

**EPA’s Reviews of Pennsylvania’s November 14, 2015  
Revised Draft BMP Verification Program Plan**

Transmitted January 26, 2016

For Pennsylvania’s reference and consideration as Pennsylvania works to further enhance its BMP verification program over the coming two years, please find a compilation of EPA’s reviews of Pennsylvania’s November 14, 2015 Revised Draft BMP Verification Program Plan in the form of a series of evaluation forms.

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*Overarching Comments*

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*Formatting and General Content:*

1. The Panel felt that the approach of building a program plan around citations of verification procedures provided in often-lengthy attached appendices was not effective or transparent. The Panel highly recommends pulling out the relevant information (text, tables etc.) from such referenced appendices and placing them directly in the jurisdiction’s program plan, and then provide a link to the full document within the program plan’s text.

Was this comment sufficiently addressed?		
Addressed: <input checked="" type="checkbox"/>	Partially Addressed: <input type="checkbox"/>	Not Addressed: <input type="checkbox"/>
Comments: Pennsylvania did an excellent job of extracting out relevant information and providing URL links to the original source materials.		

*Use of Statistical Sampling Approaches and Practice Prioritization:*

2. Anytime the jurisdictions select a subsampling percentage—e.g., 5 percent—they should document the process and rationale for how they selected that specific percentage. Simply citing a methodology used by NRCS or other data submitting partners is not sufficient in the Panel’s opinion. Emphasis should be placed on documenting the criteria for subsample selection on how that percent subsampling meets the jurisdiction’s own WIP and verification objectives to ensure they have achieved the Partnership’s BMP Verification Principles.

Was this comment sufficiently addressed?  
 Addressed:  Partially Addressed:  Not Addressed:

Comments: Within its description of agricultural BMP verification protocols, Pennsylvania did an excellent job of explaining the rationale behind other agencies—NRCS, FSA—choices for sampling percentages. However, Pennsylvania did not always document whether or not those sampling percentages were sufficient to address Pennsylvania’s programmatic objectives.

3. When using a statistical sampling based verification protocol (e.g., CTIC), the jurisdiction should clearly document how they plan to translate the findings from the statistical survey into the actual numbers and geographical distribution of practices submitted through NEIEN for crediting through the Partnership’s annual progress runs.

Was this comment sufficiently addressed?  
 Addressed:  Partially Addressed:  Not Addressed:

Comments: Documentation of how Pennsylvania plans translate the findings from the statistical survey into the actual numbers and geographical distribution of practices submitted through NEIEN for crediting through the Partnership’s annual progress runs is missing from page 33.

4. Jurisdictions should consider basing the rigor of their verification protocols by a practice’s contributions to planned pollutant reductions under the jurisdiction’s Watershed Implementation Plans (WIPs). Risk of practice failure may also be a workable means to prioritize verification if clear justification for assignment of risk to individual BMPs is provided.

Was this comment sufficiently addressed?  
 Addressed:  Partially Addressed:  Not Addressed:

Comments: Pennsylvania address this throughout all their source sector BMP verification protocols and descriptions.

5. Jurisdictions should provide the overall percentage of the total WIP load reductions contributed by BMPs that the jurisdiction has included in its BMP verification protocols. Pennsylvania's draft program plan provides good examples of this approach (see page 5 for one example).

Was this comment sufficiently addressed?  
Addressed:  Partially Addressed:  Not Addressed:

Comments: Pennsylvania address this throughout all their source sector BMP verification protocols and descriptions.

6. While the Panel recommends the prioritization of BMPs, they note that verification protocols must be developed for *all* BMPs that a jurisdiction plans to report. Therefore, the Panel is asking for the jurisdictions to fill in the blanks for any low and medium priority BMPs for which verification protocols have not yet been submitted. The Panel asks for a specific timeframe for providing verification protocols for these low and medium priority BMPs, as well as a description of the envisioned level(s) of verification, recognizing the Basinwide Framework allows for less rigorous levels of verification for these low priority practices.

Was this comment sufficiently addressed?  
Addressed:  Partially Addressed:  Not Addressed:

Comments: Although Pennsylvania acknowledges plans to develop additional BMP verification protocols, it does not provide any specific timeframes for doing so.

7. The Panel requests that all six states describe their proposed verification of septic systems/on-site treatment systems EVEN if those treatment technologies may be low priority and/or if the jurisdiction does not have plans to submit these technologies in the near future for pollutant reduction credit.

Was this comment sufficiently addressed?  
Addressed:  Partially Addressed:  Not Addressed:

Comments: Pennsylvania did not provide any documentation of proposed verification of septic systems/on-site treatment systems.

*Practice Inspections:*

8. Training requirements for inspectors were not clearly documented throughout the verification program plans. (See New York’s draft agricultural plan for a good working example of what the Panel was looking for across the jurisdictions.)

Was this comment sufficiently addressed?  
Addressed:  Partially Addressed:  Not Addressed:

Comments: Pennsylvania provided documentation of its training requirements for inspectors for each of its sector specific sets of BMP verification protocols and procedures.

9. The Panel feels that independent, third party review is necessary in most cases to meet the Public Confidence Principle.

Was this comment sufficiently addressed?  
Addressed:  Partially Addressed:  Not Addressed:

Comments: Pennsylvania address the need for independent review when necessary in its sector specific sets of BMP verification protocols and procedures.

10. If a BMP has been inspected and found to meet standards, then the jurisdiction needs to clearly document their plans to ‘restart the clock’ on that practice and apply a new life span.

Was this comment sufficiently addressed?  
Addressed:  Partially Addressed:  Not Addressed:

Comments: Pennsylvania documented procedures for re-inspection of BMPs and restarting the clock for some but not all of their sector specific sets of BMP verification protocols and procedures.

11. If a BMP has been inspected and found not to meet standards, then the jurisdiction needs to clearly document the process for corrective maintenance and the application of a new life span, or alternatively, to remove it from the jurisdiction's tracking data base.

Was this comment sufficiently addressed?  
Addressed:  Partially Addressed:  Not Addressed:

Comments: Pennsylvania documented procedures for re-inspection of BMPs and removal of BMPs for some but not all of their sector specific sets of BMP verification protocols and procedures.

12. Across the jurisdictions, the way that verification of erosion and sediment control for active construction and stormwater management for post-construction was conflated and/or confusing at times. A clear distinction between the verification approaches for these very different categories of BMPs should be provided.

Was this comment sufficiently addressed?  
Addressed:  Partially Addressed:  Not Addressed:

Comments: Pennsylvania provided clear and separate detailed BMP verification documentation for of erosion and sediment control for active construction and stormwater management for post-construction.

*Enhancing Existing Programs:*

13. If a jurisdiction has not finished issuing all its MS4 permits, the Panel questions relying on MS4 permits for carrying out verification. Jurisdictions must develop a program plan that is consistent with the urban sector guidance, and cannot simply default to MS4 methodologies.

Was this comment sufficiently addressed?  
Addressed:  Partially Addressed:  Not Addressed:

Comments: Pennsylvania is in the process of enhancing existing MS4 programs to include verification.

14. Where Bay TMDL NPDES permit limits are not yet met, a schedule for treatment upgrades and issuance of associated permits should be included in the jurisdictions' wastewater treatment verification sections.

Was this comment sufficiently addressed?		
Addressed: <input checked="" type="checkbox"/>	Partially Addressed: <input type="checkbox"/>	Not Addressed: <input type="checkbox"/>
Comments: Pennsylvania provided detailed documentation on the schedule for providing permits with CAP limits for the remaining NPDES permittees.		

15. Verification procedures for BMPs owned or operated by Federal agencies, facilities and landowners were essentially absent from the jurisdictions' initial draft BMP verification program plans—this is an issue that needs to be addressed by both the jurisdictions AND their federal agency and facility partners.

