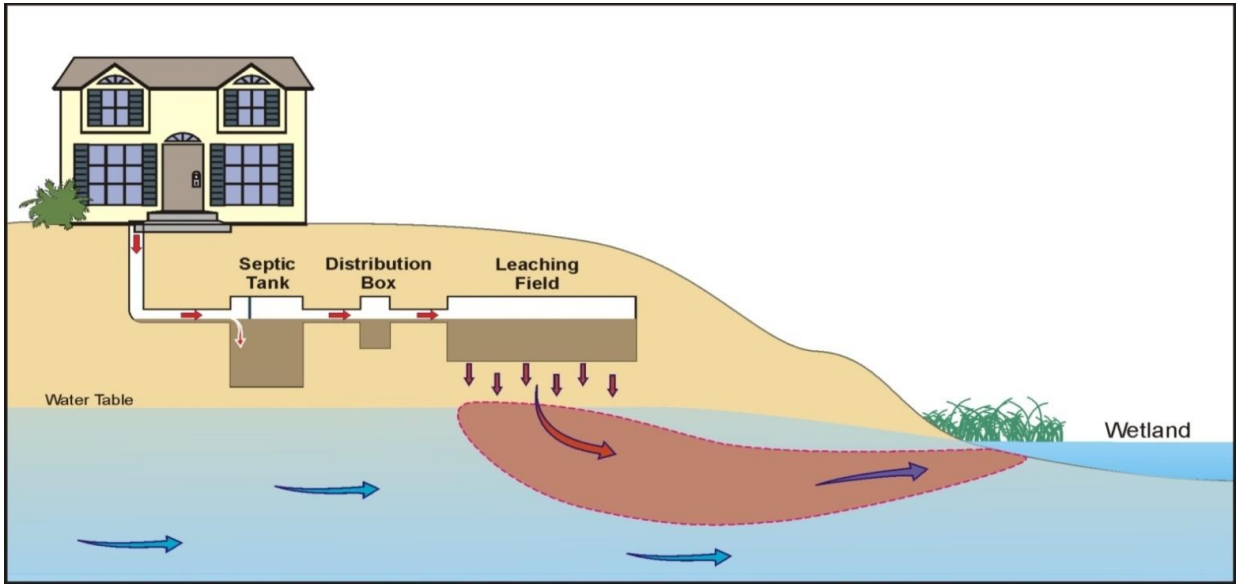
United States Environmental Protection Agency

Technical Assistance Manual for Onsite Programs in the Chesapeake Bay Watershed



Chesapeake Bay Wastewater Treatment Workgroup

July 10, 2012

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Topics to Cover

- Current Status
- Overview of State Comments
- Input/Coordination with the Workgroup

Technical Manual Status

- Staff Level Report Completed (July 2011)
- Initial Input From State Officials (Aug 2011)
- EPA Management Review (February-March 2012
- Federal Agency Comments (April 2012)

- State Comment Period (Through June 29, 2012)

- Share Draft For Public Comment (July 2012)

- Deadline to Complete– June 2013

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Background

- **EPA Committed to Develop a Technical Assistance Manual for Onsite Systems That States Can Use to Augment Existing Programs and Support Nitrogen Reduction**

- **The Focus of the Model Program is Nitrogen Management**

Background

- **The Model Program Recognizes That Onsite Nitrogen Management Plans Vary by State**

- **Headwater States Have Different Onsite System Goals**

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Model Program Elements

- **Recommended Standards For Nitrogen Reduction**
- **Recommended management approaches for advanced/alternative systems**
- **Site inspection and upgrade processes**
- **Site evaluation and system design**

Model Program Elements (cont)

- Cluster system provisions
- Operation and maintenance
- Data management/TMDL compliance
- Designer and operator training
- Approval of alternative systems
- Outreach
- Funding

Model Program Attachments

- The Framework for Onsite System Management
- Summary of Onsite Technologies
- An Annotated Bibliography
- A Document Map or Checklist
- Model Regulatory Language
- A Model State Reciprocity Agreement
- Case Studies

Nitrogen Treatment Standards

- **Currently, Standards Based on Proximity of Onsite Systems to the Bay or its Tidal Tributaries**

- **Currently, Standards Consistent With EPA's *Guidance for Federal Land Management in the Chesapeake Bay Watershed***

Nitrogen Treatment Standards

Setback Distance	Treatment Requirement
0-100 feet	No Onsite System Discharges
100-200 feet	5 mg/L Nitrogen Standard
200-1,000 feet	10 mg/L Nitrogen Standard
Beyond 1,000 feet	20 mg/L Nitrogen Standard

Overview of State's Comments

- Discrepancy between testing center and onsite influent characteristics
- Typical Nitrogen influent concentrations:
  - 35-40 mg/L For Test Centers
  - 60 mg/L For Septic Influent

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Overview of State's Comments

- **Initial Inventory and Upgrades:**
  - **Concerns With Feasibility of an Inventory/Inspection for all Existing Systems**
  - **Concerns With Installation of New Technologies and Upgrade of all Existing Systems**

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Overview of State's Comments

- Concerns With Who Funds Routine Nitrogen Sampling For Onsite Alternative Systems?
- Is Routine Testing Necessary For Approved Systems?
- Is There Adequate Staff to Complete Ongoing Inspections?

Workgroup Input Requested

- Presentation of Treatment Goals for Onsite Systems
  - Concentration Based Standards (current approach)
  - Percent reduction approach
  - Provide Nitrogen Credit Information for Meeting a Treatment Threshold (Based on Current Septic System Modeling Information)

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Nitrogen Credit Approach

Discharge Nitrogen Concentration (mg/L)	Loading (kg/person/yr)	Nitrogen Reduction (kg/person/yr)	Load Reduction Provided
39	4.04	0.00	0 %
30	3.10	0.93	23 %
20	2.07	1.97	49 %
10	1.03	3.00	74 %
5	0.52	3.52	87 %

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Workgroup Input Requested

- **How to Leverage Workgroup's Analysis of BMPs and Incorporate This Information in the Manual?**
- **Approaches for Onsite System Inspection and Tracking of Nitrogen Upgrades to Achieve Credit for Improvements?**
- **Opportunities to Promote Reciprocity?**

Verification of Alternative Systems

- Needed to confirm that technologies can comply with recommended nitrogen standards
- Greater reciprocity on system approvals needed between states to increase the pool of accepted, available technologies
- Draft reciprocity MOU provided and input from the workgroup is welcomed

Questions/Discussion