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Matthew J. Armendo
Director

January 23, 2023

Massachusetts Department of Environmental Protection,
Bureau of Resource Protection - Water Management Program,
One Winter Street, 5th floor,
Boston, MA 02108

RE: Proposed Amendment to State Environmental Code, Title V, 310 CMR 15.00 Proposed new Regulation 314.CMR 21.00 Massachusetts Watershed Permit Regulations

The Town of Westport Board of Health (Board) appreciates the opportunity to comment on the pair of draft regulations proposed by the Massachusetts Department of Environmental Protection (Department) that rewrite key provisions of Title 5's nitrogen loading limitations (310 CMR 15.215), and establish the Watershed Permit as a new regulatory mechanism to implement estuary habitat restoration commitments within designated Nitrogen Sensitive Areas (310 CMR 21).

The Board supports the Department's decision to address the long-standing need for affirmative action to address the impairment of estuaries' water quality and habitat. MassDEP has explained that while it prefers the Watershed Permit as the regulatory mechanism to implement its estuarine restoration objectives, it lacked the statutory authority to compel municipalities to obtain a permit. Therefore, it was forced to rely on its statutory authority to revise Title 5's existing nitrogen loading provisions.

It is understandable that the Department would choose the regulatory means it has available to accomplish its objective. But for communities like Westport, which rely almost entirely on septic systems, the proposed scope and timeline of the upgrade poses the threat of untenable financial consequences for homeowners and infeasible implementation demands on Boards of Health. The Board does not share the Department's apparent conclusion that threat of either of these unacceptable outcomes is the most effective means to motivate communities to enter into permit commitments to restore their waterways.

The Board recognizes that the Watershed Permit option provides a potential off-ramp that most communities will choose to avoid the potential pitfalls of the Title 5 revisions. However, due to the integrated relationship of the two regulations, there are multiple instances where omissions and restrictions in the Title 5 draft will result in adverse consequences for septic system owners and communities during the lead up to and implementation of the Watershed Permit.

As set out in detail below, the deficiencies that require resolution include:

- Requiring the Watershed Permit ensures nitrogen load reductions equivalent to the reductions that would have accrued from Best Available Nitrogen Control Technology (BANRT) upgrades of all existing septic systems within the watershed;

- Excluding consideration of cost-effectiveness and economic feasibility in evaluating site-specific implementation of the BANRT upgrade rule for existing systems.
- Limiting application of the BANRT upgrade rule exclusively to septic systems that received a Certificate of Compliance.
- Limiting the exemption from BANRT upgrades exclusively to current system owners who had installed nitrogen-reducing systems within the year prior to the adoption of the regulation.
- Limiting the exemption from repetitive BANRT retrofits exclusively to system owners who installed a BANRT system after the Westport River had been designated a Nitrogen Sensitive Area.
- Failing to include a procedure in the Watershed Permit that provided for the termination of the permit upon the community achieving TMDL compliance.

Conditioning the BANRT Upgrade Exemption on Equivalent Nitrogen Load Reductions

Section 15.215(2)(a)(2) of the Title 5 draft regulation provides for an exemption from a BANRT upgrade for all existing system within the watershed, but only if the community adopts a Watershed Permit that includes "...permit conditions that ensure at least equivalent nitrogen reductions within the schedule included within the Watershed Permit." The apparent intent of the provision is to require that the load reductions projected to result from watershed-wide BANRT upgrades become the baseline TMDL compliance objective of the permit. The subsection further goes on to establish a preferred category of exempt communities who have already entered into a permit before the pending regulation was adopted. The permits for those communities would not be required to yield reductions equivalent to the scope of the BANRT upgrade.

The Mass Estuary Report and the related TMDL approvals established that nitrogen concentration thresholds at sentinel stations, not nitrogen load reductions, were the relevant compliance TMDL target. It was determined that achieving those values will result in high quality habitat throughout the system and attainment of water quality standards.¹ The precondition necessitating the Watershed Permit incorporate nitrogen load reductions equivalent to a watershed-wide BANRT upgrade rule disregards this primary role assigned to the sentinel stations in determining the extent to which water quality and habitat has been restored. The provision that excuses a subset of already permitted communities from achieving equivalent nitrogen load reduction confirms that it is not the appropriate metric to measure TMDL compliance.

