



## Raymond H. Myers, P.E., BCEE

### Education

*Bachelor of Science - Water Resources*  
Pennsylvania State University, 1973

### Professional Experience

*Principal Engineer (1979 to Present) -*  
CET Engineering Services,  
Huntingdon, Pennsylvania

*Sanitary Engineer (1975 to 1979) -*  
Gannett, Fleming, Corrdry &  
Carpenter, Inc., Harrisburg,  
Pennsylvania

*Operations Supervisor (1973 to 1975) -*  
City of Harrisburg Wastewater  
Treatment Facilities, Harrisburg,  
Pennsylvania

American Arbitration Association:  
Appointed to Panel of Arbitrators,  
1988-2000

### Professional Registration

Professional Engineer: PA, NJ  
Board Certified Environmental Engineer

### Professional Societies

PA Water Environment Association -  
President, 1990; Secretary, 3 years,  
Board of Directors, 12 years

Water Pollution Control Association of  
Central Pennsylvania Central  
Section - President, 1985; Secretary,  
3 years

Water Environment Federation - MA  
Leader, 1999-2003

PA Organization of Watersheds and  
Rivers, Board of Directors, 1997-  
2003

National Society of Professional  
Engineers - current member

Pennsylvania Society of Professional  
Engineers - current member

### Publications & Presentations

"CSO's - Considerations Facing  
Consulting Engineers", Testimony  
before the PA Joint Legislature and  
Water Pollution Control and  
Conservation Committee, Oil City,  
PA, 2001

"Trickling Filter - Ten Years of  
Experience at Huntingdon, PA",  
PWEA PennTec 2001 Conference,  
2001

### Profile

Since 1973, Mr. Myers has devoted his career to all phases of public works engineering, with an emphasis on municipal and environmental engineering. He is a registered professional engineer and has previous experience as a certified wastewater treatment facilities operator. He has participated in and supervised all aspects of project engineering from planning through design to start-up and financing.

While specializing in the water supply and wastewater facet of civil engineering, Mr. Myers has presided, as project manager, over numerous successful municipal projects, including layout of ball fields, street repaving, curb and sidewalk replacement, municipal building improvements, stormwater conveyance improvements, and park planning and design. He is currently overseeing and/or mentoring municipal engineering for the Borough of Huntingdon and Tyrone, plus Bedford Township.

With respect to funding of projects, Mr. Myers has provided engineering assistance on public financing for projects in the form of grants and loans from PennVest, U.S. Environmental Protection Agency, U.S. Army Corps of Engineers Sections 504 and 313 Water Resources Development funds, Rural Utility Service, PA Department of Community and Economic Development CDBG funds, PA Department of Environmental Protection capital grants programs, major user capital contributions, conventional bond issues and bank loans. In most of the cases, multiple sources of financing were used.

Mr. Myers has trained personnel and conducted facilities start-ups and performance evaluations at treatment facilities ranging in size from <100,000 gpd to >35,000,000 gpd. He has managed water and wastewater treatment projects from the most basic of planning efforts in project conception to complete project execution. In addition, he has overseen the preparation of 35 Comprehensive Sewage Facilities Plans (Act 537 Plans) on projects ranging in cost from \$1,000,000 through \$20,000,000.

### Project Achievements

Borough of Huntingdon, Huntingdon, PA. Borough Engineer. Overseeing planning and design of 4 MGD \$20,000,000 improvements project. \$10,000,000 water system facilities renovations, 1993. \$1,000,000 Allegheny Street combined sewer separation project. Design and construction of Portstown Park improvements, streetscape project with construction value of \$300,000. Review of subdivision and land development plans. Act 167 storm water management plan for Muddy Run watershed. Borough Engineer since 1992.

"Financing Municipal Projects", PWEA PennTec 2000 Conference, June, 2000.

"First Annual WPCAP/Penn State Operator's Short Course" - Instructor, August, 1991.

"Huntingdon Upgrades Its Wastewater Treatment Facilities", WPCAP Magazine, 1990.

"Permit Applications for Sewage Sludge", WPCAP Operator Training Session, 1989.

"Outreach Operator Training in PA", WPCAP Magazine, 1984.

"Certification of Wastewater Operators", WPCAP Magazine, 1980.

"Land Application of Sewage Sludge", WPCAP Operator Training Session, 1979.

"Anaerobic Digestion Control Strategies", WPCAP Operator Training Session, 1978.

"Plant Start-Up Methods", WPCAP Magazine, 1978.

"Sludge Composting", WPCAP Magazine, 1977.

"Mass Balance Approach to Plant Operations", WPCAP Operator Training Session, 1977.

