<u>Question</u>: What is the level of detail required for the as-built from the critical stages engineer? Is it observation or measurements?

The as-built may include measurements (from the contractor) or it may only be red line changes (if minor).

That is different than the engineering certification. The critical stages professional is only meant to verify that the installation of the BMP was "witnessed", not that the elevations were verified. It was noted, however, that if there are changes being made in the field, it is necessary for the engineer to be aware of those changes.

<u>Question</u>: As-builts, why do changes require permission? If it is changed by design, then is it necessary to do an as-built?

Changes need to be approved, but it may or may not result in a formal modification of the plans. For example, for small changes it may be agreed that the changes will be reflected on only the as-builts and the permit doesn't need to be modified (like the location of a tree or a minor elevation difference of a seepage pit).

Question: N.O.T., which is appropriate (a or b) if a permit is extended by renewal?

For permits that were submitted after November 19, 2010 (including renewals), the long form (b) needs to be utilized. However, it should be noted that if BMPs were installed under the original permit, they won't require recordation, or critical stages, only the portions that were built after the renewal.

Question: As-builts, what is the tolerance of elevation changes or tree locations, etc.?

As long as everything is still met (volume, rate, water quality), functionality is met. It doesn't need to match the plan exactly.

<u>Question</u>: What is the number of infiltration tests required? When it says per acre, is that for the site? <u>Commercial/Industrial, it is 4-6 tests per acre of BMP area.</u>

<u>Question</u>: Clarification, it is a licensed professional that needs to sign off or a designee for critical stages of the NOT, correct?

Yes.

Question: Is there a revised PCSM Manual in the works?

Yes, it is in Draft form.

<u>Question</u>: Is there guidance for Manufactured Water Quality BMPs that are not in the manual on how to get them approved?

The question has come up regarding Snouts (WQ is on hold). The values that were being used for TSS, TP and TN from the PCSM manual for a standard water quality insert did not match what the manufacturer was able to produce in test results. Central office is waiting for studies from the manufacturer to provide numbers. The procedure to utilize BMPs not in the PCSM manual is the same that is utilized in the E&S manual.

<u>Question</u>: Say there is a 100 acre farm proposed for residential development that has had sewage sludge applied to it for many years, how would it be handled?

Environmental Clean-up Program (PaDEP) would provide coordination after it was brought up at meetings when discussing past land use. It would be similar to past land use like an orchard or potato farm.

Phase 1/Phase 2 studies would be submitted to the Districts indicating if there are any RECs
(Recognized Environmental Conditions) and they would be forwarded to PaDEP. Utilize the PACT (Pre-Application Consultant Tool) system at PaDEP (early coordination PaDEP form).

Question: How are portions of campus NPDES permits closed out?

- There is a new single page letter that allows closing out portions of campuses, industrial parks and lots from residential subdivisions.
- <u>Question</u>: Homeowners are getting scared away from PCSM BMP maintenance and liability costs. Is the District going to explain these things to the homeowners?
- The Homeowner's form as part of the NOT helps explain the maintenance, and some builders are including maintenance packages with their sales agreements. The potential costs of PCSM BMP liability hasn't been worked out by the insurance industry yet and is still being developed. LCCD developed a maintenance booklet for most PCSM BMPs which is available on-line.
- <u>Question</u>: In the process of construction, what if you discover something that would be an improvement to the existing plan? Can changes be done quickly that won't hold up the work?
- It depends on the extent of the change, if it is something small, it may be done quickly. But if you go and just make the change without approval, it may be a problem.
- Question: What is a "Minor" modification to the plan?
- It is determined on a case by case basis. It may be just a small area, but if it is outside the permit boundary or limits of disturbance boundary it is a major modification.
- <u>Question</u>: What if the builder leaves the site, 2 years later the home owner changes the PCSM BMP, the municipality notices the change, who is responsible to pay to change it back?
- It is the property owner's responsibility. The Township MS-4 needs to be able to identify the changes but they aren't necessarily going to inspect all the BMPs ever year. But if the Township identifies that the BMP has been removed or altered, the property owner is responsible for restoring it.
- <u>Question</u>: What are the NPDES requirements for land that was previously approved under a permit, but never constructed and the permit was terminated?
- If there is less than one acre of land remaining to be constructed that was previously approved on a permit, the permit doesn't need to be renewed for that portion. It just needs to be built as per plan.
- Question: Strict application to the 5:1 impervious loading ratio limits an infiltration basin to a maximum depth of 15" (based on 100% runoff of a 3" rainfall of a typical 2-year storm). As a result, we typically end up with a BMP that has too big of a footprint to be used as a rain garden but too shallow to meet all of the storage and freeboard requirements of a basin. Are there alternative ways to apply loading ratios that would allow us to convey a larger volume of runoff into the basin if measures were provided to ensure that a portion of the runoff would not infiltrate (ex. If the basin's lowest outlet orifice was set to a depth of 15", it would only capture (i.e. infiltrate) 15 inches of water per the 5:1 loading ratio, and any additional volume would flow through the outlet control structure, effectively "bypassing the infiltration system"?
- Please contact the local conservation district or DEP if you are having trouble meeting the loading ratio requirements.
- <u>Question</u>: Is a receipt needed for PNDI? It costs \$40 for a receipt. Is PaDEP looking into not having to pay? A receipt is needed. PaDEP may look into other options.
- <u>Question</u>: The NOI form is difficult to manipulate, for multiple points of interest you need to print out multiple NOIs, can't just manipulate the section Ds.
- The NOI workgroup has been meeting, it may be addressed as a software issue or maybe it could be set up with multiple sections Ds. They can discuss it at the next meeting. Later noted: The NOI can be unprotected and manipulated to work on Section D only.