Moreover, compelling adoption of a total system upgrade load reduction estimate into the watershed permit process contradicts the individualized, science-based analysis that underlies the compliance targets to be set for each community's watershed. For example, as a result of an assessment of Westport's geology, our community's Targeted Integrated Water Resource Management Plan recommended limiting nitrogen reduction upgrades to pre-1995 systems located within 2000 feet of River. That is a far more reasoned approach than presuming that BANRT retrofit of the town's 6,000+ systems are necessary to meet its TMDL.

¹ "The approach for determining nitrogen loading rates, which will maintain acceptable habitat quality throughout an embayment system, is to first identify a sentinel location within the embayment and second to determine the nitrogen concentration within the water column which will restore that location to the desired habitat quality. The sentinel location is selected such that the restoration of that one site will necessarily bring the other regions of the system to acceptable habitat quality levels." Town of Westport TMDL, page 25.

The restoration goals of the TMDL compliance initiative will only be successful if DEP takes into account the cost-effectiveness of the implementation strategies it endorses through the Watershed Permit process. Solutions primarily targeted to achieve sentinel station water quality criteria will likely result in enormous cost savings to Westport's homeowners and small businesses. Rather than being tied to septic upgrade load projections, future nitrogen reduction targets in communities with robust water quality data should be linked to closing out outstanding compliance gaps in nitrogen concentrations at target stations.

Moreover, the commitment to carryover Title 5's equivalent nitrogen load reductions is unnecessary to accomplish the Watershed Permit's objectives and is incompatible with its independent, long-term planning adaptability framework. The permit's approval criteria are designed to achieve results "necessary to meet water and habitat quality goals", not rigid, pre-determined load reduction estimates.

It is an essential purpose of the Title 5 revision that it offers an alternative compliance pathway for communities that chose to sign onto a Watershed Permit. But the Department should recognize that the Watershed Permit's design is more than robust and comprehensive enough to ensure compliance with TMDLs' core goals without importing carryover constraints from Title 5. Tying them together as currently proposed is wholly unnecessary and ultimately counterproductive.

Excluding Cost Considerations in the Application of BANRT

The Title 5 regulation's intention to advance the development of technologies that achieve greater nitrogen reduction values that are currently available is a worthwhile objective. But, as currently described, the BANRT upgrade rule carries with it the high likelihood that significant increases in compliance costs will be imposed on homeowners and small businesses without any consideration given to the cost-effectiveness or the economic feasibility of the new technology. That omission is inconsistent with the weight given to those factors in similar pollution reduction rules as well as current Title 5 regulations and policies.

In its public information sessions, the Department analogized BANRT to the Best Available Control Technology (BACT) rule applied to air quality omissions. That analogy is misplaced. BACT applies only new or modified pollution sources, not to existing systems as proposed in the draft revisions. In contrast, the Department applies Reasonably Available Control Technology (RACT) for existing emission sources. RACT explicitly factors in technological and economical feasibility in setting emission limits for existing sources. It is contrary to well-established rules that neither the BANRT definition or the upgrade rule incorporate economic feasibility evaluations in reviewing nitrogen reduction retrofits.

In addition, BACT incorporates a cost-effectiveness threshold beyond which an alternative, less expensive technology is approvable. The BANRT rule does not incorporate any mechanism to consider cost-effectiveness in relation to site-specific conditions or where acquisition and installation costs spike due to inflation, monopoly pricing or supply constraints.

The omission of these cost factors also fails to take into account that BACT is typically reserved for large, commercial operations whose owners have the means to finance, depreciate and pass on capital expenditures. Those cost minimization and mitigation options are not available to residential septic system owners who face inflated technology and installation prices in a period of high interest loan rates.

The proposed rule also contradicts the requirement that Boards of Health must consider economic feasibility in evaluating how maximum feasible compliance will be implemented in accordance with Title 5's Local Upgrade Approval provision (15.405(1)). That same financial consideration is also required under DEP's current policies on incorporating nitrogen reduction technologies into system upgrades.²

The failure to account for either cost effectiveness or economic feasibility is a fundamental flaw, which could seriously impair implementation of the upgrade rule. The regulation should be redrafted to incorporate these financial factors or limit BANRT applicability to new system construction. In the latter instance, local Boards of health could still choose to adopt a local rule for BANRT upgrades for existing systems as a component of the community's Watershed Permit plans. At a minimum, section 15.215(2)(e) should be expanded to allow Boards to consider financial feasibility as is now required under the current Local Upgrade Approval rule.