Was this comment sufficiently addressed?		
Addressed: <input type="checkbox"/>	Partially Addressed: <input type="checkbox"/>	Not Addressed: <input checked="" type="checkbox"/>
Comments: With the exception of NRCS (ag, wetlands), FSA (ag, buffers), and USFWS (wetlands) cost share programs/technical assistance programs and references to their established BMP verification protocols, there was not documentation of BMP verification procedures for BMPs owned or operated by Federal agencies, facilities and landowners.		

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## Pennsylvania

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### Overarching

The Panel encouraged Pennsylvania to use their revised program plan to also describe their resource needs in order to be successful. Maryland was cited as an example where they included an estimated number of new staff needed and the required level of funding to carry out this additional verification work.

Was this comment sufficiently addressed?

Addressed:  Partially Addressed:  Not Addressed:

Comments: With possible side reference in Chapter X. Next Steps, Pennsylvania did not document estimates for new staff needed and the required level of funding to carry out this additional verification work.

### Agriculture (Yellow)

No documentation for how the results of the remote sensing pilot project be shared with the Partnership's Agriculture Workgroup (and other relevant sector workgroups, e.g., Forestry Workgroup) and the Watershed Technical Workgroup for review in comparison with the Partnership's Basinwide Framework's verification guidance and acceptance as a new set of verification procedures by the Partnership's technical workgroups.

Was this comment sufficiently addressed?

Addressed:  Partially Addressed:  Not Addressed:

Comments: Pennsylvania addressed this comment on pages 107-111.

The Panel is concerned that the results of the pilot study will only be applied to counties with 50,000 or more acres of conservation tillage (cited on page 17).

Was this comment sufficiently addressed?

Addressed:  Partially Addressed:  Not Addressed:

Comments: Pennsylvania openly recognized this self-applied constraint, and committed to re-evaluating this constraint by examining 4 possible options described on page 33.

No attempt was made to justify levels of follow-up inspections, which are proposed as being below the guidance levels.

Was this comment sufficiently addressed?

Addressed:  Partially Addressed:  Not Addressed:

Comments: Pennsylvania provided additional documentation on the level of follow-up inspections so that the reader better understands the rationale, but provided limited justification in the context of Pennsylvania's own programmatic objectives particularly where there were conflicting levels between state agencies.

If NRCS normally checks 5% of total practices in the state with a limit of 20 per practice, no more than 3-5 low risk practices would be checked. Spot checks are to be distributed among various practices applied during the year, and each type practice should be spot checked at least every three years. Staff for practices implemented under Pennsylvania's Growing Greener Program, the Section 319 program, and Nutrient Management Act program are certified immediately following implementation by NRCS Technical Specialists, Qualified State and Federal Fish and Wildlife Staff, Qualified Private Sector Engineers and Agricultural BMP Experts, DEP Watershed Managers, TSPs, Qualified Conservation District Staff and Other Qualified Individuals. Each priority practice has a frequency amount. Frequency depends on which agency is doing review. Projects implemented using DEP provided funds are well verified at implementation time but are not consistently tracked by DEP staff after that time. There is no established and consistently followed statistical sampling of past installed state funded projects by DEP staff. A majority of these state funded projects are inspected in later years by local grant administrators but this information is not collected or verified at the state level. FSA has spot checking procedures of up to 10% on riparian buffers until all practices are implemented. NRCS (10%) and DEP check Riparian forest buffers (25%). If NRCS/FSA data is used with no further validation, their Agency selection process needs to be reviewed to determine if it is the practices that are in the state's WIP.

Was this comment sufficiently addressed?

Addressed:  Partially Addressed:  Not Addressed:

Comments: Pennsylvania added documentation basically pointing out and fully recognizing all the elements of the above comment, made future commitments to specifically address the need for verification of the state funded practices implemented under Pennsylvania's Growing Greener Program, the Section 319 program, and did not address the need to ensuring consistency across all these programs with Pennsylvania's own programmatic objectives.

Conservation Tillage is being assessed in Capital RC&D counties (15) using the CTIC Roadside Transect Survey methodology (see Appendix C in Pennsylvania's draft program plan) with 10% independent verification. Currently only counties with greater than 50,000 acres of agriculture are surveyed. The Panel saw no documentation on how the results from the transect surveys translates to BMP Watershed Model progress input data.

Was this comment sufficiently addressed?

Addressed:  Partially Addressed:  Not Addressed:

Comments: This comment is still not addressed on page 28 for tillage practices nor for cover crops on page 33.

No timeframes for filling in the admitted gaps in their verification protocols, for not only the high priority BMPs but also for the medium and low priority BMPs.

Was this comment sufficiently addressed?		
Addressed: <input type="checkbox"/>	Partially Addressed: <input type="checkbox"/>	Not Addressed: <input checked="" type="checkbox"/>
Comments:		

Pennsylvania seems to be making an effort to review the MMP and NMPs, but the documentation was unclear as to the extent to which there were onsite inspections. The reference in Table 8 on page 33 to “NMPs for CAOs and CAFOs are inspected yearly, on site.” What does an onsite review of NMPs really mean?

Was this comment sufficiently addressed?		
Addressed: <input type="checkbox"/>	Partially Addressed: <input checked="" type="checkbox"/>	Not Addressed: <input type="checkbox"/>
Comments: To this reviewer, this section of Pennsylvania BMP verification program plan is much expanded, but very difficult to follow. Still can't response as to whether Pennsylvania has addressed the above comment or not.		

Pennsylvania makes the statement: “Information on BMP implementation obtained from USDA is assumed to be accurate, and the data are not further checked or verified prior to inclusion in the annual submission to CBPO via NEIEN.” This statement caused the Panel significant concerns, as USDA’s spot checks were established for programmatic purposes beyond verification. Pennsylvania needs to determine if, and document, why (or why not) USDA’s protocols achieve Pennsylvania’s verification objectives.

Was this comment sufficiently addressed?		
Addressed: <input type="checkbox"/>	Partially Addressed: <input type="checkbox"/>	Not Addressed: <input checked="" type="checkbox"/>
Comments: Pennsylvania provided even more extensive and detailed documentation on USDA’s NRCS and FSA protocols, but does not address the core of the concern raised by the BMP Verification Review Panel above.		

Pennsylvania notes a number of verification protocol gaps: animal waste management, manure transport, animal waste management systems, and manure management plans. These gaps are a flaw that need to be addressed.

Was this comment sufficiently addressed?

Addressed:  Partially Addressed:  Not Addressed:

Comments: Pennsylvania has provided additional, detailed documentation on NRCS and state programs, but it is still unclear to this reviewer as to whether and how they have addressed gaps in the verification of their animal waste management, manure transport, animal waste management systems, and manure management plans.

Need the Statistical Sampling Design Review Team's review of the CTIC statistical sampling design protocol, need sub-sampling of actual field residues to validate the protocol, and need Pennsylvania to confirm this protocol's application to cover crops.

Was this comment sufficiently addressed?

Addressed:  Partially Addressed:  Not Addressed:

Comments: The Statistical Sampling Design Review Team has reviewed Pennsylvania's application of the CTIC statistical sampling design protocol to cover crops and confirmed it's a valid, statistically sound design.

Provide documentation on how Pennsylvania plans to take the result of its statistical-based subsampling verification protocols and convert the resultant findings into numbers of BMPs spread over what geographical areas for reporting on its progress every year.

Was this comment sufficiently addressed?

Addressed:  Partially Addressed:  Not Addressed:

Comments:

**Forestry (Yellow)**

May meet the Forestry Workgroup’s guidance, but the level of documentation is incomplete. More information must be provided in order to explain if there are alternative approaches being followed.

Was this comment sufficiently addressed?  
Addressed:  Partially Addressed:  Not Addressed:

Comments: Pennsylvania relies on a combination of NRCS, FSA and DEP staff verification protocols. From the documentation provided, all of these protocols are not consistent with the Forestry Workgroup’s guidance nor did Pennsylvania provide an alternative set of protocols and underlying rationale.

