

October 26, 2004
Pennsylvania Department of Environmental Protection (PADEP)
Stormwater Manual Oversight Committee (OC)
Rachel Carson State Office Building, First Floor Conference Room

DRAFT MINUTES

I. PADEP Announcements and Inputs

Ken Reisinger chaired the meeting with Ken Murin, Denny Stum and other PADEP staff attending. The next OC meeting will be on December 8, after a completed revised draft manual has been released to the OC.

Ken Reisinger explained a new focus group process, which is to be undertaken by PADEP in the six regions of the state. The purpose is to explain the technical contents of the Draft Manual and elicit stakeholder reaction to the Draft Manual, as the result of concerns being brought to PADEP regarding regional applicability. Focus groups will meet several times (cycle of 2 or 3 meetings) starting in late January and extending into March. PADEP staff will moderate these sessions. PADEP has publicly announced the focus group formation and is soliciting focus group members, which are intended to be broadly representative of public and private sectors. The focus group meetings will be open to the public and all members of the OC including the primary authors of the manual are welcome to attend. PADEP will provide a focus group meeting schedule at the next OC meeting. At the end of this process, PADEP will compile the results and convey them to the OC at a meeting next spring.

Denny Stum set additional 2005 meeting dates, if needed: March 29, May 24, July 26, September 27, and December 6.

There were no other major announcements.

II. Review of Eighth OC Meeting Minutes and Comments Received

Draft Meeting Minutes from the September OC Meeting were approved. Cahill's Wes Horner summarized new comments received since the last OC meeting, which were distributed (Maya Van Rossum, Robert Koerner, Tony Miller, Paul Debarry, Larry Fennessey). PADOT's Tony Miller continues to provide especially detailed comments.

III. Review of Additional Section 8.0: Methodologies for Implementation

Michele Adams of Cahill Associates distributed additional sets of coordinated work sheets, which are designed to provide guidance for new Section 9 (the "methodology" chapter of the manual). These worksheets had been introduced at the last OC meeting and have been applied across several case studies to provide direct experience relating to how the manual recommends treating both non-structural and structural BMP's. The work sheet case studies included:

- Case Study 1: a 10-acre, 10-lot residential development, detention basin for peak rate control (no volume control)
- Case Study 2: same hypothetical development using structural, distributed volume control BMP's (using 2-year storm)
- Case Study 3: as above, using non-structural volume control BMP's (2-year storm)
- Case Study 4: as above, using structural BMP's to achieve alternative Secondary Control Guidance (partial volume)
- Case Study 5: as above, using non-structural BMP's to achieve alternative Secondary Control Guidance (partial volume)

This work sheet process, as currently drafted, is intended to provide a way to integrate both the many non-structural Best Management Practices (BMP's) presented in Section 5, as well as the more structural BMP's presented in Section 6, in terms of actual stormwater calculations. Devising a methodology to integrate non-structural and structural BMP's is critical if these BMP's are to be used throughout the state. The process is also intended to help applicants methodologically link calculations for peak rate control and calculations for total volume control. Because the challenges of methodology are so important, these case studies have been developed for the use of the OC and will be included in the manual as well.

Michele reiterated that a significant methodological direction relates to the calculation of runoff for smaller storms, a problem which has been frequently addressed in terms of the TR-55 Soil Cover Complex Method which has been developed for larger storm flood control (e.g., the 10-year storm and larger) and which has been criticized as deficient for smaller storms, 2-year and smaller (TR-55 SCCM itself acknowledges that the method should not be used for these smaller storms). Michele recommended that the manual advocate use of the Small Storm Hydrology Method, as developed and refined by Dr. Robert Pitt (Pitt, 2003) at the University of Alabama, to be presented in the manual.

Multiple questions and comments followed, highlighted here:

- Be careful with giving volume control credits – BMP's may clog over time and fail to provide peak rate control.
- How will BMP's be maintained and kept in place as ownership changes? Deed restrictions might be a partial answer.
- Provide back-up BMP's, like treatment trains, so that redundancy is built in.
- A simplified credit system might make sense for smaller and simpler sites, but for larger developments, full blown calculations should be done. What this threshold is might be difficult to determine. For smaller cases (less acreage, less impervious cover), it is tempting to conclude that some methodological assumptions can be made, except that much land development takes the form of these smaller developments, which can have a large cumulative effect. We must be careful. Also, new and better models are becoming available.
- Will frozen soil interfere with successful functioning of credit system, which focuses on volume control?
- Make sure the point is made that adequate and safe conveyance of larger flows must be provided.

- Trying to put forward a new method such as Pitt's Small Storm Hydrology may be too ambitious for this manual.
- Are we sure this won't increase land development costs excessively?

IV. Additional Comments and Public Q & A (Afternoon Session)

Dr. Traver provided some additional explanation of the VUSP work ups for the various site control standards that have been developed (CG1, CG2, CG3). There was additional discussion of the importance of maintenance; PADEP needs a model O&M agreement. House Bill on stormwater utilities was discussed. Miscellaneous comments:

- Construction oversight is critical.
- Site ownership responsibilities are critical.
- Manual should include various manufactured products, inventoried and evaluated in some form, as has been discussed in previous OC meetings.

There were no additional questions from the public.