Center	July-99	Jun-03	\$716,444	Support operation of training center and purchase of training equipment
	Penn State Training Center	June-03	June-08		Support operation of training center
	Community Water Systems (Ground Water)	July-01	June-10	\$2,563,183	Source Water Protection Grants (Wellhead Protection)

## VI. CANCELLED CONTRACTS AND GRANTS

Funding Source Contractor / Grantee	Brief Description	Reason for Cancellation
<b>1452(g)(2) - Assistance to State Programs [10%]</b>		
USGS Water Resources Division	Early warning system for spills	Tasks to be incorporated into grants/contracts for various watersheds
Associations, Organizations, Community Colleges and Universities	Expand and coordinate delivery of DEP training services	Response of stakeholders indicated grant money was not needed for this purpose
DEP Bureau of Information Services	Data management system for operator certification activities	Funding not needed; work was completed with existing resources
Professional Facilitator	Assistance a public meetings for source water assessment	Assistance not required
Transfer Technologies through Computer Aid, Inc. and Remote Learner	Earthwise Academy Maintenance	Assistance not required
<b>1452(g)(2) - Technical Assistance to Small Systems [2%]</b>		
N/A		
<b>1452(k)(1) - Delineate and Assess Source Water Protection Areas [10% FY97 Funds]</b>		
Commercial Lab	Task incorporated with other projects	
Commercial Lab	Task incorporated with other projects	
Various Consultants & Academic Institutions	Tasks incorporated with other projects	

<b>1452(k)(1)(B) and (D) - Other Authorized Activities</b> <b>[5% FY97 Funds, 15% FY98 and beyond]</b>		
Municipalities, Water Systems	Grants for regionalization and consolidation of small systems	Funds to be applied to Small Water Systems Engr. Services contract
Small Water Systems	Grants for small systems to use new and alternative tech.	Funds to be applied to Small Water Systems Engr. Services contract
Computer Training Network	Loan surplus computers to small water systems	DEP software license did not allow loaning out hardware with Windows software installed