Only addresses high priority practices with no schedule for when the verification protocols for the other forestry practices will be provided.

Was this comment sufficiently addressed?  
Addressed:  Partially Addressed:  Not Addressed:

Comments: See responses to below comments.

Forestry practices are prioritized, but it is unclear if verification intensity is driven by this prioritization. For buffers, forest and grass buffers receive the same level of inspection, and only forest buffers are high priority.

Was this comment sufficiently addressed?  
Addressed:  Partially Addressed:  Not Addressed:

Comments:

There is a need to clarify the frequency of site visits on cost-shared agricultural forest buffers.

Was this comment sufficiently addressed?		
Addressed: <input checked="" type="checkbox"/>	Partially Addressed: <input type="checkbox"/>	Not Addressed: <input type="checkbox"/>
Comments: Addressed in Table 12 on pages 40-41.		

Does not address forestry harvesting practices.

Was this comment sufficiently addressed?		
Addressed: <input checked="" type="checkbox"/>	Partially Addressed: <input type="checkbox"/>	Not Addressed: <input type="checkbox"/>
Comments: Addressed on pages 104-106.		

Pennsylvania is a leader in past buffer acreage gains, so a strong program to confirm reenrollment is essential and should be documented.

Was this comment sufficiently addressed?		
Addressed: <input type="checkbox"/>	Partially Addressed: <input type="checkbox"/>	Not Addressed: <input type="checkbox"/>
Comments: Comment not applicable to verification.		

Pennsylvania should document its urban forestry program oversight. It is one of the high priority set of urban infiltration BMPs.

Was this comment sufficiently addressed?  
Addressed:  Partially Addressed:  Not Addressed:

Comments: Pennsylvania provided documentation of its plans for urban tree planting verification on pages 89-91.

The Panel questioned whether Pennsylvania was reporting forest harvesting practices.

- a. Pennsylvania stated it does report these practices for forest harvesting on state forest lands and will work to provide documentation of the verification procedures in its revised BMP verification program plan.

Was this comment sufficiently addressed?  
Addressed:  Partially Addressed:  Not Addressed:

Comments: Addressed on pages 104-106.

Pennsylvania is planning to include BMP verification procedures for urban tree planting and urban buffer practices in its revised BMP verification program plan.

Was this comment sufficiently addressed?  
Addressed:  Partially Addressed:  Not Addressed:

Comments: Pennsylvania provided documentation of its plans for urban tree planting verification on pages 89-91; no documentation provided for verification of urban buffer practices.

The Partnership's Forestry Workgroup verification guidance asks for more focus on follow-up inspections, especially during the establishment period, to address gaps in inspections of USDA-funded buffers. The purpose is to assure that maintenance problems are found and addressed. The Panel asked Pennsylvania to work to refine its proposed verification procedures to be fully consistent with this verification guidance.

Was this comment sufficiently addressed?

Addressed:  Partially Addressed:  Not Addressed:

Comments: Pennsylvania provided more documentation on the protocols of NRCS, FSA, and PA DEP agency staff, but did not refine its proposed verification procedures to be fully consistent with the Forestry Workgroup's verification guidance.

The Panel pointed out that interagency coordination and possible use of non-governmental organizations such as CBF were ways to seek resources to increase site visits according to the forestry guidance. Pennsylvania said it had good interagency coordination, but it understood the point of the recommendations.

Was this comment sufficiently addressed?

Addressed:  Partially Addressed:  Not Addressed:

Comments: Pennsylvania recognized the need for possible use of non-governmental organizations, but provided no plans for nor commitment to further pursue use of such organizations for BMP verification purposes.

As with some other states, it is unclear whether the variously mentioned FSA and NRCS inspections (% or 10% annually) are additive or the same since FSA will often provide NRCS or State Forestry funding to do this type of field work (see comment above). The 25% revisits provided by DEP currently are additive. This still falls short of the recommended re-inspection of a site 1-4 years post planting to address maintenance needs.

Was this comment sufficiently addressed?

Addressed:  Partially Addressed:  Not Addressed:

Comments: Pennsylvania provided additional documentation on each of the referenced NRCS and FSA inspection programs, but did not address the concern that each still falls short of the recommended re-inspection of a site 1-4 years post planting to address maintenance needs as called for in the Forestry Workgroup’s verification guidance.

All states conform to the initial site visit which often happens prior to planting. As mentioned above, there does not appear to be a re-inspection on all sites in years 1-4 post-planting, as suggested by FWG guidelines. PA’s Protocol indicates that NRCS or a TSP provider is required to spot-check the site at the end of the second year to determine whether the riparian buffer is established and meets the standards and specifications—again, it is unclear whether this means 100% or 5% or 10%. Spot checks on a risk-based subsampling (80% confidence) in years 5-10 post-planting is not addressed, however more RFB sites are re-inspection visits in PA than in other Bay states.

Was this comment sufficiently addressed?

Addressed:  Partially Addressed:  Not Addressed:

Comments:

No additional sampling is being proposed as an improvement on what is currently done. Information obtained from USDA should not automatically assumed to be accurate and PA needs to determine if, and document whether and how they achieve PA's verification objectives.

Was this comment sufficiently addressed?					
Addressed:	<input type="checkbox"/>	Partially Addressed:	<input type="checkbox"/>	Not Addressed:	<input checked="" type="checkbox"/>
Comments:					

### Stream Restoration (Red)

No documentation of stream restoration verification protocols.

Was this comment sufficiently addressed?					
Addressed:	<input checked="" type="checkbox"/>	Partially Addressed:	<input type="checkbox"/>	Not Addressed:	<input type="checkbox"/>
Comments: Pennsylvania provided "Legacy Sediment Removal and Aquatic Ecosystem Restoration of Natural Floodplains, Streams and Wetlands" BMP verification guidance on pages 92-95.					

The Panel noted that stream restoration was missing from Pennsylvania’s list of priority practices—does Pennsylvania plan to report stream restoration?

- a. Pennsylvania confirmed that stream restoration is a high priority practice for Pennsylvania. Pennsylvania plans to use the verification protocols and procedures used in the Big Spring Run stream restoration project as its overall stream restoration verification procedures.

Was this comment sufficiently addressed?			
Addressed:	<input checked="" type="checkbox"/>	Partially Addressed:	<input type="checkbox"/>
		Not Addressed:	<input type="checkbox"/>
Comments:			

The Panel recommended to Pennsylvania that they provide answers to the series of stream restoration evaluation review questions on page 51 in Appendix A of the Panel’s August 7th report to the Partnership within the stream restoration section of their revised BMP verification program plan.

Was this comment sufficiently addressed?			
Addressed:	<input type="checkbox"/>	Partially Addressed:	<input type="checkbox"/>
		Not Addressed:	<input checked="" type="checkbox"/>
Comments:			

The Panel emphasized the need for focusing on functionality, not just presence of the practices.

Was this comment sufficiently addressed?

Addressed:  Partially Addressed:  Not Addressed:

Comments:

### ***Urban Stormwater (Red)***

Pennsylvania's commitment to hiring three staff to conduct follow-up verification seems to be a significantly underwhelming response to a significant resource need.

Was this comment sufficiently addressed?

Addressed:  Partially Addressed:  Not Addressed:

Comments: No additional commitment of new resources was documented.

The lack of follow-up inspection program, which is under development, is a gap that is acknowledged by Pennsylvania, but also concerned the Panel. Stormwater guidance elements include good points for orienting this program (relative reduction capacity of BMPs, fast growing areas) and the Panel recommends that PA incorporate it into their follow-up inspection protocol.

Was this comment sufficiently addressed?