"Sludge Metals/Land Application", WPCAP Operator Training Session, 1974.

### Honors and Awards

Water Pollution Control Association of Central Pennsylvania - Outstanding Service, 1982; Past President, 1986.

Water Pollution Control Association of Pennsylvania - Ted Moses High Hat Award, 1987.

Water Environment Federation - Outstanding Service, Past President, 1990.

Water Environment Federation - Bedell Award, 1993.

Water Environment Federation - Directors Award, 2003.

McConnellsburg Sewerage Authority, McConnellsburg, Fulton Co., PA. Project Manager. Since 2007, overseeing planning and design of a \$7,000,000 nutrient plant improvements project. Beginning in 1992, prepared an Act 537 planning for three contributing municipalities, that led to the expansion and upgrade of the 1969 wastewater treatment facilities including complete nitrification, addition of fine bubble aeration, final clarification, and sludge digestion. Engineering services since 1992.

Borough of Tyrone, Tyrone, PA. Principal Engineer. Evaluating nutrient removal alternatives for a 9 MGD conventional activated sludge wastewater treatment facility. \$12,000,000 wastewater treatment facilities - design of 9 mgd activated sludge facilities. Water treatment and 14,000 LF water line replacement project. Review of subdivision and land development plans. Borough Engineer since 1992.

Chestnut Ridge Area Joint Municipal Authority, New Paris, PA. Principal Engineer. \$15,000,000 wastewater conveyance and treatment facilities; design 1996, construction 1998-2001. Included 180,000 LF of sanitary sewer and 0.9 mgd activated sludge treatment facilities, plus 6 remote pumping stations. Also, Phases IV & V, 110,000 LF, \$7,000,000 sewer extension project.

Curwensville Municipal Authority, Curwensville, PA. Principal Engineer. Evaluating nutrient removal alternatives for a 1 MGD rotating biological contactor wastewater treatment facility. \$2,000,000 sanitary sewer overflow elimination project, including flow equalization and sewer system rehabilitation by sliplining mainline sewers and installing new house laterals. General engineering services since 1992.

Logan Township, Blair County, PA. Principal Engineer. Sanitary sewer system engineering, including Brush Run interceptor relief sewer line, Weaver Street sanitary sewer system extension, Lakemont Corrective Action Plan, and re-rating of 1.1 MGD SBR wastewater treatment facility. Appointment since 2004.

Project Engineer and/or Sanitary Engineer on over 100 other engineering assignments, including start-up, training, and troubleshooting at dozens of wastewater treatment facilities.

Testimony to House of Representatives  
Intergovernmental Affairs Committee

**ARRA Project Funding Experience**

Public Hearing of December 10, 2009  
Harrisburg, Pennsylvania

Provided By:

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Huntingdon, PA 16652

## **Introduction**

Good afternoon, members of the Intergovernmental Affairs Committee and honored guests.

For the past 25-years, I have actively provided consulting engineering services to the Borough of Huntingdon, Huntingdon County PA. Huntingdon was recently awarded stimulus funds for its wastewater treatment facilities project. Borough Council has given me permission to share their experiences to date, which I believe will help you understand what is happening in the early stages of the use of these funds.

## **General Project Description**

The Borough of Huntingdon owns and operates a wastewater treatment facility that serves five municipalities and two state correction institutions. It is one of the Tier One treatment facilities that is mandated to remove nitrogen and phosphorus to protect the Chesapeake Bay. Huntingdon was formally notified of this mandate by a change in its discharge permit in September 2007.

In early 2008, the Borough developed a plan to add nitrogen and phosphorus removal technologies, plus replace worn out equipment and tanks from its original facilities that were built in 1964 and added to in 1988.

While the Borough embarked on the project planning and design in 2008 before the Stimulus program was envisioned, as a cost savings measure, it took steps to shorten the project construction period by purchasing long lead-time equipment in advance so it could be installed by a contractor with a minimum of delay. In late 2008 and early 2009, ten contracts were let to buy equipment worth about \$2,500,000.

The Borough also issued \$10,000,000 worth of general obligation bonds in August 2008. These were used to pre-buy the equipment, pay for engineering designs and set aside for other project expenses. Once the Stimulus funds were announced and shovel-readiness was key, having a local match in hand and equipment ready to go proved valuable.

## **Project Funding and Schedule**

The total cost of the project is about \$18,600,000. It is being funded through a \$5,000,000 H2O grant from the Commonwealth Financing Authority, a \$5,975,000 ARRA grant from PennVest and a \$7,625,000 local contribution from the bond issue.