<u>Question:</u> Are there any plans to require maintenance logs from homeowners on their PCSM BMPs? There can be agreements between the developer and the township which conveys the responsibility to the lot owner, however most Townships still aren't requiring maintenance logs from single lot owners.

Townships might be able to require the maintenance logs under their MS4 permit.

<u>Question</u>: When is it necessary to submit a revised plan? An architect or a builder changes the footprint of a plan (but not amount of impervious). When does it require a revision?

It helps to design for maximum impervious, if the runoff doesn't change if may just be a minor modification.

Question: When do you want to see the modification?

Call the District or email changes so we can determine if it is a minor modification or something that may just be reflected on the as-built or just be a red line change.

<u>Question</u>: At times the utility connection may not be determined until after the permit is obtained, now it is outside the NPDES permit boundary. Does it require a major modification even though it is just a small area?

Yes, any work outside the NPDES permit boundary requires a major modification. It was noted that unfortunately just because it is a small change, these changes are the ones that may result in the permit being overturned if they aren't handled according to permit regulations.

Question: For the requirement to have the PCSM plan recorded within 45 days of permit issuance, what happens if there are problems with the Township approvals and it can't be recorded within that time frame?

The District can grant a written extension.

<u>Question</u>: The Southeast Region has Dominic Rocco's White Paper which allows larger loading ratios than what is found in the PCSM manual.

The Loading Ratio White Paper has not been published by PaDEP. To review loading ratios larger than the PCSM manual you will need to discuss with the Districts and PaDEP on a case by case basis.

Question: Is there any written guidance on what constitutes a point of interest?

It should be discussed at the pre-application meeting. If the discharge points are far apart they would be different points of interest or if they go to different bodies of water or if stormwater discharges to an adjoiner not into "waters", that would also create a point of interest. There is nothing in writing indicating what a point of interest is.

Question: People are limiting disturbance by creating steep slopes (1:1) or by showing unrealistic limits (not showing portions of their yard being cleared and grubbed in ag fields) to avoid the regulations. How would regulators look at that if the homeowner converts other areas to lawn later?

If lawn is established by clearing and grubbing, it needs to be included within the NPDES permit boundary. If it is noted at a later date and the overall acreage exceeds an acre (may be misrepresented to the Township for a building permit) and a permit has not been obtained, a permit will be required and the lot owner may face penalties.

<u>Question:</u> Has anyone looked at the potential for pollution from sinkholes? Is it smart to promote infiltration in karst areas?

It is considered a pollution event when a sinkhole is found on a site. By not addressing volume in karst areas, there would be an increase in flooding. The manual indicates a reduced loading ratio for PCSM

BMPs in karst soils. If the project is properly designed, the risk of sinkholes is reduced (BMPs such as spray irrigation, etc.)

<u>Question</u>: Is there any way to require pre-existing lots to have a PCSM plan?

Older lots, when renewed, need to meet current regulations. Townships/developers can meet with District to discuss older lots; they may or may not meet the requirement of common plan of development. The Township may need to develop new stormwater ordinances, and the new MS-4 requirements that are coming in 2018 may handle some of those issues. If it is less than one acre, the Township Ordinances should be able to handle stormwater requirements.

Question: Spray irrigation, no problem with spray in Northampton and Lehigh Counties, but difficulty in other counties in the Commonwealth. Some areas required winter volume to be attenuated. Is their other PaDEP Guidance that is statewide?

Spray and Drip irrigation are not specifically in the PCSM Manual (except for the overall category of water re-use). Winter use is looked at as other BMPs in that if the ground is frozen there is no infiltration so spray would not be expected to be used. The manual revision is being worked on (specific work group) but it hasn't been worked on in over a year. An annual water budget is being considered since winter systems are not practical.