Addressed:  Partially Addressed:  Not Addressed:

Comments: Pennsylvania clearly followed much of the guidance provided by the CBP Urban Stormwater Workgroup, but not the specific points referenced in the comment—good points for orienting this program (relative reduction capacity of BMPs, fast growing areas).

Inspections and larger verification procedures to be further fleshed out—current process is largely complaint driven.

Was this comment sufficiently addressed?		
Addressed: <input type="checkbox"/>	Partially Addressed: <input checked="" type="checkbox"/>	Not Addressed: <input type="checkbox"/>
Comments: More details were provided, but still lacks the details to be considered true protocols/procedures.		

Did not commit to verification of legacy BMPs resulting in phasing out of these practices.

Was this comment sufficiently addressed?		
Addressed: <input checked="" type="checkbox"/>	Partially Addressed: <input type="checkbox"/>	Not Addressed: <input type="checkbox"/>
Comments: Pennsylvania provided clear language explaining how it was address legacy BMPs on page 86.		

No verification protocols and no established life spans for the post construction practices.

Was this comment sufficiently addressed?		
Addressed: <input type="checkbox"/>	Partially Addressed: <input checked="" type="checkbox"/>	Not Addressed: <input type="checkbox"/>
Comments: On page 81, Pennsylvania cites these practices as having O&M that will “be a perpetual responsibility, but the details on how to ensure those practices are, in fact, maintained in perpetuity are still be worked out.		

BMPs implemented or retrofitted as part of an MS4 program, or the Section 319 and Growing Greener grant programs were not addressed.

Was this comment sufficiently addressed?  
Addressed:  Partially Addressed:  Not Addressed:

Comments: On page 107, Pennsylvania made a commitment to “verify Growing Greener and Section 319 Projects” into the future, but did not provide details on how it would accomplish this commitment.

Need to provide more details in place of language like “a variety of data collection methods” (pages 42-43) in discussing how Pennsylvania plans to address their acknowledged verification gaps.

Was this comment sufficiently addressed?  
Addressed:  Partially Addressed:  Not Addressed:

Comments: Pennsylvania provided significantly more details on it plans for verification of stormwater practices, but there are still important details and commitments still missing.

Pennsylvania should consider extending the findings from the York and Lancaster counties’ pilot studies on addressing MS4s collectively to addressing the stormwater inspection and larger verification procedures needs across multiple townships.

Was this comment sufficiently addressed?  
Addressed:  Partially Addressed:  Not Addressed:

Comments:

What is the status of putting Phase II WIPs into place? It is relevant for the MS4-related protocol. What is the timeline?

Was this comment sufficiently addressed?  
Addressed:  Partially Addressed:  Not Addressed:

Comments: There were additional broad description of the current status of Pennsylvania's MS4 implementation (page 72), but not detailed enough to understand the implications for BMP verification.

The Panel asked Pennsylvania to be more specific about the specific inspection frequencies for MS4, post construction, and legacy BMPs in its revised BMP verification program plan.

Was this comment sufficiently addressed?  
Addressed:  Partially Addressed:  Not Addressed:

Comments: Partially addressed in Table 21 on page 87-88, but still not very clear.

The Panel recommended that if there is another entity carrying out the verification, the state needs to system for performing checks to ensure the program is being carried out properly by this non-state agency entity.

Was this comment sufficiently addressed?  
Addressed:  Partially Addressed:  Not Addressed:

Comments: Unclear if this comment was really addressed.

The Panel recommended Pennsylvania clearly document its procedure for removing practices which have gone beyond their life spans and either have not been verified or are determined to be non-functional.

- a. Pennsylvania will document how they plan to address follow up on practices which are not functioning in other documentation, not in their BMP verification program plan. The Panel concurred with taking this approach, asking that Pennsylvania to provide a short narrative in their BMP verification program plan describing the procedures taken and then providing the reader with a URL link to document which actually describes the follow-up actions to be taken.

Was this comment sufficiently addressed?			
Addressed:	<input type="checkbox"/>	Partially Addressed:	<input checked="" type="checkbox"/>
		Not Addressed:	<input type="checkbox"/>
Comments:			

The document states that BMPs implemented or retrofitted as part of an MS4 program or 319 and Growing Greener grant programs are not included in the document. That's not acceptable. MS4 BMPs (considering that PA has almost 1000 permittees) could constitute a major portion of the BMPs throughout the state that require verification.

Was this comment sufficiently addressed?			
Addressed:	<input checked="" type="checkbox"/>	Partially Addressed:	<input type="checkbox"/>
		Not Addressed:	<input type="checkbox"/>
Comments:			

## Wastewater (Yellow)

The Panel asks the Pennsylvania to provide relative details about the status of efforts to put in place permits consistent with the Chesapeake Bay TMDL.

Was this comment sufficiently addressed?		
Addressed: <input checked="" type="checkbox"/>	Partially Addressed: <input type="checkbox"/>	Not Addressed: <input type="checkbox"/>
Comments:		

Need to discuss the non-significant facilities and any planned verification efforts.

Was this comment sufficiently addressed?		
Addressed: <input checked="" type="checkbox"/>	Partially Addressed: <input type="checkbox"/>	Not Addressed: <input type="checkbox"/>
Comments:		

Missing descriptions of the verification procedures for septic systems and CSOs.

Was this comment sufficiently addressed?		
Addressed: <input type="checkbox"/>	Partially Addressed: <input checked="" type="checkbox"/>	Not Addressed: <input type="checkbox"/>
Comments: Addressed CSOs but not septic systems.		

Relies on NPDES reporting and compliance monitoring for verification. No information is provided on frequency of inspections.

Was this comment sufficiently addressed?			
Addressed:	<input checked="" type="checkbox"/>	Partially Addressed: <input type="checkbox"/>	Not Addressed: <input type="checkbox"/>
Comments:			

The Panel asks that Pennsylvania answer the series of questions contained within the wastewater sector section of the Panel's evaluation form.

Was this comment sufficiently addressed?			
Addressed:	<input checked="" type="checkbox"/>	Partially Addressed: <input type="checkbox"/>	Not Addressed: <input type="checkbox"/>
Comments:			

Pennsylvania needs to determine how to best document verification procedures as they relate to their permitted discharge facilities without getting too deep into compliance procedures.

Was this comment sufficiently addressed?			
Addressed:	<input checked="" type="checkbox"/>	Partially Addressed: <input type="checkbox"/>	Not Addressed: <input type="checkbox"/>
Comments:			

In terms of septic systems, hook-ups of septic systems to existing sewer systems are practices that Pennsylvania wants to continue to report and receive credit for into the future.

Was this comment sufficiently addressed?					
Addressed:	<input type="checkbox"/>	Partially Addressed:	<input type="checkbox"/>	Not Addressed:	<input checked="" type="checkbox"/>
Comments:					

The Panel recommended that Pennsylvania add a short narrative statement about how significant facilities and non-significant facilities are tracked against the facility specific and aggregate waste load allocations and then providing a URL link to Pennsylvania's Watershed Implementation Plan supplement document.

Was this comment sufficiently addressed?					
Addressed:	<input checked="" type="checkbox"/>	Partially Addressed:	<input type="checkbox"/>	Not Addressed:	<input type="checkbox"/>
Comments:					

WWTP: PA wastewater QAPP is also a WWTP data QAPP for the CBPO model run purpose. No detailed overall verification procedures are provided, especially for non-significant facilities.

Was this comment sufficiently addressed?					
Addressed:	<input checked="" type="checkbox"/>	Partially Addressed:	<input type="checkbox"/>	Not Addressed:	<input type="checkbox"/>
Comments:					

### Wetlands [Red]

Beyond constructed wetlands, there are no wetland verification procedures documented.

Was this comment sufficiently addressed?					
Addressed:	<input checked="" type="checkbox"/>	Partially Addressed:	<input type="checkbox"/>	Not Addressed:	<input type="checkbox"/>
Comments:					

The Panel asks Pennsylvania to documents its schedule for development of wetlands restoration verification protocols.

