SUSTAINABLE WATER INFRASTRUTURE TASK FORCE PUBLIC INPUT SESSION Wednesday May 28, 2008 Bethlehem, PA

"Good afternoon – my name is George Myers. I am the Superintendent of the Milton Regional Sewer Authority (MRSA), a regional wastewater collection, conveyance, and treatment municipal authority serving approximately 3100 customers in the Borough of Milton, and three surrounding townships. Currently four additional adjacent municipalities are considering sending some, or all of their wastewater to the Milton Regional Sewer Authority. All of these municipalities are located in Northumberland County.

I am a licensed wastewater treatment plant operator and a member of the Borough of Millville Municipal Authority in my hometown. I have been employed in the wastewater field since 1987 and at the Milton facility since 1991.

I appear today to speak to you about three issues, first the recent rate restructuring initiative we undertook at the Milton Regional Sewer Authority. This effort increased our sewer rates across the board for several customer classes and incorporated for the very first time a capital reserve component. Second, I want to describe to each of you, Milton's Wastewater to Energy project which will allow the Milton Regional Sewer Authority's wastewater treatment plant to become the world's first POTW to be a net generator of electrical energy. Lastly, I would like to briefly discuss my concerns with our aging water and wastewater operations and maintenance professionals and the need to seriously consider how these personnel are going to be replaced in the relatively near future.

As I just mentioned the most recent sewer rate increase for the Milton Regional Sewer Authority not only included a rate hike to cover the typical increasing costs of operations and maintenance, but also incorporated for the very first time a new capital reserve component. The reason this issue is important is that it would appear that in order for future municipally owned water and wastewater treatment plants to upgrade, expand, and/or replace a facility that has lived a useful life, these facilities will no longer be able to count on receiving large amounts of grant funding for the construction of these facilities. Grant funding has typically been the case in the past with most municipal WWTP's receiving 75 to 85% grant funding from the EPA's construction grants program in the mid 1970's. As these facilities continue to age and come to the end of their useful life, most municipalities are faced with the significant task of upgrading and/or replacing their existing facilities. In addition, new compliance requirements such as the Chesapeake Bay Tributary Strategy will surely drive the costs of these projects even higher. In the past, municipalities have come to rely on, and even boldly assume that they were somehow "entitled" to grant

monies when undertaking any major water or wastewater construction project. This has apparently worked in the past, however, as many can see, the days of receiving significant funding for either water or wastewater construction projects appears to be something of the past. With this in mind municipalities will have two choices, either to plan ahead and implement a capital reserve component within their billing structure or take the traditional "wait and see what, if any, grant funding will be available from the state and federal governments when the time for construction actually arrives" approach. In these days of fewer and fewer grant programs, political talk of the "evil of project earmarks", combined with the fact that more and more municipalities are clamoring for those same few grant funds, it is unlikely that any of us will actually see a huge portion of our capital projects paid for with grant funds. With this said, it would appear that successful planning for future municipal construction projects should include some sort of capital reserve fund built into the existing rate structure. One can only imagine what our current financial circumstances would be like, had municipalities implemented a significant capital reserve fund 50 or so years ago, let alone in the mid 1970's.

The next item I would like briefly discuss is Milton's Wastewater to Energy project (or Ww2E as it has been nicknamed) which will allow the Milton Regional Sewer Authority's wastewater treatment plant to become the world's first Publicly Owned Treatment Works to be a net generator of electrical energy. This is planned to be accomplished by utilizing anaerobic treatment to break down a significant amount of high strength wastewater from a large local food manufacturing customer. This anaerobic treatment process will result in the production of a significant amount of biogas (containing mostly methane) that can then be utilized in a Caterpillar type of GenSet engine to produce electricity. We plan to utilize only about ½ of the total amount of electricity which we will produce, thus allowing us to sell the remaining electricity to the grid. Additionally, since internal combustion engines are only 30% or so efficient, there is a considerable amount of "waste heat" which will result from the electrical generation process. This waste heat is then planned to be utilized in conjunction with a belt dryer to dry sewage sludge up to 95% solids. This dry product can then be utilized by facilities which have the capabilities of burning the dried sludge for its BTU value, or could possibly be used as a soil amendment, or even included as a constituent in fertilizer. As is the case with most construction projects, the costs of this project are planned to be very significant, however so are the resulting estimated cost savings for electricity, sludge disposal, and a number of other O & M related line items. Should anyone like a brochure describing the Ww2E Project, I did bring a few with me – please see me afterward.

The last item I would like to discuss with you today is the issue of my concerns with our aging water and wastewater operations and maintenance professionals and the need to seriously consider how these personnel are going to be replaced in the relatively near future. A significant number of our water and

wastewater employees, at all levels, will be eligible to retire within the next 5 to 10 years. Remember that a considerable number of these long term employees were initially hired in the mid 1970's at the same time the EPA construction grants program was helping to complete a huge number of wastewater facilities, all of which required additional operations, maintenance, supervisory, and management employees in order to properly operate these facilities. Currently there seems to me to be a serious lack of interest for younger folks to select a career path which involves either the water and wastewater fields. Other than an occasional article in a trade publication, I have seen very little to promote the water/wastewater field as a positive career option to young people. It is my belief that without a significant effort on the part of the PA DEP, we will all be faced with a severe shortage of "qualified" water/wastewater staff to successfully design, operate, maintain, and manage our existing facilities, not to mention the "high tech" facilities which are currently being designed and will be constructed within the next several years. I truly believe that the PA DEP must work with community colleges, and even local high school guidance counselors in an effort to "get the word out" that choosing a career path with the water & wastewater industry can be satisfying, fulfilling, and a rewarding experience. I would also strongly suggest to the PA DEP that the Department seriously consider implementing a tuition reimbursement program and a job placement assistance program in an effort to guarantee the supply of qualified water/wastewater treatment personnel in order to meet the requirements of the future.

As for our part as local municipal entities we should encourage and support internship programs at our facilities. We should also encourage local high school and/or college level facility tours in an effort to increase public awareness and perhaps generate some career interests for these young people as they plan to enter the workforce. This challenge to develop and maintain a highly qualified and competent staff for our water and wastewater treatment systems may well be the single most overlooked and important issue facing our industry both now and in the near future.

I thank you for your time."

Testimony written and presented by:

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