



**TESTIMONY OF RIVERS ALLIANCE OF CONNECTICUT
FOR THE ENVIRONMENT COMMITTEE PUBLIC HEARING
March 14, 2018**

RE SB 342, AAC THRESHOLD FOR THE DEPARTMENT OF ENERGY

**AND ENVIRONMENTAL PROTECTION'S REVIEW OF
ALTERNATIVE TREATMENT SEPTIC SYSTEMS.**

(Oppose)

To the Chairmen: Sen. Ted Kennedy Jr., Sen. Craig Miner, Rep. Mike Demicco,
And Honorable Members of the Committee:

Rivers Alliance of Connecticut is a statewide, non-profit coalition of river organizations, individuals, and businesses formed to protect Connecticut's waters by promoting sound water policies, uniting and strengthening the state's many river groups, and providing education on water stewardship.

SB 342 addresses alternative treatment systems (ATS) designed to treat less than 7,500 gallons of wastewater per day; the bill proposes to remove these systems from regulatory review by DEEP. The language is that "the threshold for [DEEP's review] of alternative treatment septic systems shall be such a system with a capacity of seven thousand five hundred gallons." The bill is difficult to reconcile either with current law or current practice. It sounds as if a threshold is being changed, but, there is at this time, no operative threshold for ATS review.

Public Act 07-231 conditionally transferred authority over ATS to the Department of Public Health. The conditions included the development of regulations for ATS and (importantly from DPH's point of view) was linked to an appropriation of funds

for this purpose. However, the funding was stripped from the bill, and, therefore, DPH has never adopted the stipulated regulations. Regulation of ATS remained by default with DEEP. **Assuming that DPH will still decline to develop regulations for ATS without funding, Bill 342 creates a wastewater no-man's land.**

SB 342 is similar to last year's Public Act 17-146, which increased the size of household and small commercial septic systems over which DPH and local health departments have control from a maximum capacity of 5,000 gallons per day to 7,500 gallons per day. Previously, systems designed for more than 5,000 gallons per day were under the jurisdiction of DEEP. The motive for the change appears to be that applicants for septic systems prefer to go to DPH. No doubt, many of you have observed that land use applications tend to project wastewater volumes to be just under 5,000, when this is a defensible number.

ATS have been controversial for years in Connecticut. They were banned from drinking-water watersheds (with some exceptions) in 2003. About ten years ago, there was a flurry of bills proposing moratoria or other controls on the installation of the systems.

ATS are septic systems designed for places that do not have the space or proper soil for traditional septic treatment. In Connecticut, they have a very poor performance record, partly due to weak enforcement of standards. ATS can be used for beneficial projects, such as development of a town center. But very often they are used to cram in dense development on land with unsuitable soil where dense development will impair natural resources.

ATS are in effect mini municipal sewage treatment plants. The bacteria that break down the waste are in closed containers. Pathogens are destroyed by a disinfectant, such as ultraviolet light. The discharge is supposed to meet drinking water standards for nitrogen and phosphorus. By contrast, traditional systems rely

on bacteria in the waste and in the soil to transform the waste to benign substances (water, nitrogen gas, carbon dioxide, and a hydroxyl radical). Pathogens are killed or dispersed in the soil.

The effective function of ATS depends on living organisms (bacteria of different types) within constructed containers. The organisms require scrupulous and regular maintenance. (Think of the work involved in maintaining a home aquarium. Now imagine the entire system 100 times larger and underground, where you can't see it.) The bacteria can be killed off by numerous factors, including cleaning solvents in the wastewater, not enough flow (means enough food for the bacteria), too much flow (bacteria flooded out) etc. Typically, ATS require timed pumping operations, synchronized treatment steps, testing for pH levels, testing of the quality of the effluent, and so on. These functions are costly and can drive up a home's electricity bill rapidly. Sometimes they are noisy. So sometimes people simply turn them off.

Small ATS are almost always problematic. Owners usually lack the expertise and funding to maintain them. But ATS *can* be made to work quite well, and the large facilities have more promise. ATS are most likely to be reliable when designed, installed, and maintained by a professional team. Maintenance must be frequent enough to detect problems that can happen overnight. Funding must be adequate for the life of the facility.

In conclusion, we ask the committee not to approve this bill, and to react with caution when you are asked to legislate the rules for ATS.

Thank you for your attention to this complex issue.

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