Was this comment sufficiently addressed?					
Addressed:	<input checked="" type="checkbox"/>	Partially Addressed:	<input type="checkbox"/>	Not Addressed:	<input type="checkbox"/>
Comments:					

The Panel emphasized the need for focusing wetlands verification on assessing functionality and ensuring that the functionality continues through time.

Was this comment sufficiently addressed?		
Addressed: <input checked="" type="checkbox"/>	Partially Addressed: <input type="checkbox"/>	Not Addressed: <input type="checkbox"/>
Comments:		

The Panel recommended to Pennsylvania that they answer the series of wetlands evaluation review questions on page 52 Appendix A of the Panel’s August 7th report to the Partnership within the wetlands section of their revised BMP verification program plan.

- a. Pennsylvania recognized they need to provide more documentation on their wetlands verification protocols. Majority of wetland restoration is conducted through regulatory mitigation work and NRCS funded wetland restoration projects.

Was this comment sufficiently addressed?		
Addressed: <input type="checkbox"/>	Partially Addressed: <input checked="" type="checkbox"/>	Not Addressed: <input type="checkbox"/>
Comments:		

**Format:**

Ag, Forestry, Urban Stormwater, Stream QAPP

Format doesn't follow Appendix Q Guidance. The QAPP "Procedures for Reporting BMP Implementation Data to the CBPO" describes sources of data from four sectors. Need to add the missing elements for *Group A. Project Management* (i.e., BMP definitions, Data Quality Objectives, Training, Records, etc.). Put the existing content under the heading *Group B. Data Generation and Acquisition*. Add *Group C & D* elements. In Sections *D.1* and *D.2 - Review, Validation and Verification*:

- Move text from the PADEP QAPP Addendum for the Ag BMP and Stormwater verification methods; and
- Add missing review, validation and verification protocols for forestry and stream restoration BMPs.

Was this comment sufficiently addressed?		
Addressed: <input checked="" type="checkbox"/>	Partially Addressed: <input type="checkbox"/>	Not Addressed: <input type="checkbox"/>
Comments:		

Wastewater QAPP

Format doesn't follow *Appendix Q, CBP Guidance for BMP QAPPs*.

Was this comment sufficiently addressed?		
Addressed: <input checked="" type="checkbox"/>	Partially Addressed: <input type="checkbox"/>	Not Addressed: <input type="checkbox"/>
Comments:		

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## *Pennsylvania Evaluation Questions*

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1. Will agriculture BMPs be identified and verified according to the recommended verification categories (Visual Assessment-Single Year, Visual Assessment-Multi-Year, and Non-Visual Assessment)?

Was this comment sufficiently addressed?		
Addressed: <input type="checkbox"/>	Partially Addressed: <input type="checkbox"/>	Not Addressed: <input type="checkbox"/>
Comments: This question is outside the scope of the NPDES CAFO program requirements.		

2. Will agriculture BMPs be identified and verified according to oversight categories (non-cost shared, cost-shared, regulatory, and permitted)?

Was this comment sufficiently addressed?		
Addressed: <input type="checkbox"/>	Partially Addressed: <input type="checkbox"/>	Not Addressed: <input type="checkbox"/>
Comments: This question is outside the scope of the NPDES CAFO program requirements.		

3. Does the program define the frequency of verification assessments for initial and subsequent years of implementation and reporting? (For priority BMPs, onsite visits are recommended for 10% of BMPs per year)

Was this comment sufficiently addressed?		
Addressed: <input type="checkbox"/>	Partially Addressed: <input type="checkbox"/>	Not Addressed: <input type="checkbox"/>
Comments: This question is outside the scope of the NPDES CAFO program requirements.		

4. If an alternative strategy to sub-sampling is utilized than the strategy outlined in the sector guidance, is it properly identified and appropriately justified?

Was this comment sufficiently addressed?  
Addressed:  Partially Addressed:  Not Addressed:

Comments: This question is outside the scope of the NPDES CAFO program requirements.

5. Does the program identify a process where BMP assessment methods would change with a change in BMP oversight (i.e. cost-shared contractual BMP to non-contractual BMP)?

Was this comment sufficiently addressed?  
Addressed:  Partially Addressed:  Not Addressed:

Comments: This question is outside the scope of the NPDES CAFO program requirements.

6. Does the program identify the difference in sub-sampling for subsequent years for BMPs under a CAFO permit oversight? (I.e. 20% compared to 10/5%)

Was this comment sufficiently addressed?  
Addressed:  Partially Addressed:  Not Addressed:

Comments: Per DEP's Compliance Monitoring Strategy, NPDES CAFOs are inspected by DEP at least once every five fiscal years. CD staff are responsible for NMP reviews, but do not have authority to enforce the CAFO permit. According to EPA's Ag. Program Assessment, the following BMPs are required under a CAFO permit: nutrient management, animal waste management systems (AWMS), soil conservation and water quality control plans, and barnyard runoff control. For nutrient management and AWMS, yes, 100%, however, based on EPA's Ag. Assessment, annual on-site status reviews by CD's have not been done consistently at all CAFOs. For Conservation Plans, no. For Buffers, no. For Manure Transport, this is included in the NMP review.

7. Are the assessment methods utilized to verify BMPs based on type and category of oversight clearly explained and consistent with the sector guidance?

Was this comment sufficiently addressed?  
Addressed:  Partially Addressed:  Not Addressed:

Comments: This question is outside the scope of the NPDES CAFO program requirements.

8. Does the program identify the level of verification effort in relation to TMDL sector nutrient and sediment reduction goals?

Was this comment sufficiently addressed?  
Addressed:  Partially Addressed:  Not Addressed:

Comments: This question is outside the scope of the NPDES CAFO program requirements.

9. For on-site non-visual assessments of plans for Nutrient Management, does the program identify the assessment methods utilized to verify each component of the plans, the degree of compliance with the CBP-defined practice standards, and the ability to track and report data on compliance levels of each component or standard?

Was this comment sufficiently addressed?  
Addressed:  Partially Addressed:  Not Addressed:

Comments: This question is outside the scope of the NPDES CAFO program requirements.

10. Is the intensity of verification efforts prioritized in proportion to a practices contribution to the overall TMDL pollution reduction in the jurisdiction's WIP?

Was this comment sufficiently addressed?  
Addressed:  Partially Addressed:  Not Addressed:

Comments: This question is outside the scope of the NPDES CAFO program requirements.

11. Does the program make an effort to increase the transparency of its BMP verification programs?  
If so, what steps have been proposed?

Was this comment sufficiently addressed?		
Addressed: <input type="checkbox"/>	Partially Addressed: <input type="checkbox"/>	Not Addressed: <input type="checkbox"/>
Comments: This question is outside the scope of the NPDES CAFO program requirements.		

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## *Pennsylvania*

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No documentation for how the results of the remote sensing pilot project be shared with the Partnership's Agriculture Workgroup (and other relevant sector workgroups, e.g., Forestry Workgroup) and the Watershed Technical Workgroup for review in comparison with the Partnership's Basinwide Framework's verification guidance and acceptance as a new set of verification procedures by the Partnership's technical workgroups.

Was this comment sufficiently addressed?		
Addressed: <input type="checkbox"/>	Partially Addressed: <input type="checkbox"/>	Not Addressed: <input type="checkbox"/>
Comments: This comment is outside the scope of the NPDES CAFO program requirements.		

The Panel is concerned that the results of the pilot study will only be applied to counties with 50,000 or more acres of conservation tillage (cited on page 17).

Was this comment sufficiently addressed?		
Addressed: <input type="checkbox"/>	Partially Addressed: <input type="checkbox"/>	Not Addressed: <input type="checkbox"/>
Comments: This comment is outside the scope of the NPDES CAFO program requirements.		

