Summary: EPA Evaluation of Pennsylvania Draft Watershed Implementation Plan

Rating for Gap-Filling Strategies: **Serious Deficiencies**
WIP Numbers Compared to 7/1 and 8/13 Allocations: N 0% under; P 11% over; TSS 1% over
Backstop Allocations in Draft TMDL that will remain if final Phase I WIP not strengthened:

- **High level backstop allocations** for Pennsylvania point sources
  - WWTPs: limit of technology (3 mg/L TN and .1 mg/L TP) and design flow for significant municipal plants
  - MS4s: 50% of urban MS4 lands meet aggressive performance standard through retrofit/ redevelopment; 50% of unregulated land treated as regulated, so that 25% of unregulated land meets aggressive performance standard; designation as necessary
  - Construction: Erosion and sediment control on all lands subject to Construction General Permit
  - CAFO production areas: Waste management, barnyard runoff control, mortality composting. Precision feed management for all animals. Same standards apply to AFOs not subject to CAFO permits except no feed management on dairies; designation as necessary
  - Load from point source reductions redistributed to forest, septic, and agriculture sources as possible while still meeting July 1 and August 13 nutrient and sediment allocations
- **Finer scale wasteload and load allocations** (same level of detail as tidal states) to ensure NPDES permits will be consistent with Chesapeake Bay TMDL wasteload allocations

Overall

- PA WIP very weak compared to the amount of N, P, and sediment PA must reduce. Strategies do not equate to the reductions PA is proposing, nor provide reasonable assurance that nutrient and sediment targets will be met by the 2017 and 2025 milestones. To meet EPA's expectations:
  - Provide a baseline for compliance and implementation rates of existing programs
  - Provide more detailed gap-closing strategies
  - Include contingencies for funding deficiencies (e.g. Act 167)
  - Provide strategies that explain how will achieve substantial increases in BMP implementation rates (e.g. 3% to 96% increase for pasture management)
- Correct discrepancies between PA's Table B2 and the WIP input deck:
  - PA WIP document proposes 2025 nitrogen load from forest sector of 16.1 mil lbs/year by 2025, but WIP input deck indicates forests deliver 23.2 mil lbs/year to the Bay
  - PA WIP document proposes 2025 nitrogen load from septics of 2.3 mil lbs/yr, but WIP input deck indicates onsite septic systems will deliver estimated 3.3 mil lbs/year to the Bay

Agriculture: Serious Deficiencies in Gap-Filling Strategies

<u>Key Areas for Improvement</u>

- No detailed program capacity description, gap analysis, and strategies/timeframes to fill gaps
- PA does not have an acceptable coordinated and comprehensive AFO Compliance and Enforcement Strategy. Concentrating on small dairy operations, especially considering the large number of these type of operations, raises concerns over the level of water quality

impacts on a cumulative basis based on the level on non-compliance with meeting baseline PA regulatory requirements
- No detailed plan for how to ensure compliance with existing regulatory programs
- No plan to address P imbalance in animal ag-dominated regions of PA (south central PA). Unclear whether the revisions to the Manure Management Manual will address this imbalance and ensure no over-application of P manure and address P saturated soils

Opportunities for Strengthening Phase I WIP, State Programs, and/or Authorities
- Consider expanding their CAO program to small dairies
- Consider revising their erosion and sediment control, nutrient management plan requirements, and Manure Management Plans to incorporate 502 agricultural measures
- Could improve compliance assurance program that is targeted and inspection-based
- Consider greater engagement with poultry integrators to find solutions to manure management, with an emphasis on alternative uses of manure

Urban Stormwater: Inadequate Gap-Filling Strategies
Key Areas for Improvement
- Most of the strong stormwater concepts described in the WIP are in policies, guidance and manuals, with questionable enforceability and accountability
- Emphasis is on planning (i.e. Act 167) and not on specific actions to improve water quality
- If additional reductions expected from currently unregulated urban lands, include a proposal for regulating additional discharges using residual designation authority or state regulations
- Relying on redevelopment at the current rate is not a retrofit program
- Loads from stormwater draining to MS4 systems must be in wasteload allocation. Activities (as described in the federal rules) that influence drainage into the MS4 system are regulated
- Address documented low level of MS4 compliance

Opportunities for Strengthening Draft WIP, State Programs, and/or Authorities
- To prevent increases in loads from new development in MS4-regulated areas, must apply a strong performance standard that is likely to be most effective if based on a volume or flow metric, and formulated as a retention (not detention) standard with the objective of stable hydrologic condition
- Retrofit program needs to include a strong performance standard for all retrofits that also has stable hydrology in receiving streams as an objective and a reasonably aggressive implementation schedule
- In order to prevent increases in loads from new development outside of MS4-regulated areas, a strong performance standard must be applied to these discharges. PA needs to establish a mechanism (state rules, construction general permit, residual designation authority) to regulate additional loads from new development
- More detailed description of scope and enforceability of new and redevelopment standards

Wastewater: Serious Deficiencies in Gap-Filling Strategies
Key Areas for Improvement
- Many permits that have been issued with limits that will not become effective until after 10/01/2010, some as late as 2014, contrary to the permit schedule provided in the WIP

- Need method to assign loads to non-sig. industrial facilities, and those covered by PAG04
- Only allow credits to point sources if strategy to ensure onsite systems are meeting allocation
- Need documentation that verifies existing loads will satisfy the wasteload allocations

Opportunities for Strengthening Draft WIP, Existing Programs, and/or Authorities

- Discuss method for achieving load reductions from onsite systems, particularly if assuming 30% reduction in loads from this sector
- Identify the concentration and/or load for which wastewater treatment plant permits will be based
- If an aggregate allocation is used for non-significant industrial facilities, PA will need to develop and implement an accounting of the loads from the non-significant industrial dischargers to document that the discharges are within the aggregate load

Growth: Serious Deficiencies in Gap-Filling Strategies

Key Areas for Improvement

- Offset program is not water quality-oriented for agricultural credit generation. Offset and trading credits cannot be generated until source achieves baseline TMDL compliance. There is no discussion how the "core four" practices meet base line TMDL compliance
- Unclear how Act 167 will address additional loads resulting from new construction, particularly as funding for this program has been zeroed out. MS4 and construction permits should require offsets for additional loads