

Perc-Rite®

Advanced Septic Drip System

*EPA Listed ~ Advanced Wastewater Treatment.
A Healthier Chesapeake Bay.*



Cleaner Water | Healthier Communities | A Stronger Bay

Proven Technology. Measurable Results.

American Manufacturing Company has been developing the Perc-Rite® Drip Dispersal technology since 1990. Through decades of independent research and testing, drip dispersal has been shown to effectively treat and recycle wastewater back into the environment — including significant nitrogen reduction in most soils.

Research. Validation. Results.

2014

The "Recommendations for On-Site Wastewater Treatment Systems Nitrogen Reduction Technology Expert Review Panel" was submitted to the Wastewater Treatment Workshop of the Chesapeake Bay Partnership. The report rated technologies based on their ability to meet the Chesapeake Bay goal of 50% net nitrogen reduction from current practices.

2018

An additional Expert Panel Report was published, concluding Advanced Drip Dispersal Technology meets the standard.

2020

The EPA listed Advanced Septic Drip nitrogen reduction BMPs (Best Management Practices) in August of 2020.



MEETING THE CHESAPEAKE BAY STANDARD

The EPA and Chesapeake Bay Program goal is to reduce nitrogen across the entire Bay watershed by a net 50%. States such as Virginia have codified this goal in regulation and require on-site wastewater system designs to provide for nitrogen removal for certain alternative systems. Many alternatives include "pretreatment with pressure distribution". Perc-Rite® meets the Advanced Septic Drip Criteria and is now listed with the EPA to meet the reduction standard.

The Perc-Rite® Drip Dispersal Advantage



MEETS THE CHESAPEAKE BAY STANDARD

Provides a gross 60% total (net 50%) nitrogen (TN) reduction when designed per the 2018 expert panel report.



Reduces Nitrogen

Helps protect our waterways



Recycles Water

Returns treated water to the soil



Meets Regulations

EPA listed and Virginia requirements



Trusted Technology

Over 30 years of proven performance



Simple Design. Superior Performance.

Perc-Rite® Septic Drip systems are designed to meet all the recommendations of the 2014 and 2018 expert panel reports and are listed by the EPA as a nitrogen reduction BMP.

Why Choose PercRite®?



Proven nitrogen reduction (60% TN with proper design)



EPA listed and meets Chesapeake Bay watershed goals



Supports Virginia and other state regulations



A sustainable solution for cleaner water and healthier ecosystems

Perc-Rite®

ADVANCED SEPTIC DRIP SYSTEM



AMERICAN
Manufacturing Company, Inc.



www.americanonsite.com

*Better Treatment Today.
A Cleaner Chesapeake Bay Tomorrow.*



ADVANCED SEPTIC DRIP

EPA / Chesapeake Bay nitrogen-reduction documentation • Advanced on-site wastewater treatment

What the technical record says

The Chesapeake Bay On-site Wastewater Nitrogen Removal BMP Expert Review Panel recommended a **50% net total nitrogen (TN) reduction credit** for qualifying drip-irrigation dispersal systems. The recommendation is conditional on site suitability, design, installation, and operating criteria—not simply the use of drip tubing.

50%

**NET TOTAL NITROGEN
REDUCTION
RECOMMENDED FOR
QUALIFYING DRIP DISPERSAL**

Key criteria for the 50% nitrogen-reduction guidance.



- **Shallow placement:** Drip tubing is installed on a natural surface soil horizon (such as A or A/B), no deeper than 12 inches below the original soil surface. Pad or bed installations are excluded.
- **Suitable soils and separation:** No sand or loamy sand predominating within 12 inches below dispersal depth; at least 18 inches of unsaturated soil below the infiltrative surface, subject to stringent rules.
- **Suitable site:** Stable vegetative cover, avoid closed depressions and areas that pond during heavy rainfall.
- **Pressure compensating emitters:** BMP recommendation applies only to drip irrigation systems using pressure compensation emitters.
- **Filtration and flushing:** Provide manufacturer-recommended filtration (typically 120–150 mesh / 100–120 microns) and automatic flushing at the tubing manufacturer's recommended velocity.
- **Timed, equalized dosing:** Dose over 24 hours to alternate aerated and non-aerated periods. Minimum dosed volume: 3.5–5.0× the drip network/zone volume recommended.
- **Hydraulic details:** Minimize drain-down at low lines; hydraulically isolate laterals as appropriate; provide air/vacuum release valves at high points.
- **Spacing and loading:** Maximum 2-ft emitter spacing and typical 2-ft drip-tubing on-center separation; loading rates must not exceed the soil-texture limits below.

Maximum soil texture-based area loading rates	Rate
TG II	0.27 gpd/ft ²
TG III	0.17 gpd/ft ²
TG IV	0.12 gpd/ft ²

Perc-Rite® Septic Drip: American Manufacturing states that Perc-Rite® designs meet the recommendations in the Drip Irrigation Expert Panel Report. Confirm each project's soil conditions, loading rate, layout, and applicable state/local requirements during design review.

Reference documents

- 2014 • Recommendations of the OSWWT Systems Nitrogen Reduction Technology, Expert Review Panel
https://d38c6ppuvmf.cloudfront.net/documents/Final_OWTS_Expert_Panel_WQGIT_approved_07142014.pdf
- 2018 • Drip Irrigation and Peat Treatment System On-site Wastewater Nutrient Removal BMP Expert Panel Report
https://www.chesapeakebay.net/files/documents/osww_bmp_report_4-30-18.pdf
- 2018 • Appendix G: Technical Requirements for Advanced On-site Wastewater Treatment Practices in Scenario Builder and Phase 6 Watershed Model
https://www.chesapeakebay.net/files/documents/septic_systems_technical_appendix_07_19_18.pdf

Important clarification: These references document Chesapeake Bay Program expert-panel recommendations and watershed-model crediting criteria. They do not, by themselves, establish that Advanced Septic Drip or Perc-Rite® is "EPA-listed," EPA-certified, or EPA-endorsed. Use an EPA listing/approval claim only if you have a separate official EPA record that supports that exact wording.

Technical summary based on the cited Chesapeake Bay Program expert-panel documents.

Verify project-specific requirements with the applicable state/local authority.

Perc-Rite®



scan the code to research papers

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