No attempt was made to justify levels of follow-up inspections, which are proposed as being below the guidance levels.

Was this comment sufficiently addressed?  
Addressed:  Partially Addressed:  Not Addressed:

Comments: There was some discussion in the Plan about this, however; the 100% annual on-site status review conducted by CD's at CAFOs have not been done consistently.

If NRCS normally checks 5% of total practices in the state with a limit of 20 per practice, no more than 3-5 low risk practices would be checked. Spot checks are to be distributed among various practices applied during the year, and each type practice should be spot checked at least every three years. Staff for practices implemented under Pennsylvania's Growing Greener Program, the Section 319 program, and Nutrient Management Act program are certified immediately following implementation by NRCS Technical Specialists, Qualified State and Federal Fish and Wildlife Staff, Qualified Private Sector Engineers and Agricultural BMP Experts, DEP Watershed Managers, TSPs, Qualified Conservation District Staff and Other Qualified Individuals. Each priority practice has a frequency amount. Frequency depends on which agency is doing review. Projects implemented using DEP provided funds are well verified at implementation time but are not consistently tracked by DEP staff after that time. There is no established and consistently followed statistical sampling of past installed state funded projects by DEP staff. A majority of these state funded projects are inspected in later years by local grant administrators but this information is not collected or verified at the state level. FSA has spot checking procedures of up to 10% on riparian buffers until all practices are implemented. NRCS (10%) and DEP check Riparian forest buffers (25%). If NRCS/FSA data is used with no further validation, their Agency selection process needs to be reviewed to determine if it is the practices that are in the state's WIP.

Was this comment sufficiently addressed?  
Addressed:  Partially Addressed:  Not Addressed:

Comments: PA's BMP Verification Protocol does not discuss using DEP inspections and CD on-site status reviews to verify conservation plans or buffers at CAFOs.

Conservation Tillage is being assessed in Capital RC&D counties (15) using the CTIC Roadside Transect Survey methodology (see Appendix C in Pennsylvania's draft program plan) with 10% independent verification. Currently only counties with greater than 50,000 acres of agriculture are surveyed. The Panel saw no documentation on how the results from the transect surveys translates to BMP Watershed Model progress input data.

Was this comment sufficiently addressed?

Addressed:  Partially Addressed:  Not Addressed:

Comments: This comment is outside the scope of the NPDES CAFO program requirements.

No timeframes for filling in the admitted gaps in their verification protocols, for not only the high priority BMPs but also for the medium and low priority BMPs.

Was this comment sufficiently addressed?

Addressed:  Partially Addressed:  Not Addressed:

Comments: Timeframes were not provided. PA included statements such as “additional BMP verification by DEP is being considered.”

Pennsylvania seems to be making an effort to review the MMP and NMPs, but the documentation was unclear as to the extent to which there were onsite inspections. The reference in Table 8 on page 33 to “NMPs for CAOs and CAFOs are inspected yearly, on site.” What does an onsite review of NMPs really mean?

Was this comment sufficiently addressed?

Addressed:  Partially Addressed:  Not Addressed:

Comments: CD’s are responsible for the annual on-site status review of a CAFO’s NMP. Attachment 1 provided the checklist used by the CD’s. The current checklist provides simple yes or no options and does not allow for a qualitative review. However, the current review process (i.e., checklist) will need to be improved to document and verify not just if BMPs are being implemented, but whether the BMPs are being properly operated and maintained. In addition, as stated earlier, CD’s do not consistently review NMPs at CAFOs annually and are not able to enforce the terms of the NPDES permits.

Pennsylvania makes the statement: "Information on BMP implementation obtained from USDA is assumed to be accurate, and the data are not further checked or verified prior to inclusion in the annual submission to CBPO via NEIEN." This statement caused the Panel significant concerns, as USDA's spot checks were established for programmatic purposes beyond verification. Pennsylvania needs to determine if, and document, why (or why not) USDA's protocols achieve Pennsylvania's verification objectives.

Was this comment sufficiently addressed?  
Addressed:  Partially Addressed:  Not Addressed:

Comments: This comment is outside the scope of the NPDES CAFO program requirements.

Pennsylvania notes a number of verification protocol gaps: animal waste management, manure transport, animal waste management systems, and manure management plans. These gaps are a flaw that need to be addressed.

Was this comment sufficiently addressed?  
Addressed:  Partially Addressed:  Not Addressed:

Comments: PA proposes to have CD's conduct annual on-site status reviews of NMPs at CAFOs to verify AWMS and manure transport.

Need the Statistical Sampling Design Review Team's review of the CTIC statistical sampling design protocol, need sub-sampling of actual field residues to validate the protocol, and need Pennsylvania to confirm this protocol's application to cover crops.

Was this comment sufficiently addressed?  
Addressed:  Partially Addressed:  Not Addressed:

Comments: This comment is outside the scope of the NPDES CAFO program requirements.

Provide documentation on how Pennsylvania plans to take the result of its statistical-based subsampling verification protocols and convert the resultant findings into numbers of BMPs spread over what geographical areas for reporting on its progress every year.

Was this comment sufficiently addressed? Addressed: <input type="checkbox"/> Partially Addressed: <input type="checkbox"/> Not Addressed: <input type="checkbox"/>  Comments: This comment is outside the scope of the NPDES CAFO program requirements.
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## *Evaluation Questions – Pennsylvania Stormwater*

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1. Is the existing MS4 permit inspection and maintenance framework the foundation of the jurisdiction's program? **Not entirely**

Was this comment sufficiently addressed? Addressed: <input type="checkbox"/> Partially Addressed: <input type="checkbox"/> Not Addressed: <input type="checkbox"/>  Comments: <b>State Construction program/E+S are also heavily considered.</b>
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2. Is field performance verification scheduled for every other MS4 permit cycle? How often?

Was this comment sufficiently addressed? Addressed: <input type="checkbox"/> Partially Addressed: <input type="checkbox"/> Not Addressed: <input type="checkbox"/>  Comments:
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3. Does the program link the timing of visual inspections to the length of credit durations for urban stormwater practices?

Was this comment sufficiently addressed?  
Addressed:  Partially Addressed:  Not Addressed:

Comments: **No specific timing in document. O&M plans are required at completion of BMP. MS4 annual reports must also provide an inventory of post-construction BMPs.**

4. Will MS4 communities be assessing their entire BMP populations within two permit cycles? If so, will they address pre-2000 BMPs prior to pre-1990 BMPs?

Was this comment sufficiently addressed?  
Addressed:  Partially Addressed:  Not Addressed:

Comments: **MS4 permit requires BMP inventory dating back to 2003.**

5. What is the defined amount of time a locality/federal facility has to take corrective maintenance or rehabilitation to bring a sub-standard BMP back into compliance?

Was this comment sufficiently addressed?  
Addressed:  Partially Addressed:  Not Addressed:

Comments: **Not specified, but E+S enforcement process described on p 74.**

6. Does the program address proper installation, whether or not the practice meets the design standards, and whether it functions in the hydrologic manner in which it was designed prior to submitting the BMP for credit?

Was this comment sufficiently addressed?  
Addressed:  Partially Addressed:  Not Addressed:

Comments: **Addressed in PA Chapter 102 state stormwater program.**

7. Is the program consistent with the Bay Program-approved reporting standards? Do they allow appropriate flexibility for practices that don't lend themselves to the NEIEN geographic reporting requirements?

Was this comment sufficiently addressed?  
Addressed:  Partially Addressed:  Not Addressed:

Comments:

8. Are verification efforts prioritized according to a practice's contribution to the overall TMDL pollutant reduction in a state's urban source sector? **Yes**

Was this comment sufficiently addressed?  
Addressed:  Partially Addressed:  Not Addressed:

Comments:

9. Will the jurisdiction provide spot checks on a subset of local and federal facility BMP project files to validate the reported BMP data?

