



September 17, 2012

VIA ELECTRONIC MAIL

Honorable Representative Tom Creighton
Chairman House Local Government Committee
416 Irvis Office Building
P.O. Box 202037
Harrisburg, PA 17120-2037

Amendment of the Municipal Authorities Act
Testimony for the House Local Government Committee
By Mark Derham Bowen, P.E., CFM

Dear Honorable Chairman and Honorable Members of the House Local Government Committee:

My name is Mark Derham Bowen. I am a Registered Engineer in five states, a Certified Floodplain Manager, a Water Resource Engineer with Kleinschmidt Associates, and Chairman of the Pennsylvania Stormwater Technical Workgroup (PaSTW). PaSTW is dedicated to bringing good science to stormwater implementation, and I have also dedicated my 17 years of municipal and design engineering to that same goal.

I am here to encourage you to send legislation to the House floor that would define stormwater management as an acceptable reason to form a Municipal Authority. From an engineering perspective, existing Municipal Authorities generally are better equipped to handle sewer and water engineering and construction than their member townships. Now that implementation of the Municipal Small Separate Storm Sewer (MS4) Phase II stormwater management program has become a reality for Pennsylvania, the type of expertise that can be offered by Municipal Authorities is needed, in my opinion, for stormwater management.

My testimony is limited to the affect of the MS4 Phase II program on Pennsylvania's urban areas, and to why the implementation of the MS4 Phase II program may warrant amending the Municipal Authorities Act to allow the formation of an authority for the sole purpose of handling stormwater management.

THE MUNICIPAL SMALL SEPARATE STORM SEWER PROGRAM, PHASE II

The MS4 Phase II program is the latest in a string of stormwater related programs that have grown out of the Federal Clean Water Act. For smaller municipalities in "Urban Areas" that do not have combined stormwater and sanitary sewer outfalls (CSOs), it is arguably the most burdensome yet.

"Urban Areas" are defined by the Federal Government based on the number of people living within a region as determined through review of census numbers. In general "Urban Areas" are clusters of dense population spread throughout a state. The MS4 Phase II program requires "Urban Areas" to develop a stormwater management program that includes such things as illicit discharge detection, reductions in

pollutant loads, and erosion and sediment control, among other things. In many other states federally defined "Urban Areas" include only one municipal entity such as a county. In Pennsylvania individual "Urban Areas" include many municipalities, and this leaves our municipalities at a distinct disadvantage in meeting the requirements of the MS4 program because there could be significant cost savings if one entity addressed the problem of the "Urban Area" as a whole.

There are 24 defined "Urban Areas" within Pennsylvania. The "Urban Area" in Allegheny County includes 129 MS4 municipalities. There are over 40 MS4 municipalities within the "Urban Area" surrounding the City of Lancaster, and there are over 60 in Chester County. Because there are so many municipalities involved in each defined "Urban Area" within the state, the ability to form a Stormwater Municipal Authority will help level the playing field for Pennsylvania municipalities by allowing a larger entity to implement the MS4 Phase II program similar to other states.

ARE TOWNSHIPS PREPARED FOR THIS PROGRAM?

Recently, I reached out to approximately 100 municipalities across Pennsylvania to determine how well they were prepared for the submission of their application for permit coverage under the MS4 Phase II program that was due at the Pennsylvania Department of Environmental Protection's offices Friday, September 14, 2012. All MS4 communities that I spoke with stated they would have difficulty complying with the condition of the permits for one or more of the following reasons:

1. Lack of available funds
2. Lack of understanding of the requirements
3. Lack of time to dedicate to the program
4. Lack of land available to construct the required stormwater improvements

Part of the reason many municipalities are not prepared for implementation of this program is because it is a complicated undertaking. The form they filed last week is called the National Pollution Discharge Elimination System (NPDES) Stormwater Discharge from Small Municipal Separate Storm Sewer Systems (MS4s) Permit Application. Some communities filed what are called General MS4 Permit Applications (PAG-13) and some filed Individual MS4 Permit Applications. Individual Permits are slightly more involved than a General Permit and are required for those communities in High Quality and Exceptional Value watersheds. The General Permit Application has 147 pages. I didn't count the number of pages in the Individual Permit Application. These permits must be renewed every 5 years. Progress reports are required to be submitted to PADEP in the first and third years of the permit cycle. In addition, approximately 415, or about half, of the MS4 communities that file the application for a permit are required to produce Total Maximum Daily Load (TMDL) Load Allocation Reduction Plans (for impaired watersheds) or Chesapeake Bay Pollutant Reduction Plans. With TMDLs or a Chesapeake Bay Plan included in the process, this is a complex program that may be too much for many municipalities.

