2783

Pennsylvania Council of Professional Geologists
116 Forest Drive
Camp Hill PA
717-730-9745

November 30, 2009

PCPG Comment Summary – Draft Amendment to 25 Pa. Code Chapter 102

The Importance of Site Characterization

There is much concern within our membership regarding inclusion of 2-yr storm criteria without regard for the project's physical setting, especially when infiltration to groundwater is a primary project objective. To that end, the establishment of Site Characterization requirements above and beyond what is currently in the BMP manual is essential.

Appendix C of the current BMP manual provides guidance for conducting "desktop" assessments of soils and geologic conditions, and encourages designers to consider site conditions early in the process. Detailed descriptions are provided for conducting percolation tests and double ring infiltrometer testing. The PCPG believes that Appendix C of the BMP Manual is thoroughly inadequate. In order to ensure the long term performance of BMP's, particularly those that are designed to handle the bulk of the excess runoff from the two year storm, detailed subsurface soil AND geologic investigations are critical to the design process.

In practice, since the manual is not a regulation, but only "guidance", applicants have a strong incentive to minimize these efforts. Frankly, the regulated community is far from convinced that stormwater BMP's designed to infiltrate large volumes of stormwater comprise a practical, cost effective solution to the problem. However, even when an applicant appreciates the complexity of the system and elects to follow the current guidance in full, the guidance does not prescribe adequate characterization of subsurface conditions. It is quite common to find sites that have relatively well drained soils that would appear adequate for infiltration purposes after conducting the minimum required number of percolation and or/double ring infiltrometer tests. But the minimum testing will not quantify depth to bedrock or the water table if it is located just below the reach of a backhoe, and will not quantify the ability of underlying aquifer to assimilate high volume, short term discharges of stormwater. The result is localized groundwater mounding, poorly draining BMP's, and often the discharge of groundwater in areas not intended for stormwater discharge such as basements and other structures. A frequent problem is that basins are typically designed and constructed, by necessity, at the lowest elevation of a site. These areas are typically groundwater discharge zones and are therefore not ideal for infiltration. This is a situation that needs to be characterized at the beginning of the project before the BMPs are designed and constructed.

Therefore any revised stormwater regulations should mandate the performance of sufficient site characterization.

2783

Chambers, Laura M.

From: Louis Vittorio [lvittorio@earthres.com]
Sent: Monday, November 30, 2009 5:42 PM
To: EP, RegComments
Cc: Farrington, Dave
Subject: PCPG's One Page Comment Summary to 25 Pa Code Chapter 102

Dear EQB Members:

As a follow-up to the comments provided by PCPG, please find the attached One Page Comment Summary for provision to each EQB member in their agenda packets.

Please feel free to contact myself or Mr. Farrington of PCPG should you require any additional information.

Sincerely,

Louis F. Vittorio, Jr., P.G.
PCPG Director

Pennsylvania Council of Professional Geologists

www.pcpg.org