Was this comment sufficiently addressed?  
Addressed:  Partially Addressed:  Not Addressed:

Comments: **Independent verification of data performed by PSU.**

10. Does the program address semi-regulated communities by following one of the three options provided in the sector guidance?

Was this comment sufficiently addressed?  
Addressed:  Partially Addressed:  Not Addressed:

Comments: **The document discusses semi-regulated areas on p 80, 83, and 86.**

11. Are the fastest-growing semi-regulated communities prioritized?

Was this comment sufficiently addressed?  
Addressed:  Partially Addressed:  Not Addressed:

Comments:

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## *Pennsylvania Stream Restoration*

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No documentation of stream restoration verification protocols.

Was this comment sufficiently addressed?					
Addressed:	<input type="checkbox"/>	Partially Addressed:	<input type="checkbox"/>	Not Addressed:	<input checked="" type="checkbox"/>
Comments:					

The Panel noted that stream restoration was missing from Pennsylvania’s list of priority practices—does Pennsylvania plan to report stream restoration?

- a. Pennsylvania confirmed that stream restoration is a high priority practice for Pennsylvania. Pennsylvania plans to use the verification protocols and procedures used in the Big Spring Run stream restoration project as its overall stream restoration verification procedures.

Was this comment sufficiently addressed?					
Addressed:	<input type="checkbox"/>	Partially Addressed:	<input type="checkbox"/>	Not Addressed:	<input checked="" type="checkbox"/>
Comments: EPA wetlands and stormwater programs stream restoration should be discouraged.					

The Panel recommended to Pennsylvania that they provide answers to the series of stream restoration evaluation review questions on page 51 in Appendix A of the Panel’s August 7th report to the Partnership within the stream restoration section of their revised BMP verification program plan.

Was this comment sufficiently addressed?					
Addressed:	<input type="checkbox"/>	Partially Addressed:	<input type="checkbox"/>	Not Addressed:	<input type="checkbox"/>
Comments:					

The Panel emphasized the need for focusing on functionality, not just presence of the practices.

Was this comment sufficiently addressed?

Addressed:  Partially Addressed:  Not Addressed:

Comments: The BMP does not seem to address functionality in the stream BMP's.

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## *Pennsylvania Wastewater Evaluation Questions*

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1. Does program require significant wastewater treatment facilities to monitor and report monthly flows and loads via DMRs?

Was this comment sufficiently addressed?

Addressed:  Partially Addressed:  Not Addressed:

Comments: PADEP NPDES Permitting Requirements

2. Does program require significant facilities to submit annual loading reports where trading or general permit conditions apply to a facility and when annual WIP reporting applies?

Was this comment sufficiently addressed?

Addressed:  Partially Addressed:  Not Addressed:

Comments: PADEP NPDES Permitting Requirements

3. For non-significant wastewater treatment facilities, will NPDES DMR be used to report load reductions from BMPs (i.e. upgrades and offsets of new or expanding facilities)?

Was this comment sufficiently addressed?  
Addressed:  Partially Addressed:  Not Addressed:

Comments:

- *“Non-significant facilities are presented in aggregate in the Supplement, but DEP maintains and tracks the individual facilities internally. DEP also provides updates in the Supplement to track the movement of facilities from significant/non-significant classifications and the associated redistribution of the WLAs between significant and non-significant facilities”*
- *“All permitted wastewater facilities in the Pennsylvania portion of the Chesapeake Bay watershed are required to submit DMRs to report sampling and monitoring required by their NPDES permit.”*

4. Will non-significant facilities be tracked against aggregate waste-load allocations with loads reported annually via the mechanisms documented in the jurisdiction’s WIPs?

Was this comment sufficiently addressed?  
Addressed:  Partially Addressed:  Not Addressed:

Comments:

- *“Non-significant facilities are presented in aggregate in the Supplement, but DEP maintains and tracks the individual facilities internally. DEP also provides updates in the Supplement to track the movement of facilities from significant/non-significant classifications and the associated redistribution of the WLAs between significant and non-significant facilities.”*

5. Will Combined Sewer Overflows (CSOs) undergo construction verification to ensure proper design, installation and maintenance?

Was this comment sufficiently addressed?  
Addressed:  Partially Addressed:  Not Addressed:

Comments:  

- *“Per the April 6, 2015 Revised Phase 2 Watershed Implementation Plan Wastewater Supplement, “DEP intends to continue addressing CSOs through its CSO Policy (DEP ID No. 385-2000-011), including the Nine Minimum Controls (NMCs), Long-Term Control Plans (LTCPs) and Post-Construction Monitoring. DEP does not intend to impose monitoring or Cap Loads in NPDES permits for CSOs. DEP assumes there is no remaining Capacity for CSO dischargers.””*

6. Are plans in place to ensure that CSOs receive sufficient post-construction monitoring and inspection, and that they are being properly tracked and reported?

Was this comment sufficiently addressed?  
Addressed:  Partially Addressed:  Not Addressed:

Comments:  

- *“Per the April 6, 2015 Revised Phase 2 Watershed Implementation Plan Wastewater Supplement, “DEP intends to continue addressing CSOs through its CSO Policy (DEP ID No. 385-2000-011), including the Nine Minimum Controls (NMCs), Long-Term Control Plans (LTCPs) and Post-Construction Monitoring. DEP does not intend to impose monitoring or Cap Loads in NPDES permits for CSOs. DEP assumes there is no remaining Capacity for CSO dischargers.””*

7. Are Onsite treatment system verification procedures based on existing state regulations or do they follow the set of minimum elements for verification based on existing state programs in Delaware (DE), Maryland (MD) and Virginia (VA)?

Was this comment sufficiently addressed?  
Addressed:  Partially Addressed:  Not Addressed:

Comments: NA

8. Are proper checks in place to ensure the design and installation on-site BMP systems will be done and reported by certified service providers and verified in the permitting processes?

Was this comment sufficiently addressed?  
Addressed:  Partially Addressed:  Not Addressed:

Comments: NA

9. Is the frequency of maintenance and inspection of onsite systems annual, or otherwise consistent with the recommendations from Table B-17 of the Onsite Wastewater Treatment Expert Panel report?

Was this comment sufficiently addressed?  
Addressed:  Partially Addressed:  Not Addressed:

Comments: NA

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## *Pennsylvania Wastewater*

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The Panel asks the Pennsylvania to provide relative details about the status of efforts to put in place permits consistent with the Chesapeake Bay TMDL.

Was this comment sufficiently addressed?  
Addressed:  Partially Addressed:  Not Addressed:

Comments:

- *“PADEP's most recent high-level strategy to address the requirements in the TMDL, the Phase II Watershed Implementation Plan (WIP), was finalized in 2012. Section 7 of the WIP focuses on wastewater facilities. PADEP decided to develop a more detailed supplement to Section 7 of the WIP that would enable flexibility in managing pollutant loads from wastewater facilities (Phase II WIP Wastewater Supplement). The Phase II WIP Wastewater Supplement is incorporated into this verification document by reference and can be found at: [www.depweb.state.pa.us/npdes-bay](http://www.depweb.state.pa.us/npdes-bay).”*

Need to discuss the non-significant facilities and any planned verification efforts.

Was this comment sufficiently addressed?			
Addressed:	<input checked="" type="checkbox"/>	Partially Addressed: <input type="checkbox"/>	Not Addressed: <input type="checkbox"/>
Comments:			
<ul style="list-style-type: none"><li>• <i>“Non-significant facilities are presented in aggregate in the Supplement, but DEP maintains and tracks the individual facilities internally. DEP also provides updates in the Supplement to track the movement of facilities from significant/non-significant classifications and the associated redistribution of the WLAs between significant and non-significant facilities.”</i></li></ul>			

Missing descriptions of the verification procedures for septic systems and CSOs.