Load Allocation Reduction Plans must include the design, construction and maintenance of Best Management Practices (BMPs), also known as stormwater management infrastructure, that will be needed to treat stormwater to reduce pollutant loads. The cost and complexity of these BMPs is dependent on the type of load reductions that is required in a specific impaired waterway; each receiving waterway has different and sometimes complex requirements. Pollutant loads of Total Suspended Solids (TSS), Nitrogen, Phosphorus, and others must be reduced by each MS4 community in an impaired watershed. In addition, similar requirements must be implemented by sewer plants and farmers that are in the same watershed, but the requirement is regulated under separate programs. Stormwater Municipal Authorities could, like Sanitary Sewer Municipal Authorities do currently, address the engineering, design, and

maintenance of the BMPs needed to address the Load Allocations assigned to their participating MS4 communities.

THE COST

MS4 communities within impaired watersheds that have reported projected costs to build BMPs to me anticipate between \$300,000 and \$700,000 expenses for the first 5-year permit cycle. In general, these communities did not include the cost of staff time in their estimates. Most did not include capital expenses (such a street sweepers) either. This estimated 5-year cost is close to the average annual cost of operating a public works department within Pennsylvania (2010 average annual cost \$506,199). A Municipal Authority that includes several MS4 communities could afford to dedicate staff to a program of this size producing efficiencies that the individual municipalities may not.

MUNICIPAL AUTHORITIES ARE BETTER EQUIPPED

It has been my experience that Municipal Authorities are generally better equipped to deal with complex regulatory programs such as this one. Combining several municipalities under one Municipal Authority would reduce the cost of preparation of the application, preparation of Load Allocation Plans, and reduce the application fees, annual fees, and reporting fees that are required by this program. Municipal Authorities generally experience a savings in operation costs due to the larger scale of their operation than any single municipality. A Municipal Authority may be better able to manage the engineering and construction of stormwater management infrastructure. In addition, there are long-term operation and maintenance requirements that an authority is better prepared to handle.

TAX VS. FEE

If municipalities move forward with implementation of the MS4 program, like cities with CSOs that have moved forward with a Long Term Control Plan, either a tax or a stormwater fee will likely be required to meet the anticipated expenses. Legal precedents established across the country require that fees for stormwater charged by stormwater authorities or utilities must be based on actual anticipated cost, and there must be a way for users to reduce or eliminate the fee. This is not the case with taxes. Taxes are available for general expenditures, and might not be used for stormwater. For this reason alone, it may be better to allow the formation an authority so that the cost of stormwater is transparent.

It is unclear how a tax would be levied by municipalities to meet the anticipated expenses, but if the current tax on wages is increased by the townships, the burden will be unfairly placed on the working. Another method of raising revenue could be based on taxing property. Recent analysis produced by the University of North Carolina showed the cost of stormwater fees is lower for homeowners than a tax would be. This is in part due to the tax structure in North Carolina being based on real estate value, but the spreading of the cost to all generators of stormwater runoff is also a factor that reduces the rates to homeowners.

COSTS AND BENEFITS

Finally, the advances in stormwater technology over the past few decades have improved the value of homeowners' real property by improving the environment near homes and community parks. The improvement of water quality has reduced the cost of treatment for drinking water. Cleaner water is producing jobs in tourism, construction, and engineering. Most importantly, better stormwater management reduces flooding damage. These are some of the benefits of stormwater management; and allowing Stormwater Authorities to be formed under the Municipal Authorities Act is, in my opinion, the most efficient way to meet the anticipated continuing costs.

CONCLUSION

In conclusion, many of the 24 "Urban Areas" in Pennsylvania have more than 40 municipalities in them that require similar stormwater management and could benefit by the formation of a Municipal Authority. The cost for the MS4 Phase II program may be between \$300,000 and \$700,000 for many communities. The benefits of the improved stormwater management include: increased property value, jobs added to the economy, and the protection from flooding. All of these benefits cost money. It is likely that allowing the formation of authorities for the sole purpose of managing stormwater could hold down the cost for homeowners by producing economies of scale and distributing the costs to stormwater generators. Stormwater Municipal Authorities could more equitably and efficiently implement a program of this size. From an engineering perspective, allowing legislation to go to the House floor to amend the Municipal Authorities Act to allow the formation of Stormwater Municipal Authorities would enable a more professional approach to the implementation of the MS4 Phase II program. Thank you.

Sincerely,

KLEINSCHMIDT ASSOCIATES



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