The project schedule is as follows:

Bids opened	July 2009
Construction started	October 2009
Estimated completion	March 2011

At this time, the contractor is mobilized and work has started.

### **Project Oversight and Evaluation**

To date, no specific guidance has been received from the Commonwealth Financing Authority regarding use of their grant funds. An agreement has been signed between CFA and the Borough, but the funds are not accessible at this time. Guidance is expected any day.

PennVest, on the other hand, has set forth certain requirements with respect to the Stimulus funds, including:

1. The approval of, and application of Davis-Bacon wage rates for all contracts, including sub-contracts
2. Tracking of hours and wages of anyone connected with the project including administration, legal, engineering and other non-construction staff
3. Obtaining ARRA Buy American certificates on all goods brought to and incorporated into the project

### **Our Experience**

From our point of view, as an engineer attempting to manage traditional construction projects and meet new oversight requirements (many of which are still in the process of being refined), there have been a few challenges worth mentioning.

1. Firstly, implementation guidance has not kept pace with the projects. There is uncertainty as to how to correctly comply with every aspect so there will be no findings upon project auditing. Questions asked of staff are always courteously addressed, but more times than not, cannot be answered immediately because many of our questions are being asked for the first time.

It is our belief that staff is unfamiliar with the construction contracting process and especially so for treatment plant projects. Their main point of reference seems to be water and sewer line construction projects which are very simple compared to a treatment facility project.

Some guidance uncertainties that we have as of this date include:

- a. What constitutes proper Buy American documentation?
  - b. Just what does job creation and retention mean in these construction projects?
  - c. How far into the process does one go to track jobs? Does it end with the general contractor? What about subcontractors? What about the equipment or materials assemblers or manufacturers? Does this extend to the raw materials developers, or even the raw ore excavators?
2. With respect to the use of the Davis-Bacon wage rates, other state agencies such as DCED in its CDBG program, require the use of Davis-Bacon wage rates and have policies and procedures in place to do so. It seems that DEP/PennVest created their own policies and procedures (i.e., DEP approving specific rates for a project/contract). One of the most difficult DEP/PennVest steps to implement was obtaining subcontractor certificates of rates prior to loan closing, when the general contractor did not have a signed contract with the Borrower, and it was premature, by standard construction contract procedures, to obtain this information from subs that were not even selected by the general contractor. This has only added to the confusion and uncertainty to the implementation process.
  3. An additional issue that has recently come up is that it is becoming evident that due to dwindling nationwide inventories, there is a lack of certain critical items that are part of treatment plant projects. A recent example is 30-inch diameter ductile iron pipe elbows. According to Huntingdon's contractor, he was informed by a supplier of pipe and fittings that only five of these elbows were in the nation's inventory last week. We have a project that needs six. Manufacturers

are unable to gear up cost effectively to manufacture one or two elbows, but to keep their costs as low as possible, must make dozens. Thus, they must wait for orders.

4. On treatment plant projects where there may be hundreds of purchases, contractors are spending a great deal of time chasing down ARRA documentation compliance. And, they are finding late in the game that some items are just not American-made. Recently, a contractor was informed by suppliers, that there are no door locksets made in America. Apparently, even traditional, long-time American companies, only offer imported sets that are only "packaged" in America.
5. As examples of costliness on Huntingdon's project:
  - a. The Borough pre-purchased 7 pumps at a cost of about \$280,000 just before the Stimulus Act came into play. In order to comply with the PA Steel Products Procurement Act, the Swedish pump company bought American steel and shipped it to Sweden for incorporation into the pumps. Once the Stimulus Act was passed, the Borough, in order to have the pumps assembled in America and not in Sweden, had to pay an additional \$25,000 for the extra assembly/wage costs so an ARRA certificate could be issued.
  - b. The Borough has budgeted about \$50,000 to manage the grant and all of the attending monitoring that is required with the program.

The question will probably be asked: "Did the ARRA funding for the Huntingdon project save or create jobs?" The Huntingdon contractor informs us that they will devote about 15 of their existing, full time personnel to this project. We were told that if the Huntingdon project were not in play, those people would probably have been laid off until other work was obtained. CET used the equivalent of four of its existing staff to design the project and anticipates using two during construction.

As noted previously, the mandate that the Borough do this project was set forth in 2007. Huntingdon was on pace to comply with the project and had planned to fund it locally when the Stimulus Funding became available. Whether the Stimulus Funding is responsible for the jobs mentioned above is for others to determine.

It could be said, I believe, that the ARRA grant has saved the customers of this facility from additional borrowing, and thus results in additional disposal income being available to them, which may assist in stimulating the local economy.

I thank you for your time and would be pleased to answer any questions.