Was this comment sufficiently addressed?			
Addressed:	<input type="checkbox"/>	Partially Addressed: <input checked="" type="checkbox"/>	Not Addressed: <input type="checkbox"/>
Comments:			
<ul style="list-style-type: none"><li>• <i>“Per the April 6, 2015 Revised Phase 2 Watershed Implementation Plan Wastewater Supplement, “DEP intends to continue addressing CSOs through its CSO Policy (DEP ID No. 385-2000-011), including the Nine Minimum Controls (NMCs), Long-Term Control Plans (LTCPs) and Post-Construction Monitoring. DEP does not intend to impose monitoring or Cap Loads in NPDES permits for CSOs. DEP assumes there is no remaining Capacity for CSO dischargers.””</i></li><li>• <i>“Publicly Owned Treatment Works (POTW) operators are required to submit to DEP Regional offices a tally of the septic systems eliminated and connected to their sewerage system on an annual basis. In addition to the annual accounting, there are Act 537, Pennsylvania Sewage Facilities Act, requirements, requiring a municipality or those performing the sewer extension or new sewer system work to file components M, or 3, with DEP Regional Clean Water Program Planning to update the municipality’s Act 537 plan. The Act 537 Plan is required to both delineate the area in which community sewage systems are in place, as well as, provide for the “orderly extension of community interceptor sewers” (Act 537 Section 5). Act 537 Plans must be reviewed and approved by DEP. At this time, Pennsylvania is not seeking credit for other septic BMPs. If DEP decides to report additional septic BMPs in the future for credit in the CBWM, verification procedures will be developed at that time.”</i></li></ul>			

Relies on NPDES reporting and compliance monitoring for verification. No information is provided on frequency of inspections.

Was this comment sufficiently addressed?  
Addressed:  Partially Addressed:  Not Addressed:

Comments:

- *“DEP implements its Compliance Monitoring Strategy (CMS) that is submitted to EPA for each federal fiscal year. DEP goes above and beyond national CMS goals by conducting detailed audits on compliance and non-compliance with Chesapeake Bay Cap Loads, in accordance with a standard operating procedure issued by DEP Central Office. These audits ensure that proper calculations were completed throughout the compliance year and in some cases have resulted in discoveries that facilities believing they were in compliance were actually not. In addition, DEP’s Laboratory Accreditation Program performs on-site audits of wastewater laboratories to ensure compliance with Chapter 252 requirements.”*

The Panels asks that Pennsylvania answer the series of questions contained within the wastewater sector section of the Panel’s evaluation form.

Was this comment sufficiently addressed?  
Addressed:  Partially Addressed:  Not Addressed:

Comments: I need further clarification regarding this question.

Pennsylvania needs to determine how to best document verification procedures as they relate to their permitted discharge facilities without getting too deep into compliance procedures.

Was this comment sufficiently addressed?  
Addressed:  Partially Addressed:  Not Addressed:

Comments:

- *“PADEP’s most recent high-level strategy to address the requirements in the TMDL, the Phase II Watershed Implementation Plan (WIP), was finalized in 2012. Section 7 of the WIP focuses on wastewater facilities. PADEP decided to develop a more detailed supplement to Section 7 of the WIP that would enable flexibility in managing pollutant loads from wastewater facilities (Phase II WIP Wastewater Supplement). The Phase II WIP Wastewater Supplement is incorporated into this verification document by reference and can be found at: [www.depweb.state.pa.us/npdes-bay](http://www.depweb.state.pa.us/npdes-bay).”*

In terms of septic systems, hook-ups of septic systems to existing sewer systems are practices that Pennsylvania wants to continue to report and receive credit for into the future.

Was this comment sufficiently addressed?			
Addressed:	<input checked="" type="checkbox"/>	Partially Addressed:	<input type="checkbox"/>
		Not Addressed:	<input type="checkbox"/>
Comments:			
<ul style="list-style-type: none"><li>• <i>“Publicly Owned Treatment Works (POTW) operators are required to submit to DEP Regional offices a tally of the septic systems eliminated and connected to their sewerage system on an annual basis. In addition to the annual accounting, there are Act 537, Pennsylvania Sewage Facilities Act, requirements, requiring a municipality or those performing the sewer extension or new sewer system work to file components M, or 3, with DEP Regional Clean Water Program Planning to update the municipality’s Act 537 plan. The Act 537 Plan is required to both delineate the area in which community sewage systems are in place, as well as, provide for the “orderly extension of community interceptor sewers” (Act 537 Section 5). Act 537 Plans must be reviewed and approved by DEP. At this time, Pennsylvania is not seeking credit for other septic BMPs. If DEP decides to report additional septic BMPs in the future for credit in the CBWM, verification procedures will be developed at that time.”</i></li></ul>			

The Panel recommended that Pennsylvania add a short narrative statement about how significant facilities and non-significant facilities are tracked against the facility specific and aggregate waste load allocations and then providing a URL link to Pennsylvania’s Watershed Implementation Plan supplement document.

Was this comment sufficiently addressed?			
Addressed:	<input checked="" type="checkbox"/>	Partially Addressed:	<input type="checkbox"/>
		Not Addressed:	<input type="checkbox"/>
Comments:			
<ul style="list-style-type: none"><li>• <i>“PADEP’s most recent high-level strategy to address the requirements in the TMDL, the Phase II Watershed Implementation Plan (WIP), was finalized in 2012. Section 7 of the WIP focuses on wastewater facilities. PADEP decided to develop a more detailed supplement to Section 7 of the WIP that would enable flexibility in managing pollutant loads from wastewater facilities (Phase II WIP Wastewater Supplement). The Phase II WIP Wastewater Supplement is incorporated into this verification document by reference and can be found at: <a href="http://www.depweb.state.pa.us/npdes-bay">www.depweb.state.pa.us/npdes-bay</a>.”</i></li></ul>			

WWTP: PA wastewater QAPP is also a WWTP data QAPP for the CBPO model run purpose. No detailed overall verification procedures are provided, especially for non-significant facilities.

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## *Pennsylvania Wetlands*

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Beyond constructed wetlands, there are no wetland verification procedures documented.

Was this comment sufficiently addressed?		
Addressed: <input checked="" type="checkbox"/>	Partially Addressed: <input type="checkbox"/>	Not Addressed: <input type="checkbox"/>
Comments: Page 64: DEP Central Office and Regional Office staff and/or County Conservation District staff currently provide 100% initial verification upon completion of the project, and will commit to an on-site visit once out of every five years thereafter, with a goal of visiting 20% of the projects annually.		

The Panel asks Pennsylvania to documents its schedule for development of wetlands restoration verification protocols.

Was this comment sufficiently addressed?		
Addressed: <input checked="" type="checkbox"/>	Partially Addressed: <input type="checkbox"/>	Not Addressed: <input type="checkbox"/>
Comments: Page 66 addresses wetland restoration verification protocols.		

The Panel emphasized the need for focusing wetlands verification on assessing functionality and ensuring that the functionality continues through time.

Was this comment sufficiently addressed?		
Addressed: <input type="checkbox"/>	Partially Addressed: <input type="checkbox"/>	Not Addressed: <input checked="" type="checkbox"/>
Comments: Guidelines for wetland verification was not incorporated into the BMP plan.		

The Panel recommended to Pennsylvania that they answer the series of wetlands evaluation review questions on page 52 Appendix A of the Panel’s August 7th report to the Partnership within the wetlands section of their revised BMP verification program plan.

- a. Pennsylvania recognized they need to provide more documentation on their wetlands verification protocols. Majority of wetland restoration is conducted through regulatory mitigation work and NRCS funded wetland restoration projects.

Was this comment sufficiently addressed?			
Addressed:	<input checked="" type="checkbox"/>	Partially Addressed: <input type="checkbox"/>	Not Addressed: <input type="checkbox"/>
Comments:			