

WATER TOMORROW CONSULTING LLC

Via Electronic Mail

May 8, 2018

Jay E. Patel
Environmental Program Manager
Department of Environmental Protection
Bureau of Clean Water
Municipal Facilities Division
Rachel Carson State Office Building
P.O. Box 8774
Harrisburg, PA 17105-8774

RE: PA DEP Document No. 385-2208-003

Dear Mr. Patel,

I represent WaterTomorrow Consulting LLC, a firm that assists treatment system manufacturers in meeting various market requirements including government approvals, third-party product testing and certifications. Previously, I was employed by NSF International for 30 years. From 1994 to 2015 I was responsible for managing NSF's wastewater treatment unit testing and certification program, including a lead role in developing NSF/ANSI standards for onsite wastewater treatment systems. I remain today a voting member of the standards setting committee.

I was pleased to see the adoption of Act 26, allowing for more widespread use of well established, advanced residential treatment technologies in the Commonwealth of Pennsylvania, and for creating a more standardized method of technology approval. This stands to benefit everyone.

While I appreciate all the work the Department has undertaken in the drafting of the Onlot Wastewater Technology Verification Protocol (TVP) 385-2208-003, I was surprised to see the requirements that extend beyond those of many other states. These additional requirements will add significant time and costs to both the Department of Environmental Protection (DEP) and many treatment system manufacturers. They also appear in my view to conflict with the goals of Act 26.

Utilizing existing standards, testing and certification, as applied in many other states without the further layers proposed in the draft TVP offers substantial benefits. It reduces the burden of PA DEP staff in technology reviews, reduces the time to achieve treatment system approvals, reduces the cost burden of treatment system manufacturers, enhances the number of alternative onlot technologies available to SEO's, municipalities, and homeowners, while continuing to provide proper wastewater treatment with demonstrated measures of performance and compliance.

Many of the elements of this well-established model are already included in the proposed TVP. They include the following:

1. Consensus, comprehensive American National Standards for the testing and evaluation of residential wastewater treatment systems and components: (partial list)

- NSF/ANSI 40 *Residential wastewater treatment systems*
- NSF/ANSI 245 *Wastewater treatment systems – nitrogen reduction*
- NSF/ANSI 350 *Onsite residential and commercial water reuse treatment systems*
- NSF/ANSI 360 *Water Treatment Systems – Field Performance Verification*

Comprehensive test reports are issued by the third-party product certification bodies to the product manufacturer who can then share them with the DEP.

2. Accredited third-party product certification bodies that test and certify treatment systems to the American National Standards, both for initial performance and ongoing field performance, including for example NSF International and Gulf Coast Testing, LLC.

Both these organizations publish comprehensive certification policies which detail the responsibilities and contractual obligations of the product manufacturer. The certification bodies are further audited against these policies, and to international standards by accreditation authorities to ensure they fulfill their obligations as a certifier.

3. Accreditation organizations that evaluate laboratories and third-party product certification bodies to international standards, and to their specific scope of testing and certification services. The most recognized body in the US is the American National Standards Institute (ANSI).

Requiring that alternative onlot treatment systems be certified to the appropriate NSF/ANSI Standard by an ANSI accredited third-party product certification body provides all the following and more:

- Comprehensive and extensive testing and evaluation to demonstrate, under standardized conditions with daily oversight and analysis, the effluent treatment performance of the system when loaded at the maximum daily rated capacity, without allowance for service, maintenance or repairs for a minimum six month period.
- Annual audits of the product manufacturer's production locations, ensuring the system being sold is the same as the system evaluated and certified.
- Ongoing evaluation by the third-party certifier of all product manufacturer requested changes and modifications prior to use in certified systems.
- Requirement of the product manufacturer to maintain and provide a complete list of their authorized representatives responsible for installation, service and maintenance of systems.
- Required visits every six months by the manufacturer or their authorized representative to every installation for the first two years, the cost of which is included in the original purchase price of the system. During each visit the electrical, mechanical, and other applicable components are inspected, adjusted, and serviced, along with an effluent quality inspection for color, turbidity, scum overflow, and odor.
- Requirement that the product manufacturer or their authorized representative make available to the homeowner a long-term service policy that continues the regular site visits to evaluate ongoing performance and provide needed service, maintenance or repairs.
- Required warranty by the manufacturer that all components of the treatment system be free from defects in material and workmanship for a minimum of two years from the date of installation.

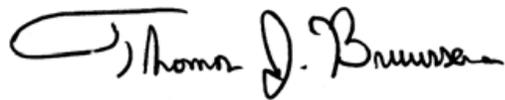
- Annual audits of a minimum of four of the manufacturer's authorized representatives, as selected by the certification body, including three installations each to ensure service related obligations are being fulfilled, along with observations of performance and evaluation of system components.
- Investigation of the product manufacturer for any complaints received regarding system performance, service and maintenance.
- Public notices, recalls and other measures of enforcement of the product manufacturer, if warranted.

All the above is available to the DEP for treatment system evaluation and approval, as it is to all states.

In consideration of the extensive requirements already applied to alternative onlot treatment systems when certified to the appropriate NSF/ANSI Standard by an ANSI accredited third-party product certification body, and the acceptance of these requirements by other states, I encourage the Department to reconsider the additional requirements proposed in the TVP, and the alignment with the goals of Act 26.

Thank you for the opportunity to comment.

Sincerely,

A handwritten signature in black ink that reads "Thomas J. Bruursema". The signature is written in a cursive style with a large, sweeping initial "T".

Thomas J. Bruursema
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