Limiting BANRT Upgrades to Compliant Systems

Section 15.215(2)(a) can be read to require BANRT upgrades only for existing systems with Certificates of Compliance. That limitation excludes non-conforming systems and systems designed and installed in conformance with Title 5, but lacking a Certificate. This outcome would result in confining nitrogen reducing (NR) upgrades to fully compliant systems while exempting non-conforming systems that typically discharge more nitrogen into the groundwater. These unintended consequences are inequitable and counterproductive to the regulation's goals. It also incentivizes uncertified system owners to avoid an upgrade prior to NRA designation in order to take advantage of the protection against successive retrofits provided by 15.215(2)(f).

Limiting the Exemption for BANRT Retrofits of Existing Nitrogen Reducing Systems

Section 15.215(2)(g) limits the exemption from BANRT upgrade retrofits to those facilities who incorporated nitrogen reducing (NR) technology earlier than one year prior to the effective date of the regulations. This time limited constraint unnecessarily imposes financial burdens on numerous Westport homeowners who voluntarily installed NR systems, or were required to do so pursuant to the Board's regulation requiring NR systems for new construction and policy for system upgrades on undersized lots with elevated groundwater nitrogen levels.

The Department needs to reconsider the imbalance of this punitive restriction in relation to the negligible impact that exempting all approved NR systems would have on estuarine water equality. The Department has not provided any analysis that broadening the exemption would have a significant impact on achieving TMDL compliance. In the absence of a compelling environmental justification, the exemption should be expanded to include all approved NR systems up to the effective date of the regulation unless a site-specific system requires replacement.

Section 15.215(2)(f) exempts the owner of a BANRT system from being required to retrofit their system with a subsequent BANRT. However, that exemption is only available if the original system was installed in accordance with the rule's upgrade requirement after the watershed receives its NSA designation. While the exemption was intended to protect owners from successive retrofits, as drafted it will operate to discriminatorily disqualify owners across the South Coast and Cape who install BANRT systems prior to their watershed's NSA designation in the indeterminate future. The proposed

² Title 5 Program's Guidance on System Upgrades in Areas Subject to Nitrogen Loading Limitations, Policy #: BRP/DWM/PeP-P99-5, Effective date: December 23, 1999; Title 5 Interpretive Guidance, Consideration of Cost in Determining Maximum Feasible Compliance, August 25, 1995.

rule will also dissuade owners from considering voluntarily installing a nitrogen reducing system prior to NSA designation in order to avoid the cost of a future BANRT retrofit. Contrary to the regulation's intent, the net effect will be to increase nitrogen loads. The exemption from a successive BANRT retrofit should be extended to all system owner that install approved NR systems prior to NSA designation unless the NR technology fails and must be replaced.

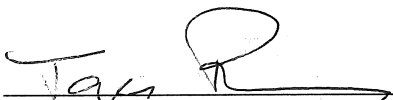
Failing to Provide a Pathway to Terminate a Watershed Permit upon Achieving Compliance

The Watershed Permit provisions addresses the Department's authority to modify, extend or revoke the permit. What the regulation does not provide for is a process and criteria through which a municipality can petition to terminate the permit through a demonstration that it has achieved compliance with water quality and habitat restoration standards, and has in place the means by which compliance will be maintained.

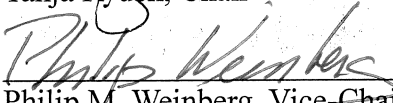
The Board of Health shares in the Department's goal to fully restore the Commonwealth's estuaries and has advanced that goal for the Westport River through our regulations and policies. The Board's efforts have been supported and joined by the complementary actions of other municipal departments, watershed and land conservation NGOs and residents.³ The Department's regulations can facilitate these continuing efforts provided it is accompanied by sustained collaborative problem solving and meaningful financial support.

Thank you for your consideration of our comments.

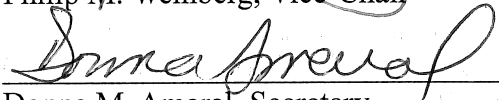
Sincerely,



Tanja Ryden, Chair



Philip M. Weinberg, Vice-Chair



Donna M. Amaral, Secretary

Enclosure

³ See attached letter from Town Administrator to Gerard Martin.