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A Model Program for Onsite Systems in the Chesapeake Bay Watershed

Update for Wastewater Workgroup

June 4, 2013

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Overview

- Current Status
- Background
- State comments
- Public comments
- Next steps

Model Program Status

- **Draft Released for Public Comment [on Chesapeake Bay Program Office Executive Order webpage - November 15, 2012**
- **Public comment deadline - December 28, 2012**
- **Briefing to CBPO, Regions 2 and 3 – May 29, 2013**
- **Deadline to Complete and Release – June 30, 2013**
  - **Satisfies both the EO Strategy and the Chesapeake Bay Foundation settlement agreement**

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Background

- **EPA committed to develop a technical assistance manual for onsite systems that states in the Chesapeake Bay Watershed can use to augment existing programs and support nitrogen reduction**

- **The focus of the model program is nitrogen management from onsites**

Background

- The model program recognizes that onsite nitrogen management plans vary by state
- Headwater states have different onsite system goals
- Recommendations on treatment levels are based on current loading, distance to the Bay and it's tidal waters, state WIPs, and available technology
- Treatment recommendations based on EPA's G*uidance for Federal Land Management in the Chesapeake Bay Watershed, May 2010*

Public Comments Summary

- **Federal Register**
  - National Association of Home Builders (NAHB) commented that "this document was not announced in the Federal Register, and many professionals, homeowners, and communities may not have been aware of the opportunity to comment."
    - Response – *This is not a rulemaking and therefore OWM is following established CBEO practice.*
- **Implementation of Recommendations**
  - States do not have the resources to implement some of the recommendations, i.e. Inventory and inspection
    - Response - States have the flexibility to select which recommendations , if any, they wish to pursue
- **Costs**
  - Costs to homeowners to upgrade is substantial. MD is the only state with a designated fund; prioritization due to demand
    - Response - States have the flexibility to select which recommendations , if any, they wish to pursue

CBF Comment

- **Treatment Level Recommendations**

  CBF commented…"We recommend that you include a section describing the scientific studies (especially those in the Bay region) that support the recommendations for varying treatments and distance from tidal waters. If you were to include this type of information in your report, not only would the document be a valuable resource for information on septic technologies, model ordinances, and other recommendations, it would also provide the scientific justification for why septic systems are important to consider in terms of pollution reductions and offsets."

Nitrogen Loadings from Onsites

- As public comments were received the latest CBPO model run indicated a reduction in loading contribution from onsite systems to the Bay,
  - by 1/3; from ~6% to 3.4% (12 million lbs to 8 million lbs); down from 8% at the time the 502 Guidance was published in 2010.

State WIP Commitments for Onsites

Based on WIPs, collectively, the CBPO model projects a N load reduction from a current load of 8.9 lbs of N/person/year (edge of the drainfield) for a conventional onsite system to an average of 2.2 lbs/person/year across all systems by 2025.

State	% load reduction in Phase I WIP
DC	NA – no onsites
DE	23% by 2025
MD	39% by 2020
NY	Pursuing elimination of direct discharges, inadequate systems, tracking, inventory
PA	Not committing to N reduction technology, only one system approved in PA for use, limited contribution to Bay, cost/benefit; trading and tracking of 'retired' systems
VA	50% reduction from Advanced Treatment, use of clusters, 5 yr pump-out requirement, tax credits for upgrades to N reducing
WV	Reduction of failing systems, incentives for upgrading; promotion of N reducing systems

Nitrogen Treatment Recommendations

Setback Distance	Draft Model Program Treatment Level for total nitrogen (TN)	Final Model Program Treatment Level for TN
0-100 feet	No Onsite System Discharges	No Onsite System Discharges
100-200 feet	5 mg/L TN	10 mg/L TN
200-1,000 feet	10 mg/L TN	10 mg/L TN
Beyond 1,000 feet	20 mg/L TN	20 mg/L TN (for new development, upgrades/replacements)

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Next Steps

- Finalize document by June 30, 2013
- Tracking states' progress through Watershed Implementation Plan (WIP) Annual reports from the states to the CBPO
- Outreach to states on recommendations and support for implementation
  - Data sharing, best practices, workshops, webinars, case studies, etc.
  - Reciprocity between states through data sharing, protocols, etc.
- Coordination with CBP efforts